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Contributors

Logistics Perspectives on Low Cost Country Sourcing
Low cost import sourcing opportunities offer many benefits for North American companies. Ensuring that the left hand knows what the right hand is doing in a global is critical as these benefits can be accrued to different organizational units in your company. Here's a compelling case that shows why it's important to counter the risks in your sourcing decision by appraising the benefits and costs across your complete supply chain.

Leveraging the Power of Networks For Optimal Supply Chain Efficiencies
A lot has been written about the value networks can provide to the supply chain from a theoretical perspective. Here is a practical and applied study on how connecting supply networks and demand networks – a network of networks – can help you to reduce costs throughout the supply chain and produce a positive outcome for both shippers and carriers.

Not All Supply Chains are Created Equal. What Your CXOs Need To Know About Logistics
Many of today's executives weigh their companies' investments in the supply chain armed with unparalleled quantities of data to measure performance, and apply to their real-world strategies. Too often, however, executives fail to use this data wisely.

The CFO and the Supply Chain
An increasing number of CFOs view the supply chain as making a crucial difference in their ability to achieve corporate objectives. But aligning supply chain strategy to business strategy continues to be a slow process that often misses the mark. Part of the problem is supply chain professionals have not put themselves in their CFO's shoes and asked themselves, “how can I speak the CFO's language?”

Securing the Global Supply Chain for the Twenty First Century
The World Customs Organization (WCO) is expected to soon adopt a new global supply chain security and facilitation framework to protect global trade assets. Over the past three months, IBM's Theo Fletcher has personally met with several countries' customs administrations about these measures. The response he has often heard is: "what is in it for me?"

What “C” Level Managers Need To Know About Logistics
Companies spend billions of dollars annually on logistics, often representing anywhere from 20 to 30 percent of their overall cost of doing business. Despite these massive expenditures, many of North America's top executives fail to see the power that logistics has on influencing a company's success.

Success, Opportunity, Change: Shanghai World Expo HR Strategies
Victor Deyglio, president of the Toronto-based Logistics Institute, has recently been appointed Senior International Advisor to the Shanghai Foreign Service Co, Limited and the Shanghai World Expo 2010 Group. Here is his synopsis of an address that he recently made at the International Conference on Human Resource Strategy for World Expo 2010, sponsored by the Mayor of Shanghai and the Bureau of the Shanghai World Expo Coordination and Municipal Personnel Bureau.

Commentary: What Executives Need To Know to Transform Supply Chains
Leveraging the means to mitigate average performance often involves widespread change and building a bridge between the status quo and what is possible. Such change management may mean turning to exemplary people within a company. It can also involve turning to outside companies to help your best and brightest champion the changes to grow your business.
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LQ’s mandate to provide “Ideas for Leadership in Logistics,” is clearly evidenced this issue with articles written by professionals and logisticians from America and Canada who are leading and transforming business by creating new roadmaps and definitions for leadership in this exciting field.

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Before joining Descartes, Mr. Mesher launched Integrated Logistics Strategies Services for the Gartner Group, building the practice into a leading advisor to major global corporations. Mr. Mesher is a frequent keynote speaker at industry events and academic institutions such as MIT, Penn State and Northwestern. He is also the author of numerous articles and white papers. Descartes’ products and services are used by 2,500 customers in more than 60 countries.

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MARK MORRISON is Senior Vice President of TNT Logistics North America. In his role of Senior Vice President of Business Development at TNT Logistics North America, Mr. Morrison leads the effort to expand the company’s customer base in several key business sectors. These sectors include automotive, tires, electronics, utilities, retail and fast moving consumer goods. Mr. Morrison joined the predecessor of TNT Logistics North America, Customized Transportation Inc., in 1993. He served as the company’s senior vice president of operations until transitioning into his current role in 2001. Prior to TNT, Mr. Morrison was senior vice president for two years at Inchape Shipping Services and was with Crowley Maritime for 14 years, most recently serving as vice president of Crowley’s Atlantic Division. He is a member of the Council of Logistics Management (now named CSCMP.) Mr. Morrison received a Bachelor of Arts degree in Accounting from San Francisco State University.

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Logistics. The driving force of human achievement.
Logistics Perspectives on Low Cost Country Sourcing

Low cost import sourcing opportunities can often result in a concomitant number of international sourcing strategies and challenges, with benefits and costs related to low cost country sourcing accruing to different organizational units. Here’s a compelling case why it’s important to counter the risks in your sourcing decision by taking a look at the benefits and costs across your entire supply chain.

By David J. Closs, Ph.D.

ONE OF TODAY’S major business challenges requiring logistics insight is the dramatic increase in international sourcing, particularly to low cost countries such as China and Malaysia. Firms in virtually all durable goods industries are investigating Asia, Eastern Europe, Latin America, and Africa as potential sources for finished goods or, at least, component parts. This article discusses the rationale for international sourcing from low cost countries, identifies some of the challenges, and offers some guidelines regarding sourcing strategy.

Rationale for Low Cost Country Sourcing

Increased global competition is driving many firms, particularly those in durable and fashion industries, to identify and establish relationships with suppliers in low cost countries. There are a number of justifications for such sourcing initiatives. First, sourcing from countries with low wage rates typically reduces manufacturing cost. While such strategies can reduce manufacturing cost, some firms have not considered the total cost impact of international sourcing particularly with respect to the logistics cost components of transportation and inventory. Second, the material or factors of production (power, water, etc.) may be less costly due to less developed markets. Third, seeking out suppliers in low cost countries can also increase competition among existing suppliers, thus reducing material cost. Fourth, low cost country sourcing can increase a company’s exposure to state-of-the-art product and process technologies. Without pressure from global suppliers, there may be reluctance on the part of local suppliers to invest in new technologies because they have significant assets in older technologies. Conversely, global suppliers may place significant focus on new technologies to establish a competitive position in foreign markets. A final justification for low cost country sourcing is to establish a local presence to facilitate sales in a new country. For example, while the U.S. automobile industry is significantly increasing sourcing from low cost countries to reduce component cost, it is also establishing the infrastructure and relationships to facilitate international automobile sales particularly in Asian countries. Due to political or legal constraints, it is often necessary for a firm to have relationships and production operations to be allowed to sell their product internationally, particularly in developing countries. The potential advantages make a strong case for sourcing materials and product from a low cost country. However, with the increased visibility and interest, it is also necessary to also consider the challenges.

Challenges for Low Cost Country Sourcing

While there is substantial rationale for low cost import sourcing, there is also a long list of challenges related to such sourcing strategies. These challenges are further complicated by the fact that the benefits and costs related to low cost country sourcing accrue to different organizational units. Procurement or manufacturing often receive the benefits through lower material, component, or manufacturing cost. However, many of the costs and the challenges to ship and guarantee delivery of the material are the responsibility of logistics. Benefits and costs must be integrated across the entire supply chain process in order to make the correct sourcing decision.

The first challenge is the identification of sources capable of producing the materials in the quality and quantity required. While it is becoming easier to achieve the acceptable quality standards, ensuring that the potential supplier has the ability to meet volume and seasonal demand fluctuations in a suitable time frame remains a challenge. The supplier may not have the capacity to adequately respond to start-ups or surges. The second challenge concerns the protection of a firm’s intellectual property as products or components are produced and transported. The suppliers and countries involved need to have legal infrastructure to protect product designs and related trade secrets. Outsourcing products or processes to Asia today sometimes exposes the firm to the potential loss of critical trade secrets. The third challenge relates to understanding import/export compliance issues. There may be government regulations regarding the volume of a commodity that can be imported before duties or other restric-
tions are enforced. The percentage of materials that are foreign sourced may also restrict a firm’s ability to sell to select customers. For example, government contracts may require a specific level of domestic-made components; if the contract requires that the product is “Made in the U.S.A.”, 95 percent of the material must be of domestic origin. The fourth challenge relates to communication with suppliers and transportation companies. While the procurement negotiation with low cost countries is not easy in itself, there is often a greater difficulty in dealing with carriers, freight forwarders, and government customs due to time zone, language, and technology differences. The fifth challenge is the need to guarantee the security of the product while in transit. It is necessary to both make sure the product is not stolen or lost in transit and to be certain that it does not become involved in a terrorist incident. This protection against a terrorist incident is important to protect the firm and its customers. The sixth challenge concerns the inventory and obsolescence risk associated with extended transit times. With the longer transit times associated with low cost country sourcing, it is not uncommon for the firm to have one or two months supply of product in transit which must be counted as an asset and incur the related inventory carrying costs. Extended lead times also increase the potential for obsolescence as orders have longer lead times and there is generally little flexibility to change. Such extended lead times can also impact recovery when quality issues develop. It is not unusual for firms to fly components from offshore suppliers to recover from an unexpected quality problems or delayed shipments. The final challenge, which synthesizes the previous ones, focuses on the need to understand the difference between piece price and total cost. While the piece price may include the material as well as direct and indirect labor, the total cost perspective needs to consider other cost elements including freight, inventory, obsolescence, duties, taxes, recovery, and other risk considerations.

### Guidelines for Sourcing

The decision to source material and components domestically or from a low cost country is a complex one. While the direct and indirect product costs represent one major factor, there are many other factors that must be considered and weighed appropriately. Products and components that have extended times between manufacturing changeovers are ideal for low cost country sourcing. A counterexample would be the life cycle for an electronics component, which is typically quite short, and would generally be locally sourced. Products and components that have numerous variations should also generally be domestically sourced because the extended lead times associated with low cost country sourcing makes it difficult to forecast the precise mix of product that will be demanded. Unless final product customization can be postponed, it is better to use local sourcing to reduce the leadtime for products with high variations. Products or components with high labor content should take advantage of the typically low labor rates in low cost counties. Products or components with high intellectual property content should be sourced locally as the legal systems in many of the low cost countries do not provide adequate trade-secret protection. Local sourcing is generally appropriate for products and components with relatively high transport cost such as those that are bulky or damage easy. Products or components with relatively low value are ideal for low cost country sourcing as the inventory carrying cost while it is in transit is not significant. Products and components that are constrained for security or other types of import restrictions by a domestic government should tend toward local sourcing. For example, there may be customs delays in importing electronic goods when the supplier does not have the trust of the importing government due to the potential for importing contraband. Finally, products or components which have a high degree of transport uncertainty due to relatively low volumes or location on tradelanes with limited service would likely be better for local sourcing.

There is no simple answer regarding which products or components should be domestically sourced as a number of the criteria are somewhat qualitative. Table 1 lists the general sourcing criteria. The final determination depends on the specific item and the firm’s expertise. As firms increase their global operations and marketing efforts, logistics managers should be increasingly involved to provide a realistic assessment of the total cost and performance implications.

With increased interest in low cost country sourcing, logistics professionals will be required to determine and evaluate the trade-offs associated with such decisions. Not only should the procurement and manufacturing costs be considered, the logistics costs and risks must also be considered. As discussed previously, this requirement represents both a challenge and an opportunity for professional logisticians. In addition to understanding the cost components, logisticians will need to develop methodologies that can effectively determine imputed costs related to low cost country risks.

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<thead>
<tr>
<th>Criteria</th>
<th>Domestic Sourcing</th>
<th>Low Cost Country Sourcing</th>
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<tbody>
<tr>
<td>Product life cycle length</td>
<td>Short</td>
<td>Long</td>
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<tr>
<td>Product variations in size, color, or style</td>
<td>Many</td>
<td>Few</td>
</tr>
<tr>
<td>Labor content</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Intellectual property content</td>
<td>Low</td>
<td>High</td>
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<tr>
<td>Transport cost</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Product value</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Security or import constraints</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Transport uncertainty</td>
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TABLE 1: Sourcing Guidelines

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LogisticsQuarterly.com
Leveraging the Power of Networks FOR Optimal Supply Chain Efficiencies

Connecting supply networks and demand networks – a network of networks – can help reduce costs throughout the supply chain and produce a positive situation for both shippers and carriers.

INTRODUCTION

Ever good supply chain manager realizes that transportation expense is the most significant component of the total cost of logistics; and at no time in recent history has it been as significant as it is now. Increased fuel, insurance, and engine costs, combined with new hours of service rules, an improving economy, capacity constraints and driver shortages have resulted in higher motor carrier rates. Fuel, the economy, and the lack of intermodal capacity have caused rail rates to increase as well. In short, there is a rather painful transportation cost environment and every indication that it will get worse before it gets better.

Most firms have been very proactive in reducing warehousing and inventory costs, but these savings are quickly paling into insignificance when compared to rising transportation expenses. It is absolutely critical that the supply chain manager turn his attention back to the transportation activity and develop creative solutions to the dilemma of rising costs.

Some motor carriers and other logistics service providers share the concern and have arrived at more innovative methods of trying to minimize shippers’ costs even as rates are increasing. They have found that establishing themselves as network connectors or integrators can be an excellent tool to be exploited for the benefit of both providers and clients.

While not a complicated concept, there is some lack of understanding of transportation networks and how they can be valuable to the firms that utilize them. Much of what has been written on the subject has been too academic to inspire even a cursory reading by the average supply chain executive.

Exactly, What is a Network?

Many of us think of a network more in terms of the Internet or as a vehicle to find a job, but the principle of the network is as old as mankind itself. Did you ever wonder how early scholars and teachers, without benefit of radio, television, telephones, computers or even mail service managed to spread their teachings throughout the world?

In 1929, a Hungarian, Frigyes Karinthy, in a short story entitled “Chains” advanced the theory that everyone in the world is tied to everyone else by no more than five links. This concept has come to be known as “six degrees of separation,” and has been confirmed by subsequent research.¹

For example, sociologists estimate that most of us have
about 300 acquaintances with whom we are on a first name basis. This suggests that we are only a handshake away from 300 people, two away from 90,000, three away from 27,000,000, etc. Over time, the concept has become so popular that a movie, *Six Degrees of Separation*, was based on this principle in 1993.

Why not, then, apply this same principle to transportation through a network of networks?

**Creating a Network of Networks**

The value or potential of a network can be defined as the possible connections between its members. The number of potential connections is $n(n-1)$ where $n$ is the number of members in the network. However, if you connect two networks via one connection, each member of each network has access to every member of both networks. In the diagram below, each network has a value of $4 \times 3 = 12$ for a total of 24. Adding a single connection between the two networks increases the network value exponentially. The number of members of the combined networks is now 8 and the value of the new network is, therefore, $(7 \times 8) = 56$.

The value of these networks went from 24 to 56 by adding a single connection.

**The Power of the Network**

By now, you probably are thinking this is nothing more than some kind of “shell game,” but the power, or value, of a network has been well defined by three basic “laws;” i.e., Sarnoff’s Law, Metcalfe’s Law, and Reed’s Law. Each of these laws, in its own way, quantifies network value based upon the connectivity within each.

**Sarnoff’s Law**

Sarnoff’s Law, named for broadcast pioneer David Sarnoff, states that the value of a (television) network grows in proportion to the number of viewers. These are the networks where content is transmitted by one and consumed by many. This is, of course, why the “value” of a television network is substantially higher during the Super Bowl broadcast than during reruns of Gilligan’s Island. That is why the network that broadcasts the Super Bowl will reach over 130 million fans in the U.S. and 1 billion worldwide and can, therefore, charge $2.5 million for airing each one of the sixty-nine 30-second commercials. From a transportation perspective, one shipper broadcasting instructions to many carriers in a one-way communication is more modest, but applicable comparison.

**Metcalfe’s Law**

Metcalfe’s Law is one of two laws that have been singled out as the reason for the success of the Internet. (The other law is Moore’s Law, which states simply that processing power will double every 18 months.) Bob Metcalfe, inventor of the Ethernet and founder of 3Com, maintains that the value of a network grows as the square of the number of members $(n^2)$, and describes networks where each member of the network can potentially communicate with every other member of the network. It’s important to understand that this deals with potential connections, not necessarily with actual connections. There are networks where the value of the potential connections may be greater than the actual connections due to security issues or business rules.

Research into the degrees of separation on the Internet has indicated that any one document is only 19 clicks away from any other.

**Reed’s Law**

Reed’s Law, developed by Dr. David Reed, explains what he refers to as Group Forming Networks, and states that the value of these networks grows as $2n$, where $n$ is the number of groups that can be formed in the network. Dr. Reed, in an article entitled *That Sneaky Exponential — Beyond Metcalfe’s Law to the Power of Community Building* writes:

> … perhaps the most important are supply networks that allow access to and bidding among suppliers and distribution networks that allow access to and competition among customers. The structure of these networks or market spaces, especially the value of the connectivity and relationships produced in these networks, can play a crucial role in defining the value of your business.

If you can manage or influence the networks that connect you to suppliers and customers to create more value for all concerned, that extra value can be used as a competitive weapon. So paying attention to network value is a crucial strategic issue, especially as businesses move their customer and supplier relationships into the ‘net.4

Dr. Reed believes that as the density of the network increases, the value of the network shifts from being defined by Sarnoff’s Law to Metcalfe’s Law and then to Reed’s Law. Therefore, the networks that will produce the greatest returns will be networks that support groups that encourage collaboration among members of the network. This, of course, is the underlying principle of the internet transportation exchanges.

**The Conventional Paradigm**

For the most part, the conventional transportation relationships have been one-on-one. For example, as shown in the diagram above, if three transportation providers want to handle shipments from three different shippers to three receivers, they must make contact with those shippers who in turn would have to connect with each receiver, a total of $n(n-2)$ or 72 potential connections (n-number of members in the network; i.e., 3 providers, 3 shippers, 3 receivers, or 9. The number of potential connections is $9(n-1)$ or 8 for a total of 72.)

In this paradigm, therefore, creating a network with a value of 72 requires 72 connections. At best this is cumbersome; and in the worst case, the network simply collapses under its own weight.
The Modified Paradigm

How then can we reduce the number of connections while at the same time maintain or increase the value of the network? What if a systems integration process could be inserted between the parties: shippers, receivers or suppliers, and transportation service providers? Each party could make one connection to the integrator and we could still maintain the value of the network. This would require only 9 connections instead of 72, yet the value of the network would remain constant at 9x8 = 72.

Once a new member connects one time to the integrator, it is therefore connected to everyone in the network. This provides the opportunity for each member to gain and give visibility into their supply chains and to leverage the connectivity of the network. It also provides the opportunity for collaboration among the various members of the network.

This modified paradigm is the basis for some of today’s more sophisticated logistics service provider offerings. State-of-the-art technology is available through a web-enabled portal, requiring no large investment on the part of the shipper. In addition to avoiding a large capital investment, shippers can:

- access to a managed network of trading partners already connected to a system;
- minimize implementation time;
- reduce systems and support costs;
- pay only for usage;
- eliminate software obsolescence;
- reduce transportation and inventory costs through better management of supply chain functions.

The Integrator and Metcalfe’s Law

In the diagrams shown here, there are three classifications of members: shippers, receivers, and transportation service providers. (It should be noted here that these concepts apply equally to inbound or outbound transportation movements.) In addition to these three, a fourth classification includes freight forwarders, customs brokers, consolidators, warehouses, transloaders, and distribution and fulfillment specialists. In its simplest form, the supply chain consists of origins and destinations that create two networks: a demand network and a supply network. The demand network is the freight that has to be moved from point A to point B. The supply network is made up of the transportation service providers and trading partners that execute the movement of that freight.

The Supply Network

The other network within the supply chain is the transportation service provider’s network. Transportation service providers have certain lanes in which they routinely operate: some local, some regional, and some national. These are their preferred networks, influenced by such things as maintenance centers, operating hubs, and driver domiciles. The transportation service providers, when allowed to operate within their own networks, can offer better rates than when forced to operate outside their networks.

As the demand increases, the members of the supply network are presented with more opportunities to carry freight within their own preferred network, reducing the number of empty miles and improving the transportation service provider’s asset utilization. In addition, the increased opportunities mean that the transportation service provider has to spend less money looking for freight within his preferred network. The transportation service provider is able to achieve savings from his cost of sales and at the same time reduce the number of empty miles. These savings then can be reflected in the rate structures.

For the members of the demand network, they get to take advantage of the more efficient rate structures presented by the transportation service providers and reduced administrative costs as a result of reducing the number of required connections. In addition, as shippers and receivers are added to the network, new possibilities for freight consolidation provide opportunities for additional savings.

A limited number of more sophisticated logistics service providers have been able to carry this concept a step forward and leverage the value described by Metcalfe’s law (i.e., the value grows as the square of the number of members). Those that have been able to do so have created the opportunity for suppliers, shippers, receivers, and transportation service providers to connect to a network of networks. In addition to potential freight cost reductions, there are opportunities to better manage inventories, because the providers have detailed visibility of products and shipments mov-
ing through the system and can enable their customers to have this same access.

Such portals offer four basic features:

- **Customer Management.** Customers, suppliers, and receivers can update their core profile information and shipment data via the Internet.
- **Order Management.** Shipments can be tracked and viewed via the Internet.
- **Shipping.** Order information can be confirmed, and shipping notices sent.
- **Receiving.** Arrivals and unloadings can be recorded promptly.

The benefits usually will offset the cost of the service and include:

- Reduced freight costs.
- Visibility of the complete supply chain.
- Ability to modify manufacturing schedules due to supply change.
- Reduced inventory carrying costs.
- Increased customer satisfaction.
- Reduced out-of-stocks.

At this point, the average reader is likely thinking that while this discussion may be interesting to someone, somewhere, there is little practical application. Nothing could be further from the truth.

Schneider Logistics, for example, has leveraged the advantages of the network principle into efficient, time-sensitive service to the automotive industry. Service part shipments to dealers present constant challenges in getting necessary repair parts to dealer garages when they need them, usually with very little lead time.

Through its convergence network, Schneider, using its parent company or other carriers, can bring parts from the manufacturer or its suppliers to a parts distribution center; and from there, using engineered routes, make the necessary deliveries to dealer facilities according to specific delivery times. Further economies can be achieved by consolidating products of various manufacturers.

There is constant visibility, regardless of which carriers are utilized.

The value of Metcalfe’s Law to the automotive companies can be seen in the income statement. The value will be reflected either in reduced costs or increased revenue. So, how are these savings reflected on the balance sheet? The answer is in working capital and its critical component - inventory. If you can reduce inventory and the associated carrying costs, you can have a positive impact on your balance sheet, freeing capital from operations to fuel the growth of the business. The above-described program, for example, has resulted in significant decreases in inventory.

**A Virtual Community**

Reed believes that **Group-Forming Networks** can create network value even more rapidly than Metcalfe indicates. The virtual community created by the network structure presents an opportunity for both real and potential connectivity for transactions. This concept gives every company the opportunity to share information among its suppliers, distributors, and customers and determine ways to collaborate on new products and services. Such collaboration provides the potential to impact the financial results of all the community members.

As each member gains and gives visibility to inventory in the supply chain, the total inventory in the supply chain can be reduced.

The trend is becoming clear: seamless inventory management from supplier-to-consumption. When a plant manager can see inventory on the floor, in the yard, and in-transit to his plant or distribution center, he is empowered with information to make better decisions about production, referrals, freight diversions, expedited transportation, and safety stock management. From a labor perspective, the additional benefits of this visibility can control flow into and within the yard and gain the ability to balance manpower requirements on the receiving dock.

**Performance Measurement and Management**

An ancillary benefit of integrated networks is the ability to measure and manage performance. It begins by leveraging the data captured during the interactivity of network members. This information can then be translated to a form of mutual performance scorecarding. Score carding is a fundamental element of supply-based management; and the provider can build scorecards on carriers, suppliers, and shippers. They can even measure the effectiveness of electronic transactions between connected members of the extended enterprise.

The scorecard becomes the basis for improving performance for all members of the network, particularly those who are direct trading partners.

**CONCLUSION**

Combining the value of integrated networks with the value of information results in the real power of the network – a complex supply chain where connected members receive mutual benefits and financial reward. It will be difficult for the firm to realize these advantages independently; however, these results can best be achieved through a provider that already has a viable network. There are a number of providers that claim strong, far-reaching networks; but in many instances, the reality does not live up to the perception. Careful and informed due diligence is a must.

**END NOTES**

2 Matthews, Robert, Six Degrees of Separation, www.worldlink.com, p 2
It’s no surprise that mounting business pressures and a myriad of new technologies have led companies to re-examine the very nature of their supply chains as a competitive weapon, a means to improve the bottom line and as an instrument to drive continuous operational improvement.

Many organizations have made large investments in solutions that promised to run their businesses better. How do you know that your operations have improved and what can you do to make sure your supply chain and the systems that run your company deliver more value to your organization? The essence of supply chain excellence is effective and efficient material and information flow throughout a business ecosystem. The process must include your suppliers, trading partners and end customers. You can’t have one without the other and the potential for improved productivity, cost reduction and customer service are enormous. As such, logistics is quickly gaining in prominence on the global corporate stage.

The right logistics solution set can mean the difference between gaining competitive advantage and losing market share.

The trend may be standardization. Your CIO may feel that the company should standardize on a single, homogenous IT platform from a name brand ERP system vendor for reduced complexity and easier integration. Your COO wants whatever it will take to optimize operations. The biggest battle for your CFO is weighing cost of ownership against superior functionality. It is important to educate your C-level executives that all supply chains are not created equal. When it comes to supply chain excellence, it is specialization and adaptability, not standardization that will set your business apart from your competitors.

There are two types of supply chains undergoing stress – long and short. Your company may have one, the other or perhaps a hybrid of both.

Long supply chains move either very high-value goods or bulk components over great distances and through many touch points. For high value goods, distribution precision is paramount, while for low value bulk goods, logistics cost is the critical factor. In this category, you will find global retailers, manufacturers, wholesalers and assembly operations such as Pier 1, Target, Ericsson, Nike and Celestica – all of them managing complex inbound supply flow with a focus on inventory and supplier management.

Long supply chains often involve complex networks – North American manufacturers sourcing from Asian suppliers and sub-assembly plants for example. They need flexibility to be effective. They also rely on high quality data.

In 2001, a PriceWaterhouseCoopers Global Data Management Survey asked managers how confident they were in the accuracy of their data. Thirty-seven percent were “very confident” in the information gleaned from their internal systems while only 15 percent were “very confident” in the accuracy of the data received from external sources such as suppliers and third party transportation providers. For many companies, this translates into significant financial loss every year in the form of elevated levels of safety stock, inaccurate billing of transportation services, decreased productivity and the like. In fact, according to the ARC Advisory Group: “Late, incomplete or inaccurate information is the Achilles’ heel of Supply Chain Management.”

Short supply chains also rely on dynamic tools to manage high velocity regional distribution. “Eighty per cent of supply chain costs are incurred in the last ‘100 yards’ to the store…” according to AMR Research. Typically, companies with short
The Short Supply Chain
GETTING IT RIGHT

The Coca-Cola Korea Bottling Company operates a fleet of over 580 vehicles servicing over 110,000 customers (supermarkets and convenience stores). Due to constantly changing consumer demand, they must have the right product on their shelves at the right time. As a result, stock-outs and inventory returns have to be as low as possible so distribution costs are kept under control.

By redesigning sales and distribution processes using a solution from Descartes (a leading third party provider), Coca-Cola Korea was able to overhaul its operations in 20 months to improve efficiency and customer service. The company is driving continuous improvement in costs and customer service through the redesign of territories, fine-tuning service visit frequency, and continuously optimizing routes for the nationwide customer base.

Through route planning and performance management, pre-sales agents spend less time traveling and more time with customers to build relationships and set up stores with promotional advertising materials.

Coca-Cola Korea Bottling has also maximized vehicle utilization, increasing product carried per trip by 13% while reducing distance driven by each truck by 30%, resulting in an 11% reduction in required vehicles.

For their C-level executives, targeted management strategies, the ability to quickly redesign territories, deploy new services and products, and evaluate the results of simulated alternatives has resulted in better decisions in implementation and gains in competitive advantage.

supply chains face greater customer compliance demands and charge backs. Often, they must manage both private fleets and third-party transportation carriers. They require support for service policy analysis and cyclical route planning for replenishment operations; the capacity to manage orders and customers that change every day; and real-time tools to track delivery assets and communicate with field personnel.

Companies with delivery-sensitive operations include retailers, wholesalers, franchises, direct delivery and transportation carriers such as Schwan’s Home Service and Old Dominion as well as manufacturers like Coca-Cola and Kraft.

For organizations with short supply chains, service is a key competitive differentiator. Delivery timeliness and accuracy, real-time delivery status notification, and the flexibility to offer optimal time windows to customers are critical elements for winning new business and maintaining customer loyalty.

No matter whether long or short, supply chains are always in a state of flux – trading partners, processes and internal resources are constantly changing. Your customers' needs are changing as well. Whom you do business with and how you do it will be different a year from now. That is why many market leaders choose highly adaptable technology solutions that offer the specialized functionality they need to compete and win, while buffering against increasing supply chain complexity.

Like supply chains themselves, supply chain technology solutions come in many different forms. The systems that really improve operations and deliver value share these characteristics:

- they offer a variety of deployment options – hosted, on-demand over the internet, traditional license, etc.;
- are built on a web-native, flexible technology platform that can be easily deployed across an enterprise, accommodate change and are configurable to evolving business needs;
- offer proven scalability and security;
- have the ability to integrate and connect with existing systems via simple interfaces;
- support interoperability in a heterogeneous systems environment where participants employ different hardware platforms with different operating requirements;
- low total cost of ownership and a short time to value; and
- they are easy to use, which drives adoption, dissemination of valuable information, and broadens the impact of transportation and supply chain data availability across the organization for overall business improvement.

The underlying processes of supply chain management are fundamental to the procure-to-pay and the order-to-cash cycles of a company. Supply chain technology solutions that really shine assist in unlocking the value not available through your company’s ERP investments alone. They help to optimize working capital and improve business performance. These issues are top-of-mind for all C-level executives.

While there is interaction between and amongst trading parties in the extended supply chain, there is no one party that administers and controls the data. When coupled with different levels of technological sophistication, disparate IT systems and the use of different standards in naming units of measure and configuration details, poor data integrability is often the result. To improve service levels and to achieve an adaptive supply chain, there is a need for the major trading parties to have access to quality data in order to better predict supply and demand, as well as plan, execute and manage logistics activities.

In the absence of quality logistics data, many organizations are using fundamentally flawed decision processes that cannot accurately measure planned versus actual supply chain
performance. The problem is that in the real world, execution does not normally go as planned and many organizations have no way of measuring their own and their trading partners’ actual performance. As a consequence, opportunities to better manage the fundamental processes of supply chain management are missed. This drives C-level executives to distraction. You cannot manage what you cannot measure. They need to see the numbers to know which processes are working and what challenges need to be further addressed. They need to be shown that investments in supply chain improvement are paying off.

Success is based on the synchronization and co-ordination between multiple parties within and beyond the four walls or your organization, each with dissimilar goals, interests and business processes. If one key link in the chain breaks down, the whole operation is adversely affected. A key learning of supply chain project implementation lies in the fact that effective communication in the supply chain, the driving force behind collaboration, is much more than tightly coupled transactions or the movement of data. There is just no substitute for human interaction.

At the same time, your COO needs to know that his operations teams are not drowning in a flood of detail. You must have accurate, up-to-the-minute information, but your people need to be insulated from the growing complexity of today’s supply chains. Where do you draw the line?

An integrated technology solution that spans the depth and breadth of the logistics process, which provides a supply chain transaction backbone with role-based access control, is critical. This backbone must broker transaction messages and accurate logistics data between disparate systems. Demand information, inventory positions, order-fulfillment, supply management, transportation requirements and a whole host of other information affects how you sell products, supply products, and make and receive payments for goods and services. Information should be passed on only to those who need to know it and in the form they need to have it in order to make time sensitive decisions with greater confidence and ease.

Managers also need flexible and user-friendly reporting tools for gathering and analyzing data over time. Supply chain key performance indicator (KPI) metrics should be available to them without having to constantly pull and manually analyze low-level data. The capability to measure and graphically represent internal supply chain performance as well as that of different trading relationships is paramount in the effort to continuously fine-tune operations. Reporting tools need to be flexible and adaptable to suit the changing needs of your business.

A new generation of supply chain systems are emerging. With specialized functionality that is easier to deploy, long-standing problems can now be addressed in cost-effective ways, delivering higher productivity, faster velocity, increased agility, greater supply chain predictability and enhanced customer service. All this equals more revenue and better margins.
SHOULD SUPPLY CHAIN STRATEGY BE AT THE TOP OF THE CFO’S TO-DO LIST?

We’re learning that anything lower invites a threat from today’s number one dampener of shareowner value – disruption in the supply chain.

A recent study by Georgia Tech University business professor Vinod Singhal, reports that supply chain glitches adversely affect a company’s stock price more than any other negative corporate event, even a plant closing.

That’s confirmed in a September 2004 Information Week cover story. It cited supply chain malfunction as one of five major threats that can sink a company.

The Georgia Tech study also concluded that the biggest hit to shareowner value came not when the company made a supply-chain gaffe, but when the gaffe came from its suppliers or other outside parties.

Clearly, when the biggest risks to shareowner value come from outside a firm’s four walls, the defense to protecting shareowners also must be extended.

It had better include an operational focus on producer to
customer processes—linkages that today often reach across oceans and time zones.

Fortunately, there’s a growing awareness among CFOs of the integral role supply chain management must play in not only achieving top and bottom-line growth, but in protecting shareowner value.

Senior finance executives are taking a much closer look at the way their organizations’ supply chains are designed, led, and executed.

In this article, I’d like to take a glimpse of today’s business world through the eyes of CFOs:

- What do they see as supply chain priorities?
- What do they see as challenges to achieving those priorities?
- And how can those challenges be met?

The CFO’s perspective on the supply chain is important to UPS.

It’s critical to our mission to help customers synchronize global commerce. So we’re continually trying to learn more about what’s on their minds.

To that end, UPS recently contracted with the research firm CFO Research Services to survey U.S. CFOs and senior financial managers.

We received more than 250 responses from corporate finance leaders who represented companies of $100 million in annual revenue to $1 billion or more.

Our respondents represented primarily three industry groups: retail/consumer products, manufacturing, and healthcare. Others also worked in the professional services, chemicals, energy and financial services sectors. Here’s what we learned.

First and foremost, more than six in ten CFOs surveyed view the supply chain as making a crucial difference in their ability to achieve corporate objectives.

Finance executives from the manufacturing and retail/consumer products companies particularly echoed this view with 74 percent and 68 percent respectively citing the critical importance of the supply chain to their business’s success.

Yet, only one in three of the respondents said their operational plans—including supply chain—were well integrated with business strategy.

A popular complaint centered around the five to eight week time lag between the development of business strategy and the creation of a supporting supply chain operational plan.

Why is aligning supply chain strategy to business strategy such a slow process that frequently misses the mark?

The most-cited response was because the supply chain is often fragmented into many organizational parts, with no single person in charge.

Logistics, fulfillment, and procurement departments still tend to function as silos, reflecting an era when supply chain was mostly about controlling cost.

Unfortunately, the world tends to change faster than organizational hierarchies. And not surprisingly, the traditional, decentralized approach to managing the supply chain has become a source of frustration to CFOs.

More than one in three said their company had unclear lines of authority when it comes to supply chain management.

And what about the importance of those supplier and customer relationships that the Georgia Tech research pinpointed?

Nearly three-quarters of the financial executives agreed that these two areas are vitally important. Eight in ten said customer relationship management is key to their organization’s success.

Yet, they also see their firms underperforming in these areas.

- Only half report their companies handle supplier management well. Less than half believe their organizations are doing well at customer relationship management.
- Closing the gaps between the “what should be” and “what is” in today’s global supply chain environment is seen as a daunting challenge.
- Less than a third of the senior finance executives surveyed believe their companies can make major supply chain changes when necessary.
- Nearly two of three say—at best—they can only make incremental changes.
- Why is it so difficult to make headway on a business priority that looms as so critical to shareowner value?

The top two reasons cited in our survey are resistance from operations (or other functions), and lack of internal leadership.

Transforming the supply chain usually involves a mindset shift from thinking as a specialist to a generalist—one who can look at the impact of the supply chain across functions.

It can take many out of their comfort zones and sometimes involve a loss of control. To shift control, you need support from the top echelon.

You can bet such a shift is imminent. Forward-thinking CFOs are already pushing it.

Now also might be a pivotal time for discerning, upwardly mobile supply chain professionals to put themselves in their CFO’s shoes.

They might wisely ask themselves, how can I speak the CFO’s language?

I believe there are four steps supply chain pros can take to make the translation:

**Step One:** **Develop a single-minded focus to matching supply chain functions and objectives to business plan objectives.**

As recently as a few years ago, it may have made a lot of sense to have a procurement department narrowly focused on buying from producers who offered the best price. The game was about squeezing cost savings from producers.

It also may have made perfect sense to push back inventory risks to suppliers, who in turn, emphasized efficiency.

A procurement department could then report to senior management that it did its job of saving the company money.

But we’ve learned the supply chain demands more multidimensional relationships.
If producers and suppliers are squeezed on price, they may take short cuts, adding risk to the supply chain.

Efficiency may not be as important as flexibility in a world with volatile changes demanded by customers empowered by the Internet.

The Hong Kong-based trading company, Li & Fung, understands the empowered customer.

Li & Fung has created a network of 5,000 suppliers in more than 40 countries to create the best worldwide supply chain for each specific order it receives from its retailing clients.

A typical order can involve production at six factories and in three different countries. Selection decisions are based on capacity, quotas, price, speed, and quality.

The supply chain is constructed around the initial product idea, and involves the entire design process.

It’s an approach that delivers value by satisfying consumer tastes, and by building in contingencies against disruption, two CFO priorities.

Flexibility at Li & Fung also focuses the big-picture savings opportunities beyond a supplier’s production process.

Li & Fung views the producer cost as only 25 percent of the picture.

A holistic supply chain view offers the opportunity to attack the other 75 percent of the soft costs in getting a product from point A to B.

Those costs include transportation, cost of in-store delivery, duties, shrinkage, insurance, overhead and more.

In short, a procurement or supply chain manager who focuses on the big, holistic picture can not only speak the CFO’s language, but bring music to his or her ears:

- By adding top-line value
- By adding bottom-line value in attacking soft costs
- And, by minimizing risk

In addition, flexibility means suppliers gain an incentive to perform well. Li & Fung succeeds in aligning its own incentives with those of suppliers because of the repeat business it offers them.

- It changed a fragmented supply chain into a holistic one that combined imports, inbound transport, customer order fulfillment and outbound delivery to ensure end-to-end tracking capabilities.

Building visibility is essential to creating a nimble supply chain team. Data on changes in supply and demand must be visible to all the players so they can respond quickly.

**Step Three: Ensure your supply chain has a solid risk mitigation strategy.**

Stanford University business professor, Hau Lee, says his research shows that most supply chains are incapable of coping with emergencies.

Preparing for the extraordinary circumstance involves analyzing where the major risk areas might be and whether there’s a contingency plan in effect to cover them.

For example, concentrating inventory in too few facilities might make a firm less able to respond quickly to swings in demand.

On the other hand, should concentrating inventory make sense, a firm can protect against risk by creating a contingency to back up a primary inventory management location.

When evaluating transportation carriers, an analysis should include how they’re optimizing their networks to ensure contingency routing.

When the recent 11-day strike of West Coast ports threatened a major consumer electronic company’s Holiday inventory coming into the U.S., UPS network planning re-routed ocean-bound shipments from wharves in Asia to aircraft, and on to U.S. retailers on time.

**Step Four: Seek outside counsel.**

The organizational stumbling blocks identified by CFOs are as much matters of emotion as inertia. An independent third party can often provide a fresh perspective, and serve as a detached catalyst for more closely aligning the supply chain with business strategy.

A skilled supply chain counseling viewpoint should align actionable solutions with benefits that can be measured and that deliver lasting value. And it should bring forward best practices to benchmark against.

Perhaps more than anything, looking outside can add network resources that help head off unexpected supply chain glitches.

When it comes to supply chain strategy, no one solution fits all. Each business plan has its own character, and it demands a supply chain strategy that uniquely complements it.

One key thing that’s evident to today’s CFOs is that the two must become interconnected to adapt to a 21st century world of fluid, shifting markets, conditions, and customer demand.

That’s today’s challenge and opportunity.
It’s no surprise that global trade is a vital driver for economic prosperity. Unfortunately, the global trading system in place today is exposed to terrorism and natural disasters and is inefficient in managing the increased scale that is being driven by a robust and growing global economy. In June, in a unified effort to combat these threats, the World Customs Organization (WCO) and its 165 member countries that represent 99 percent of global trade are expected to adopt a new global supply chain security and facilitation framework to protect global trade assets in the 21st century. If it’s implemented correctly, the WCO framework can improve the security of global trade while also enhancing trade facilitation and by reducing costs to both the shipper and the country. Companies that participate should also gain collateral customs benefits, such as faster importing.

Since 1952, the WCO has been aiding the national economic wealth and social protection of its members by promoting an honest, transparent and typically predictable customs environment. Today, this environment is being challenged by terrorism and the WCO and its member customs administrations are in the unique position to develop and promote new security policies to combat these threats and aid in their member countries economic growth. IBM is already participating in country-based programs such as C-TPAT and PIP and we fully support the efforts of the WCO and welcome the opportunity to assist member countries with their implementations.

Today, customs administrations already have the authority to inspect cargo and refuse entry or exit, but with increasing threats of terrorism this is no longer adequate. One goal of the new WCO framework will address cargo visibility. Currently, many customs administrations do not have any visibility to cargo until it hits the border. Those countries that adopt the WCO framework would be agreeing to submit cargo data in advance electronically for improved risk targeting and a holistic cooperative risk management effort. Customs administrations can also use modernized inspection processes to ease the burden of shipment inspection. But to be successful,
The new WCO framework addresses on four core elements:

- The framework harmonizes the advance electronic cargo information requirements on inbound, outbound and transit shipments.
- Each country that joins the framework commits to employing a consistent risk management approach to address terrorism and other security threats.
- The framework requires that at the reasonable request of the receiving nation, based upon a comparable risk-targeting methodology, the sending nation’s Customs administrations will perform an outbound inspection of high-risk containers using non-intrusive detection equipment, such as large-scale X-ray machines and radiation detectors.
- The framework recognizes that Customs and industry and government partnerships like C-TPAT will provide benefits that meet minimal supply chain security standards and best practices.

The objectives of the WCO framework are based on several principles with a premise to promote the seamless movement of goods through secure international trade supply chains. One objective is to establish common standards between countries to promote certainty and predictability, such as requirements for secure economic operator trader programs. This will help ensure that an international company, such as IBM, does not have to implement unique requirements in each of the 174 countries where we conduct business. The second principle is to enable integrated supply chain management for all modes of transport. Third, which I consider the most crucial, is under the headline of cooperation. Cooperation and a shared risk management approach between the various customs administrations is essential as is cooperation between customs and the businesses they support. One thing that IBM learned in transforming its own supply chain is that working in silos is costly and inefficient. The dynamic nature of the threats posed to our global supply chain and a new level of customs-to-customs and customs-to-business clearly show cooperation and communications are needed.

Implementing the WCO framework will not be easy and like any large-scale business process transformation it should be done in a phased approach, which will be provided by the WCO Secretariat, in conjunction with the WCO’s High Level Strategic Group. Not every WCO member will adopt the framework simultaneously and there is no time table. But early adopters are expected to soon share their lessons learned with other members.

This may look good on paper, but many countries aren’t as eager as I’d like to see them. Over the past three months I have personally met with several customs administrations that I consider critical to IBM’s asset-based supply chain, with the remainder scheduled over the next six months. The common response I hear is, “what is in it for me?” As adopters of the framework, customs administrations will benefit from a new and consolidated platform which will enhance world trade, ensure better security against terrorism and increase the contribution of Customs to the economic and social well-being of nations. IBM believes several countries, particularly in the Asia Pacific region, should be early adopters.

Some companies have a similar view about adopting enhanced security practices. We understand that it can be hard to quantify the value of security investments. However, countries have the opportunity to implement the enhanced security procedures while also providing more tangible benefits such as faster release times and fewer inspections, which could make these investments more attractive to corporate customers. IBM is also working with several universities to develop an ROI study on the full business value of investments in supply chain security, which we hope will help both administrations and companies make a better business case for these investments.

The implementation of the WCO framework over the next several years will be critical in ensuring the physical security of the global supply chain for the 21st century. The framework is a major step forward in developing a standardized global method of protection against terrorism in the supply chain. As a customer of many WCO members I encourage all of you to get an early start on implementation. The WCO framework will promote trade facilitation by improving efficiencies, encouraging risk management, integrity and targeted capacity building, and fostering better cooperation among all stakeholders. The global supply chain is the lifeblood of world trade and we are only as strong as our weakest link. Let’s not have any weak links.
What “C” Level Managers Need to Know About Logistics

Companies spend billions of dollars annually on logistics, representing anywhere from 20 to 30 percent of their overall cost of doing business. Despite these massive corporate expenditures, many of North America’s top executives fail to see the power that logistics has on the success (or failure) of an organization.

By Mark Morrison

LOGISTICS IS NO LONGER a function that only concerns the supply chain manager. It’s a series of interrelated activities that also impacts the boardroom, from the chief financial officer and chief information officer to the chief operating officer and chief executive officer.

Logistics processes – both efficient and inefficient – impact revenues, bottom line profits, the balance sheet, production schedules, human resource productivity and the technology that drives non-logistics parts of the organization.

Producers of goods and services continuously seek ways to lower costs and remain competitive in their areas of specialization. Across the supply chain spectrum of materials purchasing, production processing, finished goods distribution and service parts fulfillment, any waste or loss of efficiency can have a significant impact on revenues and profits.

To successfully meet the challenge of producing new and better products at lower costs, “C” level managers are learning they can use logistics to help them streamline operations and create leaner organizations that predict, respond and adapt to dynamic business environments. At the same time, pressures to drive greater competitive advantage and increase shareholder value remain top business priorities for these same top executives.

Superior supply chain logistics is a continuing source of opportunity to create greater efficiencies and lower costs. Executives who have responsibility today for delivering value must manage in a global marketplace filled with economic and political uncertainty, mergers and acquisitions, accelerated product development cycles, production cost pressures and increased offshore competition.

Historically, logistics managers and the “C” level executives haven’t spoken the same language. Logisticians are concerned about the impact of cost and service on the supply chain, while the senior managers are focused on shareholder value. We see this is changing as managers across all levels of organizations are realizing that an effective supply chain does impact shareholder value.
The CFO has a Role in Logistics

The object of business is to make a profit. Organizations that lose money won’t be around very long. The one person who seldom loses sight of this basic axiom of corporate success is the chief financial officer or CFO.

From a logistics standpoint, this profit objective is best achieved by providing error-free, on-time and cost-effective services that meet the customer’s inbound and outbound distribution requirements.

Companies spend billions of dollars annually on logistics, representing anywhere from 20 to 30 percent of the overall cost of doing business. Successful supply chain management depends on how well an organization understands the importance of logistics and how its cost relates to conducting overall business. This is where the CFO plays an important role.

As a result of corporate downsizing and the elimination of traffic departments, today’s senior executives are seeing that a reduction in freight costs and overall logistics cost savings cannot be achieved without their full attention and support. It’s usually the CFO who best understands the role of total freight cost reduction solutions and customer service as they relate to long-term corporate strategies. The CFO typically has the “big picture” vision to see beyond short-term reactions while understanding the importance of proactive, long-term supply-chain management with measurable results. Each part of the manufacturing and distribution process is integrally linked to cost and service efficiencies. Thus, logistics today should be directed from the top down, across job functions and geographic boundaries. Heads of logistics should be peers to other senior management, with the ability to communicate the importance of the logistics process to corporate strategies comfortably to other executives. The CFO, with his or her understanding of the overall business picture, is in a position to facilitate this important cross-functionality.

According to a survey done by CFO Magazine, logistics groups over the past decade have consistently shown that the CFO is the most prominently involved top executive participating in logistics decisions (outside the CEO or VP of Logistics). The principal motivations of a CFO involved in logistics are in the following areas:

- Reduce capital outlays and expense (i.e. bricks & mortar systems)
- Reduce inventories (free up cash)
- Increase inventory turnover
- Reduce fixed assets (i.e. turning over a private warehouse or fleet to a 3PL provider)
- Change fixed cost to variable expenses
- Reduce long-term liabilities
- Eliminate and optimize headcounts
- And create a better perception of their business on Wall Street.

CFOs who leverage logistics processes toward these motivations will find that the bottom-line of their organizations can improve as a result.

The CIO’s Role in Logistics

The chief information officer is responsible for processing data within your supply chain so that you can make optimal decisions about the purchase and flow of raw materials, work-in-process and finished goods. Therefore, it is the CIO’s role to equip your organization with effective supply chain execution systems, either designed in-house or acquired.

Through the deployment of effective supply chain execution systems, you can expand the visibility of material within your network of supply chain partners.

You can integrate transportation and inventory management functionality to provide you with an extended enterprise view of the manufacturing supply chain.

The impact of technology on logistics performance can be measured in a number of ways, including how it helps to:

- Reduce order-to-delivery cycle time
- Reduce network transportation expenses
- Minimize capital outlays
- Improve order-fill rates
- Reduce logistics costs as a percentage of sales
- Convert capital costs to operating costs.

Software is available that enables you to focus on every part of the logistics management process. The key is to make sure that all areas are properly aligned so that efficiencies gained in one area of the business don’t come at the expense of another.

In the not too distant past, parts of supply chain logistics have been managed using a grab bag of techniques, from pushing paper to customized electronic spreadsheets to enterprise-wide applications. However, software today can automate virtually every part of the logistic process, including data collection and order entry, procurement and requisitions, strategic sourcing, warehouse management, in-transit event management and business partner relationship management.

However, implementing effective logistics technology requires cautious and careful actions to avoid information incompatibility and overload. For example, we hear that the average U.S. manufacturers and retailers of any scale have more than a dozen order management systems. That means many companies likely have gaping holes in their ability to get their supply chains truly in order.

Let’s Not Forget About the COO

Any efficient logistics operation must begin with a clear link to the company’s strategy for delivering customer value.

The chief operating officer’s role is to manage the processes that represent the company’s core competencies. The most fundamental measure of efficient logistics is the company’s efficiency ratio, which is where the COO’s attention should be focused. And it’s where some hard questions should be asked.

Are inventories growing faster than revenues? If revenue growth equals inventory growth, your efficiency ratio is one. If inventory is rising faster than revenues, your ratio is less than one and...
you have a problem. Anything over one is pretty good. Knowing how you stand compared to your competitors is critical and recognizing that effective logistics management is key in maximizing the ratio.

The COO must focus on logistics because companies are sourcing product globally far more often than before, extending their supply chains and supplying customers whose expectations for timely delivery and lowest pricing have increased exponentially. Competitive pressures are mounting to squeeze out costs for “product at rest” and “product-in-movement”. Every player in the supply chain wants everything on a just-in-time basis. Anywhere there is excess cost in supply chain there is waste. And waste drives the efficiency ratio.

Some of the experts tell us it’s possible to get savings of up to 10 percent on logistics costs if a company has yet to focus on an end-to-end improvement drive. But increased efficiencies in the supply chain must first be linked to a corporate strategy that’s deeply focused on providing value to the customer. Only then can you determine the ways in which you can compress time and cost to create the most flexible and responsive supply chain possible.

Today’s COOs are looking more closely at the impact of improved logistics on shareholder value. But they are not necessarily interested in investing corporate dollars to improve logistics performance unless it can be translated into higher return for the shareholders.

**The Buck Stops With the CEO**

Having a logistics mentality within your business won’t be truly effective unless the top manager – the CEO – is also on board with grasping and taking advantage of the power that logistics has on the success (or failure) of an organization.

The CEO is ultimately accountable to the board of directors. His vision will lead others to make decisions that are directly related to the financial, technological and operational sides of the business. Integrating logistics into that mentality can have a significant corporate impact. It is up to the CEO to ensure that his or her team is fully aligned when it comes to matters of the supply chain.

If you look at the leaders in any industry, the top managers are becoming proficient at logistics. They realize that it can help them get a competitive advantage in a constantly changing business world.

If you are one of the “C” level executives reading this article and find yourself measuring the value of logistics within your organization, then we say congratulations, you’re doing the right thing to do for the future of your company. But if you’re not discussing the impact that effective logistics has on your supply chain and how it affects shareholder value, then we recommend you get that dialogue started right away. It’s never too late to make improvements.
Success, Opportunity, Change: Shanghai World Expo HR Strategies

Victor Deyglio, president of the Toronto-based Logistics Institute, has recently been appointed Senior International Advisor to the Shanghai Foreign Service Co, Limited and the Shanghai World Expo 2010 Group. Here is his synopsis of an address that he recently made at the International Conference on Human Resource Strategy for World Expo 2010, sponsored by the Mayor of Shanghai and the Bureau of the Shanghai World Expo Coordination and Municipal Personnel Bureau.

Victor S. Deyglio

climate with strong import-export capabilities supported by global connectivity [IT];
• Economic Development: fostering a pro-active finance, banking and investment climate;
• Business Development: fostering a strong entrepreneurial and private enterprise climate;
• Human Resource Development: having the right people with the right skills, knowledge and aptitudes, as well as global credentials, to sustain success.

To build the “world class city”, Shanghai is investing heavily in infrastructure. There are over 21,000 construction projects building everything from affordable housing, to upscale condominiums and new office towers. The Pudong Development Area is the new skyline of Shanghai – glitz and glitter, glass and neon, steel office towers and 80 storey hotels.

There are six new river container ports along the Huangpu and Yangtze Delta, a new deep sea container port at the mouth of the Yangtze, and state-of-the-art cargo terminals at Pudong International Airport. New bridges, new highways, new subway systems enhance the city’s capacity to move freight and people.

Along with infrastructure growth, however, comes the perennial urban blights: gridlock and congestion, air and water pollution, overcrowding, the abandoned down-town core. Even as

ON MARCH 4, VICTOR DEYGLIO was a keynote speaker at the International Conference on Human Resources Strategy for World Expo 2010 – Shanghai, China. The Conference was sponsored by the Mayor of the People’s Government of Shanghai, the Bureau of Shanghai World Expo Coordination, and the Shanghai Municipal Personnel Bureau.

The overall theme of my session is: Trends of Internationalization of Human Resources and the Strengthening of Urban Competitiveness. This is in keeping with the World Expo 2010 theme Better City,Better Life.

Better City, Better Life is about an enriched urban experience and the ingredients of the livable city. But it’s also about opportunity at all levels of human experience. For the people of Shanghai, as well as for the burgeoning classes of entrepreneurs [“middle class” is an out-moded socio-economic category in the New China], opportunity and mobility, education and cosmopolitan sophistication will become normative.

My address will focus on three critical factors: Success, Opportunity and Change. What follows are reflections on what this may mean to the City and People of Shanghai, and possibly to the rest of the world.

Success. Shanghai wants to be a “world class city”, comparable to New York in finance, London in trade, and Paris in culture. Make no bones about it – Shanghai will achieve its vision by 2025, and is using World Expo 2010 as a stepping stone to that end.

To become a “world class city”, Shanghai has begun to align four key areas of development:
• Global Development: fostering a trade
new satellite cities are built to modernize the urban experience for over 17 million, the sense of belonging is being eroded. Better City, Better Life is as much a challenge as it is a goal.

Opportunity. For Shanghai, Better City, Better Life is also about “urban competitiveness”. To be world class, Shanghai cannot simply imitate others; it must differentiate itself and become the “city of choice” for the world – to do business, shop, visit, and to live. Like a retailer, Shanghai must build loyal clientele, and sees “supply chain logistics” as the critical success factor linking vision and infrastructure.

Shanghai’s competitive world strategy begins with infrastructure but grows with global supply chains.


Sourcing connects us to suppliers and vendors, and replenishment-after-consumption triggers the process again.

Deployment – Consumption – Replenishment are key inventory management activities, while Distribution/Transport/Delivery provide the channel to final markets. This basic cycle repeats itself in an on-going process, although patterns may change according to the complexity of demands.

As goods flow from source to consumer, information flows from market [consumption] back to source, enabling constant levels of supply [Deployment – Replenishment] to be maintained in order to meet continuing demand [Distribution/Transport/Delivery]. A Supply Chain Logistics Strategy and a Global Connectivity [IT] Strategy are integral to one another.

World Expo 2010 highlights the issues Shanghai faces in developing and implementing a bold competitive supply chain logistics strategy. This city of 17 million expects to host 70 million guests over a six-month period in 2010. That’s about 400,000/day.

What if each visitor wanted to buy one bottle of water? That would require 70 million bottles of water. Using traditional principles [buy cheap in bulk], one could spend as much as $7 million on water [@ 10 cents-a-bottle]. With a perennial drought in China, where would all this water come from? And how many different suppliers would Shanghai need just for water?

Buying in bulk could necessitate building a DC of about 6 million cubic feet, depending on bottle and carton sizes. To avoid that, Shanghai could opt for a VMI strategy. But if you had multiple suppliers because of worldwide drought conditions, how do you negotiate a cost-effective VMI strategy?

How many trucks using how many different distribution channels would you need to deliver and replenish a consumption rate of 400,000 bottles per day? How do you maintain WE security and avoid city gridlock? [WE site is in the downtown core]. What would you do with the empties?

In this simple illustration, one can begin to grasp the magnitude of Shanghai’s challenge to implement a competitive SCL strategy that sustains its global vision to be a “world class city”. Getting there is relatively easy in terms of infrastructure and investment; remaining there demands the capacity to sustain success.


By developing Strategic HR Plans we attempt to answer the question: What is our capacity to deliver? In effect, the primary focus of such plans is on the workforce in terms of the skills, knowledge and aptitudes needed to succeed locally as well as globally.

There is a clear distinction between traditional approaches to HR Planning and the Shanghai Workforce Development Strategy. Traditional HR plans deal with jobs, job descriptions, and minimum requirements to be hired, such as experience and education.

By contrast, the Shanghai Workforce Development Strategy focuses on competence and the capacity of the workforce to do the work and perform at world class levels. The objective is not simply to give people jobs but more significantly to build the SKAs so that the workforce can manage and sustain Shanghai’s vision as a world class city.

With competency standards for the workforce, we can then roll out WE Recruitment Plans:

- First, by defining jobs in terms of SKAs, and
- Second, by hiring, and training as needed, human resources to meet those standards.

With competency standards, we can also structure training programs to build various skill levels.

The bench strength of any company or economic region in a globally competitive market is the competence of its people [Peter Senge, The Fifth Discipline]. Building competence is about changing the way we think, work, organize ourselves and compete in the world.

Change is fundamentally about altering behavior, not simply about re-engineering processes, or restructuring organizations.

Ultimately, change is about creating a new culture throughout an organization, and generally in society. Culture involves more than norms of behavior; it’s about shared values.

To be world class, Shanghai must become a leader in the world. Leaders must have:

- Personal History – inborn capabilities; deep-rooted values; experience and credibility
- Competitive Drive – standards; desire to succeed; confidence
- Commitment to Life Long Learning – seeking new challenges; reflecting honestly on success and failures
- Skills, Knowledge, Aptitude
- Competitive Capacity – capable of dealing with a competitive and fast-moving world

Ultimately, the true test of an effective leader is in “the follow-up”, that is, those willing to follow. In order to host the world, Shanghai must be world-class.
What Executives Need to Transform Their Supply Chains

Leveraging the means to mitigate average performance and the customary way of doing business often involves widespread change and building a bridge between the status quo and what is possible. Such change management may mean turning to exemplary people within a company. It can also involve turning to outside companies to help your best and brightest champion the changes to grow your business.

By Jim Davidson

WHEN YOUR YOUNG SON or daughter wishes to share their most recent dating experience, there can be times when as a parent you stop the conversation because you are receiving too much information, and instead opt to proceed on a “need to know” basis. While the subject matter of logistics is substantially different, the end result can often be the same. Today’s executives often receive more information than they can reasonably absorb. They need to be selective about how they receive this information. They must cull what is most germane to their business from vast quantities of data to find the best know-how to be applied to their organizations.

As business professionals, we attempt to manage thousands of variables on any given day. In many cases, we cannot control these variables and are placed in a position where we are forced to react to them. Those of us who react successfully grow in our ability to manage, take on increased responsibilities and often end up in a position where reacting can make up the bulk of our business day. Those of us who are fortunate enough to have a high-functioning team around us can step back from the day-to-day activities far enough to plan proactively and apply strategic thinking to our everyday world.

There is little question that logistics and the value of proper supply chain management has moved from being a line expense item on most company’s profit & loss statements to a discipline that affords a competitive advantage in the marketplace. Similarly, this change has resulted in the supply chain deci-
transform a company’s operations is essential to change management. One of the most important elements of change is the presence of a resident champion in a company. Someone who is capable of not only referring us to another, then to a supplier, then the supplier passing our name on to one of their manufacturers and so on. It’s much easier for management to embrace change that has been proven, albeit that the proof comes in the form of testimonials from suppliers, customers and often competitors.

Does change come without planning, investment, hard work and suffering? Unfortunately, not usually. The pain often has a direct correlation with the amount of change. We know new strategies to decrease overheads, reduce inventory costs and move from fixed to variable costs, often result in the closure or movement of distribution centres that have outlived their usefulness. People can be displaced as a result of applying new efficiencies. The flip side is that we are facing increasing global competition in areas that were previously bound by North American geography. We must be mindful of the impact China is having on our economy across all industries. Our ocean ports, railroads and transportation infrastructure are being taxed to handle the dramatic increase in imports and now operate beyond their capacity in many areas. Also, we must keep our own business models lean and efficient, to embrace changes similar to those that we recommend externally, to our customers.

It has been said many times that the best defence is a good offence. That statement has never been truer in managing your supply chain today. Because of capacity issues, driver shortages, rising insurance, fuel costs, hours of service rules and border security legislation, our industry must look deeper to find the solutions required to manage the supply chain effectively.

As logistics service providers, we work to minimize the pain and maximize the gain in implementing the required changes to make your supply chain flow efficiently. Often, the “low hanging fruit” is discovered early as untapped when an arm-length provider reviews your logistics practices or finds unidentified synergies within a company. For example, can our company combine various suppliers’ freight to achieve a consolidated truckload versus paying more than double that on an LTL basis? Can the raw materials coming into your plant with ABC carrier be turned around with a load of freight within that carrier’s regional expertise?

When you take the blinders off and take a snapshot of your complete supply chain, you have taken an important step to ensure the left hand knows what the right hand is doing. I have personally experienced daily inventory line fill rates go from 60-to-90 percent with the implementation of our company’s strategies. I’ve seen transportation rates reduced and service levels increased well beyond our expectations. In many cases, we find savings representing 10-to-20 percent cost reductions within the total supply chain. This provides customers with an immediate and real competitive edge in their marketplace that, in turn, results in a positive impact on their bottom line.

As logistics managers, we share a common goal when analyzing the challenges facing our industry and the requirements for better optimization and utilization of our available shrinking transportation resources. That means a change of perspective; letting go of “we’ve always done it that way” and embracing new thinking and becoming the champions of change within our organizations to ensure success for our collective futures.

The tactical view from the shipper’s door can be a vision of the truck wheels turning faster and the driver being paid less money, culminating in faster service at less cost. The strategic vision from the boardroom should be; a clear view of their supply chain that provides visibility to all who require it, that effectively reduces inventories while improving consistency, service, and quality in the process. Done properly, this can provide a significant competitive advantage to the owner of the supply chain.

In summary, to be successful in supply chain management, the business leader needs to embrace change, edit and manage useful information, build and acquire a high functioning team and provide leadership and direction in implementing a well thought out strategic plan.
WHO READS LOGISTICS QUARTERLY?
NEW PROFESSIONAL LOGISTICIANS

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To effectively manage your supply chain we strive to understand all aspects of your business needs. Our objective is to enhance your service levels and better control costs through improved strategies and proven processes. Given the opportunity, we can recommend comprehensive supply chain solutions that will encourage you to put Wheels in motion.
Schneider National is known as North America’s leading truckload carrier. But, we’re much more than truckload. Our broad portfolio of truck and intermodal services is supported by responsive associates and leading technology. Let Schneider bring you the best total value for all your transportation needs.

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