

# FEDEX CASE STUDY



**Supply chain management improves competition by controlling costs and shortening product delivery cycles.**

by Scott Gardner

**T**en years ago the concept of supply chain management was similar to nailing a custard pie to the wall: despite much effort, the result was messy. Industry talk wandered among topics as diverse as contract logistics and warehousing. Chaos reigned.

Today, a much cleaner supply chain environment is the cornerstone of our economy. It can almost be defined as a complex science that improves competition in the marketplace by controlling costs and shortening product delivery cycles.

The essence of supply chain management is the ability to synchronize the movement of goods and services with the information and financial transactions that accompany them. It stretches from the initial procurement stage all the way to the final disposition—even the recycling—of a product. Not just manufacturers but also service industries have supply chains.

As the thread that links all the various components of a business, regardless of function or even physical location, a global supply chain pulls together the world's economies and societies. Companies use supply chain management to give them a competitive edge and to bring their customers

# LINKS IN THE CHAIN

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value. For example, by carefully managing store inventories to ensure no stockouts, a company builds customer satisfaction and loyalty by always having what customers need.

To use supply chain management as a competitive weapon, a company needs to first ask, “How far and fast does a product need to travel, and what is the best model to get it there?” Armed with the answer, it can then decide whether to opt for a regional distribution network that supplies a steady stream of products over short distances or whether it’s better off with a global model that can handle customers around the world.

The best solution incorporates more than considerations about where to put distribution facilities. Issues such as longer transit times, customs clearance, and trade regulations are key factors that feed directly into the bottom line.

For this reason, locating your facility close to your market isn’t necessarily the best approach if that facility is in a region where goods are routinely held up in bureaucracy or the infrastructure isn’t developed enough. Within FedEx, this aspect of the business is referred to as *access*, because efficient and timely access to global markets is the most level playing field for companies that do business around the world.

Access is the core of a company’s ability to splice the supply chain into ever-finer components, disperse them around the world, and then reunite these components in whatever shape is necessary within a specific time frame. It is the fuel of world trade.

Trade in turn encourages the exchange of ideas, the indispensable ingredient in innovation and creativity, even as it channels the capital flow that turns these ideas into tangible products and services. Trade promotes the exchange of cultures and collaboration among people who otherwise would never have met.

For example, even 20 years ago your coworkers would consist only of the people you saw every day. Now you come into work and receive a dozen e-mails from coworkers—only they’re sitting halfway around the world instead of halfway to the office coffee machine.

Whether this phenomenon is labeled *access* or *supply chain*, it’s undeniable that it is redefining how people experience the world.

### Links of the Chain

The phenomenon did not happen overnight. Three main factors shape the modern supply chain. First is the explosive growth of world trade, since trade isn’t possible without transportation. World GDP (gross domestic

product) in trade rose from 7 percent in 1940 to 30 percent in 2005.<sup>1</sup>

Second is the growth of the world’s labor pool. From 1989 onward, about three billion people entered the global capitalist workforce owing to the end of the Cold War, the disintegration of the Soviet Union, and the greater economic openness of China and India.<sup>2</sup>

Third is the emergence of “fast cycle” logistics, similar to the fashion and consumer electronics industries, which are known for making goods that can be obsolete in a matter of months. As a result, they are extremely innovative with supply chain practices. Their profits depend on fast delivery to global markets. Companies simply can’t afford to wait weeks for components and finished goods. New products and technologies are constantly coming onto the market. With customers who want the latest and best products, obsolescence rates are high.

Industries like fashion and consumer electronics push the transportation industry to even greater excellence to meet their high customer service expectations. High-tech companies can stock and ship so that a consumer receives a customized request in days. Retail companies are able to spot trends in the marketplace and within weeks have that merchandise stocked in their warehouses.

More industries are extrapolating winning solutions from the modern supply chain model. The middle Tennessee area is home to diverse industries that can use global supply chain management to run their individual businesses effectively. Three key industries in this area are consumer electronics, such as computers and accessories; automotive manufacturers and suppliers; and of course, the music industry.

A local consumer electronics manufacturer is using supply chain management to speed products to an ever-changing market while at the same time reducing risks of product obsolescence. With technology accelerating and more consumers downloading music to MP3 players, demand for new models and accessories to fit them continues to evolve. Users face a particular challenge when the manufacturer of the MP3 player introduces the latest model: will the old accessories fit and perform the same way, or will a design change be required?

By keeping inventory lean and using air express shipping on its imports from Asia, the company is able to reduce the risk of warehousing parts that do not fit the latest popular model. Through air express shipping for order fulfillment, the company has its products on retail shelves quickly, resulting in higher customer satisfaction and sales. Because of the fast delivery of products and the fact that an e-mail to the buyer including the ship date and tracking num-

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ber is automatically generated, the number of “Where is my order?” calls to customer service has also been reduced.

Sometimes companies find that designing reliable supply chains can take the place of building brick and mortar facilities in other parts of the world. Take, for example, an automotive parts supplier that received a contract to supply replacement service parts in Japan. After the company won the business, it needed to determine how to fulfill the orders.

An expensive option would involve buying or renting a building in Japan and hiring a staff to receive orders shipped by ocean or air, stock the parts, and then ship them as needed to customers in Japan. This option, besides being expensive and loaded with possible regulatory and labor issues, has additional risks due to long-term lease requirements and a high labor cost. What would happen if anticipated sales didn’t materialize or the company lost the contract?

A second option was to create a “warehouse in the sky.” Even though the company would normally not consider flying parts across the Pacific, that method could work out to be comparable in cost when considering the total expense of doing business the traditional way.

In the end, the company chose not to set up a facility in Japan but to ship mainly by air on a daily basis to fulfill orders within three to four days of order placement. To minimize shipping costs, employees categorized the parts that sold regularly and the parts that sold less often. They shipped the faster-moving parts by ocean to a few primary distributors in order to ensure a small safety net of stock. They chose not to stock the parts that sold less often but committed to having them delivered within a few days directly to the end user.

Another middle Tennessee business, a local compact disc and DVD manufacturer selling primarily to distributors and some music stores throughout the Americas and the Asia/Pacific region, began fielding frustrated clients’ complaints of either delayed order fulfillment or the high cost of air shipments. Their clients wanted smaller, more frequent orders rather than the standard large quarterly orders, which required forecasting consumer demand.

With consumer taste and demand changing, the manufacturer’s clients needed to react to the marketplace quickly. The solution was to work with FedEx to develop a deferred air program option. Clients could not wait for a 20–25 day delivery by ocean container and did not need delivery in one or two days. Four or five business days by air was perfect for their orders of one to three skids each. By ordering a minimum number of CDs in a pallet-sized order, their shipping cost per unit was manageable. This

customized option has led to increased sales and customer satisfaction for the manufacturer. Just as important as the reasonable cost per unit is that clients can now track their shipments on the Internet from pickup through customs clearance and final delivery.

For middle Tennessee companies seeking to expand sales internationally, global supply chain management can be a strategic advantage. Those looking for a carrier should consider the service provider’s experience, depth and scope of business, resources in place globally, and networks of people, capital, and information.

### FedEx and the Supply Chain

As these examples show, for middle Tennessee businesses taking advantage of global supply chain management, the FedEx portfolio combines the three ingredients of modern supply chain management: transportation, technology, and strategy. Our delivery service includes customized options for the customer, consulting services, customs clearance, and ocean shipping.

The FedEx technology team is responsible for building tools that can track packages and calculate tariffs as well as designing handheld devices for our couriers. Our strategy is to wrap all aspects of the supply chain into one convenient and reliable package for our customers. This is why supply chain management doesn’t just move your package: it moves the world. ■

*Based in Nashville, Scott Gardner is a senior international sales executive with FedEx Services. In his 15 years with FedEx, Scott has spent time in Japan, France, and the Philippines assisting customers with supply chain solutions. Scott is active with the World Trade Council of middle Tennessee and is a volunteer speaker for the Tennessee Small Business Development Center’s Passport to Exporting seminar series. He is also a regular contributor at Nashville Area Chamber of Commerce International Business Council quarterly meetings.*

*FedEx Corporation provides customers and businesses worldwide with a broad portfolio of transportation, e-commerce, and business services. A \$35 billion company, FedEx offers integrated business applications through operating companies competing collectively and managed collaboratively under the FedEx brand.*

### Notes

1. Hoenig, Thomas M., president and CEO of the Federal Reserve of Atlanta, “The Global Economy,” speech, September 15, 2005.

2. Gereffi, Gary, Duke University, “The New Off-Shoring of Jobs and Global Development: An Overview of the Contemporary Global Labor Market,” paper for the International Labor Organization, 7th Nobel Peace Prize Social Policy Lectures, Kingston, Jamaica, December 5–7, 2005.

**Sometimes  
companies find that  
designing reliable  
supply chains can  
take the place of  
building brick and  
mortar facilities in  
other parts of the  
world.**