



High-powered computers and sophisticated software are combining to make global trade work for big and small companies alike.

Whether you're at home, at work, or somewhere in between, take a quick look around and make a mental list of where all the things you take for granted come from. That notebook computer?

It's assembled in Taiwan, with parts shipped in from Korea, Indonesia, and Malaysia. Your watch, shirt, and shoes come from Japan, China, and Vietnam. As for that car you're about to hop into, it might be assembled in a plant outside of Detroit, but the parts and components were made in Japan, Mexico, and other countries around the globe. These various products have two things in common: All were created half a world away at the end of a long supply chain, and all aspects of production and transportation were monitored and controlled by high-powered computers and sophisticated software over global data networks. It's the way things are done these days in what's become a global society.

"We live in a flat world," says Joel Sutherland, picking up on a term popularized by the *New York Times'* Tom Friedman. "Survival means focusing on world trade with a tight supply chain." Sutherland, former president of the Council of Supply Chain Management Professionals, is now industrial liaison officer at Lehigh University's Center for Value Chain Research. He adds that, although the details differ from case to case, good supply chains are revolutionizing how global companies efficiently ship raw materials to the factory and move finished goods out and onto store shelves.

### BIG PAYOFF

"Don't even think about doing business globally without a strong supply chain," warns Jim Ritchie, president and CEO of Meridian IQ, the supply-chain logistics subsidiary of YRC Worldwide, based in Overland Park, Kan. With a presence in 70 countries, Meridian IQ provides supply chain management for companies large and small. Example: Using its logistical acumen, it implemented a supply chain management system that helps a midsized publisher ship more than a million books a day worldwide. Costs were cut by \$2 million in the first 18 months, and the big payoff is that employees now know where every shipment is and when it will arrive.

The visibility that an effective supply chain provides is critical these days. "You can't hope to compete globally without knowing absolutely where everything is and when it's going to arrive," adds Ritchie. "We see this area growing tremendously in the coming years."

ARC Advisory Group, a Westwood, Mass.-based firm, agrees. It predicts that sales of supply chain management services and software will grow from last year's

## DO'S AND DON'TS OF SUPPLY CHAIN MANAGEMENT

Tips for a successful logistics operation:

### 1 GET A STRONG SPONSOR

Do your best to get a top-level executive involved to make sure this technology gets implemented. If not, it might stay at the bottom of the CEO's priority list.

### 2 BE REALISTIC

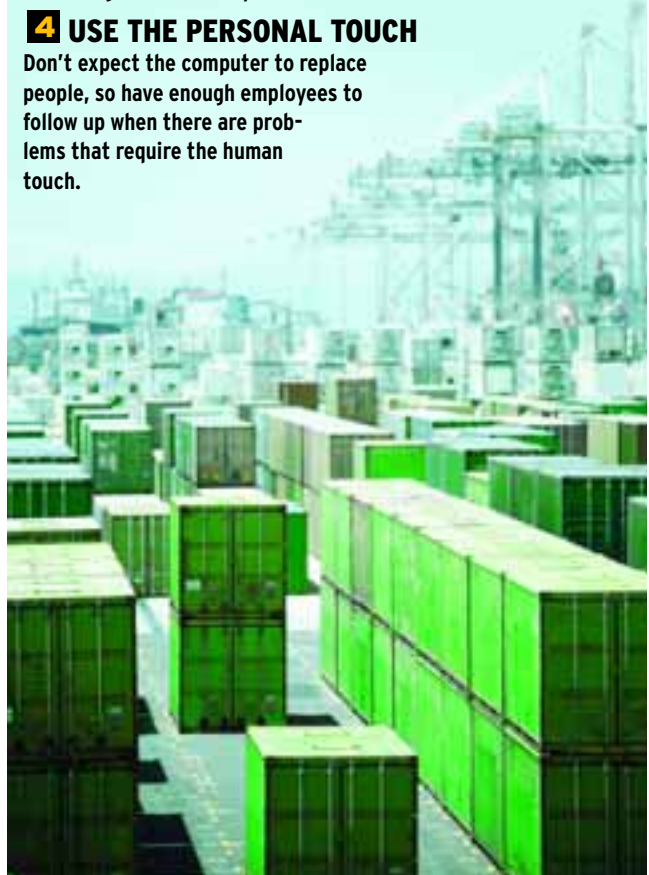
Don't oversell how much supply chain management will save, because when the results don't match the rosy predictions, the whole project might be scrapped.

### 3 STRIVE TO IMPROVE

Do as much as possible to incrementally improve the operation, whether it's by outsourcing shipping, changing ports, or reworking the software you use.

### 4 USE THE PERSONAL TOUCH

Don't expect the computer to replace people, so have enough employees to follow up when there are problems that require the human touch.



\$4.2 billion to \$6.6 billion in 2010. While the technology that orchestrates this symphony of world trade is impressive, Steve Banker, ARC Advisory's director of supply chain management, warns not to discount the human factor. "The difference between success and failure can come down to open communications between the factory and the shipper," says Banker. "Without a personal touch, all the computers in the world won't help."



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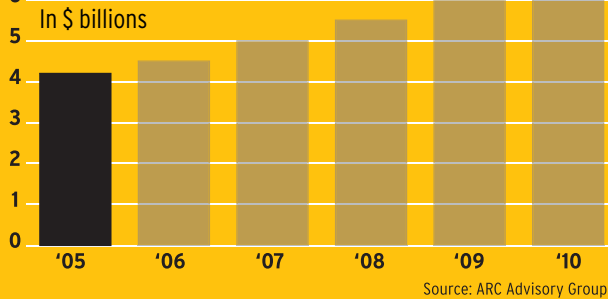


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**Sales of supply chain software and services are projected to keep rising.**



A case in point is BAX Global, a large transportation and supply chain company with 500 facilities in 136 countries, and a leader in outsourcing logistics. The company's warehouse management system tracks shipments on a minute-by-minute basis and then integrates the data in the computer networks of its customers. "We couldn't do what we do without automation, but we value the direct relationship with our customers," says John Carr, president of BAX Global's Atlanta-based supply chain management division.

**LOGISTICAL MAGIC**

How it all works was demonstrated last winter when the Microsoft Xbox 360 game console debuted. A shipper's nightmare, Microsoft marketers wanted introductions in the U.S., Europe, and Japan separated only by about two weeks, and little or no pre-shipping of the devices due to security concerns. BAX Global performed this feat of logistical magic with a fleet of 87 747s, which got the consoles to the right places at the right time. "There were no shortages," recalls Carr. "It was a tricky but rewarding job."

Outsourcing supply chain capabilities can help a smaller firm act like a megacorporation with a world-class logistics infrastructure, without investing millions of dollars. "Meridian IQ can take care of the logistics from the point of origin to point of consumption," says Ritchie, "which means our clients can concentrate on what they do best." Through MIQ web-hosted technology, clients can track shipments and display their locations on a web browser screen at any time from any computer.

The true worth of a supply chain infrastructure is how it responds to emergencies like the 2002 Los Angeles dock strike. Rather than drowning in goods from China, sophisticated supply chain management systems rerouted shipments to other West Coast docks, averting an economic disaster. "Problems always crop up in shipping," says BAX Global's Carr. "We want our customers to know we're responding and that it's taken care of."

While experts agree that outsourcing can cut 30% to 50% from production costs, it's not always smooth sailing.

Lehigh University's Sutherland points out that a supply chain that stretches to China entails higher shipping bills, longer voyages, and the need to keep more inventory on hand as a hedge against supply disruptions. Adds BAX Global's Carr: "It might cost a company next to nothing to make the goods, but the challenge is to reliably and inexpensively get them to the customer. That's where we come in."

With all that can go wrong, Murphy's Law could easily have been written about Chinese factories, ground shippers, and port operators. It's all too common to have containers lost or stolen in transit, mysteriously never make it aboard the correct ship, or even not contain the right goods. Regardless of who's to blame, these problems require expensive air shipments of replacement products to avoid lost sales.

"We have 1,800 employees in 53 offices throughout China," says Meridian IQ's Ritchie. "Our supplier management program tracks goods from the purchase order to actual shipment to ensure that what is thought to be in the container is actually there." That way, he adds, there's no need for costly do-overs, and all members of the supply chain are happy campers. —Brian Nadel

**WHERE TO GO FOR MORE INFO**

**APICS.** Building an innovative supply chain requires real-world training. The Association for Operations Management, APICS, offers Certified Supply Chain Professional (CSCP), the industry-standard supply chain certification program. Learn more about how CSCP can enhance your career by visiting APICS at [www.apics.org/certification/CSCP](http://www.apics.org/certification/CSCP).

**25th Anniversary D/C EXPO,** the top show for all supply chain systems, unveils dramatic changes at the next show in May 2007 at Navy Pier in Chicago. Sign up to keep up with breaking news at [www.logistar.com](http://www.logistar.com) and [www.a2bnetwork.com](http://www.a2bnetwork.com).

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**Technology Evaluation Centers (TEC).** Organizations compare supply chain management (SCM) software online, and interactively, to identify the best solutions for their business needs. With leading analyst research and decision-support software, TEC is the source for impartial technology evaluation. It's all at [www.technologyevaluation.com/c/SCM](http://www.technologyevaluation.com/c/SCM).

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