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**15th Annual NASSTRAC
Shipper of the Year**

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Candace Holowicki,
director of global
transportation and
logistics, TriMas

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LM management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

◆ **FedEx reports 24 percent gain in first quarter net income.** Fiscal first quarter earnings for transportation and parcel bellwether FedEx were strong, with the company stating last month that its quarterly net income of \$606 million was a 24 percent annual increase. Quarterly revenue was up 6 percent at \$11.7 billion, while operating margin checked in at 8.5 percent, up from 7.2 percent last year. FedEx reported earnings per share of \$2.10, up 37 percent from \$1.53 from last year and beating Wall Street estimates of \$1.96 per share. “We’re off to a good start for the fiscal year,” said Fred Smith, FedEx Corp. chairman, president, and CEO on the company’s recent earnings call. “We had a strong performance with Ground, solid volume and revenue increases at Freight, and volume and yield growth at Express. We expect continued revenue and earnings growth in fiscal 2015, assuming moderate global economic growth and stable fuel prices.”

◆ **UPS and FedEx ramping up staff for surge of holiday deliveries.** After last year’s harsh winter disrupted supply chain operations and deliveries, transportation and logistics giants UPS and FedEx are erring on the side of caution when it comes to adding additional staff for holiday deliveries. UPS said that it plans to hire between 90,000 to 95,000 seasonal employees, up from about 85,000 last year, to support the anticipated holiday surge for package deliveries. The company added that these seasonal staffers will be crucial for UPS to handle its expected increase in deliveries, with the company prepping to aid retail shippers to be fully equipped to meet pressing needs during the holidays. FedEx said that it expects more than 50,000 seasonal positions to be added for the upcoming holiday peak across its operating companies, including package handlers, drivers, and other support positions.

◆ **FTZs rock.** The value of exports from America’s Foreign Trade Zones (FTZs) increased by 13.7 percent in 2013 to a record-high 79.5 billion in merchandise exported, according to figures released by the U.S. Foreign Trade Zones Board in its Annual Report to Congress. At \$835.8 billion, the 2013 value of received merchandise into FTZs also reached a new high, surpassing the previous year’s record of \$732.2 billion—a 14.1 percent increase. Nearly two-thirds of the merchandise received by FTZs in 2013 was domestically sourced, with the

value of domestic status inputs growing to \$545.5 billion. The remaining \$290.3 billion in received merchandise consisted of foreign status inputs. The composition of foreign status inputs received by FTZs has also shifted significantly, according to the report. In 2013, a 16 percent decline in foreign status petroleum inputs was offset by increases in other product categories, such as vehicles, electrical machinery, and consumer products.

◆ **Balanced trade.** According to economists at IHS Global Insights, real exports have now increased five straight months, after dropping sharply in the first quarter of 2014. Exports surged in the second quarter, in part because they plunged in the first, and in the third quarter logistics managers may expect modest growth. The trade deficit zigzags from month to month—in the past 12 months it has been as high as \$45 billion and as low as \$36 billion, according to IHS. Until recently, it had been shrinking because of declining imports of petroleum products. Now, it appears to be stabilizing—and it will likely get wider soon as the pickup in U.S. growth brings in more imports. The bottom line is both exports and imports are rising, and IHS considers that a good sign for the global economy.

◆ **Trio of investors commit \$700 million to XPO Logistics.** Non asset-based 3PL XPO Logistics said last month that three global blue chip institutions—PSP Investments, Singapore’s sovereign wealth fund called GIC, and the Ontario Teachers’ Pension Plan— have invested a cumulative \$700 million into XPO, which company officials said will be used to accelerate its growth strategy and allocated mainly for unspecified acquisitions. XPO Chairman and CEO Brad Jacobs told *Logistics Management* that as a result of this new capital infusion, XPO will be able to increase its long-term financial targets. “This is a major strategic investment and a clear vote of confidence in our business plan by some of the most highly regarded investors in the world,” said Jacobs. With this capital primarily allocated for acquisitions, Jacobs said that the acquisition pipeline is very active at the moment, and XPO is focusing on companies in existing verticals that are strategically compelling and can be scaled up.

Continued, page 2

LM management UPDATE

AN EXECUTIVE SUMMARY OF INDUSTRY NEWS

◆ **Less congestion in LA/LB.** PierPass, Inc., a not-for-profit company created by the ports of Los Angeles and Long Beach to address multi-terminal issues such as congestion, announced that its OffPeak program has reached a major milestone, diverting its 30 millionth truck trip from weekday, daytime traffic since the program began in July 2005. On an average OffPeak weeknight, 17,000 trucks visit the marine container terminals at the Port of Los Angeles and Long Beach, and if all of these trucks were lined up bumper-to-bumper, they would form a line 170 miles long, half the distance from Los Angeles to San Jose. According to OffPeak officials, without the program this cargo would be crammed into a single day shift, more than doubling daytime volumes and causing major congestion. Under the OffPeak program, the 13 international container terminals at the two adjacent ports operate additional shifts on nights and Saturdays.

◆ **FTR and Internet Truckstop team up for Big Data service.** Freight transportation forecasting consultancy FTR and Internet Truckstop, an online load board service for motor carriers and shippers, last month announced a strategic industry partnership at FTR's Annual Transportation Conference in Indianapolis. FTR and Internet Truckstop said that the alliance will provide shippers and carriers with new services, including market analysis and specificity for contract and spot freight segments by region and trailer type. With Internet Truckstop's millions of load transactions meshed with FTR's forecasting and analytical capabilities, the organizations say that they'll provide shippers and carriers with a "unique picture" of the current balance of supply and demand between locations, as well as enable them to plan and base annual forecasts on condition for all types of trucks and regions.

◆ **Port of Seattle names new chief.** The Port of Seattle Commission has selected Ted Fick as the next CEO for the Port of Seattle. Fick, a Tacoma native, will take the helm when current CEO Tay Yoshitani retires this month. Fick has over 25 years of leadership experience in major manufacturing and transportation organizations, including oversight of international operations. In 2000, he left the Pacific Northwest and has since held multiple leadership positions in transportation and manufacturing

companies. Most recently, he served as CEO of Polar Corporation, a \$475 million trailer and component parts manufacturer in Minnesota. In that position, he oversaw three operating divisions, multiple manufacturing plants, and a workforce of over 2,000 represented and non-represented employees. Seattle joins the other West Coast ports of Long Beach, Los Angeles, and Oakland in appointing new leadership recently.

◆ **Shovel ready canal in Nicaragua?** The construction of the Interoceanic Canal of Nicaragua—more commonly known as the "Nicaragua Grand Canal"—will get underway in December. According to Telémaco Talavera, a member of the Grand Canal Commission, ground breaking will be the first part of meeting the canal's completion date in 2019. The integrated Nicaragua Grand Canal project will include the following six sub projects, including the canal and locks, two Ports, a Free Trade Zone, holiday resorts, an international airport, and several access roads. In addition, there will be construction of a power station, cement factory, steel factory, and other related facilities to ensure the successful completion of the canal within five years. The Nicaragua Canal will be three times the length of the Panama Canal, crossing the major Lago de Nicaragua, one of the largest freshwater reservoirs in the region. There is considerable speculation, however, that proper regulatory and environmental concerns have been addressed.

◆ **Turning tide?** While West Coast ports remain dominant in terms of volume, JLL's *Sixth Annual Seaport Outlook* report shows rapid growth and demand for space at the nation's ports on the East Coast. "Shippers are turning to the Suez Canal to reach U.S. East Coast population centers," said Rich Thompson, managing director of JLL's ports, airports, and global infrastructure group. "This route helps offset the risks associated with potential disruption and costs associated with the Panama Canal or delays and potential disruptions at West Coast ports such as LA and Long Beach." Last year was a banner year for shipping volumes, which were up by 3.3 percent on the previous peak seen in 2007. Of the 13 seaports ranked in JLL's report, the West Coast seaports volumes were 6.8 percent below 2007 peak levels, while shipping volumes on the East Coast were up 19.1 percent. □

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NASSTRAC SHIPPER OF THE YEAR

TriMas centralizes freight, boosts bottom line

26 Three years ago, Candace Holowicki (right), the company's director of global transportation and logistics, joined its Global Services Organization and helped to level functional silos and bring together procurement, logistics, operations, and continuous improvement—a move that now saves millions annually.

TRANSPORTATION AND BEST PRACTICES

Distribution Network Design: The e-commerce effect

30

New research and analysis offers suggestions of a new modal mix and a subsequent distribution process designed to help retailers meet more pressing customer demands.



Distribution network design 30

GLOBAL LOGISTICS

3PL Relationships: How to avoid commoditization

34

While shippers may generally be content with the reliability of their 3PL partners, new research indicates that there's considerable concern about the value of long-term, strategic relationships. Industry analysts explain how innovation and a deeper commitment to collaboration will become the key differentiators in 2015.



3PL relationships 34

WAREHOUSE & DC MANAGEMENT

Lift Truck Technology: Elevating the entire facility

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As the industry successfully harnesses the wealth of available lift truck fleet data, opportunities for improvement extend throughout the operation.

SUPPLY CHAIN & LOGISTICS TECHNOLOGY

Cloud Computing: Defining itself in SCM

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We explore the progress supply chain management (SCM) applications are making in the cloud, pinpoint key benefits, attempt to demystify the concerns, and discuss which solutions are helping to solidify cloud delivery in this somewhat reluctant market.

TOP SUPPLY CHAINS

The 2014 Supply Chain Top 25: Leading the decade

48

This year marks the 10 year anniversary of the *Gartner Supply Chain Top 25* ranking. There are lessons to be learned from these supply chain leaders, many of whom have led their industries over the past decade.



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SPECIAL REPORT

TOP 30 OCEAN FREIGHT CARRIERS: Profits at last?




Maersk Line, the world's largest ocean cargo shipping company, caused a stir last summer by raising its full-year profit forecast for 2014 due to higher freight volumes and lower costs. Industry analysts wonder, however, if many of the other Top 30 carriers will exercise the same discipline and constraint to achieve similar goals. Page **56S**

Now On Demand

23rd Annual Study of Logistics and Transportation Trends

Who's winning transportation's tug of war?



Results from our *23rd Annual Study of Logistics and Transportation Trends* suggest that carriers, driven by a need to maximize profitability, are at a polar opposite with shippers who are focused on reducing their costs.

How can carriers and shippers collaborate to put an end to transportation's tug of war?

Join Group Editorial Director **Michael Levans**, **Mary Collins Holcomb, Ph.D.** of the University of Tennessee, and **Karl B. Manrodt, Ph.D.** of Georgia Southern University, as they reveal all of the findings of our *23rd Annual Study of Logistics and Transportation Trends*. Shippers will learn:

- critical steps carriers and shippers need to take to put an end to the struggle;
- the percentage of freight dollars currently spent by mode over the past 12 months; and
- what the next era of transportation management will look and act like.

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TriMas: Centralizes freight, boosts profits

THE EDITORIAL STAFF of *Logistics Management (LM)* is thrilled to again have the winner of the NASSTRAC Shipper of the Year Award grace our October cover. For 15 years, *LM* has partnered with NASSTRAC, one of the leading logistics and transportation advocacy organizations in the market, to fix the spotlight on a savvy logistics operation that has demonstrated excellence in the execution of a strategy designed to streamline its company's operations and contribute to the bottom line.

And this year's winner, Candace Holowicki, the director of global transportation and logistics at TriMas Corp., and her team have executed both parts of this lofty goal—and then some.

Indeed, the story behind Holowicki's implementation of her companywide logistics strategy neatly touches on the elements that *LM* loves to highlight when we dig into a case study of this magnitude. First, her work has not only helped to reduce freight spend as a percentage of sales by 2.4 percent annually, but it also highlights the power that a smart, centralized logistics management approach can bring to a highly-diversified organization—in this case leveling the process across nine business units.

"A roll out of a centralized effort of this size amounts to nothing short of a major culture change," says Contributing Editor John Schulz, author of the cover story. "That doesn't happen unless you have support from the C-suite and every business unit leader—and that's just what she got."

In fact, her continued work is part of the company's Global Services Organization (GSO) that was started back in 2010 as an effort to level the company's functional silos (procurement, logistics, operations), gain better efficiencies, and roll out a culture of continuous improvement across the board. A few months into the project, Tom Aepelbacher, vice president of the GSO, identified freight and logistics

as a significant opportunity and hired Holowicki to lead the charge.

The changes needed became readily apparent. Prior to 2011, the company's nine strategic business units operated autonomously, and each chose its own transportation partners with almost no coordination. Locations were allowed to choose their own carriers with little regard to price, while claims were handled differently at each business.

"It was completely fragmented," says Holowicki. "Nobody was adhering to any formal set of programs, and everybody was doing what they thought was best for their own location." And due to this disconnect, freight costs were 7.2 percent of sales—a more efficient standard for a manufacturer is about 5 percent.

Starting on page 26, Schulz shares how Holowicki set out to create a centralized logistics strategy based on best practices that have been rolled out across the business units. Under her leadership, TriMas Logistics has improved shipping performance through shared tools such as outsourced freight bill audit and payment, a transportation management system, and a number of TriMas-wide requests for logistics services quotations.

"She went mode by mode, business unit by business unit, digging into the data, eliminating empty miles, and optimizing every possible move to get terrific results," says Schulz. "But perhaps the most impressive part: Now TriMas has the process and systems in place to just keep getting better."

Michael A. Levans, Group Editorial Director
Comments? E-mail me at mlevans@peerlessmedia.com
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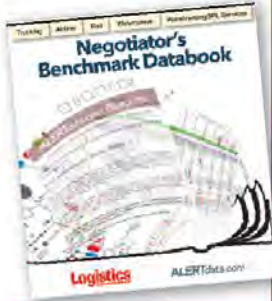


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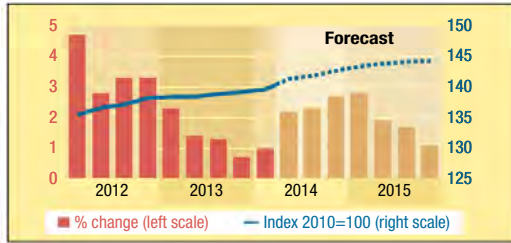
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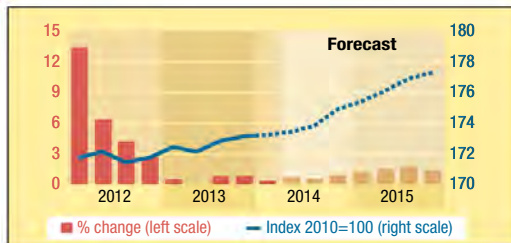
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% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
General freight - local	0.0	0.0	0.0
TL	-0.1	1.9	2.7
LTL	-1.3	3.4	4.4
Tanker & other specialized freight	0.0	0.5	0.8

TRUCKING

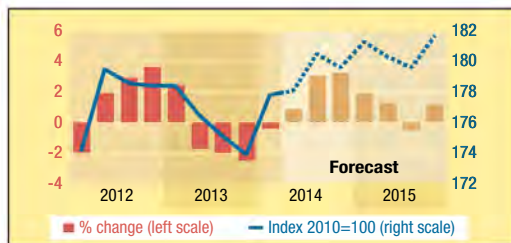
With eight months of data in hand, we're forecasting the average annual inflation rate for trucking services to hit 2.1% this year. That 2014 rate is sandwiched between 1.4% in 2013 and 1.9% forecast for next year. The inexorable rise in prices continues motoring along even though, in August, LTL tags fell 1.3% from a month ago. Our analysis of the prices customers pay and operating costs truckers incur suggests that profit trends are looking good. We estimate the industry's gross operating surplus (before taxes) totaled \$21.86 for every \$100 worth of services sold this past summer. That's \$1.08 above the summer of 2013 and \$2.36 higher than two summers ago.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Air freight on scheduled flights	-0.5	-0.3	-0.1
Air freight on chartered flights	-3.1	-6.5	2.1
Domestic air courier	0.0	-0.5	5.0
International air courier	-0.3	-0.5	5.4

AIR

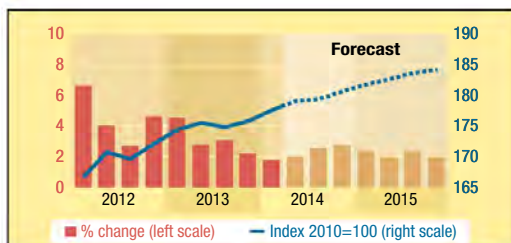
We expect the annual inflation rate for freight service on U.S. airliners' scheduled flights to inch up 0.7% in 2014 and 1.5% in 2015. Inflation lift stalled in August as average transaction prices for flying freight on scheduled flights inched down 0.5%. Chartered planes flying domestic routes also cut prices 4.6% while those flying international routes hiked tags up only 0.4%. Profit trends among U.S.-owned airline companies likewise have stalled. This past summer we figure the airline industry's pre-tax gross operating surplus stood at \$19.66 for every \$100 of airline services sold. Although that's an 86-cent improvement over last year, it's still \$2.43 lower than the summer of 2012.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Deep sea freight	0.0	0.1	5.7
Coastal & intercoastal freight	0.1	3.2	-3.0
Great Lakes - St. Lawrence Seaway	0.2	0.1	0.2
Inland water freight	5.5	3.4	4.5

WATER

We now forecast average prices in the U.S. waterborne transportation market to increase 1.7% in 2014 and 1% in 2015. Our upward revision to this year's inflation rate is due largely to inland waterways freight transportation. Here, transaction prices in August increased 5.5% from month-ago and 4.5% from same-month-year-ago. By comparison, the aggregate price index for all water transportation was up 1.1% from month-ago and 3.1% from same-month-year-ago. Alas, these late-summer price hikes will do little to improve the overall profit trends. The industry's gross operating surplus has been dead in the water at \$19.29 (per \$100 of sales), down \$3.51 from two summers ago.



% CHANGE VS.:	1 month ago	6 mos. ago	1 yr. ago
Rail freight	-0.1	0.8	2.5
Intermodal	-0.3	0.0	1.8
Carload	-0.1	0.9	2.8

RAIL

The inflation rate in rail transportation is expected to be 2.3% this year and 2.2% next year. Although demand for rail freight services was strong this past summer, U.S. Labor Department surveys suggest that railroad executives did not go for the pricing jugular. In August, average transaction prices for intermodal and carload rail services fell from a month ago by 0.3% and 0.1%, respectively. In year-to-date ending August, intermodal and carload prices both were up only 2.1%. As for the margin picture, we estimate the rail industry's gross operating surplus (before taxes) stood at \$18.93 for every \$100 worth of services sold this past summer, down 32 cents from a year earlier and down \$1.49 from 2013.

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Also:

- Alternatively fueled vehicles fight for market share as price of diesel dips to two-year low, Page 16
- Rail service issues and rates are main issues in STB reauthorization bill, Page 18
- Carriers and analysts say intermodal service issues persist, but conditions are slowly improving, Page 19

Shippers ready to adjust quickly if diesel should rise

Recent Logistics Management reader survey finds that shippers are vigilant even though diesel prices remain low.

By Jeff Berman, Group News Editor

FRAMINGHAM, Mass.—While diesel prices have remained out of the spotlight for much of 2014, shippers say that they always need to keep a close eye on what prices are doing considering the significant impact it has on transportation budgets and forecasting.

That was a key finding of a recent *Logistics Management (LM)* reader survey of roughly 150 logistics managers. Unlike other years, 2014 has seen prices hovering below the \$4 mark for an extended period. And while prices remain low, shippers are still watching prices closely because they're paying a high percentage—in terms of their average fuel surcharge—above standard base rates.

According to the survey, 30 percent of respondents noted that average fuel surcharges were more than 20 percent above base rates, with 18 percent saying that they were 16 percent to 20 percent higher.

At press time, the current average price per gallon of diesel was \$3.814 per gallon. This is in line with the EIA's *Short-Term Energy Outlook 2014* estimate of \$3.86 per gallon this year and \$3.82 per gallon next year.

As for oil prices, which are currently in the low \$90-per-barrel range for WTI crude, the EIA's forecast is calling for prices to come in at \$98.28 per barrel and \$94.67 per barrel, respectively, for 2014 and 2015.

While prices are relatively in check at the moment, things can change in a hurry, as was the case in 2008 when

the average price per gallon of diesel was approaching \$5 per gallon and oil prices were pushing \$150. Having lived through that difficult period, shippers are fully aware of the triggers that could lead to higher prices, notably the myriad geopolitical issues such as the situation in Ukraine and Russia and ISIS in the Middle East.

Should prices quickly head north from current levels, shippers say they realize budgetary needs can change in a hurry. We found that 33.3 percent of shippers expect to pay higher surcharges in the coming months, while 55 percent said that they're currently

prices, with just 28 percent saying that they would not.

As was the case in recent years, there was some variation as to how much shippers are preparing to adjust budgets, with 50 percent planning to raise or adjust freight budgets by 5 percent or less and 32 percent planning on a 6 percent to a 10 percent hike.

At last month's FTR Annual Transportation Conference in Indianapolis, Noel Perry, FTR's senior consultant, said that, since mid-to-early 2011, diesel prices

not expecting to pay higher fuel surcharges, with 11 percent unsure.

Not surprisingly, if prices were to head up, almost 72 percent of shipper respondents noted that they would raise or adjust their freight budgets to cover higher than expected fuel



overall have not largely changed.

“As you’re plugging in your assumptions about fuel for the rest of 2014 and into 2015, there is overwhelming evidence suggesting that it’s best to keep those assumptions where they are today,” said Perry. “But, if you need to recognize each month, there is a 2 percent to 5 percent variation, which makes for a nice and easy planning scenario with respect to fuel surcharges and respect to fuel costs. However, the easiest thing to do is plug in what you had last year.”

Even with prices currently working in their favor, shippers told *LM* that they’re continually working with carrier partners on ways to better control fuel cost pressures whenever possible to get freight budgets better aligned. Regardless of the fluctuation in diesel prices, shippers are cognizant of the impact diesel prices can have on their bottom line—for better or worse.

Should prices head up again, the primary strategy for shippers to combat raising fuel costs is to conduct a supply chain network optimization exercise to model the impact of rising diesel fuel and transportation costs, suggests supply chain consultant Brittain Ladd. “The key is for transportation costs to become more important relative to production, inventory, and facility fixed costs.”

Ladd said that his recommended strategy for shippers is to identify opportunities to increase the number of distribution centers to minimize distance travelled for outbound transportation and to make operational changes to trade down to lower cost transportation such as air to ground and trucking to rail.

“The challenge, of course, is that lead times and replenishment to meet customer demand must be analyzed and processes updated to adjust to the new transportation reality,” added Ladd. □

a fair amount of alternate fuel vehicles being sold,” said Chuck Hammel, president of regional less-than-truckload carrier Pitt Ohio. “However, the problem with natural gas trucks is not so much infrastructure, but the cost of the vehicle and the unknown on what the resale value will be at time of trade in.”

Hammel said that, with diesel trucks, the company can tell exactly how much it will get on a trade in three years—but the figure for CNG-powered trucks is unknown because the technology is changing so rapidly. “So far with the trucks we’re testing the technology looks promising. We’re getting good fuel efficiency, and the power is adequate.”

Hammel added that “the price is a killer,” so for the most part, the trucking industry would need subsidies to justify the cost. “By our calculations, it will take three years to recoup the cost difference, which makes it a pretty bad investment.” He added that once Class 8 alternatively fueled trucks are being mass-produced by heavy truck manufacturers, the cost will come down and they’ll become a better option.

But that may take a while. Indiana-based Cummins has delayed indefinitely development of its heavy-duty, 15-liter natural gas-powered engine. And a joint venture between Cummins and Vancouver-based Westport Innovations for the development of a similar 15-liter engine ceased production a year ago.

However, big shippers will continue to apply pressure. Procter & Gamble, Lowe’s, Wal-Mart, and Staples are among major companies pushing their carriers to increase use of alternatively fueled vehicles.

Clean Energy Fuels Corp., a key contributor to natural gas vehicle growth in Texas, says that level of pressure can only help the evolution of alternative fuel vehicles. According to a recent Railroad Commission of Texas report, CNG and LNG sales in Texas through July 31, 2014, were 220 percent above the fiscal year 2014 estimate. The report states that an estimated 14.5 million gallon-equivalents of natural gas have been sold through this period—compared to the fore-

ALTERNATIVE ENERGY

Alternatively fueled vehicles fight for market share as price of diesel dips to two-year low

WASHINGTON, D.C.—A couple years ago, the rush to move to alternatively fueled vehicles was on. Diesel prices had surged past \$4 and the American Trucking Associations hosted an overflow crowd at its alternative fuels summit where energy tycoon T. Boone Pickens said: “We have so much natural gas... and we’re going to see \$5-a-gallon diesel before we’ll see \$3 natural gas.”

Pickens may still be right, but currently the global oil markets are awash in crude. Diesel prices are hovering at a two-year low, around \$3.80 a gallon at press time. Meanwhile, compressed natural gas (CNG) is about \$2.11 nationwide, although it’s cheaper in some areas of the country.

But what trucking executives say is hindering greater use of CNG—and its liquefied cousin LNG—are two huge hurdles halting expanded use of alternatively fueled vehicles: the additional upfront costs of as much as \$50,000 for a \$150,000 CNG-powered tractor and the lack of a saturated CNG or LNG nationwide network

of truck refueling stations.

This year, about 11,000 heavy-duty natural gas powered trucks will be sold, a 20 percent rise from 2013. “There are





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casted 6.6 million gallon-equivalents.

Patric Rayburn, spokesman for Clean Energy Fuels, a California-based company that builds and operates CNG and LNG fueling stations, said that he's seeing a "broad adoption" of natural gas-powered fleets across the refuse, bus transit, and trucking markets. "Texas, Pennsylvania, and California are taking the lead in encouraging various trucking

fleets to try natural gas vehicles," said Rayburn.

Rayburn said that the heavy duty, long-haul trucking market is still in a "testing" phase. "Trucking companies like to test new vehicles for at least two years, or maybe as many as 250,000 miles, to see how it performs in the long haul," he added.

—John D. Schulz, *Contributing Editor*

RAILROAD

Rail service issues and rates are main issues in STB reauthorization bill

WASHINGTON, D.C.—Railroad service issues and rates, which many rail shippers deem as unacceptable, are front and center in a piece of legislation introduced last month by Senators Jay Rockefeller (D-WV) and John Thune (R-SD).

Entitled "S. 2777, the Surface Transportation Board (STB) Reauthorization Act of 2014," the bill's objective, according to the Senate Commerce Committee, is to make the STB an economic regulatory agency charged by Congress with resolving railroad rate and service disputes and reviewing proposed railroad mergers.

The chief objectives of the bill include:

- Strengthening the role of the STB and increasing its investigative authority so it can launch its own investigations prior to a complaint being filed.

- Increasing the efficiency of the STB by improving rate review timelines, which would make it easier for STB members to communicate and improve dispute resolution practices.

- Advance important STB proceedings that include reviewing revenue adequacy determinations, examining mandatory competitive switching, and determining whether contract bundling has had an adverse impact on the ability of shippers to bring rate cases

At a hearing last month, Rockefeller said that when Congress passed the Staggers Act in 1980 it recognized the need for a robust rail system, as the law made what he called "sweeping changes" that gave the railroad industry an opportunity to improve its finances and the ability to better compete against other modes.

"In that regard, the Staggers Act has worked," said Rockefeller. "The freight railroads continue to set new financial records quarterly, and these companies continue to raise their dividends and buy back record amounts of stock. But not everyone is doing so well. Many of the witnesses here today have struggled to remain competitive as rail service declines and rates rise—and the situation continues to get worse."

While similar attempts to improve the STB have been proposed in recent years, this one appears to be different in that rail service, going back to last winter, has experienced major delays in various parts of the country. In the meantime, Class I railroad carriers continued to make record capital expenditure investments, with much of that capital allocated for infrastructure improvements.

A large shipper group, the American Chemistry Council (ACC), supported the bill, explaining that current rail policies are more than 30-years old and not keeping up with the myriad ways in which the freight rail sector operates—and is subsequently having a negative impact on shippers.

The ACC cited a May 2014 study from Escalation Consultants that stated that rail rates have increased more than 93 percent, or three times the rate of inflation, since 2001. And it explained that reforms are needed at the STB to provide shippers with better access to more competitive and reliable freight rail service.

Association of American Railroads (AAR) President and CEO Ed Hamberger said at the hearing that the current balanced regulatory framework serves as a key enabler of the country's economic revival.

"America's freight rail system is today moving more traffic than at any time during the last seven years," said Hamberger. "Business production and consumer demand are increasing, and rail is playing a bigger part in getting American goods to market, both domestically and internationally. The record private investments that the rail industry makes every year in its network have well positioned today's continued economic recovery."

—Jeff Berman,
Group News Editor



INTERMODAL

Carriers and analysts say intermodal service issues persist, but conditions are slowly improving

FRAMINGHAM, Mass.—When publicly-traded Class I freight railroad and intermodal service providers recently issued second quarter earnings results, the topic of less-than-ideal service on the rails was a common theme.

While much of the service issues stemmed from the harsh winter weather, service capabilities slowly remain on the mend. “The one ongoing issue that persists from the winter is that we continue to experience sub-standard rail service... currently all-rail on-time performance trails historical norms,” said Dave Yeager, Hub Group CEO.

Yeager noted that there are not any “quick fixes” for getting service back to ideal levels. Areas he said that railroads are focusing on include increasing available resources and efficiency to route traffic, acquiring new locomotives where available, returning restored locomotives to service, and accelerating intermodal terminal capacity.

CSX COO Oscar Munoz noted on the company’s earnings call that even though there’s been what he called “a rapid surge in volume” since the end of the first quarter, service levels have stabilized at a lower level, but not at the level shippers expect from CSX. He added that CSX is seeing double-digit growth in the northern tier while conditions in the Chicago area remain challenging.

To address that, Munoz said that CSX is taking near-term actions to shift resources to those areas and also make infrastructure improvements and add crews and locomotives. Another focus area for improving intermodal service, he said, includes making changes on routing

protocol to use other less congested hubs.

This year has been quite different than others in that all carriers and intermodal service providers have dealt with the same service issues to a certain extent. But the good news is that things are much improved since the end of the first quarter, according to Brooks Bentz, a supply chain consultant.

“Typically when clients tell us that they’re dealing with capacity issues on the truckload side, we tell them to switch to intermodal as it has functionally unlimited capacity,” said Bentz. “But at that time they could not make the switch to intermodal because of the problems in Chicago, drayage, and network fluidity. And while there was not sufficient network capacity at that time, that issue has largely gone away.”

While there are still challenges in the intermodal network, Bentz said that things are slowly improving through better operating processes at terminals, improved technology and reservations, as well as better intake and outtake systems.

“These things are all getting better, and there is not the gigantic queue of trucks waiting to get into a gate like in the past, or at least not as much,” Bentz said. “Process improvement has just been huge.”

In light of the aftereffect of intermodal service issues in 2014, Bentz said that it’s imperative for shippers to plan ahead when using intermodal. One of the main reasons for that, he said, is that intermodal is not a “day of” type of thing, because shippers cannot get access to a trailer in the same way they can access a domestic container.

While planning accordingly is key, especially in light of current service conditions, Larry Gross, senior consultant at FTR, said that looking at service metrics, like train speed and yard dwell times for car loads for various major classifications, is very helpful.

“There are really two things to watch,” said Gross. “One is how long cars are sitting in the yard before they’re on the next train and how fast they are running. We saw a big increase in yard dwell time and a big decrease in train speeds earlier this year. It was aggravated by the winter, but there were signs of problems prior to that. Since then, railroads have put resources towards remedying this to get out of the hole as so much volume was coming in.”

—Jeff Berman, Group News Editor



Jeff Berman is Group News Editor for the Supply Chain Group publications. If you want to contact Jeff with a news tip or idea, please send an e-mail to jberman@peerlessmedia.com.



Indicators lend credence to hopes for an improving economy

AS IS THE CASE IN THIS POST-RECESSION world in which we live, there are more than a few economic indicators that have the potential to push the needle on public opinion in regards to the economy.

Some of the current indicators point to things improving and signs of better times ahead, while others signal that we're still very much embedded in a recession-induced malaise and are likely to be there for quite a while.

But for now, let's take a respite from the doom and gloom and accentuate the positive. Over the last few weeks there have been a few notable economic signs that things could truly be turning the corner, such as the Department of Commerce's advance second quarter GDP estimate of 4.0 percent growth—which, if sustained, would bode very well for overall economic activity.

Some other notable signs that *Logistics Management* has recently reported include the Institute for Supply Management's August edition of its *Manufacturing Report on Business* that cited that "new orders"—commonly referred to as the engine that drives manufacturing—hit the highest level since April 2004.

Bradley Holcomb, chair of the ISM manufacturing business survey committee, told me that the gains in "new orders" represents steady traction in manufacturing growth going back to January. He added that these gains are consistent with manufacturing's strong growth trend—coupled with manufacturing in China and the Eurozone hitting down periods at a time when the U.S. is churning along.

We can add rail volumes to the list as well. According to the Association of American Railroads (AAR), both carload and intermodal numbers for August were strong. The weekly carload average for August, at 303,072, marks the highest weekly average for any month since October 2011 and the highest August tally going back to 2008. The August weekly intermodal average, at 268,922, represents the second highest weekly average ever for a single month, with June 2014 being the best month on record.

Yet another piece of encouraging data came from Panjiva, an online search engine with detailed information on global suppliers and manufacturers. Panjiva reported that U.S.-bound waterborne shipments in July were up 2 percent annually and up 5 percent compared to June. Panjiva said that these shipment levels are on a typical seasonal path for this time of year, with July posting the highest shipment volume for any month this year so far.

Morgan Stanley analyst Bill Greene recently summed it up this way: "These growth rates [for truckload, less-than-truckload, parcel, and rail] suggest that by year end 2014, or early 2015 at the latest, every transport mode will be back to peak volumes, and we will have recovered everything we lost after the recession."

The Institute for Supply Management's August edition of its *Manufacturing Report on Business* cited that "new orders"—commonly referred to as the engine that drives manufacturing—hit the highest level since April 2004.



While things are clearly coming around, there are obviously issues that need to be dealt with before we can truly say that we're back to the good old days.

However, to be able to identify a widespread set of improving economic metrics, most with direct tie-ins to the supply chain, is a good thing. I'd even go as far as saying that it's a small, but meaningful victory.

In order for things to continue on this path more positive indicators will need to appear. Will it happen? Hopefully. So, let's hope 2014 finishes strong on the economic front and that we don't see a second-half slide, a trend that's become commonplace over the past few years. □



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Contracting for a Big Data windfall

THE DATA GENERATED when shippers buy and sell goods typically includes dozens of key fields including dates, volumes, transit times, prices, accessorial costs, locations, and most recently dimensions.

A large part of the payback for shippers in pushing their service providers and their own organization into collecting and managing transactional data comes when it's time to re-engineer the supply chain network. Re-engineering efforts need information, and experienced shippers know how difficult it is to get clean, usable, historic data to use in modeling and re-designing the supply chain.

It's the inbound and outbound transaction history derived from actual shipments that will form the backbone for a thorough understanding of a market and enable "what-if" scenarios in procurement and distribution.

Shipper executives are often amazed that their customer demand data, actual costs to serve customers, and inventory handling costs are casually thrown away when transactions are complete because their ERP system doesn't need it for the financial accounting that it is purposed for. Their ERP does not need this "extra" information.

Even "best of breed" logistics systems are geared to complete the transaction and move on. IT departments often don't understand the logistics-related data-keeping requirement and want to minimize storage space utilization.

As a practice leader in two of the big logistics consultancies, I had the unpleasant duty of explaining to many shipper executives that the reason for the high cost of their re-engineering project was due to the need to painstakingly build a database of their demand and purchasing flows so that we could model the business for them. The information that was needed had been lost in the efficiency of aggregation of information for their financial and marketing reports.

Often, more than 50 percent of the cost of a distribution network modeling initiative is in building a reliable history of their demand flow and costs in order to validate that the model baseline of the business is correct. We would call on carriers and 3PLs to create reports

from their records for the project only to find that their systems were not much better than the shippers at storing and managing transactional details.

This can be avoided by arranging ahead of time for acquiring and managing supply chain data at the time of the transactions. The shipper and carrier must agree to jointly collect the needed information. Keep in mind, this is not a part of traditional standard contracts for carriage, brokerage agreements, or spot quote letters.

It's therefore critical that a shipper insists that all contracts have the shipper's rights to data, as well as the collection and carrier storage and retrieval services regarding data, spelled out up front. This should be a

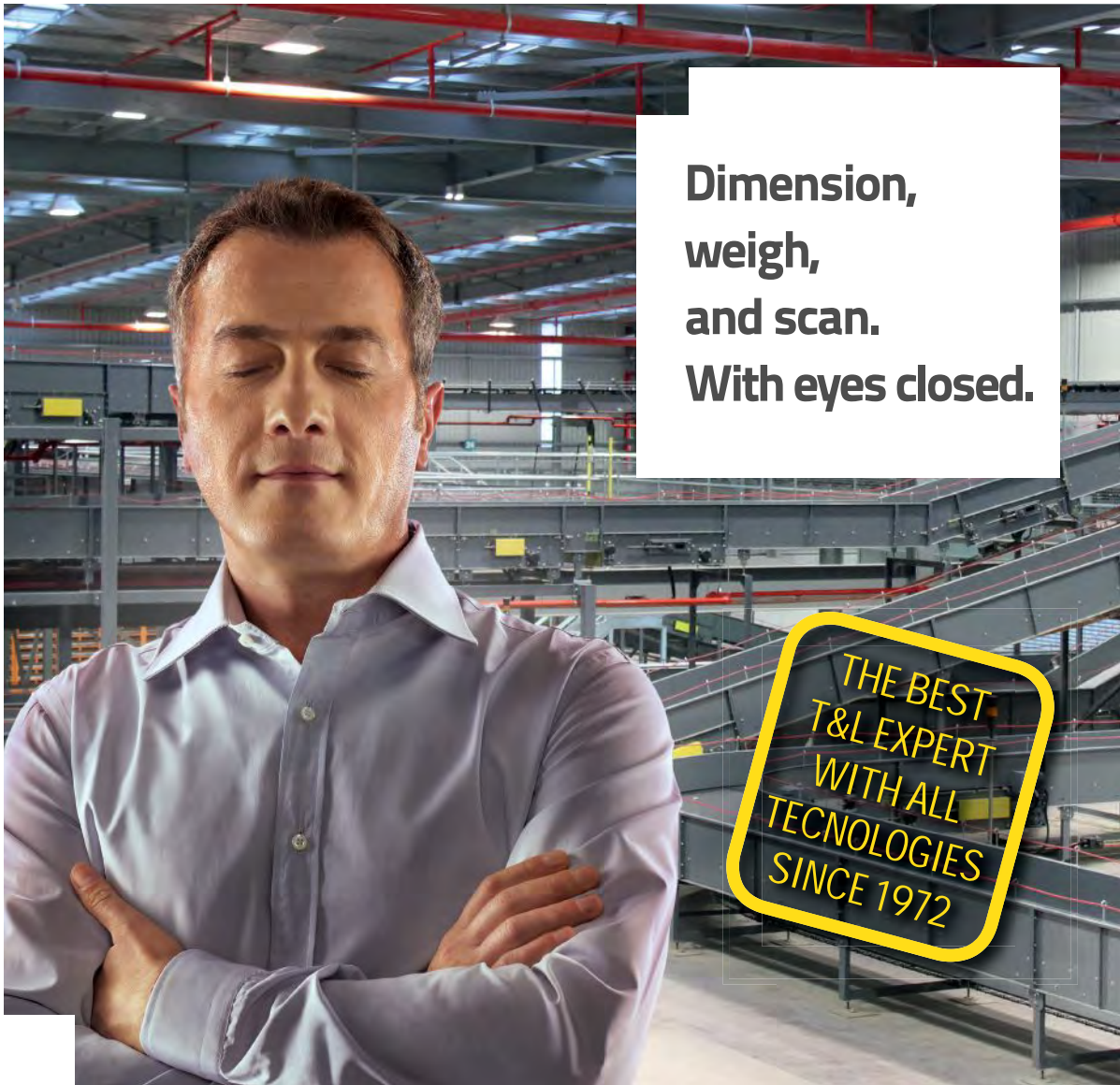
It's critical that a shipper insists that all contracts have the shipper's rights to data, as well as the collection and carrier storage and retrieval services regarding data, spelled out up front. This should be a part of the rates, but you will not find this requirement in standard Bill of Lading language or the National Motor Freight Classification rules.

part of the rates, but you will not find this requirement in standard Bill of Lading language or the National Motor Freight Classification rules.

This simply means that we need to take a fresh look at transportation contracts and re-build from the ground up.

The focus of this column is data use in periodic network optimization projects; however, it's important to understand that this rich detailed history can also be used more frequently by shippers in spotting pricing trends, violation of routing guidance, transit time changes, and accessorial cost variations.

The bottom line is that collection, management, and analysis of transactional information is a proven way to affect the cost and service levels in logistics. Investing in better contracts, processes, and systems to leverage information will yield some of the highest returns on investment in optimizing your network. □



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Strengthen the supply chain with Big Data analytics

BIG DATA ANALYTICS IS A BIG DEAL, particularly in supply chain management where this technology is broadly applicable but often underutilized. This month, I'll present a brief overview of Big Data analytics, discuss its burgeoning role in supply chain management, and examine some recent research.

For many years, supply chain decision makers have used analytics to help design facility networks, determine economic order quantities, and define safety stock parameters. However, these are not Big Data efforts. They are generally narrow and mostly piecemeal, and most are applied situationally rather than systemically.

Big Data analytics is different. On the one hand, it involves collecting and analyzing unprecedented large quantities of data in real time or close to real time. And, it's also about handling data collected across time and in myriad contexts.

Think of these differentiators as the Three Vs: volume, velocity, and variety. Big Data analytics also differs from traditional analytics because of the many techniques and leading-edge technologies it requires: statistics, mathematics, econometrics, simulations, and optimizations.

Not surprisingly, there are plenty of ways that Big Data analytics can help supply chain decision makers. According to recent Accenture research, the most frequent benefits cited were better customer service, more effective fulfillment, faster responses to supply chain problems, and increased end-to-end efficiency.

But that same research says that these benefits are only enjoyed by a small percentage of companies. And, there's little consensus about the best way to develop, structure, and deploy most analytical capabilities. Respondents worry about security, privacy, executive support, and the cost and complexity of implementation. Just 37 percent said Big Data analytics has been embedded in their key processes.

However, that's about to change. The research indicated that more companies seem ready to invest. Here are three best practices companies should consider:

- *Create an enterprise-wide strategy.* An enterprise-wide analytics strategy has the greatest potential to help companies use Big Data to drive business value. A supply-chain-specific strategy will probably be less effective, but it's still preferable to a strategy that focuses only

on a few processes. More than 60 percent of surveyed companies that have implemented an enterprise-wide strategy reported shorter order-to-delivery cycle times and increases of 10 percent or more in supply chain efficiency.

- *Embed Big Data analytics into operations.* Companies that fold analytics into their day-to-day supply chain operations often generate more significant and farther-reaching benefits than companies whose analytics efforts are applied more narrowly or sporadically. Among researched companies that took this route, roughly 60 percent reported shorter order-to-delivery cycle times, better overall efficiency and improved demand management.

- *Hire talent with a mix of deep analytics skills.* An independent team of data scientists—dedicated to Big Data analysis on an ongoing basis—is an important success determinant. According to our research, companies that assemble such teams are three to five times more likely than those that don't.

Big Data analytics also differs from traditional analytics because of the many techniques and leading-edge technologies it requires: statistics, mathematics, econometrics, simulations, and optimizations

To the last point, although Big Data analytics offers tremendous potential to improve business performance, it nonetheless is a sizeable investment whose sheer scale and complexity lessen its attainability for some companies. Strong talent is in short supply. Analytical tools are complex and rapidly evolving. Technology vendors come and go quickly. For all these reasons, some companies' best course may be to outsource the development and management of a Big Data analytics program.

In addition to leveraging best-of-breed expertise and tools, this approach could help companies launch or enhance their analytics capabilities quickly and cost-effectively, and to test-drive various approaches before bringing them in-house.

Regardless of whether you build or outsource your analytics program, the key to success is the same: identify the foremost supply chain benefits that Big Data analytics can offer and rigorously pursue the implementation path that aligns most fully with your organization's priorities. □



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TriMas centralizes freight, boosts **BOTTOM LINE**

Three years ago, Candace Holowicki, the company's director of global transportation and logistics, joined its Global Services Organization and helped to level functional silos and bring together procurement, logistics, operations, and continuous improvement areas—a move that now saves millions annually.

BY JOHN D. SCHULZ, CONTRIBUTING EDITOR

Sometimes the process of re-engineering supply chain operations results in incremental savings, while other times a company can make a huge, positive impact on the bottom line. You can safely place TriMas Corp. in that second category thanks in part to the work of Candace Holowicki, the company's director of global transportation and logistics and a driving force inside the company's Global Services Organization (GSO).

Recognizing the need to aggregate spending and find cross-business unit solutions, Dave Wathen, president and CEO of TriMas, formed the company's GSO back in 2010 in an effort to level the company's functional silos and gain better efficiencies. Tom Aepelbacher, vice president of the GSO, was then tasked to attack everything that was decentralized and communize as appropriate.

Aepelbacher identified freight and logistics as an opportunity, and Holowicki, a 24-year veteran of transportation and logistics, was asked to join TriMas with the mission to create an integrated logistics program within the GSO. Three years later, the company reports that the 46-year-old logistician has succeeded.

In fact, the implementation of her Corporate Logistics Strategy has helped reduce freight spend as a percent of sales by 2.4 percent annually for the diversified designer,

manufacturer, and distributor of engineered and applied products serving a variety of industrial, commercial, and consumer end markets worldwide.

For helping TriMas realize that significant boost to the bottom line through her ongoing logistics centralization project, Holowicki has been named the 2014 NASSTRAC Shipper of the Year, an award given annually by the association and *Logistics Management* to a shipper that has transformed operations through the implementation of best practices and innovative thinking.

Besides the annual savings, Holowicki says that she's having a blast. "It's been a lot of fun," says the modest Holowicki. "And, I've gotten so much support from both corporate and our business unit leaders."

Let's take a look at the challenge that faced TriMas' supply chain operation and the solution that Holowicki and the team implemented to help rake in the savings.

Cutting down the silos

Like many large corporations, TriMas is a large, complicated organization that can be difficult to manage from a service provider's viewpoint. For instance, TriMas had 13 acquisitions in 2013, which is indicative of the corporation's size and scope of operations.



Candace Holowicki, director of global transportation and logistics, TriMas

JEFF SAUGER/GETTY IMAGES

TriMas is organized into six reportable segments: Packaging, Energy, Aerospace & Defense, Engineered Components, Cequent APEA (Asia and Pacific), and Cequent Americas, its North America hitch and aftermarket auto accessories company. With headquarters in Bloomfield Hills, Mich., TriMas has more than 6,000 employees at more than 60 facilities in 19 countries.

Prior to 2011, its nine strategic business units operated autonomously, and each chose its own transportation partners with little to no coordination. Locations were allowed to choose their own particular carriers with little regard to price, while claims were handled

differently at each business without a focus on continuous improvement.

“It was completely fragmented,” Holowicki says frankly. And expensive. Before her arrival, freight costs were 7.2 percent of sales—a good rule of thumb for U.S. manufacturers is between 5 percent and 6 percent. “The company didn’t know there was a problem because no one was focusing specifically on logistics at the corporate level,” she says. “Nobody was adhering to any formal set of programs, everybody was doing what they thought was best for their own location.”

Holowicki set out to create what she calls “a hybrid between centralized and decentralized” logistics

management. Her position was created by Tom Aepelbacher, who had designed the GSO to bring together the procurement, logistics, operations, and continuous improvement functional areas in an effective supply chain management approach to eliminate both the functional area silos and the silos between corporate and their strategic business units.

Holowicki immediately set a goal of transportation being no more than 4.5 percent of sales. TriMas hit that goal in 2012. Last year, it was 4.8 percent—slightly above the goal, but largely because of an expensive move in 2013 of its largest manufacturing site and distribution center from Indiana, to Reynosa,

Mexico, and Dallas, Texas, respectively.

Prior to the centralization of logistics strategy, freight cost per pound in 2012 (without fuel surcharges) was 13 cents a pound. Year to date in 2014 it's 11.2 cents a pound. "That may not sound like a lot, but given how many pounds we ship, it's a big improvement," she says.

In sharing best practices across the business units and centralizing logistics strategy, TriMas Logistics has improved shipping performance across the organization through tools such as outsourced freight bill audit and payment, a transportation management system, and a number of TriMas-wide requests for logistics services quotations.

"Having a corporate contact to notify our logistics providers of newly acquired companies in order to add them to our programs and update the contracts was critical."

—Candace Holowicki, director of global transportation and logistics, TriMas

These efforts resulted in a 2.4 percent reduction in freight as a percent of sales from 2011 to 2013. Here's how the team at TriMas Logistics make it happen.

Rolling out the solution

Holowicki realized that the first step was a single logistics contact at TriMas for all modes and services. That improved relations with carriers and other providers by making it much easier to get to the correct contact within the organization—or to address any issue that crossed multiple business units.

"Having a corporate contact to notify our logistics providers of newly acquired companies in order to add them to our programs and update the contracts was critical," Holowicki says.

For example, when there's a claim, or a payables issue that cannot be resolved at the business unit level, the provider or business unit can escalate the issue to corporate logistics for assistance or mediation. Holowicki worked with the continuous improvement staff to introduce the TriMas Operating System (TOS) into logistics to bring structure, cadence, and discipline to the logistics practices and to make them more uniform.

In July of 2013, Alicia Lowry, a

logistics analyst, was added to the GSO to develop and publish standard quarterly logistics key performance indicators (KPIs) for each business unit, as well as carrier scorecards for the LTL providers. Lowry came to TriMas from a 3PL, so she was ideally suited to step in to their decentralized organization and work across all modes of transportation.

The logistics program within the GSO has centralized strategy and program design at corporate in order to leverage spending by mode across the business units; in turn, tactical decisions and execution are controlled at the business unit level. "We're finding that the cooperative nature between

corporate and the business units represents a best practice approach to provide the on-time service levels our customers require at the lowest possible costs," Holowicki says.

Through the GSO, TriMas Logistics supports its business units in reaching a corporate requirement of 3 percent to 5 percent productivity gains annually. Through monthly conference calls and an annual Logistics Summit, TriMas Logistics now provides a forum to present business unit logistics achievements and share examples of best practices from across the corporation, as well as corporate training opportunities and cross training between procurement and logistics.

For instance, at the Logistics Summit held in March, Ron Dill, director of operations for Cequent consumer products, presented an update to the logistics attendees on their improvement project launching "Box on Demand" at their South Bend, Ind., distribution center. "Now that Cequent consumer products has proved the concept, we have a great case study to share within our organization, and a proven process to replicate the success at another TriMas location," says Holowicki.

Key service providers are invited to meet with the corporate and business unit logistics staff during the annual Logistics Summit when appropriate. A recent Logistics Summit was held in Memphis in order to incorporate a tour of the FedEx World Hub as well as a

meeting with key FedEx representatives. For a service provider, having a single point of contact at TriMas for contracting and business development is very effective. That helps in exploring opportunities across business units, or across functional areas, such as their procurement or sourcing groups.

"The TriMas Logistics staff is also helpful in identifying the correct business unit contacts and maintaining accurate location information," says Holowicki.

Making it happen

To help realize the benefits she knew would be possible, Holowicki needed to go mode by mode.

TriMas utilizes four primary transportation modes—parcel, less-than-truckload (LTL), truckload (TL), and ocean—to meet its logistics needs. Parcel was manageable. With just two major providers, this mode was not far out of compliance with TriMas' logistics goals.

"Parcel was a way to get me in the door with our business units," Holowicki says. "That was a pretty easy tackle. There were only a couple business units out of alignment."

LTL was another story. It had 12 carriers under contract, but there was very little historical data being analyzed as far as rates, on-time service, claims, and other operational goals. In late 2011, Holowicki went out and met the logistics lead of every TriMas business unit to see what their complaints were, what was working, and what wasn't working.

"Everybody was very open to telling me what they didn't like," Holowicki recalls. "We then started doing this via monthly conference calls with each business unit. We discussed how each carrier was performing and how new carriers were working with a carrier scorecard."

After compiling actionable data from historical freight payment transactions, and feedback from each business unit, Holowicki began developing continuous improvement goals for each mode by business unit. By showing exactly how much money could be saved through utilization of the corporate logistics programs, business units could address the changes representing the greatest freight savings, which go directly to the bottom line.

Holowicki says that she was always

conscious not to be too heavy handed and to make sure each business unit had sufficient opportunities to provide feedback. “We never said: ‘Here’s what we’re going to do.’ Instead, we said: ‘Here’s an idea we think will work. Review the data and give us your feedback.’”

Holowicki also allowed for exceptions that made sense. For example, one TriMas business unit specializes in supporting oil and gas rigs, often in faraway places. A lot of LTL carriers in the TriMas preferred network of carriers didn’t go to those locations daily, so she allowed for use of other niche carriers in those geographic regions.

“We’re never looking for 100 percent compliance,” Holowicki says. “There are always exceptions; however, we need to find out whether they are true exceptions or just excuses.”

Ocean came next. Early in spring of 2012, TriMas performed a corporate-wide RFQ. However, getting accurate data proved to be the hardest part. Holowicki started with historical data, updated it, sent it to all nine business units for their input, and then to procurement to see what it was forecasting for the coming year.

“That was the best learn-your-new-company exercise on my part,” Holowicki says. “It was crossing over into the procurement side. I leaned on them because I couldn’t get data elsewhere. Now I share with procurement and our Lean [continuous improvement] unit. They have input, and we have a pretty good network to keep each other informed on what’s going on across the businesses.”

For it’s ocean needs, TriMas now utilizes one primary and two secondary non-vessel operating common carriers (NVOCCs) and freight forwarders. “Ocean is always more complicated than trucking,” Holowicki says. “LTL has accessorials, but ocean has a whole lot more differentiating fees and services; so we had our hiccups, but it eventually came together.”

Her goal going forward is to create consolidation of multiple business units’ products overseas before shipping to North America. That’s now doable because TriMas Logistics has visibility to the data for all nine business units, and they are sharing information across

the enterprise to see what works best.

The last mode to tackle was TL because, as Holowicki says: “It was pretty ugly.” Before her reforms, TriMas was utilizing more than 200 TL carriers. Today, it’s still slightly less than 100, but 80 percent of its freight moves by nine primary TL carriers.

Prior to the changes, less than 20 percent of TriMas TL freight moved under contract, causing the company to miss out on volume savings through long-term contracts. Today, nearly all of its TL freight moves under contract.

Holowicki calls her TL reforms “a work in progress.” In July 2013, Lowry, their new logistics analyst, did an in depth analysis of each business unit’s TL usage. An RFQ is now done with primary carriers for new lanes, and if one TriMas business unit needs TL capacity it can often find it through a preferred TL carrier from another unit.

“The goal is to eliminate empty miles by creating round trips and three-way TL moves among different TriMas business units,” says Holowicki. “That’s the Holy Grail: triangulation. We keep digging into the data and the operational business rules looking for opportunities. With increased visibility and advance load planning through our TMS, we’ll find it.”

Continuous improvement

As it stands now, Holowicki gives her programs an “A-minus.” She believes the most beneficial improvements have happened because she has an established logistics leader within each business unit.

“That’s been one of the biggest changes,” Holowicki says. “Instead of Joe calling corporate, he can call a sister company location in his area to discuss a problem or an opportunity. If the business unit logistics leaders can run point on solving cross-business unit problems or developing new opportunities for our programs, then I’ve done my job.”

At the annual Logistics Summit, the logistics managers from each unit give a PowerPoint presentation to teach leaders in other business units what’s working best. “Before, nobody saw these wins,” says Holowicki. “Now, if someone

at one business unit wants to implement a project that was presented, we can then replicate it and get maximum results in less time. It’s best learning from each other rather than having corporate or a consultant telling people how they should do it.”

That cooperative approach to is always on Holowicki’s mind. “I don’t have to be the bad guy, and I don’t have to force anything,” she says.

“We never said: ‘Here’s what we’re going to do.’ Instead, we said: ‘Here’s an idea we think will work. Review the data and give us your feedback.’”

—Candace Holowicki, director of global transportation and logistics, TriMas

“Through quarterly reports and published KPIs, management and the business units know where and what the opportunities are.”

“When one group decides to be proactive and implement positive change, the cost savings is good,” adds Aepelbacher, the vice president of the GSO. “When you take those same best practices and spread them to all 60 operating facilities, the benefits are enormous and the opportunities are huge.”

According to Aepelbacher, that 2.4 percent reduction in freight costs as a percent of sales equals substantial savings, and the organization is on track to meet that goal again this year.


“Another critical aspect in the success of the GSO is that we do not take credit for the savings that we identify,” Holowicki says. “All of the credit for savings in our projects is assigned to the business unit that works with us and completes the project.”

She appreciates this more constructive approach due to the fact that earlier in her career she saw other corporate structures taking credit for any improvements and savings, making the business units look bad in the process.

“In our model, the GSO is a corporate resource available to any TriMas business unit. As long as the business units find value in our programs and services, that’s all the verification of our value that is needed,” she says.

—John D. Schulz is a Contributing Editor to Logistics Management

Distribution Network Design: The e-commerce effect



New research and analysis offers suggestions of a new modal mix and a subsequent distribution process designed to help retailers meet more pressing customer demands.

BY JEFF BERMAN, GROUP NEWS EDITOR

The ongoing upswing in e-commerce and mobile commerce activity continues to make a significant impact on how retailers, distributors, and third-party logistics providers (3PL) approach their distribution network processes, according to recent research from global real estate firm Jones Lang LaSalle (JLL).

In its report entitled *Retail 3.0: The Evolution of Multi-channel Retail Distribution*, JLL notes that more and more retailers are leverag-

ing a multi-channel approach to meet buyer expectations and compete for market share. It adds that about 80 percent of retailers say that online sales have gone up in the last five years—with some saying by as much as 25 percent. This, in turn, has certainly led to retailers modifying traditional distribution networks to better match up with how they handle e-commerce-related business.

“E-commerce was on the radar screen five years to 10 years ago, but people were not really doing anything about it,” says Kris Bjorson,

managing director of JLL's retail and e-commerce distribution group. "But now everyone has some type of plan around it."

However, these plans can vary, with retailers letting third-party service providers that specialize in e-commerce fulfillment handle things, or choosing to partner with another retailer building out of its own e-commerce distribution network that it independently owns and operates, says Bjorson.

Determining transport strategy

Across the retail spectrum, Bjorson says that companies are at opposite ends of extremes and trying to define their multi-channel strategies—and when it is defined then determining how to implement that strategy inside or outside of their own distribution networks.

According to Bjorson, the approach retail shippers usually take starts with the service strategy that they need to meet customer demand from both a delivery and transportation mode perspective. On the delivery side, retail shippers need to know specifically what a customer wants as well as where it will be buying product.

This basic premise has seen customers get more comfortable with e-commerce in recent years, and in turn has upped the ante for retailers to have a reliable delivery service strategy. This has, of course, ushered in the need to take a longer look at how retailers view their transportation planning processes, which are contingent on specific delivery time frames or windows.

"Both shippers and carriers are looking to use greater windows of time to deliver product to consumers," says Bjorson. "Our retail clients are always asking if there's an alternative mode they can use, and every one is looking at their modes and asking if they should hire a third party to move their freight via truckload, less-than-truckload, or ground parcel—or alternatively, set up a private fleet to take more control over its service capabilities."

For those not ready to commit to a private fleet, Bjorson says that retail shippers need to have at least three to four carriers with good rate structures on the lanes they're moving freight. And if they elect to leverage intermodal for larger products, they need to make sure that they have a distribution center (DC) that's served by rail so they can cross-dock and locally transfer freight as needed.

"Having rail service is being viewed more as a must by many retailers," notes Bjorson. "It's still primarily based on the inbound supply of inventory, and not as much on the outbound side or getting it to the customer."

If the DC site is not rail-served, then the shipper needs to identify an intermodal yard in close proximity. "We'll have to map out and model what it costs to get product from that intermodal yard to the DC. If it makes sense for the shipper to use intermodal, whether it be for a sustainability

initiative or due to trucking capacity constraints, then that box is checked."

What is that optimal distribution network?

Once the transportation strategy comes into clearer view, then the shipper needs to implement what JLL describes as the "optimal distribution network"—one that Bjorson defines as achieving the balance between service and cost.

However, this ideal network is becoming harder to realize due to the fact that it's getting tougher to make long-term projections on how retailers will need to have their distribution networks perform five to 10 years out.

Ideally, these projections will need to be based on how revenue and demand is expected to grow and the products retailers will carry. There are other factors to consider, such as making significant capital investments in DCs, including

"Having rail service is being viewed more as a must by many retailers. It's still primarily based on the inbound supply of inventory, and not as much on the outbound side or getting it to the customer."

—Kris Bjorson, managing director, JLL retail and e-commerce distribution group

the more sophisticated materials handling systems that act as the foundation of many e-commerce business plans.

"Today, it's hard to even see 18 months out for these types of projections, with three years being the new stretch for planning and projections," says Bjorson. "It takes six months to get a study done and another 12 months to implement it. That's 18 months of that three years right there, and when the implementation is done you are back to studying it again. This process is called distribution network optimization."

These implementation steps are wide-ranging, with some retailers expanding networks through acquisition, as was the case with Walgreens acquiring drugstore.com, or Bed Bath and Beyond opening up multiple e-commerce distribution centers.

These steps are vital, as retailers are meshing new shopping channels to add complexity and flexibility into their supply chains, observes Bjorson. This entails taking steps to do things like reconsidering store footprints and total inventory levels.

In its report, JLL notes that retailers are seeing more cost-effective advantages to boost online logistics operations over opening up new brick and mortar locations. One way retailers are doing this is by augmenting regional distribution networks by rolling out e-commerce specific DCs.

This is becoming more apparent by looking at the annual



Speed drives service. And with that mantra in mind, Bjorson adds that e-tailers need to have facilities located close to UPS or FedEx ground locations to keep up with new expectations.

reports of retailers, nearly all of which foreshadow growth in e-commerce. This is being addressed, according to Bjorson, by the investments retailers are making into elements such as inventory, technology, and real estate to further support that growth.

These investments are crucial, as these centers also require more of a capital investment, as e-commerce DCs center around direct order fulfillment and are more costly and require more staff. What's more, many retailers are dealing with declining store growth counts, as e-commerce sales growth continues to climb.

"In terms of supply chain improvements, it's really all about speed as it relates to productivity and picking individual items, like with Amazon.com buying Kiva Systems," says Bjorson. "Using this type of [robotic] technology helps Amazon quickly process an order and box it up and send to a consumer who needs it tomorrow."



Speed drives service. And with that mantra in mind, Bjorson adds that e-tailers need to have facilities located close to UPS or FedEx ground locations to keep up with new expectations. "Consumers want next-day delivery of their orders," he says. "If you can pick an order faster and get it to a later cut-off time to deliver to a customer next day, then you're running ahead of the game and building in new efficiencies."

Design and technology

Where these DCs are located subsequently forces retailers to think about the design of their facilities. They now need to make sure that they're quickly picking individual items and have enough dock doors and trailer space to re-circulate trucks.

To successfully do this, retailers need to be nimble and flexible with their "inside the box" operations and have a fluid transportation network set-up intact. And with inventory management now more crucial than ever in supply chain management processes, technology is a linchpin for speed and efficiency from point of sale to the inventory fulfillment mechanism.

"Technology is where you talk about evolution in the e-commerce distribution world," says Bjorson. "One of the big requirements is a technology investment. From technology it goes down to the materials handling level as the next big investment in terms of importance, with real estate further down."

Even with technology being higher up on that list, the investment in materials handling systems is roughly 40 percent more, according to Bjorson.

Bigger business picture

From a business perspective, Bjorson says that it's key for JLL and similar research and consulting firms to work with retailers to fully understand their multi-channel strategies—which requires an initial business assessment and then an assessment of their current business distribution networks.

"Most retailers work within a regional distribution center network, and need to have proximity to ground hubs, as well as have the size and needed workforce to have an e-commerce distribution facility," Bjorson says. "On that assessment, there are instances where retailers find they're not in the right locations or in that states that do not have Internet taxes."

It's then vital to look at the costs needed to convert those regional distribution centers into a regional e-commerce DC. Bjorson adds that if it's found that a retailer cannot make the conversion, it then needs to consider working with a third-party provider for e-commerce related work, or finding an alternative location to roll out an initial e-commerce facility. □

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For More Info



2014 State of Cloud Computing:

We explore the progress supply chain management (SCM) applications are making in the cloud, pinpoint key benefits, attempt to demystify the concerns, and discuss which solutions are helping to solidify cloud delivery in this somewhat reluctant market.

BY **BRIDGET McCREA**, CONTRIBUTING EDITOR

This year, businesses in the U.S. are expected to spend over \$13 billion for cloud computing and managed hosting services, according to Silicon Angle's recent report, *20 Cloud Computing Statistics Every CIO Should Know*. The software delivery mechanism, which relies on a network of remote servers hosted on the Internet to store, manage, and process data, is growing exponentially and pushing

an increasing number of shippers to consider off-premise application solutions and data storage.

When asked about their use of the cloud within the supply chain management space for *Logistics Management's 2014 Software User Study*, logistics professionals offered up a mixed bag of responses. Twenty-seven percent of shippers say that they're currently evaluating such options or that they plan to do so within the next 24 months.

Twenty-six percent say that they're not sure if their companies are interested in cloud computing, and 24 percent have already adopted such solutions.

However, another 17 percent of shippers checked the "It's not an option for us" box when asked about their cloud computing intentions. Security concerns, privacy issues, system reliability, and data integrity topped the list of cloud-related concerns.

Over the next few pages we'll explore the growth of supply chain management (SCM) solutions in the cloud, pinpoint the key drivers of this trend, attempt to demystify the concerns, and discuss which SCM applications make the most sense for this delivery method.

Defining itself in SCM

Plugging partners into the cloud

With more and more users and applications discovering each other in the public cloud, it just makes sense that multiple SCM software solutions would be gaining traction in this setting.

According to Clint Reiser, research analyst with ARC Advisory Group, the two most prominent cloud-based supply chain applications currently using this alternate delivery method are global trade management (GTM) and transportation management systems (TMS). It has long been thought that these two are particularly good matches because they require ongoing import/export, rule/requirement updates (for GTM) and connections with multiple outside partners (TMS).

According to Reiser, the next most popular SCM applications found in the cloud, albeit much further down the list from GTM and TMS, are supply chain planning (SCP) and warehouse management systems (WMS). He says that all four applications have experienced some level of success in

the cloud due to the fact that they rely on the “ability to have multiple parties providing information to one another outside of the organization.”

Put simply, being able to “plug” outside partners into a web-based solution that’s available via a password-protected site on a 24/7 basis has pushed TMS, GTM, SCP, and WMS further into the cloud than any other SCM applications to date.

“Multiple organizations can use cloud-based applications for communicating with one another and for exchanging information,” says Reiser. Take GTM, for example. Most shippers use this application for a combination of visibility and event management, says Reiser. Using the software, a shipping firm may receive a pallet of goods, scan it upon receipt at the docks, and then enter more information about the goods as they pass through customs.

Then, when the shipment is loaded, the firm may enter additional information or, in the case of domestic shipments, provide information to a

TMS. “This creates an environment of visibility for trading partners,” says Reiser, “with the fact that the information is available 24/7 in the cloud adding even more value.”

Reiser compares this scenario to a traditional, licensed software structure, where only the company itself has access to its information and data and opts only to share it as necessary. “When you have a core solution that’s only being utilized within the four walls of a warehouse, for example, then the extra value that comes from being able to share with your information network is taken away,” he adds.

Taking on a life of its own

Chris McDivitt, vice president and supply chain technologies leader for Capgemini North America, says that the cloud makes the most sense for shippers that want to collaborate with outside entities. Along with TMS, he says that sales and operations planning (S&OP) applications—which determine optimum manufacturing

output levels—have caught on in the supply chain space.

By implementing these and other applications in the cloud, shippers gain the ability to collaborate on complex problems and make “faster decisions across the customer-supplier network,” says McDivitt. “When you’re talking about shippers that have hundreds of thousands of trading partners, having a cloud-based application in place helps provide greater visibility and more opportunity to create a real community of shippers, receivers, and service providers.”

When using S&OP, for example, McDivitt says that shippers are attempting to make decisions around the balance of demand and supply across both customers and shipping partners. By leveraging the cloud—and by adding web 2.0 tools like social media into the mix—he says that shippers can more effectively communicate and, as such, better attain that delicate demand-and-supply balance.

Despite the obvious benefits of using the cloud for SCM applications, not all shippers are enthused about “opening the doors” to their private data and information to a wider audience. As evidenced by *Logistics Management’s 2014 Software User Study*, there are still companies that are either evaluating their cloud-based options or not interested in the delivery method at all.

For most, the apprehension lies in the thought of sharing data in the public cloud. “The cloud is still new and there have been some pretty well publicized security breaches lately [Target and Home Depot, for example],” says McDivitt. “Because of this, we’re still seeing some reluctance around this unproven idea of sharing sensitive and proprietary data online.”

Reiser says that reluctance increases when the application in question is, in essence, the backbone for the organization

in question. In most cases, shippers are worried about the loss of control that could come when an on-premise solution is replaced by a subscription-based model.

According to Reiser, this can beg the bigger question: We put all of this money into implementing and configuring the system, and now we don’t own it anymore? When the mindset falls in this territory, he adds, a cloud-based subscription model can actually be a drawback.

More cloud ahead

With U.S. companies expected to invest billions of dollars in cloud-based software, and with companies like Oracle rolling out cloud versions of their popular TMS applications this year, the likelihood that more shippers will adopt this delivery method is highly likely.

Calling the cloud one of several “disrupters” that are currently affecting the supply chain software space, Gary Hanifan, managing director at Accenture, sees more opportunity ahead for shippers looking to leverage the cloud. “We see the movement to cloud as an important one,” says Hanifan, who points to GT Nexus and Kinaxis as two providers that are “appropriately platformed” to gain traction in the cloud SCM space.

ARC’s Reiser also sees more potential for growth in the cloud-based SCM space and says WMS will likely be the next application to expand its footprint in this arena. He also expects more companies to offer both on-premise and cloud-based models in order to fulfill their customers’ wishes on both fronts.

“If you want your solution in the cloud, then they’ll deliver it for you via a subscription basis,” says Reiser. “If you want to buy the software upfront, pay for it, and host it yourself, then they’ll do that for you too.”

Before setting customers up with one delivery method over another, vendors will also run the numbers to help users determine the most economical choice for their operations. “It’s basically six of one and a half dozen of another at this point, with shippers looking for break even points and figuring out how much additional economies of scale can be gained by hosting it themselves versus putting it in the cloud,” adds Reiser.

With the computing world as a whole moving more and more applications into the cloud, McDivitt says the fact that more supply chain management and planning software solutions will follow suit is inevitable. “There’s no doubt we’re going to see more and more applications developed around the cloud,” says McDivitt, “and across all three supply chain areas—execution, planning, and management.” □

Test your knowledge of the cloud

Here are 10 key pieces of information from Silicon Angle’s recent report, *20 Cloud Computing Statistics Every CIO Should Know*:

1. By 2015, end-user spending on cloud services could be more than \$180 billion.
2. If given the choice of only being able to move one application to the cloud, 25 percent of respondents would choose storage.
3. Eighty-two percent of companies reportedly saved money by moving to the cloud.
4. More than 60 percent of businesses utilize cloud for performing IT-related operations.
5. Eighty percent of cloud adopters saw improvements within six months of moving to the cloud.
6. There’s an estimated one exabyte (one quintillion bytes) of data stored in the cloud.
7. More than half of survey respondents say that their organization currently transfers sensitive or confidential data to the cloud.
8. There are 545 cloud services in use by an organization on average.
9. Fifty-nine percent of all new spending on cloud computing services originates from North American enterprises, a trend projected to accelerate through 2016.
10. Of the enterprises surveyed, 38 percent break out cloud computing budgets, while 60 percent include cloud-related spending as part of their enterprise-wide IT budgets.

—Bridget McCrea, Contributing Editor



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Optimizing 3PL Relationships: How to avoid commoditization

While shippers may generally be content with the reliability of their 3PL partners, new research indicates that there's considerable concern about the value of long-term, strategic relationships. Industry analysts explain how innovation and a deeper commitment to collaboration will become the key differentiators in the 2015 marketplace.

BY PATRICK BURNSON, EXECUTIVE EDITOR

A recurring theme seems to be surfacing in the complex world of global third party logistics providers (3PLs) these days. The sector is booming, but shippers are still “shopping around” for a better price or more complete service.

Explaining the friction that exists between 3PLs and the customers that they serve in key manufacturing and retail sectors was a daunting challenge for researchers at advisory firm SCM World, but a recent study may finally provide some answers.

“The disconnect between 3PL performance levels and their reluctance to embrace new technologies was something we hoped would change by now,” says Barry Blake, vice president of research at SCM World. “But that hasn’t been the case at all. Shippers say that they’re still searching

for more value.”

Between January and May of this year, SCM World fielded a six-question survey in order to understand the supply chain community’s perception of its 3PLs. After sifting through the remarks made by 557 global shipper organizations, the results were made public last month.

“The story emerging from the data is compelling,” says Blake. “Third-party logistics providers are seen as fast and fairly reliable...but not innovative. Furthermore, logistics managers are questioning the value received for the cost of their 3PL services.”

Blake asked respondents to rate 3PLs on the following metrics: reliability; speed; innovation; value for the money; and scale of impact, or how vital the 3PL is to the shipper’s strategic needs. With a few exceptions, most 3PLs scored well, with





DAN VASCONCELLOS

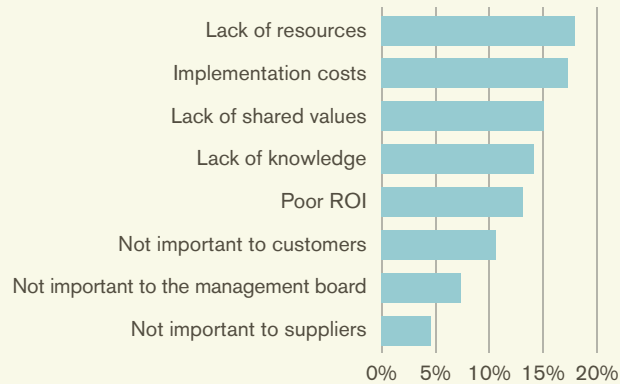
over 50 percent of respondents rating them “good” or “excellent” at the aggregate level when it comes to the basics, such as reliability.

However, shippers don’t seem completely confident that they’re receiving the degree of value expected for the money they are paying for 3PL services. Moreover, the results showed that the 3PL community collectively struggles to deliver innovative solutions in the eyes of their customers.

“The message coming across loud and clear through the data and follow-up discussions with logistics professionals is that 3PLs need to do a much better job understanding the businesses of their customers if they are to move up the innovation curve,” says Blake.

Blake adds that, while the results didn’t surprise him, shippers need to keep in mind that this is a two-way street. Unless

Biggest challenge in achieving supply chain sustainability via outsourcing



Source: eyefortransport

Supply chain risk weighs heavy in relationship optimization

The majority of shippers see supply chain risk management as a vital element on the way to optimizing their relationships with third-party logistics providers (3PLs). According to a new study by Accenture, however, only seven percent of shippers are generating returns of over 100 percent on their supply chain risk management investments.

Indeed, the study suggests that 3PLs hoping to optimize their services for shippers should develop distinct approaches toward risk mitigation.

Seventy-six percent of companies participating in the *Accenture Global Operations Megatrends Study—Focus on Risk Management* describe supply chain risk management as “important” or “very important.” Of the more than 1,000 companies represented across 10 industries, 25 percent plan increased investments of at least 20 percent in supply chain risk management in the next two years.

The analysis reveals that while nearly all of the companies represented in the study receive a return on their

investment (ROI) in risk management, the leaders—those seven percent that generated returns exceeding 100 percent—had three practices in common that distinguished them from others:

1. Make risk management a priority.

The leaders make risk management a strategic imperative and recognize the importance of capabilities that help them gain greater visibility and predictability across their supply chains.

2. Centralize their responsibility

for risk management. They have a central risk management function led by an executive in the C-suite or a vice president who oversees all of their risk management activities.

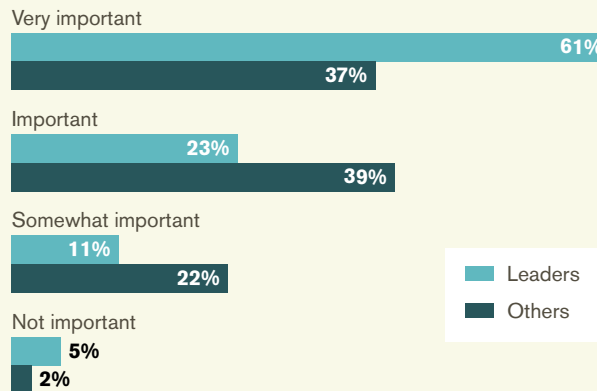
3. Invest aggressively in risk management with a specific focus on end-to-end supply chain visibility and analytics.

Leaders were nearly three times as likely to say they planned to boost their investment in risk management by 20 percent or more in the next two years.

“Although unforeseen events or natural disasters lead some to give up on risk management, most risks can be managed to not only minimize the downside, but also to gain a competitive advantage as a result of being prepared to respond to circumstances when they arise,” says Mark Pearson, senior managing director of Accenture Strategy Operations. “Scenario planning and robust analytics can play a key role in developing effective risk mitigation strategies.”

—Patrick Burnson, Executive Editor

Leaders make operations and supply chain risk management a priority



Leaders are companies that generated an ROI of 101% or more on improved SCRM capabilities in the past two years.

Source: Accenture

a shipper “incentivizes” its 3PLs to focus on innovation, it’s difficult for the provider to make the necessary investments to support it.

“Innovations don’t typically sprout overnight, nor even during the yearly tender cycle between parties,” says Blake. “Shippers and 3PLs should have a one-on-one discussion about risk mitigation, and how change management can address those concerns.”

Overall, the major expectation for logistics service providers is cost savings. This entrenched focus essentially commoditizes logistics services, creating a self-perpetuating cycle in the marketplace where 3PLs resist investing in innovation since their customers don’t yet believe that innovation

will drive cost savings more effectively than traditional methods.

“This pushes logistics services further towards blandness without any meaningful differentiation,” Blake concludes. “Both sides need to come together if logistics service innovations are to take root and see the light of day.”

Partnership pays off

As cost control remains a key priority for supply chain professionals—and no doubt will remain so for many years to come—initiatives such as horizontal collaboration and supply chain sustainability are becoming increasingly important.

Researchers at London-based Eyefortransport say that their recent survey of

global chief supply officers indicates relationships between supply chain executives and 3PLs are increasingly improving as these providers are perceived to be more proactive in suggesting strategic partnering.

Some prominent U.S. shippers agree. “Given the ongoing talent-gap in the supply chain industry, we see a greater reliance on outsourcing key functions,” says Craig Boroughf, senior director, global sourcing for U.S. Gypsum Company, a subsidiary of USG Corporation. “While we continue to invest in our own human resources, 3PLs can augment that effort by providing skilled workers as we need them.”

Boroughf is responsible for USG’s

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“While we continue to invest in our own human resources, 3PLs can augment that effort by providing skilled workers as we need them.”

— Craig Boroughf, senior director, global sourcing, U.S. Gypsum Company



procurement, including supplier management and strategy of raw materials, indirect goods, and services and freight transportation services. He maintains that 3PLs are showing a greater willingness to become strategic partners, but must continue to demonstrate that they’re putting shipper value ahead of pure cost.

“As in any customer-supplier dynamic, 3PLs should concentrate on economies of scale when budgeting in the procurement arena,” says Boroughf.

Frank McGuigan, president of transportation management at 3PL Transplace, says that closing ranks with his customer base comprising USG and others is important, but requires a new “play book.”

“The 3PL has undergone tremendous change in recent years,” says McGuigan, “and we are aware that shippers can hedge their bets by working with several 3PLs at the same time. But as their reliance on outsourcing becomes greater, the exposure to risk becomes more of a concern.

Trust but verify

As President Reagan was fond of saying: “Trust but verify.” That adage is winning currency with 3PL consultants as well. Steve Banker, who leads the supply chain and logistics team at market research firm ARC Advisory Group, says 3PLs that are seeking to optimize their relationships with shippers should invest carefully in a transportation management system (TMS).

“Before committing to any TMS demonstration, we suggest that the 3PL

asks about shipper ‘onboarding,’” says Banker. The 3PL must be able to leverage the configuration settings used to support shippers with templates that can be setup for various implementations. Shippers

a TMS that manages multi-leg, multi-mode, time-phased planning and execution,” says Banker

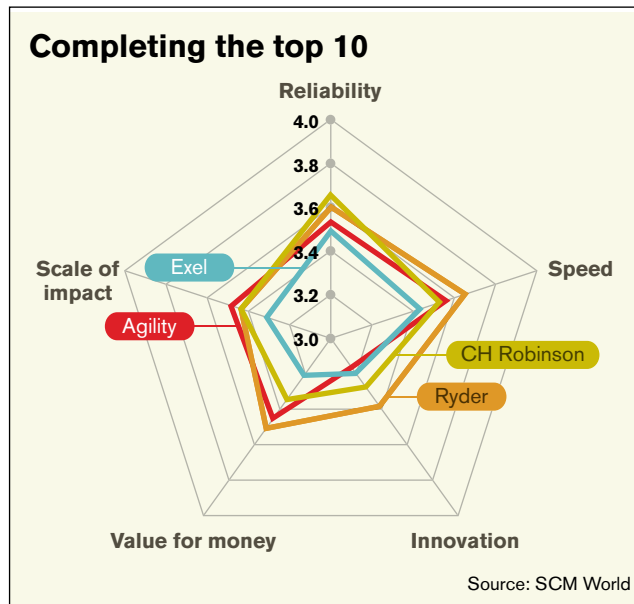
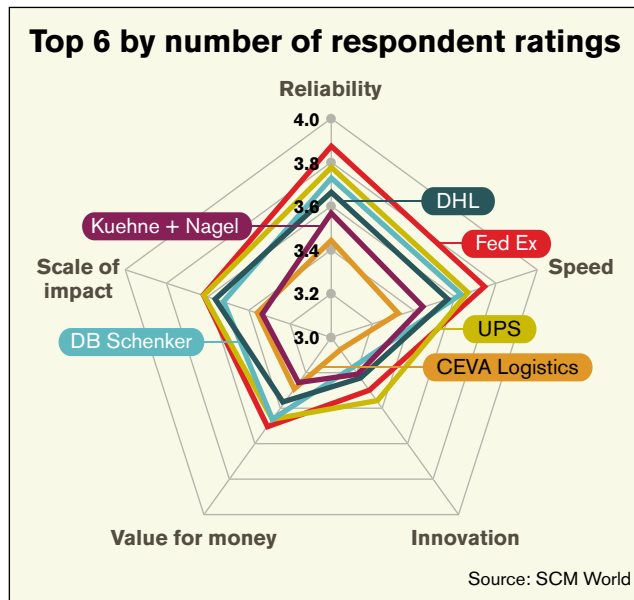
Is there a limit to the number of legs or modes? “For shipments that cross an ocean, that time-phased element is important,” says Banker. “If you look at a dray move to port, 27 days on sea, do you really want a pre-planned truck move on the other side of the ocean? A lot can happen in 27 days.”

Which brings security into the picture. Banker says that there should be “logical barriers” between a 3PL’s client base so that on shipper can’t see another’s shipment performance or billing.

A new study by Accenture reinforces the idea that 3PL/shipper relationship optimization will be focusing on risk in the future. “As demonstrated by the leaders in our study, a centralized, top-down approach to supply chain risk management tends to generate the highest ROI on risk management,” says Mark Pearson, senior managing director of Accenture Strategy Operations.

“Such a commitment to risk management between the two parties can also help managers guard against business disruptions in the wake of natural disasters, geo-political events, shifts in commodity or shipping prices, or any number of circumstances that can endanger a company’s operations,” adds Pearson.

Patrick Burnson is Executive Editor of Logistics Management



Product Distribution: Getting from “Me” to “We”

If you work for a small or mid-sized consumer product company, you’re almost certainly paying too much to get your products to market. Up to 35 percent too much.

It’s not because you’re lazy or inefficient or a lousy freight negotiator. It’s because you’re managing your own line of supply to all your retail customers.

Visit the loading dock of a retail distribution center and you’ll see your products arriving in LTL shipments at the same time as products from dozens of other companies. Many of these shipments come from the same area, yet arrive in separate, half-filled trucks. What a gross waste of money and energy.

What’s the answer? Create an infrastructure for product distribution that like companies, even competitors, can share.

In a collaborative distribution environment, consumer product manufacturers would consciously co-locate inventory in multi-client warehouses run by neutral third party logistics companies (3PLs) that house similar products shipping to the same retailers. Instead of letting buyers order separately from hundreds of different suppliers, retailers would create consolidated orders for suppliers whose inventory is at the same DC.

But, sadly, today’s retail supply chains are more about “me” than “we.” Individual companies scratch and claw for incremental advances, ignoring a game-changing strategy that could erase literally billions in costs.

We’ve heard the counter-arguments: “We need to maintain a separate distribution strategy and infrastructure because our supply chain is a competitive advantage.”

Nonsense.

Consumer product companies compete based on product quality, price and promotion. The goal with distribution should be to get products to market quickly, accurately and efficiently. By far the best way to do this is to create an infrastructure that companies can share, particularly small and mid-tier shippers reliant on higher-cost LTL.

What are the benefits for consumer goods companies of going from “me” to “we” in their distribution strategy?

- It enables a shift from LTL to consolidated truckload shipments, saving **up to 35% off LTL costs**. For a \$200 million company, that could equal \$6.8 million in incremental profit.
- It takes underutilized trucks off the road, reducing congestion and carbon emissions. Capturing just half of today’s underutilized capacity would **cut freight truck emissions by 100 million tons per year and reduce diesel fuel expenditures by more than \$30 billion annually**.

The shift from “me” to “we” would require change, but it’s not a radical idea. In fact, shared infrastructures are quite common outside logistics. For instance, wireless service providers share cell towers to avoid redundant sites and reduce capital expenses. They understand that *the power is not in the infrastructure itself, it’s what you do with it*.

Financial and environmental pressures demand that we act now to reduce costs and greenhouse gases from the retail supply chain.

Take the first step. Look for opportunities to place your inventory with 3PLs who serve a large concentration of customers in your space – even if your arch rival is one of them. *Especially*, if your arch rival is one of them.

Kane Is Able is a third-party logistics company that operates shared and dedicated distribution centers in every region of the country. KANE has long advocated for a more collaborative approach to getting consumer goods to market. For more information, read the KANE Viewpoint, “The Power of We,” at www.kaneisable.com/powerofwe

Lift truck technology: Elevating the entire facility

As the industry successfully harnesses the wealth of available lift truck fleet data, opportunities for improvement extend throughout the operation.

BY JOSH BOND, EDITOR AT LARGE

In the last few years, the concept of fleet management has been spreading throughout lift truck fleets of all sizes. At their most basic, fleet management practices work to help fleet owners spend as little as possible on equipment, maintenance, and operators while ensuring any investments made are worthwhile.

For some, a bit more discipline around tying planned maintenance intervals to hour meter readings is a good place to start. For others, real-time management of each penny is supported by a suite of integrated hardware and software technologies, most of which only emerged in the last decade.

In all cases, the closer inspection of fleet costs and processes is painting an increasingly comprehensive picture of the impact a well-managed fleet can have on not just pallet moves per hour, but the efficiency of the entire business.

In conversations with an assortment of lift truck suppliers, the general sense is that fleet management practices are poised for yet another significant shift, from something that promotes efficiency in the once-ignored lift truck fleet into a key part of an “operational management system.”

This gives the fleet an equal footing with other production, labor, and

inventory management disciplines in terms of visibility, productivity, and interconnectedness.

In fact, the lift truck no longer plays a supportive role by simply helping move materials from one value-added station to another, but has become an integral part of ensuring value throughout an operation.

“The transition from fleet management to operational management is a natural extension of analyzing each piece of the whole,” says Alan Marder, director of technology solutions at Raymond. “When you look at parts, lift trucks, and operators, you see that each is connected to a number of other elements in the warehouse. When you improve one piece, it impacts the others, and technology can help make that happen while quantifying the results.”

Learning from the lift truck

Basic or even standard lift truck technologies can help transform the lift truck into a powerful communication hub. It can report the status and location of equipment and personnel to managers in real time, and it can automatically notify maintenance personnel of any fault code or failed inspection, which can help achieve a near 100 percent first-time repair rate.

Most importantly, a connected lift truck can facilitate responsiveness as

business conditions change.

“It is certainly not what it used to be 40 years ago, when customers would make a five-year plan for their fleets, and five years later be working with the same exact specifications,” says Mike McKean, fleet management sales and marketing manager for Toyota Material Handling, USA. “Today we run into seasonal periods and times when a forklift needs to be used differently in the course of a year. Many customers are more focused on moving materials than being efficient, but technology inside and connected to the forklift can make it much easier to fine tune equipment to the application.”

Ideally, fleet management is not handled as a separate discipline, but is instead closely tied to available data from all systems. Because warehouse management systems (WMS) and inventory management software is becoming less costly, even a small company can plug and play and begin to collect good information about the lift truck fleet.

Perry Ardito, general manager of Jungheinrich’s warehouse products group for Mitsubishi Caterpillar Forklift America, says data from a WMS or fleet management software can help fleet managers make better decisions than ever before.

“They can become more intimate



with all of the happenings inside a facility, including where product is stored, when it is moved, and the performance of the lift truck and its operator,” says Ardito. “Technology in the lift truck allows for communication between the equipment, maintenance personnel, the equipment manufacturer, and the customer so that they can make the right decisions to get better and cheaper performance. In fact, we’re very close to having the lift truck communicate to us in advance of a problem.”

Jim Gaskell, director of Global Insite Products for Crown Equipment, says he’s seeing more fleet management being connected from a service standpoint to the whole data suite, so managers know what each unit is doing and when it is being serviced. These figures are critical to understanding overall utilization.

“Telematics often tell them they are using equipment 40 percent of the time as opposed to the 100 percent they assume,” Gaskell says. “Some observe utilization all the way up to 65 percent, but it’s still much lower than they expect.”

When a customer sees that 40 percent figure, they want to dig deeper to find out which units they use the least, what peak utilization looks like, and how many lift trucks they might be able to remove. “Every new discovery changes the application,” says Gaskell, from overall fleet reductions to the smallest costs. “If you look at maintenance for each lift truck you might see that some go through tires more quickly than others. What is happening in that part of the warehouse?”

Labor, management, and systems

With the growing popularity of outsourced service arrangements, businesses of all sizes have shifted focus from maintenance to the operator, who accounts for nearly 70 percent of a lift truck’s cost over its life. Reducing and optimizing the fleet size is a good way to target these costs, but managers can find value in information about the utilization of both the equipment and the operator.

McKean suggests customers visualize two buckets, one for the available hours on the forklift and another for labor at X dollars per eight hours. “You’re

paying for those eight hours regardless,” he says. “But in the other bucket, you might have 28 percent idle time when the forklift is not in use. Accounting for breaks and lunch, maybe only 15 percent of that idle time is waste. Why are you paying the operator at 100 percent when the lift truck is only in use 85 percent of the time?”

Technology can inform managers about what the operator is doing—and what they could be doing. “Forklift technology can help you manage someone who is not on the lift truck,” McKean says. “It’s an opportunity to assign tasks like cleaning up to avoid damage from shrink wrap caught around an axle. They’re little things, but until you have the tools to get that information you can’t create an action plan.”

To keep track of operators wherever they are, operator access controls intended for lift trucks might even be fitted to other equipment. Marder offers the example of a customer with robotic shrink wrappers that require operator input. “At the robot, the driver swipes the same ID card he or she uses on the lift truck and it tells the system the operator is on a shrink wrap machine instead of the lift truck,” Marder says.

Jungheinrich’s Ardito estimates that perhaps 20 percent of customers are using access control systems that allow tracking of unique operators. “Of the remaining 80 percent, maybe 50 percent have a procedure and protocol in place, and the other 30 percent keep their fingers crossed and hope operators make good decisions,” Ardito says. “For a lot of customers, they need a paradigm shift from what they were doing previously, whether for people, processes or equipment. Each piece of equipment and each operator has to be committed to task at hand in order to do more with less.”

The first layer of fleet management adoption typically targets standard reports: who logged on, idle time, and



Onboard technology can facilitate automatic communication between lift trucks, other equipment, and service providers.

travel with or without a load. “We now realize those are just the basics,” Gaskell says, “and customers are ready to go beyond that.” Still, some customer with a labor management module in their WMS feel they don’t need labor data from the lift truck.

“But there can be a real benefit to pulling in that data, since a pure standard doesn’t tell you why an operator fell below standard,” Gaskell explains. “And it goes both ways; the lift truck can help you either identify why performance fell short or why a certain operator is performing well above standard so you can replicate that. Even ‘Mom and Pop’ operations that don’t have labor management systems can use lift trucks to get basic labor management functionality.”

At the other end of the spectrum, Marder says capturing and integrating data from the WMS, time clock, battery, maintenance, utilization and budget can provide a daily, comprehensive and real-time view of costs. For example, it is possible to identify how much it should cost to put away 1,000 cases.

“If it should have cost \$3,500, but really cost \$4,200, managers can jump on that immediately,” says Marder. “Instead of reviewing reports monthly, a manager can access a daily report revealing details about each event. An engineered labor standard can tell you a task is budgeted for 50 seconds, but now you can see the lift truck’s speed, route and actions that resulted in that task taking 75 seconds.”

Aggregating data from multiple sources can also ensure the right equipment is used for the right job.

One of Marder’s customers had a fleet including reach trucks, pallet jacks, and sit-down counterbalanced trucks. “The customer was performing low-level picking, and we showed them they were using reach trucks for that task,” Marder recalls. “Pallet jacks, which should have been used in that application, were only used 17 percent of time. They were paying 65 cents a case with the reach

trucks, and only 26 cents with a pallet jack.”

The brains of the operation

In addition to increased visibility into maintenance costs, both standard and optional features can help control fuel costs. Richard Pulcini, Class I product manager for Yale Materials Handling Corporation, notes the rise of electric lift trucks in recent years, from roughly 40 percent of the market to as much as 60 percent. Combined with customer interest in efficiency, the growth of electrics has resulted in solutions to challenges once considered unavoidable.

Years ago, Pulcini says, DC lift truck controls created a performance drop-



Even basic lift trucks are increasingly connected to systems, labor management, and materials handling processes throughout a facility.

off toward the end of a battery’s capacity. With new AC controls, he says, customers can expect the same performance at the beginning and end of a shift. Pulcini says there is an industry trend to migrate toward the AC platform, which reduces the number of components subject to failure and frequent maintenance while boosting runtime. But AC-based lift trucks give users even more tools to control productivity.

“Motor controllers can be mapped for two or more levels,” Pulcini explains. “One might prioritize efficiency for long-runtime applications. The second could encompass a suite of settings in the lift truck that provides high performance. For most of the year, a customer is focused on fuel costs, so they run in economy mode. Come the holiday season, they more worried about getting product out the door.”

Right now, the norm is that lift truck performance might be tailored to a particular operator and area, Pulcini says, but that programmability might never be revisited after the initial setup. Combined with numerical pass codes unique to each operator, a supervisor can configure a number of modes suited to new trainees, veteran operators, or somewhere in between.

This programmability is not unique to electric lift trucks either, Pulcini says. Internal combustion models also offer adjustable parameters to slow acceleration and lean out the fuel mixtures for maximum efficiency. “In this way, as performance decreases, fuel economy increases,” he says, “which better synchronizes the fuel costs with the level of activity.”

Even after unifying costs and utilization, Toyota’s McKean warns against the old tendency to settle into a routine. “If you’re at the top of your game, the key to continued success lies in the data,” he says. “You own that data, and now it needs dedicated resources to make the best of it. How can you get better? Can you make maintenance even more efficient, improve uptime, make operators safer? The point is not to achieve an ROI; the point is to push on.”

—Josh Bond is an Editor at Large for Logistics Management

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The 2014 Supply Chain Top 25: Leading the decade

BY STAN ARONOW, DEBRA HOFMAN, MIKE BURKETT, JIM ROMANO, AND KIMBERLY NILLES

Gartner recently published its 10th annual *Supply Chain Top 25*, a ranking of the world's leading supply chains. From the beginning, a primary objective of the Top 25 has been to foster the celebration and sharing of best practices and to raise the bar of performance for the broader supply chain community. We also seek to shine a light on the importance of supply chain for corporate executives and the investment community at large.

The ranking is focused on identifying supply chain leadership, which includes operational and innovation excellence, but also other behaviors such as corporate social responsibility and a desire to improve the broader practice of supply chain management. While the list always changes from year to year, there are some common characteristics that separate the best from the rest. This article discusses the insights and trends we've seen this year from the leaders.

What is the definition of excellence?

Gartner defines excellence as demonstrating leadership toward a demand-driven ideal. Our demand driven value network (DDVN) model has seven dimensions with interrelated areas of capability and five stages of progressive maturity along each dimension.

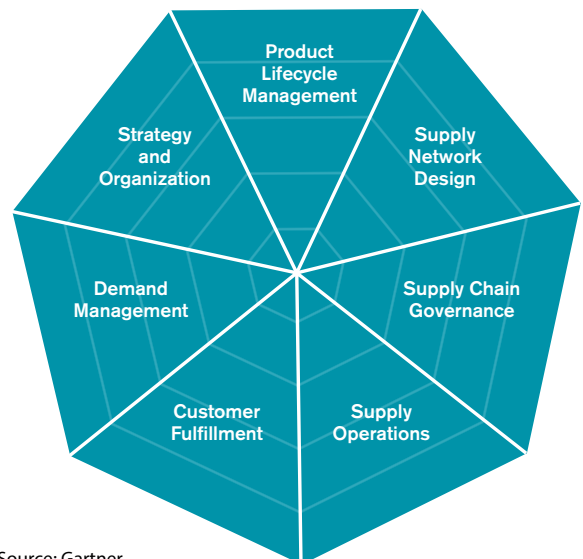
Leading companies have achieved a much higher degree of visibility, coordination, and reliable processes both within and across the plan, source, make, deliver, and return functions, but also in partnership with sales and marketing and product management organizations in lines of business. Their supply chains are designed starting with what brings value to customers and then back through the supply network. The ability to sense, translate, and shape demand—and pair up appropriate supply—is also improved and both demand and supply are determined in close collaboration with customers and upstream suppliers.

Our methodology is detailed below, but at a summary

level it operates as such. Each year, approximately 300 companies are chosen to be ranked. Companies do not apply to be included; rather, we select the companies from publicly available lists using a defined set of criteria, including size and industry sector.

Each company gets a composite score, and these scores are force-ranked to come up with the final list. The composite score is made up of a combination of publicly available financials, as well as an opinion component, providing a balance between objective and subjective perspectives. In completing their ballots, voters are asked to identify those companies they believe are furthest along the journey toward the demand-driven ideal, as defined in Gartner research and on the voting website.

The seven dimensions of demand driven value network (DDVN) excellence



Source: Gartner

This year marks the 10 year anniversary of the Gartner *Supply Chain Top 25* ranking. There are lessons to be learned from these supply chain leaders, many of whom have led their industries over the past decade.



The Gartner Supply Chain Top 25 for 2014

Rank	Company	Peer Opinion ¹ (188 voters, 25%)	Gartner Opinion ¹ (32 voters, 25%)	3-yr. Weighted ROA ² (25%)	Inventory Turns ³ (15%)	3-yr. Weighted Revenue Growth ⁴ (10%)	Composite Score ⁵
1	Apple	3187	371	20.5%	69.2	31.2%	8.85
2	McDonald's	1612	369	15.6%	153.0	4.0%	6.25
3	Amazon	3171	510	0.8%	8.9	27.2%	6.08
4	Unilever	2031	517	9.9%	6.9	2.6%	5.32
5	Procter & Gamble	2166	513	8.2%	5.9	2.2%	5.20
6	Samsung Electronics	1871	351	11.4%	18.1	12.7%	5.13
7	Cisco Systems	1092	480	9.1%	12.3	6.3%	4.57
8	Intel	908	475	12.8%	4.8	3.8%	4.51
9	Colgate-Palmolive	891	322	17.4%	5.1	3.1%	4.22
10	The Coca-Cola Co.	1820	265	10.1%	5.3	6.2%	4.03
11	Inditex	751	259	17.7%	3.9	9.1%	3.99
12	Nike	1192	225	14.2%	4.2	11.0%	3.89
13	H&M	690	108	26.7%	3.6	6.4%	3.83
14	Wal-Mart	1764	215	8.0%	7.9	3.5%	3.52
15	PepsiCo	1000	298	8.6%	8.2	3.2%	3.37
16	Lenovo	808	210	3.3%	17.5	24.4%	3.14
17	Starbucks	1044	185	8.5%	5.7	11.9%	3.06
18	3M	975	146	13.6%	4.1	4.1%	3.05
19	Qualcomm	193	56	14.1%	6.8	30.6%	2.95
20	Seagate Technology	67	39	19.5%	12.5	8.1%	2.75
21	Kimberly-Clark	605	206	9.9%	6.1	1.6%	2.65
22	Johnson & Johnson	957	149	9.6%	2.8	5.2%	2.65
23	Caterpillar	696	245	5.4%	3.0	3.3%	2.43
24	Cummins	153	144	12.1%	5.3	6.0%	2.34
25	Nestlé	1060	99	8.3%	5.4	1.5%	2.30

Notes:
 1 Gartner Opinion and Peer Opinion based on each panel's forced-rank ordering against the definition of "DDVN Orchestrator"
 2 ROA: ((2013 net income / 2013 total assets)*50%) + ((2012 net income / 2012 total assets)*30%) + ((2011 net income / 2011 total assets)*20%)
 3 Inventory Turns: 2013 cost of goods sold / 2013 quarterly average inventory
 4 Revenue Growth: ((change in revenue 2013-2012) *50%) + ((change in revenue 2012-2011) *30%) + ((change in revenue 2011-2010) *20%)
 5 Composite Score: (Peer Opinion*25%) + (Gartner Research Opinion*25%) + (ROA*25%) + (Inventory Turns*15%) + (Revenue Growth*10%)
 2013 data used where available. Where unavailable, latest available full-year data used.
 All raw data normalized to a 10-point scale prior to composite calculation.
 Ranks for tied composite scores are determined using next decimal point comparison.

Inside the numbers

The Top 5

Apple's (No. 1) supply chain strategy has always centered on orchestrating the delivery of winning customer solutions. Historically, this was through complete ownership of the design and control, but mixed ownership of the physical supply chain. Of late, it is investing billions of dollars in manufacturing tooling and equipment to ramp and automate production of its latest gear.

Within the past year, Apple has become more vertically integrated through strategic acquisitions for key component technologies. Its supply

chain also brought its iPad and iPhone component sourcing back in-house. Apple has consistently delivered the operational performance and votes to keep it at the top of our list.

McDonald's (No. 2) is focused on talent management, new product expertise, coordination across the supply chain, and high speed to market. It's "McDonald's System" has well-articulated operating principles for owner-operators, suppliers, and McDonald's corporate. This is supported by a culture that emphasizes long-term strategic collaboration with suppliers. In the product domain, one of the more impressive aspects of McDonald's supply chain is how it man-

ages consistency across its large global network.

Amazon (No. 3) continues to innovate in both products and services. In a high-tech version of a razor handle and blade model, Amazon manages its physical supply chain with precision and efficiency, enabling broad adoption of its competitively priced hardware, which acts as a platform for software and media content sold either discretely or through its Prime subscription service.

Amazon is exploring taking over management of the last mile of delivery to customers in some markets. One of its more provocative proposals in

this area is the use of unmanned aerial drones to deliver shoebox-size packages from Amazon's fulfillment centers to customers' homes within 30 minutes.

Unilever (No. 4) has pursued an ambitious vision for sustainable growth for the past few years that targets doubling its revenue at half the environmental footprint by 2020. Its channel-ready supply chain program determines the appropriate level of supply chain services and marketing support each channel and customer requires to enable growth, in a profitable way. A complementary cost-to-serve program is helping drive improvements in its distribution network and trade marketing budgets.

P&G (No. 5) is a pioneer in demand management excellence incorporating a range of inputs, including consumer social data. P&G also scores well with retailers for collaboration. Understanding the importance of emerging markets, a few years ago, P&G moved its personal care and cosmetics HQ to Singapore.

Now P&G has an advanced Innovation Center there enabling prototype manufacturing for rapid, small-scale consumer testing and innovations in packaging. Recently it made an announcement that it would be cutting nearly half of its brands to drive growth through its higher velocity products.

Movers and shakers: Number 6 through number 15

Three leading high tech companies sit atop this group: Samsung, Cisco, and Intel. Samsung (No. 6) runs a highly coordinated, vertically integrated supply chain that includes critical display, touch, camera, and microprocessor component technologies. Having built solid collaborative planning forecasting and replenishment (CPFR) capabilities with larger, more mature customers, its supply chain has expanded its effectiveness by including detailed sell-through and activation visibility in many of its other channels.

Cisco's (No. 7) supply chain is viewed as a growth enabler for existing and new businesses in cloud infrastructure and the "Internet of Everything."

This includes the 160-plus acquisitions the company has completed over past two decades. Cisco is well known for maturity in collaborative planning and risk management with customers and suppliers, and also has a major focus on supply chain talent.

Intel (No. 8) is an ingredient company that cracked the code on being customer-centric several years ago. Partnering with customers to quickly ramp inventory hubs and collaborate on products and operational efficiency capabilities has led to world-class customer satisfaction levels. Intel has also been a vocal advocate for social responsibility in areas such as conflict minerals.

There are also several leading consumer product (CP) and retail companies in this second group.

Colgate-Palmolive (No. 9) has a long heritage of people management at a global level. Colgate once again leads the CP industry in return on assets (ROA) at 17.4 percent. It has one of the best item management programs in consumer products, focused on product productivity, and continues to reinvest the savings back into its business operations. In general, there is strong alignment from the CEO down through to operational execution, driving margin expansion and improved cash flow.

Coca-Cola (No. 10) has a global goal of becoming water neutral by 2020 and replenishing 100 percent of the water it uses in making its products. We recognize Coke's ability to grow by shifting its portfolio from carbonated to non-carbonated beverages with support from supply chain initiatives like demand analytics and segmentation, capabilities that help Coca-Cola profitably serve 22 million channel customers.

Nike (No. 12) has improved its sensing and shaping of demand in vol-

atile markets. Its Supply Chain Center of Excellence (COE) is leveraging advanced analytics for supply network design. This fashion and apparel leader also has mature practices in sustainable design and speed to market.

Swedish retail giant H&M (No. 13) is also very good at PLM coordination across its 160 in-house designers and 900 independent suppliers. It is strong at demand sensing (i.e., fashion trend sensing) and the supply chain supports brand messaging on fashion, quality,

Amazon is exploring taking over management of the last mile of delivery to customers in some markets. One of its more provocative proposals in this area is the use of unmanned aerial drones.



and price. H&M runs a leading sustainability program and launched its first closed loop products with about 20 percent of materials sourced from 3,000 tons of unwanted garments.

Inditex (No. 11), owner of the Zara brand, is another large European retailer on the list.

It has continued to post strong financial performance and has leveraged its excellent demand sensing and shaping into supply chain capabilities like supply chain segmentation. Inditex is also partnering with H&M on several corporate social responsibility initiatives.

Wal-Mart (No. 14) is accelerating its focus on multi-channel. For the first time in a decade, its online sales growth is greater than Amazon's (up 30 percent). In support of this capability, the retail giant has acquired 12 e-commerce software companies in the last three years. To complement these online capabilities, Wal-Mart has added a stand alone pick-up center where shoppers drive up and receive orders.

PepsiCo (No. 15) is a leader in inventory turns again this year in the consumer segment. The PepsiCo supply chain is using consumption data to plan transportation and truck routing

for direct store deliveries. PepsiCo also leverages consumer insights for store level execution. One product group, in particular, is able to manage event-based promotions to specific location, SKU, and hourly timing combinations.

**Rounding out the list:
Number 16 through number 25**

We typically see companies enter the list in the group between No. 16 and No. 25, and 2014 is no exception. We're excited to welcome Seagate to the list for the first time and Kimberly-Clark for its second appearance in three years.

Wal-Mart (No. 14) is accelerating its focus on multi-channel. For the first time in a decade, its online sales growth is greater than Amazon's (up 30 percent).

Seagate (No. 20) is consistently turning in strong financial performance. Its supply chain is running multiple transformation programs out of a COE. Two notable examples are focused on supply visibility/resiliency and talent management. After the Thailand floods of 2011, Seagate developed advanced analytics to "heat map" supply risks. In the area of talent management, it is attracting high potential individuals from outside the company and offering an advanced development program for top existing performers.

Kimberly Clark (No. 21) is another supply chain with a well-developed COE team. It has a strong focus on demand sensing through structured analysis of point of sale data and are implementing both a customer segmentation program and supply chain cost-to-serve capabilities to the joint benefit of Kimberly Clark and its customers.

Several industrials are also in this group, including: 3M (No. 18), Caterpillar (No. 23), and Cummins (No. 24). Each has its own supply chain COE and all three are delivering differ-

entiated solutions to customers linked to either geography-specific requirements or a consciously-designed set of tradeoffs between product complexity, order fulfillment lead time, and cost.

3M has a vision to move the extended value streams supporting customers from "good to great" performance as a key differentiator to support growth. The company has brought in new senior leaders to drive this vision and is building capabilities such as the adoption of Lean concepts across the extended supply chain.

CAT, facing a secular downturn in



the mining industry last year, leveraged its skills in network optimization to continue servicing dealers without a large build-up of inventory. The industrial leader has also created a new "order-to-delivery" organization to improve its supply responsiveness to demand.

Cummins is focused on strengthening its supply chain orchestration capabilities. The company is running a synchronized business planning (SBP) initiative designed to provide a real-time, enterprise-wide alignment of demand, supply, and product. Its supply chain strategy team is also focused on spreading the adoption of differentiated business models across its vertically integrated network.

Two high-tech companies, Lenovo (No. 16) and Qualcomm (No. 19), are also returning to this group for a second year in a row.

Lenovo has aggressively pursued growth, both organically in PCs, servers, and mobile devices and through acquisitions. Its supply chain analytics COE is leveraging a more data-driven approach to global supply network design, including sourcing and manu-

facturing decisions. The team is also focused on improving supply chain visibility over a standard cross-enterprise platform for improved productivity, control, and inventory management.

Qualcomm is the dominant chip player for mobile devices, particularly smart phones. Its supply chain is focused on improving new product time to market and governance of their active product portfolio. On the supply side, Qualcomm is investing in analytics to improve both planning cycle time and manufacturing costs.

Rounding out the last group are Starbucks (No. 17), J&J (No. 22), and Nestle (No. 25). All of these supply chains are focused on sustainable growth and improving living conditions in emerging markets.

Starbucks runs a broad spanning supply chain that includes new product development, customer service, and strategy. A proactive talent strategy is also one of Starbucks' strengths.

This includes a career development rotational program where participants gain experiences in leadership competencies, supply chain education, and Starbucks culture. This year, it has launched an innovative new partnership with a U.S.-based university to subsidize college expenses for qualifying associates.

J&J has a visionary supply chain organization focused on supporting the next billion healthcare consumers. Operationally, this means driving economies of scale across its diverse businesses and differentiating where it is value add for its customers. Its Janssen pharmaceutical group has implemented a handful of distinct supply chain models, leading to improved service and inventory management.

Nestle, the largest food manufacturer in the world, is driving complexity reduction and item productivity improvements from its Nestlé's Continuous Excellence (NCE) and lean value stream implementations. It has also developed advanced and well-integrated raw materials sourcing strategies.

Characteristics of leaders

As demonstrated, each company develops supply chain strategies and priorities tailored to its corporate and market context. While these are useful for others to learn from, in our research we also look for shared characteristics. For many companies, these characteristics are easier to talk about than to actually implement. What differentiates the leaders is that they have moved beyond the discussion phase to make the hard changes that are required throughout the organization.

We've talked about many of these in past articles, and they remain relevant.

- **Outside in focus:** Most companies think that they are demand driven and focused on the customer, but the two concepts are not identical. You can be focused on the customer from either an outside-in or inside-out mentality. Leaders start with the customer experience of their supply chain and work their way back through their supply chain designs for an appropriate, profitable response.

- **Embedded innovation:** Indicates a supply chain's close integration into product lifecycle management both internally and with up and downstream partners. There is also the ability to innovate supply chain practices. This means not only adopting and adapting others best practices, but also breaking the rules, defying conventional wisdom and writing new rules for the supply chain community, as a whole. These companies are not afraid to experiment, fast fail in some areas and drive competitive advantage in others.



Several of the leading consumer products companies on this year's list are offering e-commerce subscriptions for their products, in partnership with retailers, to create a seamless multi-channel experience.

- **Extended supply chains:** More mature companies are managing multi-tier networks with strong visibility and agility to support rapid changes in demand or disruptions in supply.

- **Excellence addicts:** These companies are never satisfied, even if their performance in an area would be considered world class by objective standards. Most often there is an underlying culture driving this behavior and strong governance mechanisms managed through centers of excellence.

Trends

Each year, our analysts talk to and research the supply chains of hundreds of companies. Through these discussions, we note certain patterns in the trends on which the leaders are focusing their time and efforts. Here are the notable trends this year:

Understanding and supporting the fully contextualized customer.

Listening to supply chain leaders over the past year, we heard them expand the demand-driven concept in terms of how they relate to their customers. It is now about understanding customers in a deeper way and blending seamlessly into their daily routines. Big Data analytics has become a buzz phrase, whether sourced from point of sale (POS) transactions, online searches, ordering activities, or assets-in-service. We see leading companies going beyond just advanced analysis from a distance, however. They study the environments this activity occurs in to parse out the contextual reasons behind local behaviors.

Some examples of this include:

- A consumer products company runs a simulated retail environment where it tracks the eye movements of paid volunteers to determine the optimal placement of product along aisles and on shelves. The company also runs similar eye movement tests for various pack-

aging types to see which ones attract the most attention on a crowded shelf.

- A U.S. mall operator has set up a communications infrastructure that enables individual retailers to recognize when past customers, who have agreed to be tracked, enter the premises. Some of the retailers have set up event management rules that will automatically send out "come back, we miss you!" promotional texts and e-mails to these shoppers, if they have come to the mall a couple times in the recent past, but have not bought anything in their stores. Machine learning routines are also being used to target what approaches work best with shoppers.

A convergence of digital and physical supply chains delivering total customer solutions.

Leading companies have moved past only selling discrete products or services to their customers and are now focused on delivering solutions. In high tech, this might mean selling a coordinated collection of hardware, software, and services to stand up a data center for a business customer. In consumer markets, this same company might sell a hardware device for near break-even, recognizing that the profit of the solution will come later through the metered delivery of software applications and content.

Regardless of industry, these companies want their customers to be loyal subscribers to their solutions. Several of the leading CP companies on this year's list are offering e-commerce subscriptions for their products, in partnership with retailers, to create a seamless multi-channel experience. This approach offers convenience and privacy to end customers that would normally buy these products in a physical store and might switch to another consumer brand during any given store shopping visit.

Some other examples of this trend include:

- A heavy industrial company sells equipment through its dealer network, but also monitors equipment in service at end users. More specifically, this company is looking for equipment usage patterns that may lead to the need for more or less maintenance.

Historically, the assumption was that spare parts demand (i.e., equipment failure) was most closely correlated with time in service, but a more detailed analysis showed that failure rates spiked when the equipment was loaded above a specific threshold over its rated capacity.

- P&G sells a lot of Oral B toothbrushes and Crest toothpaste, but for these products, their connection to the consumer typically ends at the check-out line. A few months ago, Oral B

What differentiates the leaders is that they have moved beyond the discussion phase to make the hard changes that are required throughout the organization.

introduced a Bluetooth connected toothbrush with cloud-based software that monitors oral care routines and health as part of a broader solution.

Supply chain as trusted and integrated partner. Our annual CEO survey this year showed that the C-suite is now laser-focused on growth. A full 63 percent of senior executives picked growth as a top imperative, as compared to the next most popular area, cost management, at 25 percent. Leading supply chains are enabling this growth, both organically and through successful M&A integration. At the same time, we're seeing true supply chain leaders emerge as trusted and integrated partners to business groups. Their focus on profitable growth often leads to smarter, more conscious decision making, saving business groups from spiraling out of control in the drive to maximize revenue.

This means strong governance and analytics around the cost to serve customers and the profit contribution of products. It is also about corporate social responsibility (CSR). Sometimes doing the right thing for the environment also yields cost savings through the elimination of waste. By contrast, pursuing a higher standard for human rights at suppliers in less-stringent geographies costs more, but is the right thing to do. In organiza-

tions where the head of supply chain speaks passionately and often on this topic, social responsibility has become a mantra for the entire organization.

Supply Chain Top 25 methodology

The way we determine the ranking is something we have been transparent with since the beginning. We have also sought to keep it both consistent as well as responsive year after year, taking direct feedback from the supply chain community of professionals and incorporating suggested changes into the methodology where possible. As a result, the list reflects not only what Gartner analysts think about supply chain leadership, but what the community as a whole respects.

The *Supply Chain Top 25* ranking comprises two main components: financial and opinion. Public financial data provides a view into how companies have performed in the past, while the opinion component offers an eye to future potential and reflects future expected leadership, which is a crucial characteristic. These two components are combined into a total composite score.

We derive a master list of companies from a combination of the *Fortune* Global 500 and the *Forbes* Global 2000, with a revenue cutoff of \$10 billion. We then pare the combined list down to the manufacturing, retail, and distribution sectors, thus eliminating certain industries, such as financial services and insurance, which do not have physical supply chains.

Financial component. ROA is weighted at 25 percent; inventory turns at 15 percent; and growth at 10 percent. Inventory offers an indication of cost management, and ROA provides a general proxy for overall operational efficiency and productivity. Revenue growth, while clearly reflecting myriad market and organizational factors, offers some clues to innovation. Financial data is taken from each company's publicly available financial statements.

The weighting within the financials has remained consistent since 2010.

Prior to 2010, inventory was weighted higher than it is today, at 25 percent. We had considered dropping it all together. As much as inventory is a time-honored supply chain metric—one of the few “real” supply chain metrics on a company's balance sheet—there have always been issues, not the least of which is that higher turns don't always point to the better supply chain.

At the same time, it's a metric that is widely known and understood, both inside and outside the supply chain community. Despite the issues, it's not entirely invalid as an indicator, particularly if combined with other metrics. Therefore, we left it in, but reduced its weighting.

Since 2009, we've used a three-year weighted average for the ROA and revenue growth metrics (rather than the one-year numbers we had previously used), and a one-year quarterly average for inventory (rather than the end-of-year number we had previously used). The yearly weights are as follows: 50 percent for 2013, 30 percent for 2012, and 20 percent for 2011.

The shift to three-year averages was put in place to accomplish two goals. The first was to smooth the spikes and valleys in annual metrics, which often aren't truly reflective of supply chain health, that result from events such as acquisitions or divestitures. It also accomplishes a second, equally important goal: to better capture the lag between when a supply chain initiative is put in place (a network redesign or a new demand planning and forecasting system, for example) and when the impact can be expected to show up in financial statement metrics, such as ROA and growth.

Inventory, on the other hand, is a metric that is much closer to supply chain activity; we expect it to reflect initiatives within the same year. The reason we moved to a quarterly average was to gain a better picture of actual inventory holdings throughout the year, rather than the snapshot, end-of-year view provided on the balance sheet in a company's annual report.

Looking forward, we are evaluating changes to the way the financial components will be calculated in future

Supply Chain Top 25 cycles.

Opinion component. The opinion component of the ranking is designed to provide a forward-looking view that reflects the progress companies are making as they move toward the idealized demand-driven blueprint. It's made up of two components, each of which is equally weighted: a Gartner analyst expert panel and a peer panel.

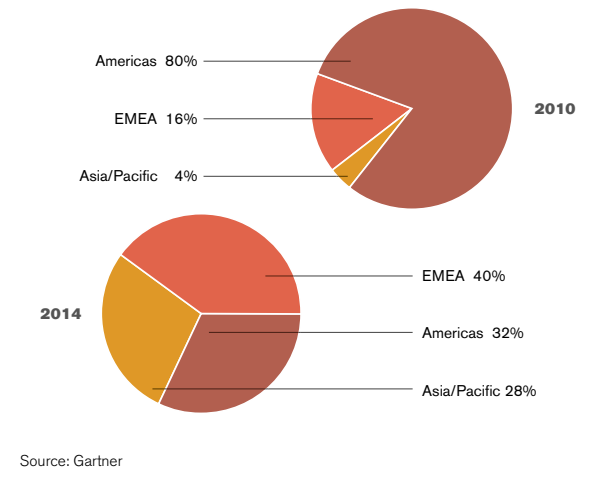
The goal of the peer panel is to draw on the extensive knowledge of the professionals that, as customers and/or suppliers, interact and have direct experience with the companies being ranked. Any supply chain professional working for a manufacturer or retailer is eligible to be on the panel, and only one panelist per company is accepted. Excluded from the panel are consultants, technology vendors, and people who don't work in supply chain roles (such as public relations, marketing, or finance).

We accepted 219 applicants for the peer panel this year, with 188 completing the voting process. Participants came from the most senior levels of the supply chain organization across a broad range of industries. There were 32 Gartner panelists across industry and functional specialties, each of whom drew on his or her primary field research and continuous work with companies.

Organizations must surpass a base threshold of votes from both panels to be included in the ranking. Therefore, a company that had a composite score fall within the *Supply Chain Top 25* solely based on the financial metrics would not be included in the ranking.

The regional breakdown of voters continued to be a particular emphasis for us, and we made significant progress this year. In the past, North American voters made up 80 percent of the total, despite many efforts to get a more even regional distribution. We've been making steady and constant improvements since then to increase the percentage of voters from

Supply Chain Top 25: Comparison of peer panel regional composition, 2014 vs. 2010



Europe and Asia/Pacific. This year, we had 40 percent representation from Europe, 32 percent from North America and 28 percent from Asia Pacific. We expect the trend to continue towards fully balanced regional representation.

Polling procedure. Peer panel polling was conducted in April 2014 via a Web-based, structured voting process identical to previous years. Panelists are taken through a four-page system to get to their final selection of leaders that come closest to the demand-driven ideal, which is provided in the instructions on the voting website for the convenience of the voters.

Here's a breakdown of the voting system:

- The first page provides instructions and a description of the demand-driven ideal.
- The second page asks for demographic information.
- The third page provides panelists with a complete list of the companies to be considered. We ask them to choose 30 to 50 that, in their opinion, most closely fit the demand-driven ideal.
- After the subset of leaders is chosen, the form refreshes, bringing just the chosen companies to a list. Panelists are then asked to force-rank the

companies from No. 1 to No. 25, with No. 1 being the company most closely fitting the ideal.

Individual votes are tallied across the entire panel, with 25 points earned for a No. 1 ranking, 24 points for a No. 2 ranking and so on. The Gartner analyst panel and the peer panel use the exact same polling procedure.

By definition, each person's expertise is deep in some areas and limited in others. Despite that, panelists aren't expected to conduct external research to place their votes. The polling system is designed to accommodate differences in knowledge, relying on what author James Surowiecki calls

the "wisdom of crowds" to provide the mechanism that taps into each person's core kernel of knowledge and aggregates it into a larger whole.

Composite score. All of this information—the three financials and two opinion votes—is normalized onto a 10-point scale and then aggregated, using the aforementioned weights, into a total composite score. The composite scores are then sorted in descending order to arrive at the final Supply Chain Top 25 ranking.

Conclusion

We are proud to share this 10-year celebration of supply chain leadership with the supply chain community and look forward to continuing to highlight the lessons learned, providing a platform for informed and provocative debate, and helping supply chains provide vital contributions to the global economy.

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Top 30 Ocean Carriers **Profits at last?**

Maersk caused a stir last summer by raising its full-year profit forecast for 2014 due to higher freight volumes and lower costs. Industry analysts wonder, however, if many of the other Top 30 carriers will exercise the same discipline to achieve similar goals.

By Patrick Burnson, Executive Editor

The key indicators followed by the top ocean carrier analysts are fairly clear: U.S. economic growth—and the improved consumer spending that comes in tow—is on the rise and will result in stronger demand for container shipping.

“The world’s largest economy is getting better by the day, leaving the devastating first quarter GDP setback behind,” says Peter Sand, chief shipping analyst for The Baltic and International

Maritime Council in Copenhagen (BIMCO). “For an economy mainly driven by consumer spending, this is good news for shipping. We expect this to positively affect demand for trans-Pacific container shipping as well as increase U.S. East Coast container imports, as containerized goods are predominantly consumer products.”

The Conference Board Consumer Confidence Index (CCI) continued to improve in



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Alphaliner Top 30 Ocean Carriers (Operated fleets as per September 2014)			
Rank	Operator	Teu	Share
1	APM-Maersk	2,781,456	15.00%
2	Mediterranean Shg Co	2,508,692	13.60%
3	CMA CGM Group	1,596,791	8.6%
4	Evergreen Line	918,049	5.0%
5	COSCO Container L.	799,579	4.3%
6	Hapag-Lloyd	736,429	4.0%
7	CSCL	670,945	3.6%
8	Hanjin Shipping	592,717	3.2%
9	MOL	586,083	3.2%
10	APL	580,126	3.1%
11	OOCL	517,690	2.8%
12	NYK Line	500,172	2.7%
13	Hamburg Süd Group	499,879	2.7%
14	Yang Ming Marine Transport Corp.	414,512	2.2%
15	Hyundai M.M.	396,346	2.1%
16	PIL (Pacific Int. Line)	358,368	1.9%
17	K Line	357,052	1.9%
18	Zim	336,642	1.8%
19	UASC	293,811	1.6%
20	CSAV Group	244,220	1.3%
21	Wan Hai Lines	216,150	1.2%
22	X-Press Feeders Group	107,354	0.6%
23	HDS Lines	88,608	0.5%
24	KMTC	79,971	0.4%
25	SITC	77,588	0.4%
26	NileDutch	71,064	0.4%
27	UniFeeder	62,830	0.3%
28	TS Lines	55,826	0.3%
29	Simatech	52,063	0.3%
30	Arkas Line / EMES	49,324	0.3%

Source: Alphaliner
 **Based on existing fleet and orderbook
 TEU capacity available on board operated ships.
 All figures are consolidated."

seasonally adjusted 1.09 million unit annual pace, according to the U.S. Commerce Department. The gain reversed two months of consecutive declines.

"Furniture and appliances are among the top categories of imported containerized goods into the U.S. from Far East Asia, which is why we follow the housing market closely," observes Sand. "BIMCO's own U.S. West Coast import data show a 4 percent increase for loaded containers during the first seven months of 2014 over same period last year, while U.S. East Coast improved comparably by 8.8 percent during the first six months."

At the same time, however, Drewry's second quarter 2014 *Container Forecaster* highlights that there's a widening gap between the positive financials of the few carriers that are focused on cutting costs and the rest of the Top 30 as they battle with the pressure of falling freight rates.

Market discipline

Analysts at Drewry forecast that, once again, average freight rates will be lower than in the previous year. The London-based consultancy estimates that on the headhaul trans-Pacific trade alone, carriers have given away in the region of \$1.25 billion in annual revenue via the lower annual contracts they signed with shippers in May. They also signed new annual contracts on the Asia-Europe trade earlier in the year at levels of around \$150-\$200 per forty-foot unit (FEU) container lower than in 2013.

On the positive side, carriers may have secured base cargoes to fill their ships at a low price; however, this puts more pressure on the Top 30 to try and recover revenue from the spot market. Drewry believes that volatility in the spot market will remain high this year.

Analysts further note that while supply and demand remain key drivers of freight rates across all trades, those carriers cutting their costs are also better equipped to offer lower rates. "In real terms, they're in fact passing back these benefits

August, heading up for the fourth consecutive month as surging business conditions and robust job growth helped boost consumers' spirits. Overall, consumers remain quite positive about the short-term outlooks for the economy and labor market despite having doubts about whether their income will increase over the next six months, say analysts.

Improving economic conditions are also visible in the U.S. housing market. Privately-owned housing starts grew by 15.7 percent in July to a

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* From Asia, cargo shipped through the Port of LA arrives approximately 12 days faster to the Midwest, 6 days faster to the Eastern Seaboard and 3 days faster to the Southeast.

**Source: Logistics Management, Peerless Research Group (PRG), 2013 Quest for Quality Survey

to shippers,” says Neil Dekker, Drewry’s director of container research.

Industry unit costs per twenty-foot units (TEUs) are forecast to decline by 2.5 percent this year, and strategies such as slow steaming and distribution network re-designing are crucial to this. “Yet, carriers will struggle to make a profit because we’re also forecasting unit revenues to decline by a similar amount,” says Dekker.

The blocking of the P3 Global Alliance (comprising Maersk, Mediterranean Shipping Company, and CMA-CGM) by the Chinese authorities is also disappointing for the industry because it was an excellent opportunity to help stabilize the main trades in terms of capacity management and efficient use of assets, say analysts.

“That chance is now missed,” says Dekker. “A mature debate is required to help balance the benefits of higher economies of scale, alliance consolidation, and the need to control an oligopoly of mega alliances.”

According to Dekker, the huge task of adequately matching supply and demand at the global level and on a consistent basis—which ultimately helps to drive freight rates—is simply beyond the industry. “We do not mean this as a condescending insight,” he hastens to add. “This is an industry where accurate volumes on many trade lanes are unknown, simply because there is no unified and agreed system of accounting.”

Because accurate volume forecasts are difficult to obtain from all but a handful of global shippers, the containerized shipping industry will continue to face daunting challenges, Drewry maintains. “This is an industry where the constant desire to launch bigger ships in order to reduce unit costs can only ever logically be at odds with the aim of matching supply and demand,” concludes Dekker.

Trans-Pacific trends

That trend may be addressed this fall, however, as member container shipping lines in the Trans-Pacific Stabilization Agreement (TSA) attempt to forge



an across the board general rate increase (GRI) of at least \$600 per FEU to all destinations. Time will tell, however, if the recently imposed hike sticks.

“Lines have made modest revenue gains to date this year, but they continue to struggle in terms of returning to profitability,” says TSA executive administrator Brian Conrad. “In most route segments they are operating at or near full capacity with little room for error in managing assets, so this increase is needed as a cushion to cover costs and assure service choice and reliability.”

Carriers had filed increases in their individual tariffs in late July and subsequently began notifying shippers directly. TSA lines said that the planned GRI follows strong cargo demand and high vessel utilization levels in recent months, which forward bookings suggest will continue through September.

With equipment, inland transport, and other cargo handling costs rising steadily, carriers see higher baseline rates going into 2015 as essential to maintaining adequate service levels over time. Analysts warn that the Far East routes to both the U.S. West and East Coasts seem exposed to a gradual deterioration of freight rates as the peak season passes by and winter service programs for the liner operators picks up. All of this is subject to solid demand growth in their quarter of this year.

But the same shippers who opposed the P3 Alliance are expected to resist value-added pricing, says Chris Welsh, secretary general of The Global Shippers’ Forum (GSF). Based in London, the GSF is an umbrella organization



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focus on reducing their costs, it seems significant opportunities are present if they were able to improve their on-time performance,” says Alan Murphy, COO of the Danish consultancy SealIntel. “With improved on-time performance, shippers would receive a product more in line with what was promised, and that should hopefully also prove a significant market driver, even in these troubling times.”

“Unbundling” logistics

Alphaliner’s maritime analysts in Paris cite another development worth noting:

Carriers are returning to their core competencies by “unbundling” logistics affiliates.

When Sea-Land, APL, and Maersk started to provide cargo consolidation services in the 1970s, the carriers extended their intermodal capabilities beyond the provision of end-to-end container transportation. This led to an increase in demand for integrated supply chain management and third-party logistics (3PL) services, which grew significantly in the last two decades into major independent business units for these carriers—eventually becoming Damco and APL Logistics.

Other carrier affiliated logistics companies, such as Yusen Logistics and MOL Logistics, were formed initially to provide air and ocean freight forwarding services before moving into contract logistics.

“In the last decade, carriers such as Maersk and APL sought to expand the supply chain management capabilities of their 3PL arms to further differentiate their ocean freight services and to increase their competitive advantage through vertical integration with the bundling of logistics services with ocean transportation,” says Stephen Fletcher, CCO and commercial director AXSMarine and Alphashipping. “The logistics activities also provided a more stable source of income than the volatile ocean freight market.”

However, the strategy appears to be unraveling. Damco reported a third consecutive quarter of operating losses last month, while APL Logistics could be divested, according to a statement by parent company NOL. Meanwhile, several other carriers have also disposed of their logistics arms, including the mega carrier Cosco.

of shippers’ associations such as the National Industrial Transportation League (NITL).

“We intend to leverage our concentration of collective volume to keep additional costs in check,” says Welsh. “These include unsubstantiated shipping surcharges, terminal charges and more than 20 other non-negotiable local charges being imposed on shippers worldwide.”

Carriers onward

Objections by China and international shipper consortia spelled doom for the P3 Alliance, acknowledge industry experts. However, they contend that market forces driving carrier consolidation continue to gain steam.

The carriers of the G6 Alliance—APL, Hapag-Lloyd, Hyundai Merchant Marine, MOL, NYK Line, and OOCL—have extended their cooperation beyond the Asia-Europe trade and into the Atlantic and Pacific, and there’s now speculation that Maersk Line and Mediterranean Shipping Co. could eventually operate ships of up to 19,200 TEUs on east-west trades that touch the U.S. within their planned “2M Network.”

Meanwhile, the formerly “ever independent” Taiwanese carrier Evergreen has teamed up with the CKYH Alliance partners Cosco, K Line, Yang Ming, and Hanjin, thereby becoming the fifth member of what is now the CKYHE alliance. And finally, there’s the retreat of Zim from the Asia-EU trade, and CSAV has announced the sale of its container-shipping operation to Hapag-Lloyd.

So, what does all this mean for shippers? “In these years where the carriers have a strong



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Commanding profits

That disposal of their logistics operation is part of a cautionary tale for China Cosco Holdings, which reported losses of \$338 million so far this year, thereby gaining the attention of China's state council, the nation's governing cabinet.

"Shipping is a key component in economic development and plays an important role in protecting a country's maritime rights and economy, in promoting exports, and industrial development," contend state council spokesmen. Analysts add that, given its command economy, China is not about to allow its national commercial fleet to fail. In fact, Cosco is now scrapping surplus vessels and readying itself for a rebound in container volumes.

"China has introduced tax and other regulatory reforms while pushing shipping firms to upgrade and modernize their fleets to build an efficient, safe, and environmentally friendly shipping system by 2020," observes China expert Rosemary Coates, president of Blue Silk Consulting. "This represents a big advantage that other commercial ocean cargo carriers simply don't have."

U.S. shippers may also be aware that the U.S. Federal Maritime Commission (FMC) is unlikely to approve the proposed "2M" alliance between container shipping giants Maersk Line and Mediterranean Shipping Co. before consulting with Chinese regulators.

As for the other Top 30 players, analysts maintain that sustainable service levels must be locked in by the time the next peak season kicks in. This truth was demonstrated by China Shipping Container Lines (CSCL), which moved



into the black last June without government assistance or incentives.

And it keeps looking better for CSCL, observe analysts. The carrier plans on joining CMA CGM and United Arab Shipping Corp. (UASC) in yet another a vessel-sharing agreement, this one dubbed "Ocean Three" and representing the last bit of carrier consolidation for 2014.

Shipping analysts are expected to weigh in soon on the potential impact of this latest consolidation effort will have on the marketplace. However, it's likely that they'll come to one conclusion: Rates will become firmer as capacity is better utilized. In turn, logistics managers should brace themselves for tougher negotiations in 2015.

—Patrick Burnson is Executive Editor of Logistics Management

Containers lost at sea

The World Shipping Council (WSC) recently released an update to its survey and estimate of containers lost at sea. The earlier WSC survey, released in 2011, covered the years 2008, 2009, and 2010. The new survey includes data for years 2011, 2012, and 2013.

For the combined six-year period from 2008 to 2013, WSC estimates that there were 546

containers lost on average each year, not counting catastrophic events, and 1,679 containers lost at sea each year including catastrophic events, such as the MOL Comfort disaster. The report notes that 2011 and 2013 each saw rare catastrophic events that resulted in complete and total vessel losses.

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would like to avoid,” says Chris Koch, WSC president and CEO. “The updated report not only provides more accurate data on the issue, but also identifies those initiatives the industry is supporting to increase container safety and reduce such losses.”

Koch also notes that while no one can eliminate the challenges of bad weather or the risk of vessel casualties at sea, care and cooperation among all those who pack, handle, weigh, stow, and secure containers is needed to improve safety.

—Patrick Burnson, Executive Editor

Los Angeles and Long Beach port volumes are mixed in August

The old thesis that August is traditionally one of the biggest shipping months of the year was tested by the Port of Los Angeles (POLA) and the Port of Long Beach (POLB) based on August volumes released in mid-September.

In fact, volumes at the ports were mixed in August. May and June saw higher than usual seasonal volumes, due to the West Coast port labor situation, and July was down as retailers had completed filling inventories for back-to-school shopping.

Total POLB volumes dropped 9.1 percent in August at 573,083 twenty-foot equivalent units (TEU) compared to August 2013, which the port said was its highest-volume month since 2007. Imports were down 8.2 percent, exports fell 17.7 percent, and empties were down 2 percent.

POLB officials said that August volumes reflect early shipping activity on the behalf of importers this year, with declining volumes coming on the heels of a surge in activity between April and June, as many retailers shipped products earlier than usual—prior to the July 1 contract expiration between the Pacific Maritime Association and the International Longshore Warehouse Union.

While POLB volumes were down, August volumes at POLA were strong, with the port reporting its best month since August 2010. Total POLA volumes in August were up 6.7 percent compared to August 2013. POLA imports, primarily comprised of consumer goods, were up 7.8 percent, exports headed up 6.16 percent,



Port of Long Beach officials said that August volumes reflect early shipping activity on the behalf of importers this year, with declining volumes coming on the heels of a surge in activity between April and June.

while empty containers were up 5.3 percent.

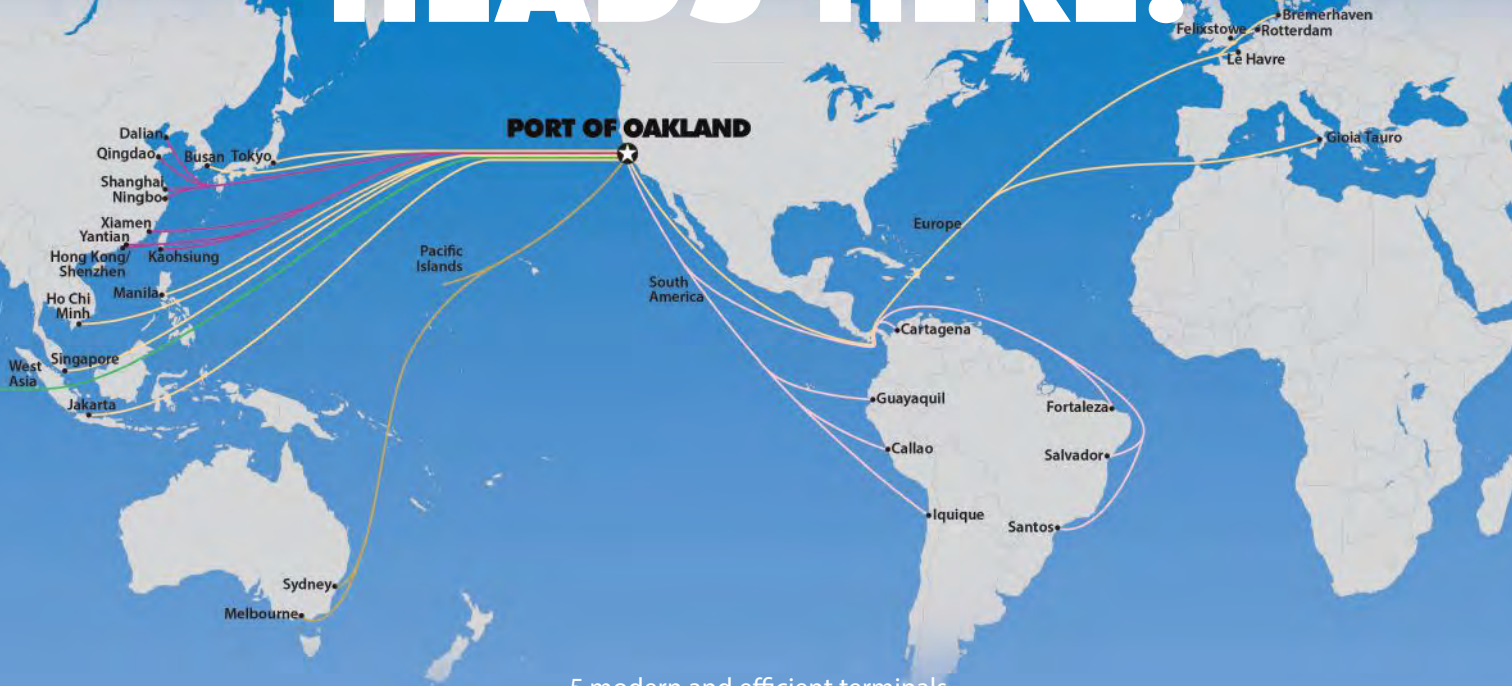
“A combination of larger vessel calling at the Port of Los Angeles as well as the beginning of peak shipping season has led to a particularly strong August here in Los Angeles,” said Phillip Sanfield, POLA director of media relations. “We haven’t seen a month with 757,000 TEUs since August 2010, and before that, our peak year in 2006. We’re cautiously optimistic that this bodes well for the remainder of the peak season ahead.”

In the most recent edition of the *Port Tracker* report from the National Retail Federation and Hackett Associates, the report noted that retail shippers concerned by the lack of a West Coast longshoremen’s contract will continue to bring merchandise into the country at above-average levels this month, but volume will drop from the record set in August.

Hackett Associates Founder Ben Hackett wrote in the most recent report that he continues to project continued growth in demand with rising imports in North America. “Our projection for the full year is 6.4 percent, with the East Coast doing better than the West Coast mainly due to labor issues with a shift in coastal share to 38 percent for the East Coast,” noted Hackett.

—Jeff Berman, Group News Editor

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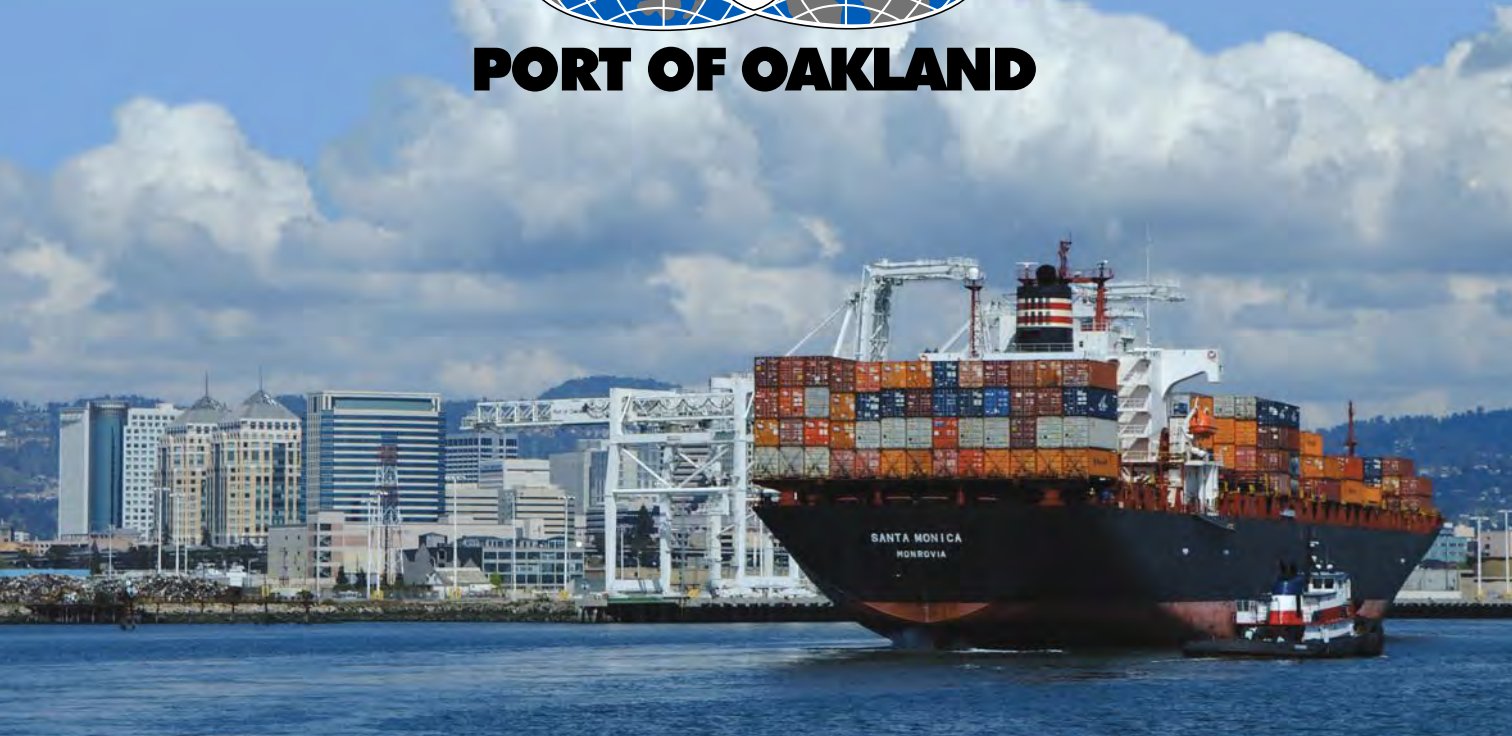
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PORT OF OAKLAND



Ocean carriers face another challenge: Manning vessels

The current shortage of officer corps seafarers is forecast to worsen and risks impacting ocean cargo carrier profitability, according to Drewry's recently published *Manning 2014 Annual Report*.

Owners and managers need seafarers—and they want experience, expertise, and quality. However, they do not have the resources to fund substantial rises in remuneration. In recent years, owners and managers have been heavily cost focused as weak freight rate earnings have yielded poor returns.

Manning has become the natural target for cost cutting, being the single largest element in ship operating costs, with officer recruitment being directed towards the lowest cost source.

Drewry estimates the current officer supply to be 610,000, representing a shortfall of more than 19,000 personnel. This shortfall is forecast to rise to 21,700 by 2018 given that there will be a requirement for an additional 38,500 officers by this time.

“While ratings remuneration packages tend to

follow International Transport Workers Federation (ITF) standard terms, officer earnings are more market driven,” says Drewry’s managing director Nigel Gardiner. “Manning costs look set to come under renewed upward pressure, putting a further squeeze on profitability unless owners are able to push freight rates higher.”

However, there’s less supply pressure with ratings, and this will have a moderating influence on wage negotiations currently underway between the ITF and International Bargaining Forum, which represents employers. The other factor in owners’

favor is the that fact that most seafarers are paid in U.S. dollars. When converted to domestic currency, seafarer earnings tend to compare well with other occupations.

“But the shortage of officers remains, especially among senior engineering ranks and for specialist ships such as LNG carriers,” warns Gardiner. “There’s also a general drift towards shorter working tours and increased benefits which is putting further pressure on supply.”

—Patrick Burnson, Executive Editor



NITL ocean cargo chairman shares views on state of the high seas

Don Pisano, ocean cargo chairman for the National Industrial Transportation League (NITL) and vice president in charge of imports for the American Coffee Corporation, recently shared his take on the state of ocean carriage with our Patrick Burnson. Following are his observations.

Logistics Management (LM): While the P3 Network failed to materialize, the G6 Collaboration remains on the table and there’s talk of other carrier alliances being formed. What impact will this have on global shippers?

Don Pisano: Increasing efficiency and cost saving measures is in everyone’s best interest. Collaboration, not manipulation, will be the key in the further formation of alliances, and they will continue to form.

LM: Collaboration between mega-shippers and carriers is also a constant theme these days. Are beneficial cargo owners (BCOs) really calling the shots?

Pisano: Certainly in shipping, volume matters. I’m not sure that translates into the mega-shippers calling the shots, as there are

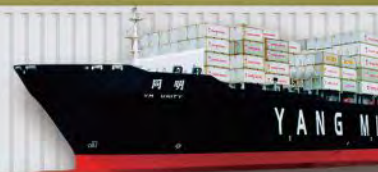
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always two parties to any negotiation.

LM: With the Panama Canal moving toward completion, will carriers be reconfiguring their deployments through 2015? Which ports are likely to profit by this?

Pisano: I expect some reconfiguring will take place, but the Suez Canal will remain a viable option for East Coast ports.

LM: The Nicaraguan Canal is also being considered as a viable alternative by some shipping executives. How might this alter carrier calls?

Pisano: At a projected cost of over 40 billion dollars, at five years before completion, and considering the mounting internal concerns in Nicaragua about jurisdiction, foreign influence, as well as environmental protection...it's not quite on our radar screen yet.

LM: In the meantime, which trade lanes will capture most of the mega-carrier traffic?

Pisano: Certainly Asia to the U.S. West Coast will continue to be the main trade lane for the mega-ships, but we can expect to see infiltration to the East Coast and Gulf Coast ports from Asia and Europe. I don't see any mega-ships being deployed in the North/South trade lane.

LM: Any thoughts on rates? What challenges will ocean carriers face regarding fuel prices for the remaining months of 2014? Are there other hidden costs shippers should be aware of?

Pisano: We expect ocean rates to be fairly stable through the end of the year with ample capacity to meet current demand. We don't expect fuel to spike unless we have a significant flare up in the Middle East, and we're currently more concerned on the domestic front with truck availability and see prices trending higher.

As a commodity importer, quiet frankly we're very concerned about mounting costs associated with government directed examinations and the future costs associated with complying with government regulations resulting from the Food Safety Modernization Act.

LM: Finally, what strides are ports and carriers making toward fostering more seamless intermodal networks?

Pisano: I believe that Washington has finally woken up to that fact that our infrastructure has been neglected for decades and that our nation demands long-term investment in ports, intermodal connectors, and projects that support the movement of goods and people.

—Patrick Burnson, Executive Editor

National maritime strategy gains support

A recent hearing of the Subcommittee on Coast Guard and Maritime Transportation—part of the House of Representatives' Committee on Transport and Infrastructure—suggests that the U.S. Merchant Marine industry may be poised for a major comeback.

That's good news for U.S. shippers, of course, but also strengthens our global security position at a time when we may need all available resources for national defense.

"Each year, the U.S. maritime industry accounts for over \$100 billion in economic output," said sub-committee chairman, Duncan Hunter, a Republican Congressman from San Diego. "Some \$29 billion of which consisted of wages going to some 260,000 workers."

Unfortunately, over the last 35 years, the number of U.S. flagged vessels sailing in the interna-

tional trade has dropped from 850 to less than 90. Less than two percent of the world's tonnage now moves on U.S. flagged vessels.

In the same period, the nation has lost over 300 shipyards and thousands of jobs for American mariners. This trend must be reversed, argued Hunter, before it's too late.

To that end, another California congressman (and sub-committee member), Rep. John Garamendi has joined Hunter in urging MARAD's new Administrator "Chip" Jaenichen, Jr. to develop a national maritime strategy.

"If we want to grow our economy and remain a world power capable of defending ourselves and our allies, we must work together to strengthen our merchant marine," added Hunter.

—Patrick Burnson, Executive Editor

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Pacific Rim Report

By Patrick Burnson

Patrick Burnson is Executive Editor of *Logistics Management*. If you want to contact Patrick with feedback or a story idea, please send an e-mail to pburnson@peerlessmedia.com.



Logistics & Localization: Asia Pacific shows the way

HOW IMPORTANT IS THE Asia Pacific to the continued growth of globalization? Two new reports suggest that multinationals are becoming increasingly reliant on “localization” within that vast region.

When A.T. Kearney released its Global Services Location Index (GSLI) last month, it ranked the top 51 countries worldwide based on metrics, and focused on in three categories: financial attractiveness, business environment, and people skills and availability.

Among the key findings is that Asia continues to dominate, with six of its countries among the top 10, with India, China, and Malaysia rounding out the top three off-shoring destinations.

After aggressively outsourcing back-office operations in the mid-2000s, multinationals are reassessing their outsourcing strategies, according to the 2014 GSLI. The research identified a course correction wherein some functions are being repatriated from vendors back to the use of companies’ own service centers and employees. This is particularly true of IT because of the advance in digitization.

“What was once a decision based primarily on cost-effectiveness has now started to incorporate other considerations,” says Erik Peterson, study co-author and managing director of A.T. Kearney’s Global Business Policy Council think tank. “These are, for example, whether the function is core to the business and therefore needs to be brought back in-house, as well as external regulatory factors impacting business relationships, accountability, and the ability to protect intellectual property and customer privacy.”

“In terms of surprises, India’s increasing lead is a finding that was not a certainty a few years back,” says Johan Gott, study co-author and senior manager at A.T. Kearney. “Even with automation and culling of low end jobs, India may retain its role as the industry aggregator, even as the value chain shifts, and be the place where the automation is managed and programmed from.”

Another newsworthy item is how the global services supply chain has expanded to also include smaller players on both the demand and supply side, observes Gott. He says that through freelance connecting platforms, small companies can now access talent globally and talent can now access markets from almost anywhere. This way, off-shoring has become a truly global phenomenon.

Meanwhile, research giant Gartner, which regularly monitors and ranks the top performing supply chain organizations around the world, has become more granular. In a recent report, it refined its Supply Chain Top 25 to

create a Top 10 list for businesses headquartered in the Asia-Pacific region. Here is a rundown of the “Top 10.”

- South Korea’s Samsung Electronics challenged Apple to become the world’s largest provider of smartphones.
- The Lenovo Group in Beijing has taken a data-driven approach and cross-platform visibility for manufacturing and sourcing decisions covering both in-house production and contract manufacturers.
- Toyota of Japan is building its next-generation customer service model on a cloud-based platform that will allow owners, dealers, and service agents to exchange information about the vehicle.
- Hyundai’s South Korean localization strategy sees it producing and supplying high quality cars in physical proximity to its target market.
- Huawei, headquartered in Shenzhen, has invested significantly in supply chain management technology,

Asia continues to dominate, with six of its countries among the top 10, with India, China, and Malaysia rounding out the top three off-shoring destinations.

while strong cost-based optimization models dictate trade-offs on profitable response to demand.

- While other regional retailers are still developing supply chain strategies, Woolworths in Australia has already embarked on its “supply chain transformation journey.”
- Honda saw significant financial performance across its car, motorcycle, and power products lines, improving its decision-making speed and supply responsiveness by reorganizing its operations activities under the three separate business divisions.
- In Singapore, Flextronics’ future supply chain leadership is focused on 3D printing and various advanced engineering services.
- Investments in advanced planning and forecasting capability drives tangible benefits across the value network for Korea-based LG Electronics.
- Sony’s rise this year shows a focus on network optimization, end-to-end supply chain visibility, and an exit plan from PC into mobile, game, and imaging.

While most regional companies still need to elevate their supply chain capabilities to compete on a global level, Gartner researchers say that it’s “encouraging” to see companies dramatically improve their position on the global ranking compared to last year. The Asia Pacific’s enterprise dynamism makes it possible. □

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Air Cargo 4 Settlement, c/o The Garden City Group, Inc., P.O. Box 10083, Dublin, OH 43017-6683, USA. Completed claim forms must be postmarked no later than January 6, 2015.

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If you do not want to take part in one or more of the settlements, you have the right to opt out. To opt out of one or more of the settlements, you must do so by November 7, 2014. Class members have the right to object to the settlements, the Plan of Allocation, and the request for up to 22 percent of the settlement funds in attorneys' fees, and incentive awards of \$90,000 for each of the six class representatives. If you object, you must do so by December 26, 2014. If you do not opt out of a particular settlement, you will be bound by the terms of that settlement and give up your rights to sue regarding the settled claims. You may speak to your own attorney at your own expense for help. For more information, visit www.AirCargo4Settlement.com or call toll-free 1-855-382-6460. Outside the U.S. and Canada, call 1-513-795-0998 (toll charges apply).

A Final Approval Hearing to consider approval of the settlements, the Plan of Allocation, the request for attorney fees, reimbursement of expenses and incentive awards will be held at the United States District Court for the Eastern District of New York on January 16, 2015 at 10:00 am. You may ask to appear at the hearing, but you don't have to attend. For more information, visit www.AirCargo4Settlement.com or call toll-free 1-855-382-6460. Outside the U.S. and Canada, call 1-513-795-0998 (toll charges apply).

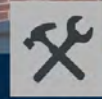
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