REGIONAL REPORT/ASIA

Middleman Becomes Master

Wal-Mart watch out—giant Hong Kong trader Li & Fung boasts an information system to beat.

BY WILLIAM J. HOLSTEIN

The Holy Grail of the late 1990s was that the Internet would allow companies to buy all their parts and components online through giant electronic marketplaces. This would create a “frictionless” economy in which all greedy, inefficient middlemen would be effectively cut out of the action. Blissful companies would be able to see every link in their global supply chains to the producers of basic commodities. They would have to hold precious little inventory as a result.

Of course, it didn’t work out that way for the vast majority of companies. So it’s ironic that one of the middlemen that was supposed to get blown away has proven a master of Internet-based supply chains. It’s doubly ironic that this success story, Li & Fung, is a trading company that began in Canton in 1906 selling porcelain, bamboo, rattan ware and firecrackers.

Today, Li & Fung is based in an industrial section of Hong Kong’s Kowloon district and maintains offices in 40 countries, which oversee the production of merchandise for many American retailers. Its sales last year were $4.2 billion. “We’ve moved from being the perennial Chinese sort of middleman doing everything you associate with my grandfather’s days to fully embracing the supply chain management concept,” says William Fung, group managing director and CEO.

Fung and his older brother Victor are the family’s third generation to run the business, which handles both soft goods such as textiles and hard goods like toys, sporting equipment and household items. Both men were educated at universities in the U.S. William studied computer science at Princeton during the era of punch cards and the Fortran and Cobol computing
languages. “Everything I learned in those days is totally useless,” he jokes. After Princeton, he went to Harvard Business School. Victor did his undergraduate and masters work at MIT and then got a Ph.D. at Harvard in applied mathematics.

The short road home
They might have pursued careers in American academia or the corporate world had it not been for a phone call from their mother in 1972. “If one of you boys doesn’t come back and help your father, he’s going to kill himself working so hard,” she said. William returned that year, and Victor in 1974. At that time, most of the goods they traded were made in Hong Kong, then a bustling manufacturing hub.

Over the years, the brothers professionalized and modernized the business, which is publicly traded. As Hong Kong lost its manufacturing competitiveness with the rise of cheaper-labor bastions elsewhere in Asia, they established relationships with manufacturers throughout the region, but never actually made anything themselves.

In 1997, they also started contending with the Internet. Franklin Warren McFarlan, a senior associate dean at Harvard Business School who first met Victor when he was a student and now sits on the company’s board, recalls that the Fungs were worried their company would be disintermediated and therefore disappear. But rather than lament the new technology, they figured out how to use it to secure Li & Fung’s middleman role. “What they discovered was that the Internet allowed them to provide more value-added services and intensify the relationship with their customers,” says McFarlan, the technology “guru” who, according to William Fung, helped guide the firm.

What the Fungs created is a hybrid system. Today, the company maintains Internet-based communications with its major customers. Almost 75 percent of those are large retailers in the United States including Avon, The Coca-Cola Co. and Disney, all of which rely on Li & Fung for promotional items. Its largest customer in the U.S., Kohl’s Department Store chain, accounts for 13 percent of Li & Fung’s sales.

For these large customers, Li & Fung has created extranet sites dedicated to them. Information about the products they’ve ordered comes from Li & Fung’s Electronic Trading System, now in its fifth generation of refinement and known as XTS 5.

Li & Fung’s XTS is also linked to its own network of offices, where it has 5,000 people supervising the manufacturing of customer items. The nature of its electronic connections varies depending on the sophistication of a country’s telecommunications system. In more advanced countries, a Li & Fung local office can be linked immediately to headquarters in Hong Kong. The branch office can tap the company’s central databases and send digital photos of fabrics or products back and forth. The geeks at Li & Fung call that a “thick” connection. In cases where telecommunications are more primitive, however, the company depends on emails and email attachments, using Lotus Notes. That’s a “thin” connection.

Li & Fung uses Hewlett-Packard and Compaq computers and Oracle database software to manage information and store the data, but has largely designed and written the software that makes up its XTS. “The important part is what we do with the technology,” Fung says. Altogether, the system currently holds a very respectable 1.5 terabytes of data, which is
equivalent to 1.5 million books.

The company’s most important tech initiative is working with Microsoft’s Biztalk software to better connect front-end orders from all customers—from the biggest to the smallest—with the back-end order processing system. That will enhance the supply chain’s efficiency and make the system more transparent to customers. But Fung points out that the Internet applies only to certain segments of the supply chain. At other points, there is no substitute for human expertise, such as in the designing of products or allocating a single big order to four different factories to get the job done quickly.

The company doesn’t connect its system to the thousands of manufacturers who make its products, partly because communications systems aren’t advanced enough in China, the Philippines, Bangladesh and other Asian countries, not to mention Africa and the Caribbean. Li & Fung relies on personal visits, phones, faxes and couriers to keep in touch.

The other reason manufacturers aren’t linked to Li & Fung’s system, however, is that it wants its own employees to make sure that materials have arrived, that production has been scheduled and shipping arrangements have been made. If it depended on manufacturers to directly enter that information, the quality of its data would be “like raw sewage,” says Fung. A manager in Pakistan could say, “Sure, we’ve started production—pay us,” even if nothing was happening. Li & Fung personnel also have to be on the ground to make sure manufacturers comply with a customer’s standards in terms of how they treat labor.

For all those reasons, it’s unlikely the Internet will ever connect the complete supply chain. “Technology is an enabler,” says Fung, a 53-year-old marathon runner who needs stamina for the 150 days a year he spends on the road. “You have to be clear on what you want to achieve.”

McFarlan believes the more comparable American example to what Li & Fung has achieved is Wal-Mart. The giant retailer collects vast amounts of data about how its products sell and gives its suppliers a “window” into what is selling best. While Wal-Mart is known for providing suppliers with the latest information, Li & Fung has used technology to link its offices and connect to customers.

“They are the leaders in Asia in providing this full solution of sourcing and supply-chain management,” says Laurence H. Alberts, managing partner for Asia for Mercer Management Consulting, also based in Hong Kong. “They’ve built up a very considerable barrier to anyone else trying to replicate it.”

**Better than virtual supply chains**

Alberts says the early prophets of “virtual” supply chains at companies such as Ariba, Manugistics and I2 Technologies failed to understand all the practical challenges of trade. Those include the complexities of U.S. textile quotas and huge numbers of requests for quotes, bids, invoices and shipping documents that must be prepared for a global supply chain to work (and most are global). “The virtual supply chain managers underestimated the physical challenges,” Alberts says.
One of the things that Li & Fung can do, which no computer can, is deconstruct an order and use what William Fung calls “distributed manufacturing” to make it. He says the best way to make polo shirts for the American market, for example, is to buy American cotton, knit it and dye it in China because it can be done quickly and cheaply there, and then actually sew the garment in Bangladesh. Even though some countries such as Bangladesh and Pakistan offer rock-bottom prices for labor, their work forces lack the skills to create the higher value-added components.

That’s why when it comes to making attaché cases, Fung says his company arranges to buy leather in India, ships it to South Korea for tanning and then sends it to China for final assembly with metal fittings made in Japan. Similarly, a talking toy assembled in China has a voice semiconductor made in Taiwan and sports clothes made in South Korea. By managing this process, Li & Fung is able to get quality products quickly at a low cost. “We’re actually the bridge between low-cost, labor-intensive manufacturing of consumer goods in the developing world and the consumers of those products, who are primarily in large, developed economies,” Fung argues.

As long as Li & Fung sticks to its core areas, it can’t be disintermediated, says Fung, and its work with Coca-Cola shows how it has used the Internet to consolidate its position. A few years ago, the soft drink giant and its many independent bottlers around the world were increasingly relying on merchandise tied to sporting events to promote the Coke brand. But as a beverage company, not a manufacturer, Coca-Cola found managing all the manufacturing activity expensive and the process too slow to respond to sporting and entertainment events.

So in March 2001, it turned to Li & Fung. The Hong Kong company designed and built the extranet site, code-named Kodimsum.com—KO for Coke’s stock symbol, and dimsum for the Hong Kong delicacy. Coke executives and bottlers can now go on the Web site either to order specific items they design with Li & Fung’s help or to see what other bottlers already have ordered. (The company has built similar sites for its 10 largest customers.) If they see a product that would be useful in their own market, they can “piggyback” on an existing order, thereby driving down the cost since the volume of production has ramped up.

The technological sophistication of the items that Coke wants isn’t high, but it’s difficult to design, manufacture and deliver any product within a four-week to three-month period compared with the six- to nine-month cycle that’s customary for most other products. “They are true experts in the supply-chain management process,” says Cindy Birdsong, Coca-Cola’s director of worldwide licensing in Atlanta, who declines to quantify how much business the company does with Li & Fung.

To get a glimpse of what Li & Fung does when it gets an order from a company like Coke, take the ferry from Hong Kong up to the Nanshan district of Shenzen, one of the special economic zones where China’s “Four Modernizations” drive was launched. There, on a former banana plantation, a factory owned by the Union Paper Box & Printing Press of Hong Kong makes a
wide variety of calendars, high-end stationery items and gift boxes. The Nanshan factory is able to import the best inks from Japan and the best coated papers from Europe.

Upstairs are assembly rooms where hundreds of young Chinese women, average age 24, are working 10-hour shifts to do the detailed work of assembling final products. They come from the much poorer inland regions of China, such as Sichuan province. The average monthly salary for an unskilled worker is $55, whereas the person who operates the printing equipment is considered rich, earning $750 a month.

Local phone lines aren’t good enough to handle Internet-based communications with Hong Kong. But product mock-ups, orders and other material get ferried at the end of each day to the city. That’s where information is entered into Li & Fung’s trading system, allowing customers in the States to see where their orders are. All of which explains the “bridge” function that the company plays.

Challenges ahead
Li & Fung has made its share of miscalculations. Its attempt to expand into smaller and medium-sized U.S. retailers through a San Francisco-based bubble-era company called Studio Direct never took off and Li & Fung has gradually sold off most of its holdings in it.

The company could also face challenges over the long run, says consultant Alberts. He believes one potential threat could be a consolidation in American retailing—if, say, Wal-Mart steamrolls its competitors into submission. Should the giant retailer, which rarely uses intermediaries, acquire or put out of business another American retailer, that could threaten the 8–10 percent margins that Li & Fung currently enjoys. “If they end up with so much of their business in the hands of a few customers, then the balance of power shifts,” Alberts warns.

But Li & Fung has bulked itself up, too. The Fung brothers have bought out some of the major British “hongs,” or trading companies that once competed against their grandfather such as Swire MacLean and Dodwell, a unit of Inchcape. Fewer middlemen in Hong Kong and China means major retailers are more likely to turn to Li & Fung.

If Li & Fung has survived everything from British imperialism to the Internet bubble, it’s not going to be disintermediated anytime soon.