Insight from industry

How international firms are coping with supply chain issues in China

Bin Jiang

Introduction

A recent US-China Business Council survey found that US companies cited the supply chain-related problem as a major problem facing companies operating in China.

One reason for this is the restrictions placed on providing distribution services through third parties. Foreign firms are required to import products through officially sanctioned trading companies. Third-party foreign trading companies and distributors have been prohibited from direct participation in the market and from providing a complete range of trading and distribution services.

Other supply chain-related problems include:

- Difficulty in locating local qualified suppliers.
- An underdeveloped information technology (IT) and telecommunications infrastructure.
- The unreliability of the Chinese transportation infrastructure in many areas.
- The high rate of damage/loss in transit.

This paper addresses issues of interest to firms wishing to establish their supply chains in China. It provides a snapshot of current problems facing firms expanding operations in China and describes the practical strategies for solving these problems. Finally, it provides a synopsis of lessons learned by firms currently operating in China and future trends in the country.

The author

Bin Jiang is a PhD Candidate at the Department of Information Systems and Operations Management, University of Texas at Arlington, Arlington, Texas, USA.

Keywords

China, Supply chain, International trade

Abstract

Foreign firms face many supply chain-related difficulties in China. These include China's overburdened, underdeveloped physical infrastructure; inexpert, underfunded state-owned distribution companies; an enormous, fragmented distribution and logistics sector; and regional protectionism. Additionally, foreign firms face bureaucratic restrictions that prohibit them from legally importing, selling, and servicing products in a straightforward manner. Companies are looking to strengthen their supply chains in China in an effort to leverage the country's cheap labor costs. This strengthening of the supply chain can be accomplished through three methods: the cluster approach; the use of non-Chinese 3PLs; and the use of local carriers.

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Foreign firms' supply chain models in China

More and more foreign companies are entering China to leverage the country's cheap labor costs and establish long-term competitive advantages in the world's largest potential market. To be successful in the long term, foreign companies need to establish, maintain, and strengthen their supply chains in the country. This can be accomplished through three methods: the cluster approach, use of non-Chinese 3PLs, and local carriers.

Cluster approach model

The Chinese Government encourages foreign firms to procure more and more components from local sources (these sources include domestic component suppliers as well as

Supply Chain Management: An International Journal
Volume 7 · Number 4 · 2002 · pp. 184–188

· ISSN 1359-8546
DOI 10.1108/13598540210438926

Supply Chain Management: An International Journal
Volume 7 · Number 4 · 2002 · 184–188

foreign entities with factories inside China). For example, if foreign firms purchase local-made equipment or components, they will enjoy preferential tax rates in China. As a result, upstream foreign firms are asking, if not forcing, their original component suppliers to enter China with them. Thus, the groups band together, or cluster, to improve their odds of successfully entering China.

There are two types of the cluster model: export focused and domestically focused.

Export focused

In general, the upstream companies enter China within the free trade zones (FTZ) and export most of their products to the rest of the world. These FTZs stretch down the eastern coast of China. Over the last few years, China has granted limited trading rights to foreign firms in the FTZs. If an upstream company's original suppliers also set up factories in the FTZs, they can freely trade with their upstream customers there.

The foreign original equipment manufacturers (OEMs) are nudging their integrated circuit (IC) suppliers to set up shops in China. Companies like Nokia, Ericsson, and Philips are asking their suppliers: "How can we shorten the supply chain and reduce costs in China?". OMRON is a large Japanese company that makes electronic sensors (it has 90 percent of the global market for those used in a standard computer mouse). In China, it already has a vast assembly plant, which imports essential components from Japan. In mid-January 2002, President Yoshio Tateishi stated that he wants output in China to double within three years and wants to set up a "quasi-headquarters" in Shanghai. One of OMRON's main management goals is to work with "local components makers" who might eventually be able to supply OMRON in China.

Domestically focused

In 1992, McDonalds entered China. Its need for high-tech logistics meant it did not have the option of outsourcing to local underdeveloped logistics firms. So McDonalds convinced its longtime logistics provider, HAVI Group LP, to come with it.

HAVI is responsible for ensuring that hundreds of McDonalds around China receive their frozen food at the right temperature and their napkins and packages in nice shape. Furthermore, this must occur on time.

The only way to ensure delivery times was to own and manage a fleet of trucks operating out of distribution centers dotted strategically around the country. But in addition to HAVI's management distribution challenges, the laws against nationwide distribution on the part of foreign companies has led to a patchwork of local licenses, the paying off of local road toll collectors, and in general operating in a very gray legal area.

Non-Chinese 3PL model

Not every upstream firm has the power to force or convince their suppliers to follow them to China. Some companies are trying to outsource their logistics to non-Chinese third-party logistics (3PL) providers in China. However, these local third-party logistics providers within China are still emerging. Less than two years ago, the Chinese term "logistics" was not even recognized by business registration authorities.

There are two types of the non-Chinese 3PL model which are discussed below.

Established logistics providers

Most large world-class logistics players have been working to enter China. A few of them, such as UPS and MAERSK, have recently received licenses from the Chinese Government. Their successes in China are the result of years of groundwork. For example, UPS began operating in China as early as 1988, by partnering with the Chinese Government-owned Sinotrans, which flew UPS packages into the country. Through this cooperation, UPS not only brought significant profits to this primary government-owned enterprise but also transferred many cutting-edge techniques to China. MAERSK has bought 25 vessels ($750 million) and more than 50 percent of its 700,000 containers from China.

In April 2001, UPS became the first US cargo carrier to operate independently in China. It was also granted permission to fly directly from the USA to China. This has huge implications for export-focused corporations in China as they cannot deliver their goods to Europe, Japan or the USA by truck. These corporations are forced to rely on either air or ship. The same state-of-the-art services UPS and MAERSK offer in the USA and Europe are now available in China.

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Small but nimble logistics providers

Royal Dutch Shell has sold industrial lubricants in China since the early 1990s. In 1998 the company decided to pursue a nationwide marketing strategy, so it outsourced the work to EAC Logistics. This northern European company had been in China for a short time and only had 135 employees. However, its small size allowed it to be flexible in dealing with local provincial regulations.

Small, nimble logistics firms can operate in a gray area of Chinese law. Logistics, unlike distribution, does not have a clear regulatory structure in China. However, the logistics industry does face irritating local barriers in developing long-haul routes. Some provinces and municipalities make it so onerous for outside trucking firms to secure licenses that shipments must be offloaded at the border and reloaded onto the next jurisdiction's trucks. The average freight distance by highway in China is only 58km, 8 percent of the US level. So most of the small, dedicated logistics firms have managed to obtain a patchwork of local trucking licenses and thus attained a degree of national coverage. In this way, EAC established 11 logistics centers around China.

Many domestically-focused companies who are lured by the huge potential Chinese market but hesitate to invest heavily in this uncertain market, are following Shell's logistics strategy in China.

Localization model

China's size, the historic strength of regional supply chain barriers, central and local government regulations, and the country's fragmented infrastructure add to the logistical complexities firms face. To simplify the day-to-day operations of supply chain management, many foreign companies localize their supply chain management in China. They do this in two basic ways: either through a wholly-owned supply chain or by using local outsourcing.

Wholly-owned supply chain

A few prestige MNCs have received permission from local governments to establish distribution centers that in effect act as wholesalers for their production supplies. In such cases, the company can directly import the components it needs for its manufacturing process and then set up branch offices in other FTZs to sell the products.

Now these deep-pocket MNCs, such as Intel, Nokia, and NEC, have built front- or back-end chip plants and distribution centers in China. Siemens (China) has established more than 40 operating companies. Ericsson (China) supply chain directly created 30,000 job opportunities. Proctor & Gamble established a spin-off, PG Logistics, for its logistics business in southern China.

The extended regional supply chains are the backbone for MNCs' long-term business success in China. Localization of supply chains in China not only allows foreign companies to produce locally, but also keeps them closer to the market, allowing faster response to customer demand and more effective on-site consultation and services. This includes pre-sales consultancy, engineering, installation and training, and maintenance, repairs and servicing.

Local outsourcing

With more companies looking to source products in China, local logistics providers have been developing quickly. For example, the largest Chinese ocean carrier, COSCO, and the largest inland carrier, Sinotrans, are developing intermodal and integrated service offerings and investing in port and infrastructure improvements. New services are now offered across the entire supply chain. These include raw-materials management and inland transportation as well as packaging, bar coding, order-management and follow-up. Even carrier and/or supplier management services are being provided.

The key advantage local providers have compared to non-Chinese 3PL providers is their strong relations with local or central governments. Sinotrans is a wholly owned enterprise of the Ministry of Foreign Trade and Economic Cooperation. With 67 subsidiaries and 48 joint ventures around China, Sinotrans is still the only 3PL provider in China that possesses a nationwide logistics services license. Motorola has outsourced its logistics to Sinotrans since 1995. Other local and regional 3PL providers also have their unique advantages in particular regions or particular industries. Many of them even seek to build personal relationships directly with government officials – which can prove valuable in expediting otherwise delayed shipments.

Of course, local 3PL providers also have some obvious disadvantages. The government-controlled, wholly-owned providers are notorious for bureaucracy. In addition, all local providers currently lack cutting-edge technical support, such as tracking. Usually, once a shipment has entered the rail system it is impossible to know where it is.

Lessons learned

Two supply chain worlds in China

There are large disparities among regions and between export focused and domestically focused foreign firms in terms of market needs, logistics needs, economic resources, infrastructure, and interpretation of regulations. In general, export focused firms in coastal FTZs have efficient and simple supply chains and enjoy high quality logistics services provided by world-class companies such as UPS. Domestically focused firms within inland regions are facing more complicated supply chain issues.

Today's challenge will be tomorrow's opportunity

The current Chinese logistics industry is underdeveloped and historically prone to local protectionism or unfair competition. However, existing constraints can also be turned to opportunities by creating innovative solutions with "Chinese characteristics". HAVI, the foreigner pioneer in the Chinese logistics market, is reaping the rewards of setting up early. Now more foreign investors in China are waiting to join its growing client list. EAC (Royal Dutch Shell's logistics provider in China) built their business from nothing. Recently, ASG Logistics paid a high price to acquire EAC's distribution network in China. With China's entrance to the World Trade Organization (WTO), severe restrictions on foreign companies' distribution rights should be removed over the next several years. As a result, powerful MNCs, such as UPS and MAERSK, will probably dominate the nationwide distribution business in China due to their previous efforts.

Opportunities abound

In fact, many rules remain to be written in the Chinese logistics market. Companies that are well connected with the right authorities and are socially responsible will stand a good chance of determining how those rules will be written. The more powerful the companies (such as MEARSK and UPS) are, the more easily the companies can approach their goals. However, small companies (such as EAC and Chinese regional players) can also play important roles in this "workshop of the world". The relative immaturity of China's supply chain system may provide a better chance for small players who are more flexible. In China, business is built largely on personal relationships. Small players, particularly those that offer value-added services, could survive by serving niche markets or long-established customers.

Conclusion

Export focused foreign companies are currently enjoying a reasonably good logistics infrastructure, low-cost production, and streamlined supply chain within China's FTZs. These areas should continue to see an increased amount of investment in the near term.

Domestically focused foreign companies are striving to reach Chinese end-customers by fighting with underdeveloped transport/IT infrastructure, protectionist regulations, and culture conflicts. This has led to complaints about China's supply chain system.

Table I provides a perspective on supply chain players in China. There are two main groups. The first one is largely made up of global supply chain players supporting MNCs in China. The second consists of domestic players supplying small to midsize foreign companies and local companies.

In the future, the booming economy and WTO entry will attract more foreign investments. The Chinese Government is trying to steer some of these investments into infrastructure improvements in the inland areas. The West China Development Strategy provides special government benefits to those firms that invest in infrastructure improvements in particular areas. The hope is that this program will dramatically improve the distribution and logistics infrastructure of the inland provinces.

Under the WTO, severe restrictions on foreign companies' distribution rights should be removed over the next several years. In the

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Volume 7 · Number 4 · 2002 · 184–188

Table I Supply chain players in China

Players	Active region	Customer	Advantages
Original suppliers (export focused)	Free trade zones	MNCs	Long-term partner
Original suppliers (domestically focused)	Nationwide	MNCs	Long-term partner, can reach end consumer
Established foreign 3PL suppliers	Stepping up on expansion	MNCs	Cutting-edge services
Small foreign 3PL suppliers	Nationwide	MNCs and foreign firms	No culture conflict, nimble, can work in gray area
Wholly owned suppliers	Nationwide	MNCs	Total control, can reach consumers
Large government owned suppliers	Nationwide	A few MNCs and lots of foreign and local firms	Seamless national networks, strong ties with governments
Local regional suppliers	Regional	Foreign and local firms	Strong ties with local society and business, very nimble

short term, local players will still force most foreign competitors to work in FTZs or within legal gray areas. In three to four years, however, the barriers to distribution and logistics services market entry should be lifted totally.

The next few years will determine the new landscape of China's supply chain. Since both foreign and Chinese firms have the same logistics and distribution problems, they will exert significant competitive pressure on local and foreign supply chain service providers to improve their existing business models and force increased integration in the value chain.

The result will probably be industry consolidation and introduction of more professional service providers – the majority of which will likely be located in the major provinces. Nationwide, the established foreign operators and larger government-related operators will play a greater role.