

WHAT 2009 BODES FOR THE SUPPLY CHAIN

Two thoughtful
leaders see challenge
and change ahead.

BY NEIL SHISTER

Every December we peer into the future. This year we had conversations with two business school experts about what to expect.

Joel Sutherland

Joel Sutherland ranks among leading supply chain thinkers, a long-time supply chain executive and former head of Council of Supply Chain Management Professionals who now directs the Center for Value Chain Research (CVCR) at Lehigh University.

Following the University of Southern California (B.S. Marketing Logistics) and an MBA from Pepperdine, he got his hands-on education in the logistics trade during eleven years at Denso, Toyota's automotive parts manufacturer, where he rose to Vice President, Operations. Following that were stints with CSX (in the wake of the Sealand acquisition where his mission was to establish global transportation capabilities) and later J.B. Hunt where he was one of the creators of Transplace, a third-party transportation and logistics company.

At Lehigh, Sutherland directs a multidisciplinary program that combines industrial engineering and business research, with one of the focus areas on network and supply chain optimization in both the domestic and global supply chain.

What do you see as the changes and issues confronting the supply chain in 2009?

The drivers in October were transportation cost, now it's changed and I am giving you a slightly different answer than I would have a month ago. We still have volatility. Who knows where it's going to go? We're back to cheap fuel temporarily because oil is a limited resource. OPEC is trying to control supply. We can't put blinders on and say 'it's okay now and will be fine for years to come', I don't think it's ever going to be fine.

Are you seeing people scurrying to re-configure their supply chains based on fuel?

Absolutely. I talk to companies all the time. The thing I'm seeing is that they are moving their distribution centers closer to the customer and the point of demand.

Is this a major change going on?

I guess it's how you define major. It's definitely a tweaking. For example, we're work-

ing with a company right now that has 28 distribution centers around U.S. and we're recommending a reduction to 22. Those additional six don't add any value in terms of cost reduction or service improvement. This typifies what's going on throughout the sector. The history of the recent past has been for companies to increase DCs through construction or as they acquire companies or get a piece of business. There hasn't necessarily been a lot of optimization planning nor thought about where you hit diminishing returns. That's why companies need to look at their supply chain every two or three years and do an optimization.

Do you see this as a normative situation all over the country?

Absolutely.

What has led to this over-capacity?

Scope creep! It's a classic problem where companies grow and when they're profitable they make decisions without thinking them through. Most companies don't have the algorithms to solve these supply chain problems, they get a pencil and a piece of paper and get some transportation costs and make a decision. They don't have dynamic software built in for their industry or for their company that they can use on a regular basis.

Why this change in the approach of companies to supply chain?

It used to be when you put a distribution network in place it could last three to five years. We used to say, 'you don't have to look at this every year, you can look at it every five years.' Today, companies have to look at it more continually, at least every two years.

Out-sourcing will continue. As long as space is available, companies don't have to invest in brick-and-mortar. We're working with a company right now, for example, who asked us, 'Can you engineer a solution that can move our product (sporting goods from Asia)?' Their infrastructure was being stressed as they opened new retail stores. They asked us, 'Can you re-engineer our network so product flows in-bound from Asia through our domestic network to our 700 retail stores, so that when it hits our distribution network it flows through rather than is stored for a period of time or ever hits a dock?'

Our assignment was, thus, to get the DCs as much as possible out of the mix.

Our solution was not getting rid of the DCs per se, but rather expanding the role of the brick-and-mortar, giving it a 'new life.'

What is the DC doing in this network that is different?

The life of the existing network was driven by how many retail stores it had to support. If the company changed

nothing, by adding 100 stores a year to the network they would have outgrown it. We're now saying to them, 'As far as we can tell, as long as the supply chain continues to flow through and it's more of a cross-dock, consolidation operation, and as long as you have better visibility on the in-bound coming from Asia and can sort it into containers coming from Asia so that it goes directly from the port to the store, then you have increased the life of their existing brick-and-mortar distribution network indefinitely.'

The new model is 'flow through.' The distribution center will serve as more of a cross-dock for the product that has to serve that particular network of stores within 500 miles. A lot of containers will go directly to stores without touching that dock, the DC will largely have to be a consolidation area for domestic supply that has to be married to that.

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To switch subjects, World Trade has been talking a lot about the new model of the enterprise where the supply chain occupies a centric position, where the supply chain is a core strategic tool and not 'just about' logistics anymore. What do you think will happen with this trend?

Whatever we say about 'supply chain,' I think for the most part we still haven't moved beyond integrated logistics. I don't believe anyone can manage a 'total supply chain.' It's too big. What you can do is manage parts of it to get the greatest impact.

Some companies are doing a better job at breaking down silos and integrating certain functions, but I've yet to see a company that has entirely broken down the existing silos necessary to manage their internal and supply chains.

So you're not looking for major managerial changes around supply chain in the near future?

Not in a meaningful way. I don't think we've made a significant shift to breaking down the silos and integrating the supply chain. Some companies have done a better job, like Dell. But guess what, they're going more from a 'pull' to a 'push.'

As I talk to large companies, they continue to struggle with integrating their supply chain. Part of the problem

Nine Global Trade Predictions for 2009 & How to Capitalize on New Market Trends

This year the growing interest in international markets continued, spurred on by a sluggish U.S. economy, weakened dollar and strong growth markets in Europe and Asia. While companies are now talking about near-sourcing and looking closer to home, McKinsey has projected that by the year 2025, eighty percent of all business-to-business transactions will be international business.

What do businesses need to know about the global marketplace in 2009 so that they can capitalize on new trends and opportunities while preparing for challenges? Below are nine predictions related to global trade for the coming year:

1. **New competition** will continue to crop up from new places and impact companies across a wide variety of industries.
2. **Shorter product life cycles** (and the above mentioned heightened competition) will make go-to-market speed increasingly critical for companies, especially those in the healthcare, technology and retail industries.
3. **Transportation mode shifting**, including greater use of ocean freight, will continue due to sustained fuel costs and the need for companies to keep overall transportation and freight costs down.
4. **Consumers will gain more power** as they demand more from companies and as more markets and territories come into play with the rising middle class in China and other emerging markets.
5. **Tightening security concerns** and a changing regulatory environment will make regulatory compliance a key focus area for companies looking to do more business with overseas companies and consumers.
6. **Small- and mid-sized businesses** will continue to drive exports globally as new market opportunities continue to arise in other parts of the world.
7. **More companies will outsource** global supply chain functions as they look for ways to grow their business while managing costs and focusing on their core competencies.
8. **Recent growth in "near-sourcing"** will continue as companies focus on the bottom line, yet this trend will co-exist alongside global sourcing. Successful companies will pursue optimal sourcing strategies for each market they serve, and each SKU they bring to market.
9. **Global trade will continue**—and thrive.

Matt McGee directs the global marketing strategies for the UPS supply chain and international freight product portfolios.

is that they continue to change senior management. Every time they change somebody at the top, the new people bring in their own ideas and start back from the beginning.

Why aren't they doing this, re-organizing the enterprise to be supply chain centric?

Because it's hard! I've been doing this for 35 years and the reality is that we've built bigger barriers, more silos and we still have bad practices. And, it will get more difficult next year because of the global economy. Companies are going to put their efforts in other areas. They're going to put their efforts into survival and short-term, 'How do we get through the next two or three years?'

What do you expect people to focus on in terms of supply chain management in 2009?

Unfortunately, I think 'we survived' is going to be the chief goal. They will say, 'We really had to focus on cost controls.' It will be painful, they will have had to go through head count reductions, cut out the inefficiencies, and become a stronger company as a result of tough times.

I expect companies to take a look at more technology solutions. With on-demand, we have technology that is cheaper than ever. On-demand technology is going to be huge. Five or ten years ago the whole notion of acquiring and integrating new technology was a daunting task; today you can go out and get on-demand that is very robust, very function rich. Whether it's transportation management system or warehouse management system, whether it's some of the visibility tools—it's much easier to on-board this new technology and integrate it to existing systems or have it on a stand-alone basis. And it's cheaper because you don't have to buy the whole

package—you can pay for it as you go.

So companies that want to make improvement in their organization will be able to get technology quicker. I think people should run toward the on-demand technology in the next year.

What other big changes do you see on the horizon?

The aging and changing population is going to hit the global supply chain hard in the next few years.

As this population shifts and the percentage of working population becomes smaller and also less qualified in certain countries, this will cause disruptions in production and may even bring back production to those countries better able to manage it.

Take China, for example. Where are managers coming from who manage the over-seas facilities? They're not Chinese but rather coming from the country that moves over there. What happens if that supply is insufficient? We could be faced with a shortage of qualified management in the supply chain area in the near future in these emerging countries.

And the area of supply chain risk management in general?

I think it's going to go on the back burner again. People will be more concerned with survival than investment.

I think we will have enough transportation capacity out, at least in the short term, because of reduced demand in every facet. Companies will be looking to buy transportation on the cheap. That means financially strong companies (road, rail, ocean, etc.) will survive because they have enough resources to survive; smaller players will be struggling to stay in business with many going out of business. There's going to be a lot of cheap deals out there.

John Langley

Dr. John Langley is Professor of Supply Chain Management and Director of Supply Chain Executive Programs at Georgia Tech.

He received his B.S. (mathematics), M.B.A. (finance) and Ph.D (business logistics) degrees at Penn State University, after which he taught for 28 years at the University of Tennessee. He serves on the Board of Directors of Averitt Express, Inc., Forward Air Corporation, and UTi Worldwide, Inc., and participates as an advisory board member to a number of firms in the supply chain technology and outsourcing businesses.

How is 'economic pain' in 2009 going to impact supply chains?

In the next couple of years the likelihood is that our global business models aren't going to be at the top of their game so it's going to be really important for companies to be scalable. With regard to supply chain activities, it means that in good years the priority will be on growing in response to economic health and in years



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when things are 're-building' (as they like to say in this framework) you need to be

scalable in a downward context. That means take organizations and be sure that costs don't grow while in the meantime still continuing to provide levels of service customers expect and also do whatever is possible to use supply chain abilities as a differentiator amongst the competition.

From a very practical, operational perspective you have to be careful about talking about cost savings achievable through supply chain so that at the same time you don't dampen service levels.

There's going to be great opportunity to achieve efficiency and effectiveness by professionally managing supply chains.

In taking out supply chain costs, what are the 'impulsive mistakes' that management might make?

The most impulsive mistake is to pressure your suppliers of all types for lower prices. On the one hand with the economic situation like it is, suppliers are likely to be responsive to pressures to cut cost, but on the other hand if you're not careful you will impair your supply chain by focusing more on taking out cost than building in value.

Is there a standard proposition or metric that enables management to weigh these two factors, supply chain costs vs. supply chain value?

Actually, meeting this objective requires part art, part science. The important thing is to make sure that any time you make a change, you make sure you develop a meaningful and comprehensive statement of benefits and costs. Unfortunately, many companies will succeed in reducing a specific type of cost, for example transportation, and then fail to identify and quantify adverse consequences that may result from purchasing lower-priced transport services. In a case like this, the direct cost savings may be wiped out by the detrimental impacts on areas such as customer service and operating efficiency.

Are you concerned that a lot of companies are unable to analyze the impact of supply chain decisions on a holistic enterprise level? That they don't even have the capacity to do that?

In current times, many companies are trying to work effectively with their suppliers and customers to try to take cost out of the supply chain process so there's a built in motivation

to take a holistic view, which we may not have had prior to this time. There's good reason to think that there will be more collaboration, working together, and identifying how processes can be improved at an organizational level.

What do you expect to see in the area of 4PLs in the next year?

There are a number of different definitions as to what constitutes a 4PL. The most common ones are that a 4PL might be a manager of 3PLs, another might be that they provide a 'control tower' for the customer to provide visibility across the supply chain and help the customer identify needed changes and provide leadership for seeing that those changes occur; and a third definition for a 4PL is that it provides information for the customer and leverages the benefit of IT.

Regardless of how you define it, the 4PL concept reflects a bundle of services that need to be accomplished somewhere by some party. It's absolutely essential that the companies figure out how to do these things effectively and efficiently.

The report card so far on 4PLs has been a little bit of a mixed picture. We've seen a number of successes, and we have seen some instances where improvement was needed. Overall, my feeling is that the concept is quite valid, and that over the next several years we will see an increasing number of examples of success with the 4PL concept.

Are you concerned that the results have been thus far mixed?

Any time you've got a new product concept, you will have stops and starts. The 4PL concept is still in its infancy,

and in most instances today, the companies vying for 4PL business are actually business units of existing 3PLs.

What would a 'pure play 4PL' look like?

I like to discuss several competencies that relate to the 4PL concept: the ability to manage information, relationships, integration, knowledge, and innovation. I believe the current 4PL environment is beginning to meaningfully move in these directions.

If you look at the 3PL sector and its level of maturity 15 years ago, you would find that most 3PLs were in fact business units of asset-based organizations (e.g., LTL and TL carriers, warehouse management organizations, etc.). Now, the 3PL sector has evolved where there are quite a number of 3PLs that are not organizationally related to any asset-based providers.

I think we're going to see is that companies such as consulting firms and IT providers are certainly potential players in the 4PL marketplace. Given the strategic role of information technology in the supply chain, it would be a natural phenomenon.

What's the next threshold in technology going to be?

I see two things. One is the effective integration of supply chain functionality with company-wide information abilities. You've got some big players that now have some very capable supply chain functionality—like Oracle, SAP, EDS. One by one they have been developing or acquiring supply chain functionality and doing a better job of integrating it with the broader business process.

At the same time, this adds prestige and value to supply chain functionality itself. There are still a lot of people who view the supply chain, even though they distinguish it from logistics, as more of an operational area. But if you look at the impact on your business of professional, capable supply chain management, it makes a good business case for using only the best, most responsive technologies that can be integrated with corporate systems.

Is it a question now of getting in the trenches and doing the algorithms or is there a new intellectual paradigm that has to be developed to further this integration?

One of the areas where we still have an exceptional amount of progress to make is demand management. I've recently seen a study of how long it takes most companies to acknowledge point of sales information and the results are appalling. How can you have a responsive supply chain if it takes four to eight weeks for most companies to have knowledge about what's going on at the cash register? The answer is you can't!.

Thus developing technology for demand management is a particularly tough area?

It's tough to solve because it involves inter-firm information transfer and management. A lot of retailers still protect sales data.

What will 2009 bode for near-shoring?

Companies are going to be re-evaluating their portfolios of geographic locations of all types of activities. What will happen is that companies will be re-aligning their supply chains and locations of key facilities to have better chance of achieving lowest net landed costs. This would involve adding some near-shoring—for the U.S. that may mean locations such as Mexico, Panama, or Costa Rica; for China it may mean Vietnam, Thailand, and Malaysia, and for Europe it may mean Russia and former Soviet republics—as companies look for new portfolios of geographic locations.

The second driver is that this will be consistent with need to source from global locations and also satisfy global markets. This requires a lot of balance as to where we have our facilities.

How about supply chain risk management initiatives in 2009?

On the Boards I serve on, we're spending a lot of time on enterprise risk management. Categorically there are four kinds of risk facing businesses and supply chains: strategic, operational, financial, and compliance risks. I see a lot of time and attention being spent by companies on risk mitigation and elimination. Nobody wants to be dealing with risk on a daily basis if they can help it, they want either to make it go away or at least mitigate the impact.

“Now with so many things changing all at once—currencies, wage rates—it's a much riskier business world.”

So how would you sum up what's going to be happening in 2009?

Adversity sometimes brings out the best in companies. I've used a quote from Henry Ford recently, “whether you think you can or you think you can't, in either case you'll be right.” I think that's probably a good message for companies today.

What's the most important advice you would give a company in 2009 involving risk management?

“Be able to carefully manage current and future investments in order to be both effective and changeable as needed. And I would also say from a business point of view, do not underestimate the importance of having cash on your balance sheet. The debt markets and equity markets may be a little tight coming up, companies able to fund initiatives themselves are going to be better able to respond the way they would like to respond. WT

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