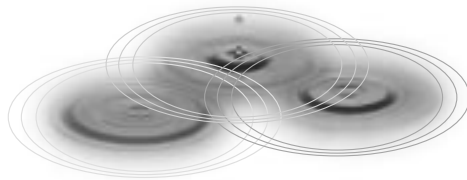


collaborative logistics networks -

breaking traditional performance
barriers for shippers and carriers

By Kevin Lynch
Chairman and CEO
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Foreword

Collaborative Logistics - The Skeptics Are Converting

By Dr. C. John Langley, Jr.,
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When the *7 Immutable Laws of Collaborative Logistics* were unveiled July 13, 2000, I hoped it would stimulate significant further discussion. And, I was not disappointed.

In the past six months, I've watched the mindset of my colleagues, business associates and students at the mention of "Collaborative Logistics." They have evolved from an initial curiosity to true belief in its practical application. In a market typically skeptical of dot-com hype and flash, this trend has risen above the fray – led by brick-and-mortar companies and individuals I would never have expected.

The bottom line is that Collaborative Logistics is at work, and it is being successfully achieved by companies of all sizes and cultures.

Rising Above the Confusion When selecting any academic journal, trade magazine or business publication, one can't help but hear about the latest in logistics exchanges, marketplaces, auctions, and reverse auctions. The question I am most often asked is how do these items interrelate with Collaborative Logistics.

A thoughtful response first must acknowledge it is critical to understand that Collaborative Logistics is driven by a changing corporate vision that views competition and suppliers as potential collaborative partners in logistics. Smart companies are leveraging these relationships to gain efficiencies through shared operations. It is a relationship that is the core differentiator between Collaborative Logistics and all other strategies aimed at improving operations and coordination in the supply chain. And, it can only be facilitated through a neutral entity – the Internet.

Often, spot or open exchanges, auctions, and reverse auctions are grouped with Collaborative Logistics. Although they do share some common objectives with those of Collaborative Logistics, there are important differences. Principle among these is that these types of exchanges or auctions require neither existing relationships between companies, nor the establishment of mutually agreed upon rules of engagement to guide the practices between these companies.

The relationship between Collaborative Logistics and business marketplaces is often misunderstood. Depending on their business model, marketplaces may encourage collaboration in addition to their goal of demand aggregation. Collaborative Logistics may be implemented within the marketplace as a value-added offering to its members, but alone, a marketplace itself is not synonymous with Collaborative Logistics.

Collaborative Logistics occurs only when a community of shippers and carriers coordinate business activities using an Internet service to improve profitability and performance.

Proof of Concept

Even when the terminology and definition are clear, individuals next require real-life examples or proof of the concept. Based on my many years in this industry, I know that basically we are a group of critical thinkers who are not easily convinced with words alone. We require action and measurable results. Since July, I've seen Collaborative Logistics' proof points grow exponentially. The following are some examples that have been published:

- General Mills is saving approximately \$800,000 per year by collaborating with another community member on a single tour;
- Nabisco estimates 10% of its \$200 million transportation expenses will be eliminated; and
- Omni Consulting Group estimates a 12.3% reduction in overall logistics expense.

As proof of its adoption by the industry, the November 20th issue of Business Week highlighted collaboration as the next step for business-to-business logistics. It highlighted companies including Ace Hardware, Caterpillar, Fort James Corp., Nabisco, and Subaru as real-life examples of collaboration in practice.

What's Next -- Collaborative Communities

As the new millennium unfolds, we often ask, "what is next?" The answer for Collaborative Logistics is "communities." These evolving and ever-changing groups of companies come together to share complementary lanes and jointly reap the benefits of shared visibility. These are typically started by a single company with a strong vision – (i.e., General Mills in CPG, Agilent Technologies in high-tech) – and the drive to transform traditional business relationships into collaborative communities. These companies understand the urgency of taking advantage of the synergies they find within their operations but outside of their corporate walls.

Faith Keenan may have said it best in her November Business Week article when she wrote:

"... as more companies learn to share via the Net, the competitive advantage may shift to team players. And loners could end up being derailed."

My advice to the market is to continue to heed this advice, and to start now. Select a few lanes and talk with a few companies. Test the collaborative concept, and start to reap its benefits. By joining a Collaborative Logistics Network, you acquire not just a technology solution, but also the ability to identify beneficial collaborative relationships, that enable members of an existing community to meaningfully and productively share valuable resources.

Collaborative Logistics Networks - Breaking Traditional Performance Barriers for Shippers and Carriers

By Kevin Lynch
Chairman and CEO, Nistevo Corporation

Supply chain innovation has put increasing pressure on the logistics services industry.

Over the last decade, innovation in supply chain management has exploded. In the drive toward lower inventory carrying costs and better customer service, supply chain velocity has been the key vehicle of change. The result has been a reduction in working capital costs, handling costs, shrinkage, and obsolescence.

However, there is still room for significant improvements. Both shippers and carriers are scrambling for new ways to operate more efficiently. Increasingly, this struggle has resembled a tug-of-war between the two because of a simplistic and adversarial viewpoint: for one party to gain leverage, the other must lose.

In response to the increase in supply chain velocity, shippers are under continuous pressure to increase logistics performance while reducing costs. They move smaller product quantities more often, which may mean filling half a truck twice a week rather than a full truck once a week, to meet shorter customer lead times. Furthermore, the supply chain buffers that once protected against shortages have shrunk, as inventory volumes grow smaller. Mistakes that were once covered by excess inventory now emerge as expedited logistics costs.

Carriers are facing new challenges to profitability, too. Many carriers already suffer from margins that have been reduced to an average of 4.8%. Driver turnover is a major concern, with the industry average hovering at 103%. To make matters worse, fuel costs are surging. According to a press release from the American Trucking Association (ATA) in September 2000, the average cost of a gallon of diesel fuel has risen 73% over the last 18 months. To make matters even worse, carrier insurance costs have also been rising dramatically.

Though shippers continue to squeeze carriers for additional cost reductions, carriers have no more room in which to maneuver after reducing rates over the last five years in response to competition. In fact, downward pressure on profitability has been driving carriers from the market at an accelerated rate. According to A.G. Edwards and the ATA, 1,320 carriers left the market in the third quarter of 2000, and they expect this trend to continue well into 2001.

Recently introduced e-logistics solutions address only the transaction efficiency between a single shipper and its carrier base.

In an effort to address the need for increased performance, both shippers and carriers are turning toward e-logistics solutions. The hope is that efficiencies can be gained by simplifying the logistics process.

There is no question that managing logistics is a complicated operation. Each shipper relies on many suppliers. Service agreements are based on attributes, not part numbers, making contracts difficult to manage. Transactions tend to be long and complex. And unexpected service exceptions are the norm.

For the shipper, the value in automating a manual business process is reducing errors and streamlining processing cycle times. By increasing contract compliance, the shipper can reduce leakage. Optimizing service demand can help to maximize efficiency in load building and truck routing. An automated process also improves the ability to track activity-based costs, which can help reduce billing and payment errors.

However, most of these automated features have been commercially available with conventional transportation management systems (TMS). The market for these systems, which emerged in the early 1990s, continues to grow today. Many systems offer features such as optimization, contract management and automated freight payment.

Given these TMS capabilities, what true gaps remain for e-logistics? As it turns out, the benefits that e-logistics vendors typically offer up are related mainly to communication and visibility. By using the Internet, a cheap and easily obtainable communications tool, shippers can avoid the expense and complexity of EDI. In addition, they can greatly reduce time-intensive fax or phone communications with logistics service providers. The ubiquity of the Internet increases visibility by allowing all parties to post or access updates on a logistics transaction.

The main problem with e-logistics is its elusive return on investment. Early e-logistics solutions simply replicated existing TMS value propositions without creating breakthrough business processes. *The real opportunity for both shippers and carriers lies in leveraging the power of the Internet as a common computing platform that enables a completely new business process: Collaborative Logistics.*

Collaborative Logistics leapfrogs these simple transaction models in order to break traditional performance barriers.

The key to understanding Collaborative Logistics lies in recognizing how costs are distributed in a logistics network. Both shippers and carriers focus a lot of attention on controlling costs to improve profitability. Following a traditional approach, each organization has the ability to increase the efficiencies and reduce the "individual costs" of only those business processes that the organization independently controls. However, they have no visibility over "hidden costs."

Here's the big question: How is it possible to reduce costs that are hidden? And, here's the sole answer: Collaborative Logistics. This new business process makes hidden costs visible, so companies can work together to reduce them.

An example of a hidden cost that all members of a logistics transaction pay, but none individually control, is asset repositioning.

- Shipper A requires goods be delivered at a certain place and time.
- Shipper B requires goods be picked up at a certain place and time.
- The carrier must decide how to optimally apply their asset to this situation.
- Shipper A and Shipper B do not understand how their interaction affects asset repositioning costs.

In other words, no single player controls asset repositioning costs. They are a hidden cost paid by all. By maintaining an isolated approach, members of a logistics transaction are limited in their ability to reduce overall costs.

Collaborative Logistics gives shippers and carriers visibility to hidden costs.

Through collaboration, all participants can identify hidden costs and then implement a business process specifically designed to reduce or eliminate them.

Even with collaboration, companies are responsible for controlling their individual costs. Total costs are comprised of both individual and hidden costs. The objective of Collaborative Logistics is to minimize total costs by providing an avenue for controlling these hidden costs.

A good example that reveals the benefits of collaboration involves scheduling truckload movements between multiple shippers. Consider a tour set up between two of our member companies. Through collaboration, they have created and are using a dedicated 2,500-mile continuous move route that reaches many Midwestern and Eastern U.S. cities. The seven stages of this route encompass various distribution centers, production facilities and retail outlets for both companies.

Through the Collaborative Logistics Network, the two member companies identified these synergistic moves and created a regular weekly route that minimizes asset repositioning costs and gives the carrier's drivers a repeatable schedule. This route resulted in a 19% savings for both shippers over their former company-centric model. Furthermore, the carrier is also experiencing higher margins through better asset utilization and lower driver turnover through more regular driver schedules.

The results are obvious:

- Increased logistics service performance at a reduced cost for the shipper;
- Better margins and lower driver turnover for the carrier.

Collaborative Logistics creates a true win/win scenario that allows all members of the logistics community to reduce hidden costs and share the savings.

Collaborative Logistics Networks use the Internet as a common computing platform that enables the community to execute this new business process at scale.

Collaborative Logistics is not just a concept. In place and operating successfully are Collaborative Logistics Networks that allow the logistics community to collaborate in a mutually beneficial environment. Characteristics of these networks are governed by Dr. C. John Langley's *The 7 Laws of Collaborative Logistics* (downloadable from www.nistevo.com), introduced in July 2000.

For instance, a Collaborative Logistics Network:

- Is a single place where all members can participate in this new business process;
- Must not disturb current relationships;
- Must not sacrifice privacy;
- Must allow flexibility.

Internet technology has made the Collaborative Logistics Network possible. Early e-logistics solutions greatly underutilized the power of the Internet as just a fast, open replacement for EDI. The key to unlocking breakthrough efficiencies with Collaborative Logistics lies in leveraging the Internet to its full capacity. A Collaborative Logistics Network uses the Internet as a distributed computing environment common to all network members. It allows for a single scheduling system and integrates with enterprise systems to handle transaction volume, yet lives outside the organization's four walls to maximize collaborative opportunities. The Internet is uniquely suited to deliver these capabilities. As Confucius wrote, "A timber suitable for being a pillar should not be used as a toothpick."

Collaborative Logistics Networks allow members to evolve both individually and together.

Only through a "community" business model can companies share knowledge, costs and savings that lead to improved performance. Whether shippers or carriers, all members of a logistics community want the visibility and flexibility inherent in a Collaborative Logistics Network to:

- Know what the savings opportunity is now and over time;
- Identify which partners maximize performance;
- Redesign partnerships as business environments evolve.

It's critical for all parties in any collaborative network to examine the risks and rewards, and to set rules of engagement before joint efforts are executed. In December, we unveiled the Nistevo Network Builder™ service to help shippers and carriers do just that. The service helps member companies identify optimal Collaborative Logistics partners by comparing their transportation routes with a database containing all Nistevo members' routes. The resulting analysis identifies, scores and ranks the member companies that would benefit from collaborating on common lanes.

Using a neutral Collaborative Logistics Network based on relationships with like-minded shippers and carriers, participants realize benefits quickly. Our network members are seeing a reduction in logistics costs, improved reliability with their service providers, shorter cycle times and improved flexibility.

Summary

The evolution of logistics is being driven not by the availability of the Internet so much as the need for businesses to find unique solutions to lower costs and improve performance. However, Internet technology is an integral part of changes taking place.

As with any new technology, early adopter enthusiasm quickly transforms into early majority pragmatism and realistic ROI expectations. Many organizations today are looking outside their own four walls and limits set by enterprise resource planning, supply chain management software systems, and e-logistics services. However, simply automating existing processes on the Internet is a self-limiting answer.

Collaborative Logistics Networks transcend this confined approach. These relationship-based networks are the enabling technology that both shippers and carriers can leverage to break traditional performance barriers. Collaborative Logistics is unique in its capacity to identify and quantify costs, through Internet technology, and to support these new community business models.

Kevin Lynch

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Nistevo Corporation*

As chairman and CEO of Nistevo, Kevin Lynch is responsible for guiding the strategic vision of the company in its mission to lead the logistics procurement market.

Prior to founding Nistevo, Lynch was president and co-founder of Allaire Corporation, one of the industry's leading independent e-business platform providers. With Lynch's guidance and direction, the Allaire Cold Fusion product line has since become a recognized leader in the market for web application development tools.

Before joining Allaire Corp., Lynch worked as an options trader with the Chicago Board Options Exchange, which develops products and technology that help to meet the needs of investors worldwide. He holds a master's of business administration in finance and a bachelor of science degree in engineering from the University of Minnesota.

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Dr. C. John Langley is the John H. Dove Distinguished Professor of Logistics at the University of Tennessee. He is a former President of the Council of Logistics Management, and was the 1993 recipient of the Council's Distinguished Service Award. His current areas of involvement include supply chain strategy, third party logistics, and eCommerce applications in supply chain management.

He is an author of books titled *Creating Logistics Value*, published by the Council of Logistics Management, *The Management of Business Logistics*, a 6th edition textbook published for use in undergraduate and graduate classes, and *Traffic Management: Planning, Operations, and Control*. In addition to his university duties, he actively consults with both logistics user and provider firms. Also, he serves on the Board of Directors of Averitt Express, Inc., and Landair Transportation, Inc., and on corporate advisory boards for Plasticsnet.com and for Accenture's Ideas and Exchange facility in Atlanta. His logistics and supply chain activities have involved travel to South and Central America, China, Europe, the Middle East, and Africa.

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