

## **The Detour Economy**

*Kerry A. Dolan, Forbes Global, 02.18.02*

Business has a new enemy since Sept. 11: security snags. Flextronics is fighting back. Individually they are small. Collectively they represent a staggering burden on business and trade. These are the impediments to the movement of people and goods brought on by Sept. 11: the wasted hours of employees showing proof of identification to get in their building, the delays at the airport, the backlog of trucks at the border, the increased cost of air freight, the dead weight of higher insurance premiums. Add up these insults to the economy and there is no doubt that they are hobbling international trade and prolonging a worldwide slump.

Alice Schroeder, an insurance analyst for Morgan Stanley, pegs the "cost of risk"--higher premiums and the increased risk of uninsured losses--at up to \$25 billion this year for U.S. companies alone. Air cargo costs have risen nearly 15 cents, to an average of \$1.30 a kilo, because of higher security costs. The top ten Wall Street firms will spend half a billion dollars to upgrade their disaster-recovery capabilities. Myriad companies have diverted manpower to update antiterror plans. This friction is sand in the gears of the global multinational corporation.

"Courtesy of a world worried about global terrorism, you have the equivalent of a tax on cross-border connectivity," says Stephen Roach, chief economist at Morgan Stanley in New York.

Post--Sept. 11 friction impedes almost every industry, but it is felt most in businesses that deal with transportation and logistics across international borders. Take apart a Palm handheld organizer and you'll find parts from Japan, Korea and Mexico. That poses problems for Palm's contract manufacturer, Flextronics International--especially after Sept. 11. "People are concerned about this, but we're on the forefront of making our customers' lives easier," says Michael Marks, the CEO of Flextronics.

Though Flextronics' main U.S. office is in California, 4,700 kilometers from New York, the ripple effect has altered many decisions it makes. At a hundred factories in 28 countries on four continents, Flextronics churns out half a million products daily--printers for Hewlett-Packard, cell phones for Ericsson and handhelds for Palm. It then delivers the products to distribution centers and customers in the U.S., Europe and Asia. Even under normal circumstances the logistics are daunting. Since mid-September they have been further complicated by border tie-ups, tighter security checks and increased shipping costs.

Flextronics had bad delays in the days after the terrorist attack, but since then deliveries have been on time or only a few hours late, says Thomas Wright, its chief of logistics. The extra effort added friction to the process of doing business.

Smart companies were figuring out how to reduce the problems even before the terrorists struck. Now companies have no choice. Insurance premiums will go up, though some companies will combat this by increasing their deductibles or reducing coverage. Most businesses have adopted tighter security measures. The Empire State Building in New York has increased security personnel by 25% and added baggage-scanning machines at its five entrances to the tune of several million dollars.

Sand in the gears shows up in ways large and small. Travel is a big one. On Sept. 11, TheraSense of Alameda, California, which sells glucose-monitoring systems for diabetics, was doing a road show for its initial public offering. When it resumed three weeks later, it had to rent a corporate jet at triple the cost of business class, says Mark Lortz, its CEO. "With all the uncertainty and the long lines at airports, we would never have been able to do that aggressive, back-to-back travel on a commercial airline," he says.

After Sept. 11, the airlines imposed a security surcharge on cargo that averages 15 cents a kilo. Some customers have sidestepped the increase by sending goods by ship, says Richard Zablocki, a managing director at Emery Worldwide. At Universal Electronics in

Cypress, California, some formerly highly mobile employees remain reluctant to travel. For now they're making their sales calls on the phone, but at some point revenue might get hurt.

Sometimes the expectation of hassles is enough to divert business. Traffic across the Canadian border into Detroit, Michigan, is down as much as 40% from a year ago. But to avoid a crisis if traffic should pick up, U.S. Customs might need to add more border agents. Technology could help, too. General Motors has worked with U.S. Customs on a pilot project that puts transponders in trucks to zap data about the shipment and driver to agents before the truck crosses the border. It now has taken on more urgency, especially since gm and Ford had to temporarily shut down some production lines because of parts shortages after Sept. 11. In the meantime some big automakers have chosen to stock more inventory in case of shipping delays. More inventory means higher financing costs, which means lower profits.

Flextronics' business could be especially vulnerable to minor disruptions. Founded in 1969 as an assembler of circuit boards, Flextronics is based in Singapore and has its main U.S. office in San Jose, California. When Marks was named CEO in 1994, the company had \$93 million in revenues. Marks realized that tech companies would pay for design, logistics and distribution as well as assembly, so over the years he acquired companies in those areas. Today Flextronics is approaching \$14 billion in sales, contending for the No. 1 position in its industry against its archrival Sollectron.

The growth was good, up to a point. As Flextronics took on new business from Hewlett-Packard, Alcatel and others, it often bought the clients' factories and continued to make their products there. That resulted in a scattershot array of sites around the world. Late last summer, as the economic slowdown thickened, the strategy became unwieldy--too many factories in high-cost or isolated locations. When business was booming, it was a way to meet demand, but now production lines were idle. Yet customers wanted even lower costs.

Flextronics needed to do business in fewer places and have products cross fewer borders--goals that became especially important in the world after Sept. 11. Marks' team formed a plan to consolidate production in eight industrial parks, most in such low-labor-cost locations as Hungary, China and Mexico. Flextronics lures key suppliers to set up at each park. Because it can make products for several customers at the same park, it spreads risk and overhead. Flextronics had five such parks already up and running and likes the results.

So does Kodak. Flextronics has been making disposable cameras for Kodak at its Hungarian park since mid-1999. Because the plastic-molding and assembly lines are near each other, Flextronics can turn resin into a camera in fewer than eight hours. In 20 minutes it can switch from production of, say, a 24-exposure camera without a flash to a 36-exposure flash camera. And Kodak can ramp production up or down as needed, building up for the peak in summer and winding down in the fall. "We have more flexibility working with Flextronics in Europe than we did when Kodak was running its own plant here," says Angelika Theissen, a manager for Kodak in Europe.

An extra benefit: Locating more of its suppliers at a park helps Flextronics circumvent some of the added friction. Last year a truck filled with microchips that were flown in from the Philippines--earmarked for use in the new Microsoft Xbox videogame machine--was hijacked on the drive from the Guadalajara airport in Mexico to the nearby Flextronics park. But production wasn't interrupted, because Flex keeps two weeks of Xbox parts inventory at or near its Guadalajara site, and parts suppliers nearby keep another two to four weeks of inventory on hand. "Strange things do happen," says Todd Holmdahl, a general manager for Xbox. "I have had a cargo container of computer mice fall into the ocean. This buffer gives you the opportunity to keep your manufacturing lines up and running."

The park setup also lets Flextronics produce goods for the closest market. Palms made in Hungary go to the European market, those made in Guadalajara to North and South America. Even that can be altered if demand spikes in one region. "We've got the ability to optimize where the product is sourced and how it is assembled," says Wright.

To adopt the park plan, Flextronics laid off 10,000 people, closed 20% of its factory space and took a \$400 million charge in the quarter ended Sept 30. Some factories are still under construction; most of the existing ones are being expanded. Currently 30% to 35% of Flextronics' business goes through the parks; in five years that will grow to 70%, with each park producing \$1 billion in revenue. "The future is big locations like these," Marks says. Customers agree: Flextronics' revenues rose 7% to \$3.5 billion in the quarter ended Dec. 31, and, after a one-time charge, earnings grew 21% to \$82 million. Its rivals, including Solectron, have posted declines.

If anything, the gridlock that took hold in the days after Sept. 11 has improved the sales pitch of such outsourcers as Flextronics, as more companies eye letting experts handle the logistics. "If a disaster happens, who's going to be better prepared to solve it--your own company or someone who has a hundred customers and deals with a thousand details every day?" says Miles Cook, a vice president of Bain & Co., a consulting firm.

**Flextronics has modeling software called SimFlex that helps customers figure out the best way to outsource. Input data on, say, sales and demand for Palms and SimFlex factors in customs duties and currency issues to help customers choose where to have their products made and how to ship them. The software was developed six years ago by a team in Finland partly for the Finnish military to manage the movement of supplies if a road were blown up. That capability has taken on added importance since Sept. 11. Flextronics acquired the software last May and charges tens of thousands of dollars to use it. "Customers just love it," says Marks. Palm's supply chief, Angel Mendez, calls it a "superior tool."**