TOP FREIGHT TRANSPORTATION PROVIDERS OF 2017

With the complex economic and global trade environment, logistics professionals are under more pressure than ever to secure the right carriers and transportation service providers—while squeezing as much value as possible out of their transportation network.

PEERLESS CONTENT CREATION

Logistics MANAGEMENT

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The trend set over the past few years for mergers and acquisitions has hardly subsided, and a fresh injection of equity investment is transforming the marketplace. At the same time, shippers may expect to see 3PLs continue to purchase high-tech "solutions" and hire young professionals for implementation.

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Top 35 ocean carriers still a puzzlement 27

The collapse of Hanjin in 2016 fueled speculation that new players might be emboldened to enter the "top tier" and begin competing for market share. With this, logistics mangers putting container shipping to work are facing the biggest shift in their carrier base in 20 years—and now must adapt their procurement and contract strategy.

welcome

2017 Top Providers: Time to put the best to work

The U.S. economy has taken a step forward, capacity is tightening across the modes, and the outlook is generally positive for growing freight volumes through 2023. Now, more than ever before, savvy shippers need to fine-tune the management of their logistics operations and gain a firmer grasp of rate and capacity levels to keep their supply chains and budgets in balance.

To be successful in that endeavor, U.S. shippers must now keep carrier and logistics service provider relationships top of mind. And if shippers feel those existing partnerships are not currently optimizing efficiencies, they must search for new, more dynamic partners that maintain a broader breadth of services along with rock-solid financial performance to keep operations as risk-free as possible.

In this Special Digital Issue, the editorial staff of *Logistics Management* has collected our annual lists of top carriers and service providers broken down by financial performance and freight volume moved in order to help today's shippers better understand who's leading the pack in terms of investment and service offerings.

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SPECIAL REPORT

Trucking Top 50

Reinventing *the* fundamentals

A new breed of leadership is creating a long-term vision to earn strategic relationships with shippers. Solid day-to-day execution and aggressive investment in technology set the direction for trucking's new guard.

By John D. Schulz, Contributing Editor

Over the years we've found that the biggest trucking companies have maintained their size and scope due to the leadership of solid management teams that have the ability to transform a long-term vision into a profitable day-to-day business plan—and continue to do so in a cyclical industry where earnings for even the best companies are razor thin.

This formula for success is not difficult to create, but it's elusive to achieve. "You have to find a niche and serve it better than anyone else," says Stifel's veteran trucking analyst John Larkin. "Stay true to that core service offering, watch your costs like a hawk and treat your people like the heroes they are."

Top 25 Less-Than-Truckload Carriers: 2016 revenues

(Including fuel surcharges)

Rank	Carrier name	2015 Revenue ($ million)	2016 Revenue ($ million)	YoY % Change
1	FedEx Freight	$5,745	$5,936	3.3%
2	XPO Logistics	$3,525	$3,445	-2.3%
3	Old Dominion Freight Line	$2,893	$2,936	1.5%
4	YRC Freight	$3,033	$2,923	-3.6%
5	UPS Freight	$2,479	$2,384	-3.8%
6	Estes Express Lines	$2,135	$2,155	0.9%
7	ABF Freight System	$1,870	$1,870	0.0%
8	YRC Regional	$1,777	$1,741	-2.0%
9	R+L Carriers*	$1,429	$1,452	1.6%
10	Saia Motor Freight Line	$1,221	$1,218	-0.2%
11	Southeastern Freight Lines*	$1,031	$1,043	1.1%
12	Averitt Express	$702	$717	2.2%
13	Central Transport	$675	$703	4.3%
14	AAA Cooper	$513	$518	1.0%
15	Dayton Freight Lines*	$462	$498	7.8%
16	Roadrunner Transportation	$516	$460	-10.8%
17	New England Motor Freight	$388	$398	2.6%
18	Pitt Ohio	$396	$397	0.2%
19	A. Duie Pyle	$282	$290	2.8%
20	Central Freight Lines*	$216	$202	-6.5%
21	Oak Harbor Freight Lines	$191	$198	3.6%
22	Daylight Transport	$192	$195	1.2%
23	Ward Trucking	$155	$153	-1.3%
24	Wilson Trucking	$148	$142	-3.9%
25	LME	$110	$126	14.1%
TOTAL TOP 25 LTL CARRIERS		**$32,085**	**$32,099**	**0.0%**

Note: Revenue for LTL operations only, unless otherwise indicated and includes Canadian operations
*Revenues primarily LTL and include less than ten percent for truckload and other services
Source: Company reports and SJ Consulting Group estimates

Top 25 Truckload Carriers: 2016 revenues

(Including fuel surcharges)

Rank	Carrier name	2015 Revenue ($ million)	2016 Revenue ($ million)	YoY % Change
1	Swift Transportation	$3,512	$3,361	-4.3%
2	Schneider National	$2,380	$2,422	1.8%
3	J.B. Hunt Transport Services	$1,837	$1,921	4.6%
4	Landstar System*	$1,697	$1,619	-4.6%
5	Prime**	$1,504	$1,520	1.1%
6	Werner Enterprises	$1,623	$1,504	-7.3%
7	U.S. Xpress Enterprises	$1,343	$1,323	-1.4%
8	CRST International	$1,135	$1,173	3.3%
9	Crete Carrier Corp.	$1,014	$984	-3.0%
10	C.R. England	$924	$903	-2.2%
11	Knight Transportation	$952	$900	-5.4%
12	Celadon Group**	$870	$892	2.5%
13	Roadrunner Transportation	$811	$862	6.2%
14	Ryder Systems	$734	$837	14.0%
15	Ruan Transportation Management Services	$770	$750	-2.5%
16	Daseke	$675	$655	-3.0%
17	Penske Logistics	$506	$642	26.7%
18	Cardinal Logistics*	$630	$621	-1.4%
19	Heartland Express	$736	$613	-16.8%
20	Covenant Transportation Group	$647	$594	-8.1%
21	Anderson Trucking Service	$618	$593	-4.0%
22	Stevens Transport	$616	$589	-4.4%
23	Marten Transport	$517	$533	3.2%
24	XPO Logistics	$562	$530	-5.7%
25	Western Express	$520	$528	1.5%
TOTAL TOP 25 TRUCKLOAD CARRIERS		**$27,134**	**$26,869**	**-1.0%**

* Light-Asset Carrier
** Results adjusted to closer resemble calendar year
Revenues primarily for truckload operations and may include less than ten percent for non-truckload services
Source: Company reports and SJ Consulting Group estimates

But while the logos on *Logistics Management*'s (*LM*) annual listing of the Top 50 trucking companies rarely changes, we're seeing a new breed of younger, but seasoned management teams take the helm of several of these market leaders—changes that are sure to continue.

For example, FedEx Corp.'s 72-year-old founder Fred Smith stepped down as president of the nation's second-largest transportation concern as of Jan. 1, although he will remain CEO and board chairman. David Bronczek is taking over Smith's role as president, and analysts say that the $50.4 billion freight conglomerate won't miss a beat.

At Swift Transportation, No. 1 on the *LM* listing of truckload (TL) carriers, its founder and longtime chairman and CEO Jerry Moyes stepped down recently and was replaced by Richard Stocking. Not to worry, as Swift's senior management team still has more than 150 years of trucking experience.

Following the death of its namesake chairman and truckload visionary Don Schneider in 2012, the No. 2 TL carrier is making a significant move of its own this year. Privately held Schneider is planning to go public with what

would be the largest initial public offering (IPO) since Swift went public in 2010. The move is being engineered by Schneider's CEO Chris Lofgren who formerly was chief information officer at the company and generally regarded as one of the best innovators in the industry.

When Robert Young III joined ABF Freight (No. 7 on the *LM* LTL list), President Harry Truman fired Gen. MacArthur, Joe DiMaggio played his final game for the Yankees, and Winston Churchill returned to power in the U.K. It was 1951, and Young was 10. He recently ended a 52-year career at the conglomerate now known as ArcBest Corp., and organization now run by Judy McReynolds—the only female CEO among *LM*'s Top 50 listings.

"There comes time when a leader is ready for retirement, and, if the retiring CEO has done a good job, there

ArcBest takes diversification route

ArcBest Corp., parent of ABF Freight (No. 7 on the *LM* Top 25 LTL list), is undertaking the biggest transformation in the company's 94-year history.

When Judy McReynolds took over as board chairman last year, she began accelerating ArcBest's move away from its traditional, unionized LTL operation into a new, more diversified approach to transportation.

As recently as 2009, ABF produced as much as 93% of its parent company's revenue. Last year, that share was 70%. According to ArcBest's internal projections, the goal is a 50/50 split between asset and non-asset based services within a decade.

Its goal, according to projections given at a recent investor conference, is to become "one fully-integrated logistics enterprise" involving as many as four operating units including managed transportation (ABF, truckload, ocean and warehousing), ground expedited (including its Premier and Panther expedited units), moving (U-Pack) and maintenance and repair (including FleetNet).

ArcBest's plan would seem to follow the successful diversification strategy of industry leader Old Dominion Freight Line (ODFL), No. 3 on our LTL list. ODFL made a conscious strategic management decision more than 15 years ago to diversify away from being simply a Southeast regional LTL carrier into a multi-regional, multi-modal "solutions oriented" carrier that's now posting industry-leading operating ratios in the mid-80s.

—By John D. Schulz, contributing editor

will be at least several candidates ready to move up into the CEO slot," says Larkin. "Often the change is tricky, as an entrepreneurial founder is often replaced by a younger 'professional manager.'"

Other times, a change at the top is the best thing that could have happened. For example, James Welch performed a near-miracle as new CEO in saving YRC Worldwide (YRCW) from bankruptcy. A Yellow veteran who left the company during the reign of Bill Zollars, Welch returned in 2011 and has led a successful turnaround. This occurred after YRC, which is parent to the No.4- and No.8-largest LTL companies in its long-haul and regional carriers, flirted with bankruptcy amid $2 billion in debt.

Getting YRC on the road to profitability—and saving 10,000 jobs in the process—is an ongoing task. "Progress at YRCW has not, or will not always be linear as we work to move the company profitably forward," said Welch. "We can expect some bumps along the way."

What "bumps" lie ahead for some of the biggest and the best in the trucking industry? *LM* looked at what makes the biggest companies tick and what changes they're making to stay on top.

Technology, technology, technology

Increasingly, spending millions on technology is no longer seen as optional for the biggest trucking companies. Today, it's simply the ante required to stay in the game. As analyst Larkin says: "Technology is everything."

"I rarely turn down a request internally for IT capital expenditures," says Brad Jacobs, chairman and CEO of XPO Logistics, parent of the No. 2 LTL carrier, who adds that technology is a "big part of our strategy to make it easy and profitable to do business with us."

Since XPO bought the former Con-way LTL companies for $3 billion in 2015, Jacobs told *LM* that the company has completed "dozens" of significant IT developments. These include the rollout of 15,000 handheld devices for better crossdock management at its terminals, an LTL dashboard for shippers and a new "virtual pricing" workbench for its sales staff along with other mobilized IT processes.

"We've integrated our LTL options into every other XPO unit to spot untapped efficiencies and create cost savings," says Jacobs "First, it makes

FTR cites flat trucking conditions with an eye on growth as year goes on

Flat conditions were the theme of the recent edition of the "Trucking Conditions Index" (TCI) issued by freight transportation consultancy FTR.

The TCI reflects tightening conditions for hauling capacity and is comprised of various metrics, including capacity, fuel, bankruptcies, cost of capital and freight.

According to FTR, a TCI reading above zero represents an adequate trucking environment, with readings above 10 indicating that volumes, prices and margin are in a good range for carriers.

For January, the most recent month for which data is available, the TCI came in at 2.7, which was in line with December's 2.9 and down from November's 4.38 and October's 4.58. As was the case in December, the numbers from January reflect what FTR described as a low point for trucking conditions in advance of "an expected bounce as 2017 progresses." The consultancy added that while the industry feels positive following the election, there are risks related to various economic proposals currently being considered by the new administration and Congress.

"It's looking like 2017 will be a better year for the trucking industry," said FTR COO Jonathan Starks. "This late recovery is consumer driven, which is relatively light on increasing freight demand, but we will see modest growth. More importantly, the industry is really beginning to face up to the costs and changes from ELD implementation."

Starks said that we should expect a productivity and capacity hit to the industry, though the effects will be felt differently, with early adopters ahead of the curve. "One of the big issues we expect companies to continue to struggle with is the driver situation, with the number of new hires not keeping pace with overall demand for drivers," he said.

If capacity doesn't meet demand, then truckers will be able to raise prices. However, FTR does not expect to see that make an impact until late 2017, or into 2018. "We're also closely tracking government policies and actions," said Starks. "The main concern continues to be the possibility of trade wars, which could have immediate and detrimental effects on freight transportation."

According to FTR, the ELD implementation scheduled for December could be markedly affected should the White House or courts significantly curtail or remove it, although the consultancy noted that should not be the case, given the long-standing bipartisan support for transportation safety regulations.

According to Starks, FTR will closely monitor how small carriers begin to implement ELD into their operations over the next nine months to 12 months, and how it is likely to affect changes in carrier capacity and rates.

"Even though the market outlook is showing signs of optimism, the freight environment remains in a pattern of largely flat growth, including fluctuating GDP, decent job growth figures and signs of increased consumer spending," added Starks.

—Jeff Berman, group news editor

both carriers and their customers more efficient. Second, it brings down costs." And third, but certainly not least, this level of integration creates what Larkin calls "sticky" relationships between carriers and shippers—less transactionally-based, and more strategic in nature.

According to Larkin, what the best carriers are trying to give their customers is state-of-the-art visibility while providing shippers with continually optimized, "fail-safe" supply chain management services.

"Almost all of us are trying to get more strategic with customers from a sales and services perspective," says John White, chief marketing officer for U.S. Xpress, the No. 7 TL carrier. "We're all trying to get deeper relationships, providing multiple service relationships, getting more imbedded into customers supply chains and bringing value beyond trucks and rates."

To do that, says White, "requires trucking carriers to start rolling up our sleeves and driving efficiencies and costs out with our mutual customers. Their customers are ultimately our customers as well."

Changing to stay in the mix

No trucking company was in worse financial condition than YRC was back in 2007-2010. Coming off ill-timed purchases of Roadway Express and USF Corp. and grappling with the worst economic downturn since the 1930s, YRC teetered on the brink of bankruptcy.

Bill Zollars, who had engineered the Roadway and USF purchases in an attempt to grow in revenue to compete with the likes of multinational giants UPS and FedEx, left under pressure in 2011. That opened the door for James Welch, who held senior management positions at Yellow before leaving the company five years earlier, to return.

The blueprint was simply survival. Equipment and terminals were sold for cash. Labor negotiations were renewed with concessionary agreements. Non-performing operations were closed or sold. And management was trimmed, a move that continued this year when about 100 middle managers at both YRC's long-haul and regional carriers were let go.

YRC called it "normal rightsizing adjustments" as a result of advances it has made in processes and technology. Welch calls the entire recovery process "a balancing act" to create profitability.

According to Welch, it starts with weight per shipment and lengths of haul in an effort to create the right "freight mix" among its customers. "A little tweak here and a little tweak there in its customers' freight can create all the difference when it comes to producing the freight density needed on key lanes to create long-term profitability," he says.

The results have been impressive. YRC ended 2016 with the lowest levels of debt YRC has had since 2005, reducing debt by more than $70 million. Last year's operating income of $124.3 million was YRC's best result in 10 years. But when asked if he was satisfied, Welch said that the answer is "a resounding 'no.' However, I believe the company is well positioned to participate profitably as the economy strengthens."

What can shippers expect from changes?

So, what are the immediate effects of these long- and short-term changes being made by these top carriers as they work to become more diversified, more strategic and more connected with their customers?

In short, it means rate increases, probably in the 3% range for TL carriers and perhaps as high as 5% for some LTL customers. However, these are not your father's rate increases. Unlike the one-size-fits-all rate hikes of the past, more carriers now say that they're tailoring their rate increases to cover their costs first on their most costly customers.

If a shipper is providing “driver-friendly” freight on efficient lanes with steady demands, that shipper can substantially reduce or mitigate these price hikes, carrier executives say.

“In terms of demand and pricing, the LTL market is looking good,” says Wayne Spain, president and COO of Averitt Express, No. 12 on our LTL listing. “We’re optimistic that LTL shipments will grow relative to the positive outlook of the economy.”

Spain adds that there’s “a good possibility” that the trucking industry and freight numbers “could outperform many of the predictions that analysts made” at the end of last year. Of course, there are may uncertainties including the mercurial new administration in Washington, geopolitical macro issues and general skittishness on the part of businesses to invest in their operations.

Implementation of electronic logging devices (ELDs) has already occurred in most LTL carriers as well as in most of the largest TL carriers. “I suspect if it has any impact, it will be on the truckload side,” says YRC’s Welch.

Of course, any TL capacity issue is never a bad thing for LTL, because some of those multi-stop truckload shipments filter back down into LTL networks. “From a capacity standpoint, I can tell you that we have capacity at all four of our operating companies,” says Welch. “Some companies have a varying degree of difference between capacity that’s available, but we certainly think that we can handle the surge if there is one. We’ll just have to see how it plays out.”

With that said, Welch adds that he’s planning “an aggressive stance” on pricing over the next couple of quarters, calling the LTL market “very stable” at the moment.

However, the situation in TL is harder to predict, analysts say, because of the unknown impact on ELDs on capacity. “It helps us,” says USX’s White. “In the short run it may increase some costs, but in the long run it ends up with benefits.” •

—John D. Schulz is a contributing editor to Logistics Management

Staffing changes in trucking sector

Preliminary research indicates that the entire logistics industry is on a course of change due to more women entering the workforce.

As *Logistics Management* provides readers with its 33rd annual “Salary Survey” this month, the focus will again be on regional trends and generational demographics. But the role of women in logistics will also be top of mind.

Preliminary research indicates that the entire logistics industry is on a course of change due to more women entering the workforce.

“When women turn to nontraditional careers, they not only find challenges and opportunities, they find a better salary,” explains Ellen Voie, president and CEO of the Women In Trucking Association (WIT). “The Department of Labor identifies nontraditional careers for women as those that include less than 25% of females. However, these women earn better salaries on average than their peers in traditionally female occupations.”

The WIT, adds Voie, aims to change an image many people have regarding careers in transportation. “They see a truck with a diesel engine and smokestacks and a big grill. What they don’t see is a very technologically advanced vehicle that no longer requires as much physical strength to operate, and is as comfortable inside as the family car,” she says.

Prior to founding WIT, Voie held a variety of roles in the transportation industry, most recently as manager of retention and recruiting programs at Schneider, Inc.

According to Voie, it’s about time that shippers and consumers began to realize that that the trucking industry is working hard to provide drivers with a better work life balance. “Ordinary citizens don’t see the connection between that truck and the gallon of milk on their grocery store shelf,” she adds. “Our challenge is to change that perception…and that’s what WIT is doing.”

—Patrick Burnson, executive editor

PREPARING FOR THE UNCERTAIN

The advent of new carrier alliances and "big ship readiness" will determine which of the top ports gain share and supply chain advantages. Meanwhile, logistics managers must hedge their bets to mitigate risk and avoid reliance on a handful of key gateways.

BY **PATRICK BURNSON**, EXECUTIVE EDITOR

Port authorities are always being told to prepare for the uncertain, but this year ushers in a whole new set of challenges.

For example, while the expanded Panama Canal locks went into operation in mid-2016, the impact of that development has yet to be fully measured, say analysts for Fitch Ratings LTD, a nationally recognized investment consultancy.

However, Fitch analysts note that port capital improvements continue to center on capacity enhancements to accommodate larger container ships being routed through Panama, and for the even more massive "mega" vessels on all-water routes. At this stage, nine ports have water depths sufficient to handle post-Panamax ships: Los Angeles; Long Beach; Oakland; Seattle; Tacoma; New York/New Jersey; Norfolk; Baltimore and Miami.

"Our research did not come to many unexpected conclusions," says Stacey Mawson, a director at Fitch Ratings. "Dockside and terminal performance across the sector was mixed last year due to the Hanjin bankruptcy that created a backlog that has largely been cleared."

However, Mawson adds that renegotiated trade agreements or newly implemented tariffs under the Trump administration could result in changes to import and export volumes, along with the relative importance of affected trade routes. Furthermore, United States withdrawal from the Trans-Pacific Partnership may adversely affect cargo volumes. "The full

Shipping alliances comparison at top U.S. ports

(Before and after April 1, 2017)

U.S. ports	Number of alliance services			Number of deployed vessels			Average vessel capacity (TEUs)		
	Before	After	Changes from before	Before	After	Changes from before	Before	After	Changes from before
Los Angeles	11	15	▲ by 4	206	191	▼ by 15	8,500	9,300	▲ by 800
Long Beach	13	10	▼ by 3	182	175	▼ by 7	9,000	8,600	▼ by 400
New York/New Jersey	21	17	▼ by 4	215	146	▼ by 69	7,800	8,300	▲ by 500
Savannah	23	19	▼ by 4	246	213	▼ by 33	7,500	8,100	▲ by 600
Seattle	6	7	▲ by 1	119	67	▼ by 52	7,600	8,300	▲ by 700
Tacoma	4	4	No change	90	46	▼ by 44	7,300	6,600	▼ by 700
Norfolk	24	19	▼ by 5	239	185	▼ by 54	7,900	8,700	▲ by 800
Oakland	16	19	▲ by 3	240	215	▼ by 25	8,600	8,900	▲ by 300
Houston	5	7	▲ by 2	42	55	▲ by 13	5,000	5,100	▲ by 100
Charleston	21	14	▼ by 7	205	151	▼ by 54	7,500	7,700	▲ by 200
Miami	8	10	▲ by 2	81	108	▲ by 27	5,800	6,600	▲ by 800

Figure: 2M, CKYHE, G6, and 03 trans-Pacific and trans-Atlantic services before April 1, 2017 compared to the 2M, OCEAN and THE trans-Pacific and trans-Atlantic services after April 1, 2017. The services are based on alliances' and carriers' proforma schedules available through March 17, 2017.
Source: CargoSmart

Shipping alliances comparison at U.S. ports

(Before and after April 1, 2017)

U.S. ports	Number of alliance services			Number of deployed vessels			Average vessel capacity (TEUs)		
	Before	After	Changes from before	Before	After	Changes from before	Before	After	Changes from before
Boston	3	3	No change	29	48	▲ by 19	7,600	8,600	▲ by 1,000
Jacksonville	5	4	▼ by 1	64	69	▲ by 5	5,600	5,700	▲ by 100
Wilmington	1	2	▲ by 1	35	78	▲ by 43	6,600	7,900	▲ by 1,300
Mobile	3	5	▲ by 2	42	55	▲ by 13	5,000	5,200	▲ by 200
New Orleans	4	4	No change	22	24	▲ by 2	4,900	5,700	▲ by 800

Figure: 2M, CKYHE, G6, and 03 trans-Pacific and trans-Atlantic services before April 1, 2017 compared to the 2M, OCEAN and THE trans-Pacific and trans-Atlantic services after April 1, 2017. The services are based on alliances' and carriers' proforma schedules available through March 17, 2017.
Source: CargoSmart

effect of any changes would extend beyond 2017," says Mawson.

To help gauge the possible scenarios, Fitch Ratings maintains 16 stand-alone revenue-backed ratings across 15 U.S. ports and also rates ports where debt is supported by tax revenues. Based on the its most current data, the outlook for U.S. port ratings is "stable." The "A" category remains the most common rating for stand-alone U.S. ports, reflecting the sector's relatively low credit risk and the resilience of cash flows despite volume fluctuations during economic downturns.

"Hanjin effect"

The sudden and unexpected collapse of one major state-supported carrier last year traumatized an already fragile ocean carrier community. That shock quickly spread to the U.S. ports served by the world's leading vessel operators.

According to Panjiva, an online search engine with detailed information on global suppliers and manufacturers, "the Hanjin effect" can be seen most starkly in the drop in volumes at Long Beach and Seattle last year. Both gateways hosted the failed carrier's terminal operations and lost business to their sister ports—Los Angeles and Tacoma—respectively.

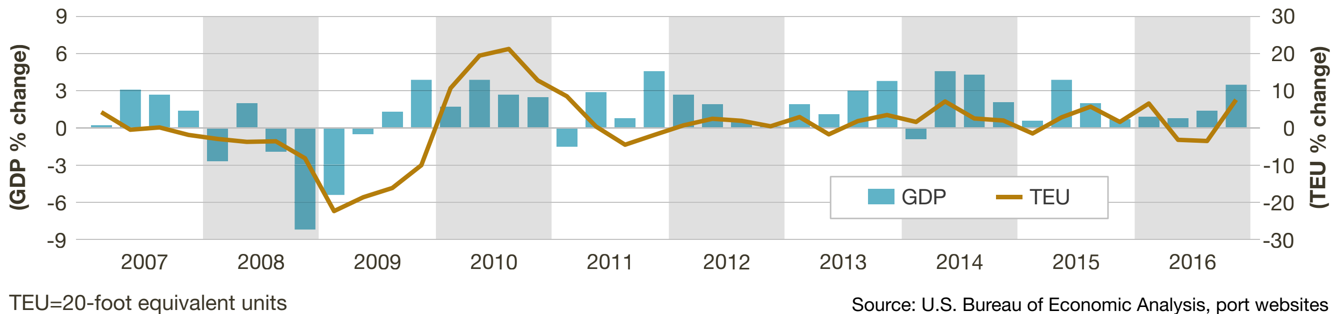
"Other ports have plenty of reasons to celebrate despite this big setback," says Chris Rogers, Panjiva's research director.

Top 30 U.S. Ports

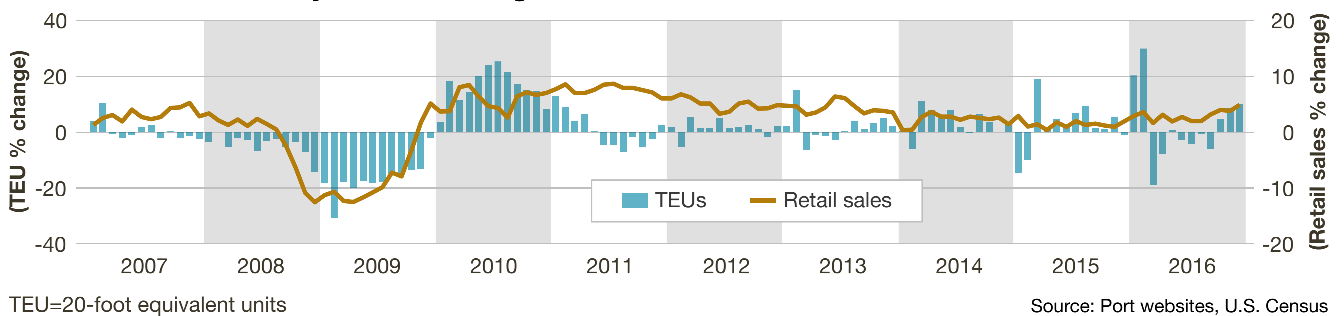
Import TEUs		2016				2015			
Rank	Port	TEUs	% of Total	% of Change	5 year CAGR	TEUs	% Total	% Change	Rank
1	Los Angeles	4,620,355	18.4%	6.5%	1.2%	4,338,357	17.7%	-6.8%	1
2	Long Beach	3,708,978	14.8%	-2.6%	2.0%	3,809,430	15.5%	1.6%	2
3	Port of New York	3,552,646	14.1%	2.9%	4.5%	3,453,154	14.1%	7.5%	3
4	Savannah	1,808,236	7.2%	6.4%	6.3%	1,699,896	6.9%	7.8%	4
5	Tacoma	1,802,397	7.2%	7.6%	17.7%	1,674,589	6.8%	2.3%	5
6	South Houston	1,508,725	6.0%	4.0%	4.6%	1,451,233	5.9%	0.9%	6
7	Norfolk	1,162,634	4.6%	9.2%	8.8%	1,064,635	4.3%	-2.2%	8
8	Charleston	1,055,660	4.2%	0.4%	8.1%	1,051,578	4.3%	12.1%	9
9	Oakland	948,884	3.8%	5.6%	-0.3%	898,364	3.7%	-8.0%	10
10	Seattle	932,477	3.7%	-20.6%	-11.6%	1,174,604	4.8%	-2.4%	7
11	Port Everglades	686,560	2.7%	6.0%	5.0%	647,981	2.6%	-2.3%	11
12	Miami	528,418	2.1%	1.4%	1.0%	521,019	2.1%	10.6%	12
13	Baltimore	428,232	1.7%	9.2%	6.9%	392,167	1.6%	9.7%	13
14	Philadelphia	321,016	1.3%	23.8%	13.4%	259,363	1.1%	20.6%	15
15	New Orleans	288,979	1.2%	-9.5%	4.8%	319,316	1.3%	43.9%	14
16	Jacksonville	238,293	0.9%	8.2%	5.5%	220,257	0.9%	-4.1%	16
17	Wlimington	171,823	0.7%	3.4%	3.1%	166,195	0.7%	-7.2%	18
18	Boston, MA	165,088	0.7%	-9.3%	11.3%	182,033	0.7%	62.8%	17
19	Mobile	139,512	0.6%	18.1%	8.5%	118,084	0.5%	-6.0%	20
20	West Palm Beach	138,925	0.6%	-0.3%	4.3%	139,379	0.6%	2.6%	19
21	Gulfport	82,434	0.3%	15.2%	-6.2%	71,549	0.3%	-25.8%	21
22	Chester, PA	75,690	0.3%	18.4%	7.6%	63,950	0.3%	10.6%	23
23	Eddystone	75,696	0.3%	18.4%	7.6%	63,956	0.3%	10.6%	22
24	San Diego	70,708	0.3%	22.4%	7.5%	57,751	0.2%	7.1%	24
25	Port Hueneme	47,206	0.2%	9.0%	21.2%	43,295	0.2%	-11.6%	26
26	Freeport	42,344	0.2%	-5.5%	6.7%	44,815	0.2%	10.1%	25
27	Port Tampa	30,612	0.1%	1.5%	3.5%	30,154	0.1%	16.2%	28
28	Tampa, FA	30,605	0.1%	1.5%	3.5%	30,149	0.1%	16.2%	29
29	Everett	28,272	0.1%	-18.7%	2.5%	34,784	0.1%	27.2%	27
30	Port Manatee	21,691	0.1%	-9.8%	27.2%	24,047	0.1%	105.9%	30
National		**25,117,742**	**2.5%**	**3.1%**		**24,498,423**	**1.4%**		

Source: Panjiva

U.S. GDP versus quarterly TEU growth rate



TEUs versus monthly retail sales growth



"Overall, import handling still increased 2.5% on 2016 over 2015," he says.

The growth in Savannah and Houston can be explained by the opening of the Panama Canal extension, notes Rogers, who adds that Charleston probably saw a benefit, too. Miami, meanwhile, lost share to other ports in Florida, while the "niche" Port of Philadelphia continues to steadily climb in the Top 30 rankings.

Changing partners

Meanwhile, carriers are changing partners after bankruptcy, acquisitions and consolidation roiled container shipping last year. Eleven of the world's largest container shipping lines have come together in three new alliances, reflecting an industry-wide effort to cut excess vessel capacity and trim costs. For most ports, this means fewer carriers making regular scheduled calls. This does not alarm many industry insiders, however, who say that cargo volumes will remain about the same—or even increase as Mega vessels displace smaller ships used for deployments in the past.

Analysts with CargoSmart Limited, a global management software provider for the logistics community, say based on proforma schedules provided by the new alliances that service disruptions should be manageable through peak season.

"For ports that are accommodating larger vessels, there may need to be greater adjustments in berth windows

Inland ports partner with coastal gateways to gain competitive edge

The impact of the expanding Panama Canal is now even being felt in America's heartland, as a recent strategic alliance points out.

Just this spring, the Board of Commissioners of the Port of New Orleans and the St. Louis Regional Freightway entered into a memorandum of understanding (MOU) to exchange market and operational information with the goal of growing trade and building upon existing and new business relationships between the two regions and critical ports. The agreement also calls for joint marketing efforts to meet those objectives.

According to Mary Lamie, executive director of the St. Louis Regional Freightway, the MOU is the culmination of discussions begun during a September 2016 visit to St. Louis by the top official for the Port of New Orleans.

"At that time, it became evident that it would be mutually beneficial to foster even greater collaboration and leverage the intermodal connectivity between the Port of New Orleans and the St. Louis region," says Lamie.

Located in the Lower Mississippi River system and served by all six Class 1 railroads and the interstate highway system, New Orleans is arguably one of the most "intermodal" ports in the nation.

– Patrick Burnson, executive editor

for the greater volume of cargo," says Lionel Louie, CargoSmart's chief commercial officer. "We may see initial frequent updates to carriers' sailing schedules as the alliances deploy the ships on the new services. He adds that most of the major U.S. ports will have fewer visiting vessels for each alliance service. In addition, the average vessel size by TEU capacity for the alliance services will increase at most of the Top 30.

"With the expected number of alliance vessels on the trans-Pacific and trans-Atlantic trades visiting these ports decreasing by 17% and the average alliance vessel capacity increasing by 5%, we anticipate that the new alliance services will be operating overall less capacity at the top ports," says Louie.

At the individual level, those that are expected to have more visiting vessels and with greater average TEU capacity could see an initial impact on operations as they adjust to the possible new volumes, he cautions.

Transhipment concerns

Executives at Navis, a cargotech company specializing in software solutions for port terminals, comes to the same conclusion as Louie. "There's going to be a need for more terminal software optimization and training for sure," says Raj Gupta, chief technology officer for Navis. "We can see that the complexity of the ocean cargo supply chain is placing new pressures on landside operations and yard management of containers."

This, in turn, creates problems for logistics managers who might not have complete control of port terminal preference. Analysts for the London-based maritime consultancy Drewry note in their latest "Ports and Terminals Insight" report that new alliances have thrown a wrinkle into the situation. "Our analysis shows that even when a shipping line has a significant stake in a terminal, it doesn't necessarily mean that the port is selected for the network schedule," says Neil Davidson, a Drewry analyst for ports and terminals.

"Carriers have to bear in mind the preferences of shippers for major ports, but we were surprised that carriers have not paid much attention to the transhipment hub, which is entirely within their control."

This analysis also shows that individual lines are not entirely in control of their own destinies when it comes to port choices, as partner lines in their alliances may have conflicting port choice preferences and particular "idiosyncrasies," Davidson says. "Even if alliance partners have corresponding port preferences, there's still potential for conflict at the terminal level if more than one line in an alliance has interests in different terminals at the same port," says Davidson.

He adds that even if a terminal operator brings in a shipping line as a joint venture partner, there is no guarantee of securing an alliance's volume. •

—Patrick Burnson is executive editor of Logistics Management

Great Lakes shipping forecast is promising

Logistics managers reliant on the Great Lakes/St. Lawrence Seaway system were encouraged by a recent forecast for steady growth as the shipping season got underway last month.

"Certainly there was a big improvement in the last quarter of 2016 with the resurgence of iron ore pellet exports out of the U.S. and a strong grain season," says Bruce Burrows, president of the Chamber of Marine Commerce. "We expect that positive momentum to continue with overall cargo volumes increasing this year."

Vanta Coda, executive director of the Duluth Seaway Port Authority, is equally bullish. "The overall feeling in the Port of Duluth-Superior is positive, and 2017 is shaping up to be a building year to regain traffic," he says.

Coda adds that coal should stabilize, iron ore should be up and he believes that his port has the opportunity to do well with grain shipments again this year. "We're expecting a middle-of-the-road season in terms of project cargo, though we could be surprised to the upside," he adds.

Jeff Fleming of the Port of Milwaukee says that they're anticipating another busy year as well. "We expect volumes of inbound raw material for manufacturing and outbound agricultural products to be strong in 2017."

The Port of Detroit is among those with new projects on the horizon. "We expect to execute an agreement with the U.S. Army Corps of Engineers for a dredging project on the Rouge River to deepen the channel to 25 feet," says John Loftus, executive director of the Port of Detroit. "We also anticipate the opening of a new general cargo terminal in Detroit."

The Port of Green Bay, meanwhile, expects to see increases in limestone and petroleum this year. In 2016, petroleum product imports were up 1,421% as a result of a pipeline shutdown, that had severed Northeast Wisconsin. These imports are expected to rise as the pipeline shutdown continues.

"Based on the 2016 results, I'm looking forward to this shipping season as the industry continues to be the most cost-effective method of transportation for commodities," says Dean Haen, director of the Green Bay Port. "We want to capitalize on that to expand the movements of diverse cargo."

– Patrick Burnson, executive editor

SPECIAL REPORT

2017 Top 50 U.S. and Global 3PLs

Leading industry analysts maintain that the "mega-deals" witnessed over the past two years in the third-party logistics provider (3PL) sector have abated, but that certainly doesn't mean that mergers and acquisitions (M&A) will fall out of the picture.

According to Evan Armstrong, president of the consultancy Armstrong & Associates, the 3PL market is also still ripe for equity investment. "The one outstanding example of this was when Aerospace, Transportation and Logistics [ATL Partners] bought a controlling share of Pilot Freight Services late last year," he says. "We also anticipate more M&A activity as 3PLs strive to expand geographic scale and provide integrated solution offerings."

At the same time, says Armstrong, technological changes are having a dramatic impact on 3PL operations. Companies such as project44, MacroPoint and others are driving improved transit status data and carrier capacity information from transportation providers to lead logistics companies.

"This year's electric logging devices [ELD] mandate could also be a boon for shipment tracking and carrier capacity monitoring information,"

Armstrong & Associates Top 50 U.S. 3PLs (April 2017)

2016 Rank	Third-party Logistics Provider (3PL)	2016 Gross Logistics Revenue (USD Millions)*
1	C.H. Robinson	13,144
2	XPO Logistics	8,638
3	UPS Supply Chain Solutions	6,793
4	J.B. Hunt (JBI, DCS & ICS)	6,181
5	Expeditors	6,098
6	Kuehne + Nagel (The Americas)	4,909
7	DHL Supply Chain North America	4,200
8	Burris Logistics	3,629
9	Hub Group	3,573
10	FedEx Trade Networks/SupplyChain Systems/GENCO	2,916
11	Ryder Supply Chain Solutions	2,659
12	DB Schenker (The Americas)	2,630
13	Coyote Logistics	2,360
14	Total Quality Logistics	2,321
15	CEVA Logistics (The Americas)	2,310
16	Panalpina (The Americas)	2,209
17	GEODIS (The Americas)	2,200
18	Schneider Logistics & Dedicated	2,125
19	DSV (The Americas)	1,798
20	Echo Global Logistics	1,716
21	Transportation Insight	1,710
22	Landstar	1,632
23	Transplace	1,620
24	Americold	1,555
25	Penske Logistics	1,500
26	Swift Transportation	1,431
27	NFI	1,250
28	Werner Enterprises Dedicated & Logistics	1,156
29	OIA Global	1,150
30	BDP International	1,090
31	APL Logistics Americas	1,055
32	Yusen Logistics (Americas)	1,044
33	Cardinal Logistics Management	1,006
34	Mode Transportation	949
35	SunteckTTS	900
35	syncreon	900
35	Lineage Logistics	900
36	Radial	800
36	TransGroup Global Logistics	800
37	Ruan	796
38	Nippon Express (The Americas)	790
39	Radiant Logistics	783
40	Damco (The Americas)	773
41	Neovia Logistics Services	763
42	Worldwide Express	750
43	ArcBest	677
44	Odyssey Logistics & Technology	650
45	Hellmann Worldwide Logistics (The Americas)	640
46	Kenco Logistic Services	626
47	Crane Worldwide Logistics	616

*Revenues are company reported or Armstrong & Associates, Inc. estimates and have been converted to US$ using the average annual exchange rate in order to make non-currency related growth comparisons.
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Armstrong & Associates Top 50 Global 3PLs (April 2017)

2016 Rank	Third-party Logistics Provider (3PL)	2016 Gross Logistics Revenue (USD Millions)*
1	DHL Supply Chain & Global Forwarding	26,105
2	Kuehne + Nagel	20,294
3	Nippon Express	16,976
4	DB Schenker	16,746
5	C.H. Robinson	13,144
6	DSV	10,073
7	XPO Logistics	8,638
8	Sinotrans	7,046
9	GEODIS	6,830
10	UPS Supply Chain Solutions	6,793
11	CEVA Logistics	6,646
12	DACHSER	6,320
13	Hitachi Transport System	6,273
14	J.B. Hunt (JBI, DCS & ICS)	6,181
15	Expeditors	6,098
16	Toll Group	5,822
17	Panalpina	5,276
18	GEFCO	4,800
19	Bolloré Logistics	4,670
20	Kintetsu World Express	4,415
21	Yusen Logistics	4,169
22	CJ Logistics	3,662
23	Burris Logistics	3,629
24	Agility	3,576
25	Hub Group	3,573
26	Hellmann Worldwide Logistics	3,443
27	IMPERIAL Logistics	3,352
28	Kerry Logistics	3,097
29	FedEx Trade Networks/SupplyChain Systems/GENCO	2,916
30	Ryder Supply Chain Solutions	2,659
31	Damco	2,500
32	Coyote Logistics	2,360
33	Total Quality Logistics	2,321
34	Sankyu	2,275
35	Schneider Logistics & Dedicated	2,125
36	Wincanton	1,720
37	Echo Global Logistics	1,716
38	Transportation Insight	1,710
39	APL Logistics	1,700
40	NNR Global Logistics	1,676
41	Mainfreight	1,640
42	Landstar	1,632
43	Transplace	1,620
44	arvato	1,615
45	Americold	1,555
46	Fiege	1,550
47	Penske Logistics	1,500
48	Swift Transportation	1,431
49	Groupe CAT	1,328
50	NFI	1,250

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says Armstrong. “These types of advances allow for more process automation and increased operational efficiencies. They’re also increasing the quality of information available to customers of non-asset based transportation managers.”

Specifically, industries such as pharmaceuticals are increasing their digitalization needs, Armstrong’s research reveals, putting more emphasis on 3PLs to match these new technological demands. To better ensure counterfeit products are not being sold within established sales channels, for example, the pharmaceuticals industry has a 2017 mandate to begin capturing product serial numbers across its supply chains.

“While this mandate has presented a challenge for many value-added warehousing 3PL operations, the ones we’ve met with are implementing the required operations changes and will meet the deadline,” says Armstrong.

“Adapt or die”

Logistics managers should also expect more 3PL consolidation, says Armstrong, pointing out that the global market is finding it exceedingly hard “to grow and scale” their networks organically.

“Acquisitions are required to leapfrog into and move upward within the Top 50 Global 3PL rankings,” says Armstrong. “This will continue to drive acquisitions like we have seen with DSV/UTi; XPO/Norbert Dentressangle, and Con-way with Geodis/OHL.”

Finally, the “adapt or die” imperative is still with us—and will be for the foreseeable future. To keep pace with omni-channel fulfillment and disruptive technologies like drones, 3D printing, Internet of Things, driverless vehicles, advanced robotics and wearable tech-

nology, it's become painfully clear that 3PLs must constantly evolve to anticipate shipper demands.

"Fortunately, 3PLs are amazingly good at embracing change," says Armstrong. "For example, we've been in operations utilizing PINC Solution's drones for improved trailer yard management and Google glasses for warehouse picking. In addition, many applications, such as HubTran, are adapting machine learning to automate mundane freight bill payment tasks."

In the meantime, Armstrong adds that 3D printing remains mired in its growth stage, but will continue to impact spare and service parts logistics operations. "However, we will see some type of human-overseen driverless vehicles hit the streets in the near term, and that could be especially beneficial in long-haul trucking operations."

For Armstrong, the "Uberization" of trucking, or what he prefers to call "digital freight matching," is still trying to find its legs. "However, we see that there's significant progress being made to build improved real-time lane pricing information with companies such as CargoChief, and improved carrier management applications from industry stalwarts such as C.H. Robinson and Coyote Logistics," he says.

Building a portfolio

Many of the same observations are shared in Gartner's annual "Magic Quadrant" report that was released last month at its supply chain conference in Phoenix. The aim of the report is to provide a qualitative analysis of the market, its direction, maturity and its participants.

Greg Aimi, Gartner's director of sup-

ply chain research and co-author of the "Magic Quadrant," says that logistics managers are still pressing for consolidation in their 3PL portfolios, but not until providers can demonstrate that they have a truly global network.

"For this to happen," says Aimi, "there must be a significant air and forwarding capability. Furthermore, 3PLs in the Asia Pacific region have yet to get started with western acquisitions—but I assume they will." He adds that the report revealed that logistics managers are seeking out a high-degree of industry vertical expertise and specialized solutions, thereby driving a number of "tuck-in" M&As.

"At the same time, the technology area for 3PLs is just getting started," adds Aimi. "Let's just forget that they were laggards when it came to unifying software systems to a single global platform in the past. Today, global operational transparency requirements and digital business drivers from their shipper customers are just going to increase the need for 3PLs to be top dogs when it comes to tech and innovation."

New journey

According to Aimi, this is the second iteration of the "Magic Quadrant" for North American 3PLs. Since the first report, Gartner made significant changes in the criteria definitions to better identify what makes a 3PL valuable to shippers seeking a North American regional provider.

Researchers note that the 3PL industry is "progressing along a maturity spectrum," and trying hard to accommodate increasing shipper requirements through a combination of acquisition and organic growth strategies. However, not all are at the same place in their journey.

According to Gartner, there's a transformation underway across today's logistics industry, and perceptions of logistics service providers are changing. Relationships historically have been transactional, pragmatic and "physical activity oriented."

> **"Logistics managers should be ever mindful that 3PLs are partners who are re-examining their supply chains and looking for useful ways to innovate and transform."**
>
> — *John Langley, Jr., Ph.D, clinical professor of supply chain management, Penn State University*

Researchers note that 3PLs contributed by competing head-to-head in low-margin pricing wars and assumed the role of an interchangeable commodity. Consequently, the idea of leveraging specialized services seemed out-of-reach—until recently.

"As acceptance has grown for an

increased amount of logistics outsourcing, companies are realizing that their performance is more dependent on not only their 3PL providers' capabilities and execution, but also the manner in which they are managed," says Aimi. "This mandates a transition in the roles and responsibilities of tomorrow's logistics professional from being a master of logistics execution to a master of provider orchestration; and it puts an importance on the relationship between customer and 3PL."

Shareholder pressure

Interestingly, while the importance of resource integration is widely acknowledged, it's not uncommon for logistics companies to continue to operate their systems separately, notes John Manners-Bell, chief executive of the London-based consultancy Transport Intelligence (Ti).

For example, Manners-Bell notes that companies like DHL, UPS, Deutsche Bahn and SNCF continue to operate despite the fact that there is little integration between many of their operations or functions. He maintains, however, that this is a less than optimal situation and has often led to a significant lag in the realization of costs savings or to the absence of expected cooperation.

"What's more," says Manners-Bell, "this lack of cooperation makes disposals likely if and when management comes under pressure from shareholders. While contract logistics companies typically integrate well, due to their asset-light nature, they still need to work on the daunting challenge

3PL: Cultural shift underway

Gartner analysts note that in the North American logistics market, most 3PLs started business by predominantly providing deep capabilities in one of three major logistics service roots: transportation services, warehousing and fulfillment services, or international freight forwarding and customs brokerage.

In fact, many providers today still predominantly offer services from just one of these main service lines or "root services." Other providers, especially the larger ones, have expanded their offerings to include services from one or both of the other roots to have a more comprehensive offering.

The truckload brokerage business, for example, has been regarded as one of the stodgier business models in the logistics sector for some time. However, one firm that appears to be breaking out of that mode recently came to our attention when we learned of its "new age" culture and young leadership.

Nolan Transportation Group (NTG) is a company in this high-growth, fast-paced industry, providing third-party logistical services to over 8,000 customers across the United States, Canada and Mexico. Founded by Kevin Nolan in 2005 as a truckload brokerage with a box of cash and two employees, the company posted $278 million in revenue in 2016.

According to Nolan, it's all about culture. He notes that the brokerage business is built on effective sales with a high volume of transactions happening every minute of every day. He's built a successful sales organization by hiring recent graduates who believe in a high energy, collaborative work culture with ample opportunity for growth and promotion from within.

Logistics Management recently sat down with Nolan to gain his observations on the journey so far

***Logistics Management* (*LM*): Do you expect barriers to entry in the 3PL space to come down, or will it be tougher for new players to emerge?**

Kevin Nolan: I believe the legal—bond, insurance and background—barriers to entry will stay consistent with current levels due to the new administration. However, the difficult barriers to compete with players of scale will grow as consolidation and investments continue. Examples of this are technology, hiring and paying vendors faster.

***LM:* What advice can you give to new players breaking into this business?**

Nolan: Balance…plain and simple. Being a 3PL means we're in the middle of customer and vendor. Treat carriers and customers the same, because you can't exist without either. It's easy to gravitate to the customer side more, but the great 3PL sees both sides as equals.

***LM:* How important is trust in the supply chain?**

Nolan: For non-asset and asset light, trust is everything. Production, construction time lines, and end-user satisfaction are all based on delivery of product. If you don't give correct information, the trickle down will ruin your reputation across their whole organization. In supply chain, surprises and breakdowns happen. You have to face these problems head on and communicate with all parties so they can plan accordingly as well.

—Patrick Burnson, executive editor

of integrating the IT systems of the acquired company."

Ti researchers say that the logistics industry maintains the consolidation trend, suggesting that acquisition remains the most favored route towards building global portfolios of integrated services. Their analysts agree with Armstrong and Gartner that the level of consolidation in 2017 is estimated to drop compared to 2016, both in terms of total deal value and volume.

"Acquisitions are required to leapfrog into and move upward within the Top 50 Global 3PL rankings."

—Evan Armstrong, president, Armstrong & Associates

"However, looking ahead, the outlook for consolidation activity in the industry remains positive," says Manners-Bell. "In addition to being driven by the search for growth through global presence and expertise in high-margin sectors, the continued growth of e-commerce will also drive M&A activity in the logistics industry."

John Langley, Jr., Ph.D., clinical professor of supply chain management at Penn State University, agrees with many of the points raised by Armstrong, Gartner, and Ti, but concludes that logistics managers must be aware of other imperatives as well.

"Three factors will contribute to a greater reliance on technology as 3D or additive manufacturing comes into play," says Langley. "We have the same forecast for issues related to block chain, visibility, and optimization."

At the same time, Langley cautions managers to consider disruption and risk when choosing a global 3PL, particularly if they're operating in a politically unstable environment.

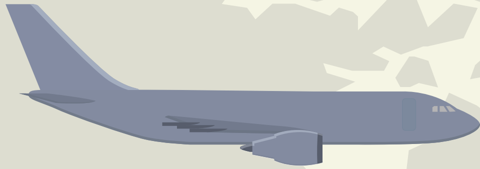
"Also of significance is that the 'Amazon concept' is resulting in a great need for providers of all types to reassess their existing capabilities and essentially transform their strategies and operations to better fit into the future needs of shippers," says Langley. "Logistics managers should be ever mindful that 3PLs are partners who are re-examining their supply chains and looking for useful ways to innovate and transform." •

Patrick Burnson is executive editor of Logistics Management

Examples of major contracts in early 2017

Client	Company	Duration	Sector	Country	Region	Description
Mercedes-Benz	CEVA	3 years	Automotive	Brazil	South America	CEVA renewed its existing contract with Mercedes-Benz for a further three years. It also signed two new agreements which will extend elements of the contract for three and five years respectively.
Carlsberg	DHL Supply Chain	2 years	Consumer/ Retail	UK	Europe	Carlsberg awarded a two-year contract to DHL Trade-team for the management of UK distribution services.
Groupe SEB	XPO Logistics Europe		Consumer/ Retail	Global		XPO secured a multi-million pound, long-term contract with global domestic appliances and cookware giant Groupe SEB.
SAS Scandinavian Airlines	Kuehne + Nagel (K+N)	3 years	Aerospace	Global		SAS Scandinavian Airlines extended its contract with K+N for global logistics services until 2020. K+N will manage the international transport of spare parts for the SAS airplane fleet.
Neue Halberg-Guss (NHG)	Yusen Logistics		Industry and Manufacturing	Germany	Europe	Yusen Logistics won a contract for a total supply chain solution for NHG. The contract covers the movement of engine blocks from Germany to the production plant of a car manufacturer in Ohio, as well as the provision of a closed loop supply chain back to Germany.

Source: Ti database of major contracts

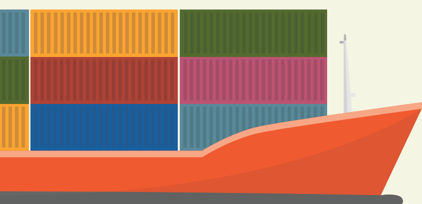


Freight Forwarding 2017: DIGITIZATION & E-COMMERCE continues to reshape marketplace

The global freight forwarding market has grown by 2.7% in real terms since this time last year, but owing to a continuation of excess capacity issues and lower average oil prices, rates continue to fall in both air and sea freight. Forwarders now need to ramp up the value-add visibility services in an effort to boost revenues and keep shippers smiling.

Over the course of 2016, real revenue and volume growth in the air and sea freight forwarding markets was remarkably similar globally, but this disguises significant differences across important countries and regions, say analysts who keep a close eye on the market.

By Patrick Burnson, Executive Editor



Top 25 Global Freight Forwarders

Ranked by 2016 Logistics Gross Revenue/Turnover and Freight Forwarding Volumes*

A&A Rank	Provider	Gross Revenue (US$ M)	Ocean TEUs	Air Metric Tons
1	DHL Supply Chain & Global Forwarding	26,105	3,059,000	2,081,000
2	Kuehne + Nagel	20,294	4,053,000	1,304,000
3	DB Schenker	16,746	2,006,000	1,179,000
4	DSV	10,073	1,305,594	574,644
5	Sinotrans	7,046	2,950,800	532,400
6	Panalpina	5,276	1,488,500	921,400
7	Nippon Express	16,976	550,000	705,478
8	Expeditors	6,098	1,044,116	875,914
9	UPS Supply Chain Solutions	6,793	600,000	935,300
10	CEVA Logistics	6,646	681,600	421,800
10	GEODIS	6,830	690,000	330,000
11	Bolloré Logistics	4,670	856,000	569,000
12	Hellmann Worldwide Logistics	3,443	902,260	576,225
13	Kintetsu World Express	4,373	556,640	495,947
14	Yusen Logistics	4,169	633,056	332,389
14	Kerry Logistics	3,097	1,055,600	282,200
15	DACHSER	6,320	481,400**	272,100
16	C.H. Robinson	13,144	485,000	115,000
17	Agility	3,576	513,500	372,700
18	Hitachi Transport System	6,273	430,000	230,000
19	Toll Group	5,822	542,000	114,000
20	Damco	2,500	659,000	190,000
21	XPO Logistics	8,638	131,500	72,300
22	Logwin	1,095	600,000	140,000
23	NNR Global Logistics	1,676	146,278	286,897

*Revenues and volumes are company reported or Armstrong & Associates, Inc. estimates. Revenues have been converted to US$ using the average exchange rate in order to make non-currency related growth comparisons. Freight forwarders are ranked using a combined overall average based on their individual rankings for gross revenue, ocean TEUs and air metric tons.
**Includes LCL shipments.
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For example, airfreight forwarding growth in China is thought to have been robust this past year, while sea freight growth was much weaker. Conversely, the United States saw moderate expansion in sea freight as air cargo growth faltered over the same period.

Looking ahead to the next 12 months, the market is anticipated to grow at a real compound annual growth rate of 4.1%, as global trade volume growth accelerates. Meanwhile, logistics managers moving freight globally should plan their budgets accordingly.

According to the new "Global Freight Forwarding 2017 Report" compiled by the London-based think tank Transport Intelligence (Ti), a continuation of excess capacity issues and lower average oil prices in 2016 led rates to fall in both air and sea freight, meaning most forwarders reported lower year-on-year revenues.

"While air and sea volume growth picked up a bit in 2016, most forwarders experienced declining revenues on the back of substantial rate declines," says David Buckby, an economist at Ti. "However, and as usual in such circumstances, the fall in forwarder sell rates did not match the drop in their buy rates, leading to improved gross profit margins."

Over the medium term, Buckby expects growth to pick up in line with higher global trade volume forecasts in 2018, though risks are tilted to the downside due to factors such as political uncertainty and continued trade protectionism rhetoric.

Deep dive into the market

The Ti report also explores the performance of the top players against the rest of the market; disintermediation; regionalization; vertical sector opportunities and the effectiveness of online booking platforms.

On profitability performance, survey results indicate that excluding the impact of volume and rate changes, margin pressures for forwarders will intensify over the next five years. Indeed, researchers feel that with investment in technology and offering new or more value-added services, middlemen will develop more successful strategies to sustain margins. In addition, it appears that conventional forwarders are set to lose volume share to other parties like smaller, more technologically savvy 3PLs, but the threat may be "asymmetrical" for air and sea.

A deep dive into the world of freight forwarding technology reveals the disruption caused by digitization, changes to the competitive landscape, and, ultimately, whether forwarders can adapt and survive the upheaval being caused by the continued evolution of the digital supply chain.

"The research we've conducted indicates that there's substantial demand for online interfaces that allow forwarders to better serve shippers," says Ti analyst Alex Le Roy. "Nonetheless, it's clear that the scope of these solutions, in terms of geographic coverage for example, needs to broaden in order for them to deliver value. This will occur, but we are now bearing witness to a race for scale amongst the start-ups."

John Manners-Bell, CEO of Ti, also asserts that the forwarding sector is facing a challenging time, not least because the global economic environment has remained volatile and difficult to anticipate—though this was nothing new, and the sector has always coped well in such circumstances. He warns, however, that structural challenges such as trends toward regionalization and near-sourcing, coupled with greater technological demands, will prove more difficult to manage.

"Political, economic and technological pressure will continue to shape the industry in the coming

year," says Manners-Bell. "One thing is certain, whether large or small, freight forwarders will need to remain agile if they are to flourish in an uncertain and complex world."

"The new generation entering the logistics markets have grown up with the laptops and smartphones and expect business transactions to be the same or just as easy as ordering a pair of shoes from Amazon."

— Cathy *Morrow Roberson, Logistics Trends & Insights Morrow Roberson.*

Digitize or die

The Ti report mirrors much of what's contained in a recent survey conducted by the consultancy Logistics Trends & Insights. According to "The Evolving Freight Forwarding Market 2017," digitization is looming large in the immediate future.

Cathy Morrow Roberson, president of the consultancy, maintains that the advent of non-traditional players riding the wave of e-commerce growth—such as Amazon, Alibaba, and the many new tech-based startups—are changing the face of forwarding.

"The digitization of supply chains has forced many traditional forwarders into investing and automating their processes," says Morrow Roberson. "The new generation entering the logistics markets have grown up with the laptops and smartphones and expect business transactions to be the same or just as easy as ordering a pair of shoes from Amazon."

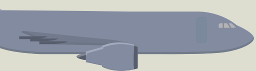
When asked what improvement will be utilized the most over the next five years, 58% of responding shippers named "digitization," with 92% of survey respondents saying "digitization adds value." Furthermore, says Morrow Roberson, 58% of survey respondents view online freight marketplaces as an opportunity for traditional forwarders.

"In fact, we're seeing partnerships being established between traditional forwarder and non-traditional," says Morrow Roberson. "DB Schenker and uShip, for example. Schenker acquired an equity stake and is using uShip within the European road freight market. Drive4Schenker uses uShip technology to connect the some 30,000 transport partners in the European land transport network to their freight."

Morrow Roberson adds that partnering with an online freight marketplace allows a traditional forwarder to offer a digital solution in a faster manner. As an example, she points out that DHL introduced its online marketplace—CILLOX—that matches full truckload and less-than-truckload shipments with available transportation providers.

"A big plus for digitization is that it levels the playing field for small- to medium-size forwarders as well as the larger ones," says Morrow Roberson. "And it's not only forwarders, but also shippers of all sizes. Shippers can take advantage of numerous online marketplaces, such as Freightos, to obtain a rate, book the freight and track it from beginning to end."

According to Morrow Roberson, a drawback to many, if not all of these marketplaces, is that not all trade lanes are included; so shippers will need to choose wisely which marketplace to use and



remember to compare rates among all of them, including those of traditional forwarders.

"The big question to ask," cautions Morrow Roberson, "is as if the rates are published or negotiated."

Margin watch

Dr. Zvi Schreiber, CEO of Freightos, a technology provider focused on instant freight quotes for freight forwarders and shippers, admits that the last quarter "ended on a somber note for digitization" due to cyber-attacks that temporarily crippled some of the major global forwarders.

"However, the shipping community will remain vigilant in safeguarding the progress we've made toward transparency," says Schreiber.

The most recent Freightos newsletter, "LogTech Review: Q2 2017," notes that during the second half of June, Amazon and Alibaba both held conferences in the United States, appealing to small and midsize businesses selling on their platform.

"While Alibaba was advocating sales to China as Amazon encouraged cross-border importing, both were clearly pursuing a small- to medium-sized business focus, as Big Box retailers continue to struggle," says Schreiber.

For enterprise forwarders and carriers, the marching orders for the second quarter appeared to be freight visibility, as a number of companies unveiled solutions to enhance cross-supply chain visibility of shipments. The last-mile drone delivery space stayed hot, both in the air and on the ground. Meanwhile, Uber Freight formally launched its product, while continuing to face strong competition from other on-demand trucking startups.

"The second quarter of this year was a strong quarter for visibility technology," says Schreiber, "particularly for DHL's varied divisions." DHL Global Forwarding launched Ocean View, which offers real-time updates on maritime shipments; DHL SupplyWatch, an AI program for identifying supply chain disruptions; and Saloodo, an online trucking marketplace.

Meanwhile, DP World also released a container visibility solution in the UK, as French startup Traxens unveiled a smart freight train tracking solution. In Germany, Panalpina launched a pilot ocean shipment management system. "Finally, CHAMP took tracking further with voice-based air cargo tracking via Alexa," says Schreiber. "And the timing couldn't be better."

Brandon Fried, executive director of the Air Forwarders Association (AfA), agrees with Schreiber positive take on the innovation being pushed into the market, noting that while air cargo volumes have increased, margins remain depressed and most of AfA members are looking forward to more tech-driven opportunities in which profitability may improve.

"One influencing factor to consider is the growth of capacity we've seen over the past couple of years, keeping pricing at lower levels," says Fried. "This increase in space is attributable to the large amount of new and efficient wide-body aircraft, each with generous belly space flying the popular trade lanes."

Another significant factor inhibiting this growth in many cases lies with lower customer pricing agreements that may no longer reflect today's market conditions. Once these contracts expire, says Fried, prices and margin should improve overall.

"However, new transport pricing agreements alone will not assure increased profitability, and this is why forwarders must be searching for more operational efficiencies that only technology can provide," says Fried. "People still play a crucial role in our business, but technology will help them work smarter and provide an improved customer experience." •

Patrick Burnson is executive editor of Logistics Management

TOP 35 Ocean Carriers

Still a puzzlement

The collapse of Hanjin in 2016 fueled speculation that new players might be emboldened to enter the "top tier" and begin competing for market share. With this, logistics mangers putting container shipping to work are facing the biggest shift in their carrier base in 20 years—and now must adapt their procurement and contract strategy.

By Patrick Burnson, Executive Editor

As we noted last year at this time, the poor handling of Hanjin Shipping's downfall left many shippers scrambling for alternative carriers when new alliances and consortia were simultaneously disrupting the industry.

Fast forward 12 months and maritime analysts for Xeneta, a global benchmarking and market intelligence platform based in Oslo, Norway, note that new alliances, structural change and positive economic trends have now transformed the container shipping market over the past year.

Alphaliner Top 35 Ocean Carriers
(Operated fleets as per September 2017)

RANK	OPERATOR	TEU	SHIPS
1	APM-Maersk	3,524,325	655
2	Mediterranean Shg Co	3,086,793	508
3	CMA CGM Group	2,487,510	489
4	COSCO Shipping Co L	1,799,358	325
5	Hapag-Lloyd	1,501,838	213
6	Evergreen Line	1,045,750	193
7	OOCL	677,703	101
8	Yang Ming Marine Tra	585,078	96
9	Hamburg Süd Group	553,048	103
10	MOL	544,504	78
11	NYK Line	541,100	96
12	PIL (Pacific Int. Line)	368,620	137
13	Zim	367,249	76
14	Hyundai M.M.	357,267	61
15	K Line	341,746	58
16	Wan Hai Lines	232,579	88
17	X-Press Feeders	160,427	100
18	KMTC	125,468	61
19	SITC	98,747	74
20	IRISL Group	94,387	44
21	Zhonggu Logistics Cor	93,769	80
22	Antong Holdings (QA)	84,737	80
23	Arkas Line / EMES	74,712	42
24	TS Lines	71,408	33
25	Sinotrans	67,417	42
26	Simatech	66,199	22
27	UniFeeder	53,069	50
28	Salam Pacific	52,221	53
29	SM Line Corp.	51,549	16
30	Sinokor	46,274	39
31	Heung-A Shipping	46,227	37
32	Swire Shipping	43,746	29
33	Emirates Shipping Line	43,710	9
34	Matson	43,310	26
35	RCL (Regional Container Line)	42,416	23

Source: Alphaliner
All information above is given as guidance only and in good faith without guarantee.

Furthermore, this transition is driving growth and pushing business performance figures from "deep red into black," says Patrik Berglund, CEO of Xeneta. He cautions, however, that carriers must continue to watch their spending. "Long-term rates are in some cases up by triple digits year-on-year," he says, "in further proof that the recovery of the container shipping market is is well underway."

Berglund points to Maersk's recent 2017 second quarter financial report indicating that higher freight rates propelled revenues upwards by 8.4% to almost $10 billion for the quarter. At the same time, Hapag-Lloyd may be on its way to triple its earnings this year.

Strong consumer demand, the restructuring of industry alliances (90% of all container ship traffic is now accounted for by THE Alliance, OCEAN and 2M) and Hanjin's demise all help push up utilization and rates, Berglund adds. "We remain optimistic with regards to the remainder of 2017, but the longer term becomes more complex, as more mega vessels come into deployment," he says.

Berglund observes that a staggering 78 new "mega-ships" are due to come online for the Asia-Europe trades over the next two years, pushing capacity up by over 23%. "Mega-ships make obvious sense in terms of economy of scale and optimizing transport costs," he says, "but when you have this much of a capacity injection it requires a huge demand increase. Where will that come from?"

Analysts agree that mega-ships of 18,000 twenty-foot equivalent units (TEUs) must command utilization rates of at least 91% to achieve cost savings. Even in the high volume Asia-Europe trades that's difficult, and may necessitate lower than average rates for some volume, which, inevitably, will hit overall rate development.

"Each of the key alliance partners is playing catch-up with one another, trying to reap the mega-ship benefits," adds Berglund. "In doing so, they're going to flood the market with new capacity and risk reversing current positive trends. This is a potential mega-problem in waiting."

Due diligence necessary

Chris Rogers, an analyst with Panjiva, an online search engine with detailed information on global suppliers and manufacturers, observes that another risk lurking for the carrier industry is that some nation states will commence a new round of low-cost capacity construction. "That in turn could result in an oversupply of vessels and a new round of troubles for the container industry," he says.

According to Rogers, only a handful of carriers have contracted—including Hyundai Merchant Marine and Hamburg Sud—through a mixture of not replacing older capacity and foregoing chartered vessels. "My general view on the ocean carrier sector right now is that it appears to be out of the woods financially, but a continued recovery depends on discipline in ordering new capacity being maintained," he says. "That's far from a given right now."

This leads Rogers and other market analysts to conclude that logistics managers must pay close attention to the market if they seek the best rates for their assets, services and shipments.

Panjiva notes that container lines operating on U.S.-inbound routes had another month of growth in August, led by COSCO Shipping and Hyundai MM that both expanded 31% during that month. Remarkably, MSC grew its handling by 12%. That may have come at the expense of Hapag-Lloyd, which dropped 7% over that period of time as it integrates its UASC acquisition.

Panjiva analysis of over 4,100 carrier-country pairs shows Hapag-Lloyd likely lost out on European-based routes. Maersk saw a 3% drop in volumes in the same month likely due to a loss of market share to resurgent Asian shippers on Pacific lanes. Hamburg Sud, which is being bought by Maersk, saw a 12% drop potentially reflecting weak Mexican and Latin American volumes after Hurricane Harvey and Hurricane Irma.

Consolidation and new players

The process of consolidation certainly continues. The upper echelon of carriers, following the current round of acquisitions and mergers, would have had a 39% market share in the past quarter, up 3% points on a year earlier.

The COSCO/OOCL merger will not be signed until COSCO Shipping Holding holds an extraordinary general meeting during the middle of this month. The combined entity—if the merger is completed—would become the world's third largest container carrier. Specifically, the duo would have a combined fleet of 400 vessels operating over a much-expanded network, with the capacity exceeding 2.9 million TEUs including order book, pushing CMA CGM from its current spot.

Meanwhile, COSCO Shipping Lines and OOCL will

FMC moves to mitigate risk

When Federal Maritime Commissioner (FMC) William Doyle spoke at last month's FTR Transportation Conference in Indianapolis, he announced that the THE Alliance would establish a $50 million "insolvency contingency fund" to mitigate the risk of another ocean carrier bankruptcy or "catastrophic failure."

Doyle was among those commissioners who voted to expedite the FMC's decision and support THE Alliance's amendment authorizing creation of a contingency trust fund designed to protect shipper's cargo should one of the players suffer financial distress or "an insolvency event."

Parties to THE Alliance Agreement are Hapag-Lloyd AG and Hapag-Lloyd USA LLC (acting as one party); Kawasaki Kisen Kaisha, Ltd.; Mitsui O.S.K. Lines, Ltd.; Nippon Yusen Kaisha; and Yang Ming Marine Transport Corp. Each of these carriers would initially contribute $1 million into the contingency trust fund and a further $9 million in additional funds or through a letter of credit.

According to the filing, the agreement establishes the voting rights and obligations for the Parties in the event of an "Insolvency Event or Material Adverse Change." In addition, the agreement establishes "procedures for the orderly removal or replacement of vessels and the rights of the remaining parties to negotiate directly with agents and subcontractors of the affected party."

"I firmly believe that if a carrier joins an alliance, it's the responsibility of the alliance members to ensure that the cargo gets to where it needs to go," says Doyle. "If a carrier fails and that carrier is party to an alliance, the cargo carried on the failed company's ships may equate to a fraction of the container volume carried. Many containers may belong to the other carriers in the alliance."

–Patrick Burnson

continue to operate under their respective brands, providing both container transport and inland logistics services.

One of the more surprising developments in today's ocean cargo marketplace has been the emergence of a major new player in the trans-Pacific. The sustained period of lower fuel costs and second-hand vessels provided South Korean carrier SM Line to enter the fray. Founded in December 2016, SM Line is part of South Korea's Samra Midas Group, which has its main interests in manufacturing and construction, but has also had previous shipping involvement through its ownership of bulk carrier Korea Line Corporation.

According to ocean freight procurement consultancy Drewry Supply Chain Advisors, SM Line beat the restructured *de-facto* national South Korean carrier Hyundai Merchant Marine (HMM) for the Asia-U.S. trade-lane assets of bankrupt Hanjin, paying an apparently reduced figure of $23 million in early January 2017.

Then came the purchase of 11 Hanjin ships at discount prices and two key Hanjin terminals in Gwangyang and Incheon, South Korea. And once having gained the approval of the Federal Maritime Commission (FMC) in April, SM Line commenced a one-loop Asia to U.S. West Coast service, deploying five 6,600 TEU vessels into the trade.

Rubik's cube

Drewry further notes that international transport and logistics executives using container shipping are now facing the biggest shift in their ocean provider base in 20 years and must adapt their procurement and contract strategy,

In the last five years, shippers have been able to secure large reductions in freight costs by running traditional competitive bids with numerous providers in an over-supplied, fragmented market. "But today's business environment is starkly different, so we're now pro-actively advising shippers that last year's contract strategy will simply not work as a blueprint for the forthcoming annual ocean tender," says Philip Damas, head of Drewry's logistics practice, who adds that things will be different and organizations must be prepared.

"Rapid consolidation in the supplier base, changes in supplier behavior, huge reductions in vessel orders and new developments in tender technology will bring real change and uncertainty to the ocean transport procurement environment," says Damas.

For example, on the Asia-North Europe route, the number of containership operators—excluding slot charterers—will decrease from 15 in July 2016 to 11 in July 2017 to just eight in July 2018. Globally, in 2016, orders for new containerships decreased from $17 billion in 2015 to $2 billion in 2016.

On the other hand, the capacity of new containership deliveries is expected to increase from about 900,000 TEUs in 2016 to 1.1 million this year. The bankruptcy of Hanjin Shipping in 2016 has highlighted the performance risks of some financially weak providers, and some shippers and ocean carriers are experimenting with new contractual models.

According to Damas, annual contracts being renegotiated on the Asia-North Europe and Asia-U.S. West Coast routes are typically seeing container annual freight rate increases of about 50% (although from a low base). In such a market, Drewry believes that logistics managers will need to re-think their contract negotiation strategy and, by incorporating benchmarking and e-sourcing best practices in their tender management process, rate increases can be mitigated.

"Use of Big Data and optimization can also help find the best combination of bids to meet the intended balance between cost and service for the shippers many different lanes or supply chains," says Damas.

Shippers could also face more frequent potential issues from roll-overs and cancelled sailings in the medium term. In early 2017, European exporters suffered shortages of export shipping capacity to Asia at a time when quarterly volumes to China were running 18% higher than in the first quarter of 2016.

Dan Smith, a principal with the freight transportation consultancy firm Tioga Group, likens the current situation to a Rubik's Cube, with a jumble of boxes begging for reconfiguration. "Logistics managers want to see a consistent and sustainable solution to this puzzle," he adds. "With the introduction of mega-ships into the equation, carriers have created issues for ports, terminals, drayage firms, and the communities and regions from which they operate." •

Patrick Burnson is executive editor of Logistics Management