



Trends to Watch in 2012

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The year 2011 was a very instructive one for the global supply chain. From the earthquake and subsequent tsunami in Japan, to the volcano eruption in Iceland, to the floods in Thailand, Mother Nature forced companies to scramble and, in some cases, rethink their supply chain policies and strategies.

Globalization of the supply chain has made it more vulnerable. While there are cheaper labor and production costs overseas, the natural disasters of 2011 showed us exactly how tenuous the links in the supply chain are.

“The Japan earthquake and the Thailand flooding...are having Wall St. Level implications on a number of very large companies,” explains Greg Kefer, director, corporate marketing, GT Nexus. “This tells us that supply chain control and agility will be even higher on the C-suite radar than ever before. With this renewed focus, we expect companies to double down on their efforts to address the technology gaps that have proven incapable of supporting them when it comes to being responsive. Agility will also play a role in how companies are opportunistic in tapping new commercial regions and/or taking advantage of new sourcing/manufacturing opportunities.”

Companies have dealt with these supply chain disruptions in many ways. Some companies are looking to make their supply chains leaner, to cut out any unnecessary or unproductive aspects of their supply chains. Others are diversifying their supply chain bases, either by moving to multiple levels of sourcing or perhaps even by bringing sourcing and manufacturing closer to home.

“[Companies need to] focus on end-to-end supply chain management to enable efficient and cost effective supply chains on a global basis,” says Kim Wertheimer, EVP, CEVA Logistics. “This involves being able to provide integration with various partners across the supply chain allowing for flexibility and agility.”

Additionally, companies are re-focusing on business continuity in the face of these disruptions.

“Many companies are tightening down their global supply chains; refining their enterprise systems; and collecting, identifying, and providing easily accessible data that aligns with their business objectives—all in support of rapid decision making,” says Danny Slaton, EVP, SMC³. “Also, many organizations are aggressively adopting lean processes. As their ‘just in time’ and ‘made to order’ processes change, their quality initiatives are evolving, too, which means they need a flexible, cross-trained, high-quality workforce.”

The No. 1 message that 2011 taught us is that visibility is more important than ever, and having more flexible supply chains will lessen the impact of future supply chain disruptions, be they natural or man-made.

“De-risking will become a key supply chain agenda item in 2012,” agrees Jim McAdam, president, APL Logistics. “The tsunami in Japan and the flooding in Thailand have shown us how fragile global supply chains have become. Globally, manufacturers and retailers are taking a renewed interest in re-designing and re-engineering their supply chains in the wake of these events.”

“There will also be an increased interest in understanding total costs, including potential hidden costs in production sourcing decisions,” says Brian Newton, VP of strategy, Exel. “The simultaneous need to lower costs and increase service levels will continue the focus on core capabilities (driving the rate of outsourcing growth), and an expanding interest in internal/external collaboration. The speed at which collaboration benefits will be realized will depend on the parties’ ability and willingness to negotiate benefit-sharing and the emergence of systemic industry structures to facilitate collaboration.”

“Uncertainty and concern about fuel costs, supplier capacity, raw materials shortages and availability, and labor limitations... [have] resulted in an increased interest in making supply chains more agile, improve visibility across the customer’s entire supply chain ecosystem, and in taking a harder look at current operational systems to ensure that they are able to support these new realities,” agrees Alan Gold, VP, marketing and business development, Kewill Inc.

“More specifically, we see a strong interest in closer understanding of shipping costs and spending with an eye toward cost containment and ideally reduction,” adds Gold.

Additionally, consumers need to be taken into account with new supply chain models.

“Supply chains need to be realigned to a new consumer demand-driven model, a model IBM calls Smarter Commerce,” explains Gene Nusekabel, worldwide industry lead-wholesale distribution Smarter Commerce, IBM Software Group. “‘Pull versus push’ has been discussed for years, but now with all the technology options available to end consumers to fulfill their purchasing needs in both B2C or B2B worlds, consumers are ‘pulling’ and organizations need to design their supply chains to seamlessly integrate from supply point to consumer, end-to-end.”

Below, we take a look at the major emerging trends for 2012.

3PLs

Third-party logistics companies are increasingly becoming the “jacks of all trades” in the global supply chain.

“There is an increased demand for 3PLs to play a role in capacity strategies as they offer a wider array of services,” explains Jim Butts, SVP at C.H. Robinson. “Within many of our own customer relationships, we are being inserted up and down the supply chain, playing many different roles, assuming many responsibilities, managing and monitoring the key performance indicators, and not only reporting but taking action, post-analytics.”

“Shippers are demanding technologies that optimize planning and enable visibility in increasingly complex and lengthened global supply chains,” agrees McAdam. “In the major developed markets, 3PLs will find themselves more often not only competing with their peers but also with the in-house logistics departments of companies that have freed up capacity and resources as growth slows in these markets. This puts further pressure on 3PLs to provide best-in-class, differentiated and value-adding solutions, leveraging technology and specialized logistics expertise.”

Companies are increasingly employing 3PLs to increase operational agility within their supply chains.

“Companies are seeking ways to adapt with more agile and flexible networks, in an effort to be more responsive to the challenges that come with the globalization of their supply chains,” explains Joe Gallick,

SVP of sales, Penske Logistics. “Also, as the logistics outsourcing trend has continued to increase, many companies have amassed multiple 3PL relationships. As such, there appears to be a resulting trend emerging, albeit in the nascent stage, of shippers seeking to consolidate or rationalize its 3PL base to relieve an administrative burden of managing multiple providers while leveraging a larger, indirect spend pool among best-in-class 3PLs.”

“About half of U.S. shippers are reducing or consolidating the number of 3PLs they use,” agrees Slaton.

Some 3PLs are increasing their service offerings to set them apart from their competitors.

“More warehouses and distribution centers are including value-added services to their product offering,” says Tim Osmulski, supply chain segment manager, The Raymond Corp. “Contract packaging, custom packaging, re-packing, and disposal of returns are some of the services offered by the larger 3PLs. For consumer goods, individual store deliveries are custom picked to order at the 3PL locations. This trend is driving the increased sale of layer picking equipment and causing the warehouse design engineers to find more effective methods of case pick as opposed to full pallet picks.”

“Another transformation underway is the concept of a 4PL and 3PL becoming a hybrid term,” explains Wertheimer. “Generally speaking, a 3PL is an actual service provider and the 4PL manages those suppliers but what we are seeing is an expectation from our customers to manage and operate the supply chain such that the provider has direct accountability and responsibility for the overall performance of the supply chain activities.”

Mobility and the cloud

The use of mobile devices and cloud technology took off in 2011 and will only continue to rise in 2012.

“The use of M2M (mobile-to-mobile) technology is exploding,” says Christian Schenk, VP of product marketing, Xata. “Even better, an increasing number of software providers are certifying the use of their solutions for off-the-shelf consumer and ruggedized devices, giving end-users an application-specific choice of hardware at a reasonable cost. The prevalence of the Android operating system is also growing exponentially, as the ease of use is great for both developers and end users.”

“As a technology company, we see cloud as a green field opportunity in supply chain, and 2012 will be a big year for ‘cloud supply chain,’” explains Kefer. “Traditional ERP license software is not capable of supporting the multi-enterprise world of supply chain management. Cloud is disruptive and the established old guard of big software companies is scrambling to offer their own cloud solutions. But in supply chain, it goes beyond better IT economics and into completely new information models that the software and EDI network approaches used over the past 30 years can’t replicate. By leveraging a Facebook-like information model, cloud is doing for SCM what social networks have done for consumers.”

“Supply chain technology vendors will seek ways to use the cloud to facilitate application integration and data visibility, and work with material handling equipment manufacturers to bring MHE automation closer to real world application,” says Newton.

Transportation modes

All modes of transportation are facing challenges, and this will drive the adoption of intermodal transport.

“All transportation modes are being challenged,” explains Nusekabel. “Ocean needs to determine a competent pricing solution to allow shippers to plan. Trucking faces predicted driver shortages, potential highway user fees, and changing governmental regulations. Rail (intermodal) is becoming a mode of choice, but the railroads and required drayage need to be more shipper-friendly regarding pricing and execution.”

“Intermodal rail is increasingly becoming a compelling proposition in North America against the backdrop of ever-tightening trucking capacity and high trucking rates,” says McAdam. “Conversely, intermodal rail has dramatically narrowed the gap both in terms of transit time and predictability over the recent years.”

“In transportation, ‘intermodal’ is the buzzword,” agrees Osmulski. “Intermodal facilities are being built in several U.S. locations and are being heavily promoted by the railroads. More supply chain managers are looking at intermodal transportation as a way to reduce fuel costs, increase the speed of delivery, and have less reliance on the over-the-road (OTR) trucking industry. Some freight carriers are already deeply involved in creating a sub-category of bi-modal transportation.”

“At some point, capacity will go from a minor issue to a major one. Any uptick in the economy will set off a chain reaction,” says George Abernathy, president, Transplace. “The improvements in rail infrastructure in the eastern part of the U.S. will assist in moving freight in that area of the country off of trucks and onto railroads.”

“Trucking capacity is expected to remain relatively tight due to its favorable impact on carrier profitability and concerns about a continuing driver shortage,” agrees Newton. “Shippers and 3PLs are increasingly utilizing intermodal for these reasons, as well as its smaller impact on the environment.”

Trucking and capacity issues

With pending CSA and HOS legislation, the trucking sector will face capacity challenges in 2012.

“With new compliance mandates for trucking (CSA, etc.) and an ongoing driver shortage, we’re seeing trucking companies and private fleets addressing these issues head-on by implementing software and hardware solutions that keep their operations DOT-compliant and cost-effective,” says Schenk. “This includes increased adoption of the latest in mobile applications and devices, including those that run on smartphones and tablet computers.”

“When the economy and shipping demand improve, there could be a capacity issue, but based on a shortage of CSA-compliant drivers, not on a shortage of carriers or trucks,” continues Schenk. “All the more reason fleets and drivers should ensure that they’re compliant with all federal regulations.”

“We’re seeing good freight volumes and lean inventories right now,” says Slaton. “But the LTL industry is still facing the most complex regulatory environment we’ve seen in a while. Surviving carriers must continue to adapt.

“We’re seeing a pronounced driver retention challenge,” continues Slaton. “And yes, we will continue to see a trucking capacity crisis with driver shortages, as government policies and corporate hiring practices impact the quantity and quality of drivers hired. For the most part, carriers are continuing to try to maximize their existing equipment/assets and improve yields—particularly in the face of rising equipment costs.”

“The enlightened approach calls for planning, full engagement of capacity providers, and being proactive about making your freight, processes, and practices carrier-friendly and your premises driver-friendly,” agrees Butts.

“Shippers are mindful of the likelihood of a truck capacity shortage and are implementing strategies to take advantage of SaaS technology, alternate modes (intermodal), and optimized shipment structures,” explains Abernathy.

The capacity crisis has a real human element as well.

“The sheer demographics make one think a capacity crisis is/will be real, particularly in the TL sector,”

explains Nusekabel. “Drivers are retiring, and younger people do not see trucking as an attractive career. I certainly believe that will be the case if the trucking industry and shippers/consignees do not make it a more attractive and realistic career option. Who wants to drive across the country and have a consignee tell the driver to unload? Drivers are paid to drive and, yes, that is their expertise.”

Partner integration

Disparate supply chain players will come together to form partnerships and work together to benefit the entire supply chain.

“Partner integration in the trucking industry is really starting to take off, as each solution provider can focus on just what they do best,” explains Schenk. “Integrating partner applications provides customers with a pallet of functionalities they need, while ignoring (i.e. not paying for) what they don’t need. Mobile applications make these integrations easier.”

“Success in today’s competitive economy requires strategy,” explains Butts. “Integrated relationships are the way to long-term, sustainable competitive advantage. Often times, the 3PL acts as the architect, the orchestrator, and administrator of the relationships, through people, process, and technology.”

“Choosing your customers and your partners intelligently—with a mutual commitment to long-term collaboration—is still the best formula for riding out economic downturns,” agrees McAdam. “To bring as much certainty as possible to bear, the logical thing for the customers to do is to look for common and bilateral commitments to rates and capacity, commit on the volumes and stick with the chosen carriers or service providers. There is always a temptation to jump ship for a short-term low rate but you could end up losing the long-term rate and capacity from the carrier or provider eventually. It’s not a wise thing to do but we’ve seen this happen to many service providers in 2009.”

Other industry experts agree.

“While an elevated interest in partner collaboration and integration is anticipated for 2012, it is a complex undertaking and the industry will be challenged to meet these higher expectations,” explains Newton.

“Balancing the benefits of channel partner integration is challenging with successes to date imposed by a powerful channel captain or the result of relationships and trust between long-time, non-competitive channel partners.”

“Smarter commerce requires seamless integration with all partners in the end-to-end supply chain, particularly in the complex global supply chains of today,” says Nusekabel. “As a trend, many organizations have far to go to become supply chain leaders who use technology solutions to collaborate, integrate, and reduce costs. Leaders are improving supply chain visibility, execution, and analytics to be more agile. Today’s smarter consumer and the global economic realities demand seamless partner integration to break down supply chain silos, internal and external.”

Systems integration is not the only integration that is important going forward.

“We see a continued focus on partner integration, not just on systems but process integration as well,” explains Wertheimer. “There is tighter integration between our customers’ suppliers and partners enabling a greater flexibility and agility across the supply chain process. There is also greater integration across functions within the customers’ organization where as historically each group optimized their individual processes but there was a lack of communication across the functions.”

“To have an efficient supply chain, you need to have visibility and communications in place to collaborate, inform, react among partners,” says Gold. “Finding ways to integrate across various layers of the relationship (business, execution, technology) is being seen, with increasing frequency, as a competitive advantage and a

best practice.

“From a technology perspective, we are seeing prospects and customers requiring compatibility between systems, the ability to provide an end-to-end view of activities that impact the business, and business intelligence capabilities that support more informed decision making and anticipate/avoid challenges before they impact the business.”

“[Integration] is a key part of the cloud story described above,” explains Kefer. “With cloud (like Facebook), a partner connects to the platform once, and then can work with multiple customers on that same platform, share data feeds, and take advantage of a community-wide approach to data quality management. The work of one can benefit the whole community. The days of one-off partner-by-partner integration will come to an end thanks to cloud. This already in place with all of the world’s top ocean carriers and 3PLs today. Eventually other transport modes will reach also critical mass. And gradually global suppliers will become members of the big cloud supply chain platforms.”

Near-sourcing

Some of the lessons that Mother Nature taught in 2011 have led companies to consider bring their suppliers and manufacturing plants closer to home.

“Near-sourcing will likely increase [in 2012],” says Slaton. “Unstable oil prices, rising labor costs in China, the successful resurrection of the cross-border trucking program with Mexico, our proximity to Canada (we are their largest trading partner), the removal of trade barriers, and the exploration of U.S.-Mexican trade corridors are all helping that to happen.”

“In the automotive sector, more transplants will happen in the North America Free Trade Agreement (NAFTA) corridor. Consequently, this will lead to higher North-South traffic along the NAFTA corridor,” says McAdam.

“All signs point to an increase in near sourcing in 2012 as companies have wrestled with the challenges of operating a global supply chain, particularly with increased labor costs abroad, higher energy and transportation costs, and potential disruption of supply, all resulting in higher inventory levels needed to satisfy local demand,” agrees Gallick. “This bodes well for U.S. manufacturing which has seen signs of resurgence in parts of the country, and also for Mexico, as evidenced in recent reports of NAFTA trade growth.”

“Mexico will be an ever-increasing manufacturer and trading partner,” agrees Abernathy. “Shippers that utilize technology to provide transportation visibility and optimization will have an advantage.”

But not all industry experts see eye to eye on near-shoring.

“We could see this in some areas,” says Kefer. “China is getting more expensive and long supply chains have a lot of risk associated with them. However it could just as easily move to other ‘far shore’ locations like Vietnam, Pakistan, or Kenya. At the end of the day, companies need to have an agile approach because the world is now flat and there will always be new sourcing regions (and selling regions) to take advantage of.”

“Some customers are looking at South America as a destination of near-sourcing, while others are limiting the ‘near’ to Mexico and Central America,” says Osmulski. “Brazil has become a favorable destination of near-sourcing and is seeing major expansion by the 3PL industry.

“As opposed to multiple time zones and long distance flights to Europe and Asia, Latin America is within most of the U.S. time zones, eliminating the need for looking at the clock and adding six to 12 hours to the conference call schedule,” Osmulski continues. “Near-sourcing will increase with North American based

supply chain operations if Latin America can compete on costs with Asia.”

Sustainability

Going green has been a hot topic in the supply chain, but are sustainable practices being implemented beyond the buzzword?

“[Sustainability] will continue to be a focus for shippers and carriers alike, as long as there is a business benefit,” says Abernathy. “It has grown past being a trend and is now a regular part of doing business.”

“Sustainability is increasingly a strategic business and marketing strategy for savvy companies across the board,” agrees Slaton. “While most corporate sustainability initiatives start out in response to regulatory imperatives, many companies (including LTL carriers) who have pursued sustainability initiatives in earnest have been able to unearth opportunities to reduce costs, create new revenue streams, and develop more innovative business models.”

“Sustainability is an ongoing concern for every type of operation,” explains Schenk. “As financial situations allow, I can envision a greater focus on sustainability, particularly for petroleum. You’ll see companies more concerned with saving fuel as the price of oil continues to remain volatile. It’s in a lull right now, but a number of international influences (war and conflict, political pressures, etc.) could easily send fuel costs skyrocketing again, like we saw a couple of years ago.”

“Shippers are more environmentally aware than ever,” says McAdam. “Many have started measuring the emissions their supply chains are responsible for and driving down their carbon footprints. There is an increased willingness to consider converting to more sustainable modes of transport where appropriate—such as from air to sea, from trucking to intermodal rail. A growing number of forward-looking 3PLs has in place environmental initiatives to help customers reduce carbon footprints associated to their supply chains.”

“As Dr. Robert C. Lieb, professor of supply chain management at Northeastern Univ., noted in an annual survey of third-party logistics providers, 3PL interest and involvement in environmental sustainability issues continue to gain relevance,” says Gallick. “In fact, almost half of the 3PL CEOs surveyed indicated an increase in the launching of new sustainability initiatives throughout the past year. High quality logistics providers have long understood the efficient design, application, and execution of a well-maintained fleet of equipment, or network of distribution centers, is not only friendlier to the environment, but profitable to the business as well, as less fuel is consumed, waste created, NOX emitted, and capacity underutilized.”

But not all industry experts agree.

“As the global economy has weakened, so has the will to keep sustainability front and center,” says Nusekabel. “It is a long-term issue and can be easily dismissed when profit margins and company performance are at stake. Consumer concerns affect the sustainability agenda and, in the current economy when consumers may not be willing to pay more, it has become less important for many businesses. If the consumer demands it and is willing to incur the additional costs, it will again come to the forefront.”

“The cynic in me says that much of the focus will be public-relations-oriented rather than reflecting real change except by a notable few companies,” agrees Gold. “But what is said repeatedly often becomes reality and real change will certainly happen as customers press their suppliers to take a more proactive role, and as companies are rewarded by the consumer for responsible practices. So too will economic realities such as continued fuel cost increases, competition by the early adopters of sustainable practices, etc. It will become a competitive necessity.”

Looking to the future

Overall, 2012 promises to be an interesting year for the global supply chain. New technologies will come to the fore that will transform the way the supply chain is handled.

“We are looking forward to 2012,” says Kefer. “Sometimes unpredictable economic climates force change. It forces the establishment to look beyond the way they have always done it and to seek new alternatives. Economics and tight budgets force the issue. Fortunately there is an option for supply chain practitioners. Cloud is already proven and is changing the way companies run their global operations. Change is hard, especially for big corporations, but if the business and IT teams don’t move, the order will come from the top.”

“We are in very interesting times,” says Gold. “It seems clear that the global recession’s lingering effects, the capital market’s volatility, debt pressures all around the world, natural disasters (global warming or not—you choose), and regional instabilities all apply pressure to company’s supply chain. To succeed, a supply chain needs to be efficient, predictable, and responsive to changes without breaking. That in turn requires thoughtful automation and integration as well as forward-thinking management.”

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