When did Logistics become Supply Chain Management? Why did this change occur? More to the point: does it matter?

About 20 years ago, logistics managers' primary concern was optimizing their activities within their companies' "four walls" to achieve a low-cost position. This priority reflected an underlying assumption that the role of Logistics was essentially reactive, fulfilling the business that Sales and Marketing generated. In this context, the primary task was to do what was necessary to meet customer requirements, using as few resources as possible.

In the mid-1980s, a paradigm shift occurred. Logistics managers began to realize that their tasks were largely determined by events unfolding within their customers and suppliers — events that could be influenced. The emergence of early innovative buyer-supplier inter-company operating ties, like Baxter's Stockless System in hospitals and Procter & Gamble's highly coordinated relationship with Wal-Mart, began to offer a glimpse that logistics managers could gain enormous new leverage and productivity from working closely with their customers and suppliers.

Leading logistics managers began to develop customer and supplier initiatives, and no longer confined their actions to simple cost minimization within their four walls. This change constituted the source point of modern Supply Chain Management. And yes, as I explain below, this transformation does really matter.

Supply Chain Management

It is axiomatic today that the domain of Supply Chain Management is structuring and managing the flow of products from raw materials to customers, compelling supply chain managers to coordinate with their customers and suppliers. Yet, to what extent are these principles really followed?

Most companies have at least a surface knowledge of their customers' operations, and a deeper knowledge of a few key customers. However, in my experience, few companies have developed the deep, systematic, fact-based customer knowledge necessary to reshape their extended supply chain, even though this is the necessary first step in transforming their own operations. (The same is usually true of companies' understanding of their suppliers' operations. However, for our purposes here, I will focus on customer integration and tackle supplier management in a future column.)

The stakes are high. Companies that have done this successfully have slashed supply chain costs by 30-50%, for their own companies as well as for customers. But first, supply chain managers must learn how to walk in their customers' shoes.

Customer wants — customer needs

The starting point in customer coordination revolves around understanding customer needs. How do you do this?
Just ask the customer. Right?

Wrong. When you ask the customer, you learn what the customer wants, not necessarily what the customer needs. There is often a world of difference between the two.

For example, if the customer doesn't trust its suppliers to deliver on time, it will often ask for faster order cycles and carry higher inventory levels than are really needed. Even if your own customer service levels are great, a customer may institute these policies across the board in response to problems with other suppliers.

As another example, in many situations, various products can substitute for each other, yet this is rarely reflected in customer order patterns and inventory stock levels. Moreover, if your company offers a stock rotation program in which you take back excess and obsolete product, there is little incentive for the customer to carry the right amount of inventory. Here, the customers' instinct that it is "better to be safe than sorry" can cost you a lot of money.

Even granting good intentions, many customers don't really understand how to order, stock, and distribute most efficiently. Beyond this, there are tremendous joint economies available through supply chain coordination. For example, agreeing to expedite delivery of costly products directly to points of use late in the lifecycle can offer large joint savings. A wide variety of other types of gains from supplier-customer coordination can be created as well.

The key to identifying these potential gains is to spend enough time with enough customers to figure out what the customers really need. Ask yourself this question: what would you do to change the customers' operations if you were managing them yourself? If you don't have enough information to answer this question, that tells you that it would be very productive to spend time developing a systematic understanding of your customers' operations.

Determining customer needs

The first step in determining real customer needs is to establish a baseline view of your existing extended supply chain. A channel map is a very powerful tool for assembling this picture. A channel map is a representation of the physical product flow across the extended supply chain, spanning your operations and your customers' operations, with associated time, activities, costs, and product flow variance at each step. It gives you a clear picture of the current baseline, and enables you to spot quickly the largest pools of cost and potential gain.

To develop a channel map, try selecting four to six products that represent important product types, such as fast-movers, slow-movers, critical, and short lifecycle; and four to six customers that represent important customer segments, such as large, small, relationship, and transactional buyers. In most companies, it is not difficult to make these selections. Nevertheless, this is a very important step, because each product-customer node typically needs a different set of supply chain policies and supplier-customer coordinating mechanisms.

For each of these matrix nodes (e.g., non-substitutable fast-mover in a large relationship-buying customer), analyze the customer's orders over a representative two to three month period. Observe the variance in the order pattern and investigate why it occurred. Map the time the product dwelled at each stage in the supply chain, in both your company and the customer's company, and identify which actions took place at each stage. Assign costs to each stage, working at “70% accuracy,” which allows you to work quickly and to identify the big opportunities for cost reduction in both companies.

This process should take a small work team three to four months at most. Remember, the extended supply chain includes both your company and the customer company. View the assignment as a great management development opportunity, because team members will learn an enormous amount.

Beyond mythology

It is critical to work with primary data and move beyond company mythology. Here are two examples from Baxter's development of one of the first vendor-managed inventory systems, in which it took responsibility for managing the in-hospital inventories of the hospital supplies it sold to certain hospitals:

- First, the Baxter system required daily deliveries to each hospital. Some managers argued that this would be very costly because current company policy mandated that major accounts would receive deliveries
two to three times per week. To investigate this claim, the team actually inspected hospital receiving logs. To their surprise, they found that on average, a major account received four to six deliveries each day. What actually happened is that when a hospital ran low on a product, one of the employees would call the sales rep. The rep would bring the product to the hospital in his or her own car, send it by taxi, or divert a Baxter truck to add a non-scheduled stop at the hospital. Well-planned daily deliveries actually reduced delivery costs.

- Second, it was traditional for nurses to count every product on every ward every day. They then transmitted orders to the hospital stockroom, and each ward was replenished daily. When the work team actually looked at the ward replenishment data, they found that only a small proportion of products were used in any given week. Over 70% of the counting and replenishment was unnecessary. With a little added safety stock of critical products, the majority of these costs could be safely eliminated.

Putting it together

As the team engages the customers' managers during the channel mapping process, they should seek to understand not only what these managers are doing, but more importantly, why they are doing it. These discussions will unearth the primary factors that determine the customers' supply chain structure and operating policies. They also will give the team vital clues about the likely points of acceptance or resistance to change.

In addition, during this process the team will have an opportunity to identify and bond with customer managers who will be future counterparts and champions for exerting necessary change. In this way, channel mapping is a critical step in building the operations-to-operations change management process essential to intercompany supply chain coordination. For this reason, it is critical that team members be your best managers, not just good analysts.

The channel mapping process enables effective supply chain managers to ‘walk in their customers' shoes’ in a well-structured, well-grounded way. Channel mapping provides a forum for your best managers to work with their counterparts in key customers, to identify opportunities to improve supply chain productivity in both companies. Through this process, your company can realize the full potential of modern supply chain management.

Jonathan Byrnes teaches Supply Chain Management and Integrated Account Management at MIT, and is president of Jonathan Byrnes & Co., a focused consulting company. He can be reached at SupplyChainEditor@larstan.net. Please see his website http://mit.edu/jlbyrnes for a discussion forum on his articles and other topics of interest.