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Business and Logistics Strategies of Global Logistics Firms Responding to the Changing Logistics Environment in China*

Il-Soo Jun*

목 차

Key Words: China's logistics market, 3PL provider, logistics outsourcing

Abstract

Ninety percent of an average Chinese manufacturer's time spent is on logistics. Therefore, logistics presents the greatest challenge for multinational companies conducting businesses in China. Although more than 18,000 registered logistics companies exist in China, 85 percent of their revenues are generated from basic trucking and storage services. These facts indicate that China will need increasing presence of high-quality foreign 3PL providers, who are able to provide sophisticated IT systems, industry/operational expertise, standardized operating processes, and international networks, compared to their Chinese counterparts. However, they are facing complicated array of laws and regulations as well as difficulty of finding qualified people to fulfill these needs.

There are a number of foreign 3PL providers engaged in China's logistics sector to reap a huge opportunity. Nevertheless, many 3PL foreign providers are still cautious about making large investments. Thus they arelooking for alliances that can provide complementarities instead. Another salient feature of strategy is to take over the transportation assets and warehousing of major Chinese manufacturers and distributors.

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** Dean and Professor, Graduate School of Logistics, University of Incheon, Korea Junis50@incheon.ac.kr

1. PRESENT STATUS OF LOGISTICS IN CHINA

In the last two decades, China has shown an economical miracle by recording average economic growth rate of 8 percent. As a consequence, China ranks the 4thin volume of trade in the world. In 2003, China became the biggest foreign direct investment (FDI) destination by displacing the U.S. By the end of 2003, 470,000 foreign companies from more than 180 countries and regions invested in China. More than 80 percent of Fortune 500 companies have invested in China.

What is the number 1 problem for the multinational companies (MNCs) who have come into China? For these companies who are taking advantage of China as a global manufacturing center and it as a new market for their retailed goods, the greatest challenge is how to get the product and rawmaterials in and out of the China. That is, logistics and distribution presents the greatest challenge for companies doing in China. Morgan Stanley estimated that, in 2001, logistics expenditure in China accounted for 20% of nation's Gross Domestic Products, while U.S. is about 9%, Japan 9%, Northern Europe 10-12%. According to Economist Intelligence Unit report (Dec., 2001), 90 percent of an average Chinese manufacturer's time is spent on logistics, while 10 percent is spent on manufacturing.

Despite these weaknesses, China's logistics sector is growing rapidly. The logistics industry has grown more than 40 percent per annum last two years. In 2004, it is expected to grow 50 percent. However, although more than 18,000 registered companies claim themselves as logistics companies, logistics industry is dominated by individual companies offering basic service. That is, 85 percent of their revenues are generated from basic trucking and storage services. Due to this industry fragmentation, no single logistics provider commands more than a 2 percent of market share. Therefore, 55 percent of foreign companies in China rated logistics and distribution as their greatest challenge.

Looking at China's current state of logistics management, inefficient logistics management resulting in product loss, product damage and inventory carrying incurs 66 percent of total logistics cost due to lack of integrated logistics service concept and lack of efficient logistics service infrastructure as well. As can be seen in Table 1, top element in logistics cost is found to be cost of lost sales due to inefficient stock management of production and distribution.

Table 1. Elements of Logistics Costs

Elements	Share
Product Loss Cost	30%
Transportation Cost	20%
Product Damage Cost	18%
Inventory Carrying Cost	18%
Warehousing Cost	12%
Management Fees	1-2%

Source: Deloitte Consulting; provided by Samsung Logistics.

2. CHINESE GOVERNMENT'S LOGISTICS POLICY

At present, however, the hierarchicaland procedural central/local authorities and associated red tape slow down the approval processes and cause inefficiency in logistics industry. It is common that more than one ministry are involved in regulating and setting policy in operating logistics industry and each has a different perspective on its development and regulatory reform program. Particularly, they have introduced a series of geographic and fiscal constraints on foreign-controlled logistics companies operating in China. Followings are brief summaries of key regulations affecting logistics industry.

With respect to full service foreign-invested logistics companies, they are restricted to operating in the provinces of Guangdong, Jiangsu and Zhejiang and the cities of Beijing, Chongqing, Shanghai, Shenzhen and Tianjin. In the case of handling international logistics service, foreign companies are limited to controlling only up to 50 percent of the equity.[1] In addition, the ventures established must be capitalized at a minimum of US$5 million and the operating franchise is restricted to 20 years, although there are normally renewal options.

Similar restriction is applied to Class A License Freight Forwarding Companies. Overseas cargo companies can establish new ventures with at least US$1 million in capital, and each branch office adds another US$ 120,000. Foreign freight forwarders are allowed to own up to 75 percent of its subsidiaries in China.

With respect to Ocean Shipping Companies, foreign investment in maritime joint ventures is limited to 49 percent. In particular, ocean consolidators (NVOCC) must deposit about US$ 100,000 in cash in a Chinese bank. They are allowed to open own offices only in ports where their ships make direct calls, and branch offices and agency arrangements must be joint ventures with Chinese companies.

However, Hong Kong logistics companies are freer under CEPA.[2] That is, Hong Kong companies are permitted to set up wholly-owned enterprises to provide logistics services, freight forwarder, storage/warehousing service, and transport service. They also enjoy national treatment in respect to the minimum registered capital requirement.

In response to increasing activity of MNCs in China and overall pressure to reduce the to-market cost of goods, both domestically and for export, logistics is at the 'center stage' of the government's 10thfive-year plan and is being backed by US$18 billion in investment. In particular, Chinese Government set up the logistics policy as follows:

1) Developing logistics infrastructure such as logistics centers;
2) Establishing large-scale logistics enterprizes;
3) Encouraging domestic companies to develop partnership with 3PL providers

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1) Foreign air express operators in China are now free to take control of joint ventures upto a maximum 75 percent, against the previous 49 percent limit. Chinese Government promised to allow foreign express operators to establish wholly-owned operators in China, but hasn't said when. China currently forbids foreign express operators to handle shipments of less than 50 grams (1.1 pounds), citing a monopoly clause in the charter of the State Postal Bureau, which runs China Post.

2) CEPA: Closer Economic Partnership Arrangement between Mainland and Hong Kong.

and to outsource a greater percentage of their logistics needs; and

4) Reducing regulations that hinder entry of foreign 3PL providers into the market.

With access to WTO, China committed some reform to open up logisticsand transport market to foreign investors as shown in Table 2. In most logistics business, ownership conditions are expected to be relaxed probably in 2005-2006. The notable exception is domestic shipping, where only minority stake will be allowed in the future. However, it is expected that China delay WTO implementation and regulate competition to help local companies compete in the market by maintaining barriers, such as licensing, health, technical and packaging standards. China also set up a draft regulation to prevent new comers from using existing channels and to give local companies more time to prepare for direct competition.

Table 2. Planned Reforms to China's Logistics Sectors

Transport/Logistics Sector	Current Status	Planned Changes
Customs brokerage	Less than 50%	Full foreign ownership by end of 2005
Domestic shipping	Zero	Minority foreign ownership
Freight forwarding	Up to max 75%	Majority stake by end 2002; Full foreign ownership by end 2005
Domestic mail & parcel services	Zero	Full foreign ownership by end of 2005
International air express Mail & parcel services	Up to max 75%	Full foreign ownership by end of 2005
Rail services	Less than 50%	Full foreign ownership by end of 2006
Trucking services	Less than 50%	Full foreign ownership by end of 2004
Warehousing	Total ownership allowed	No change

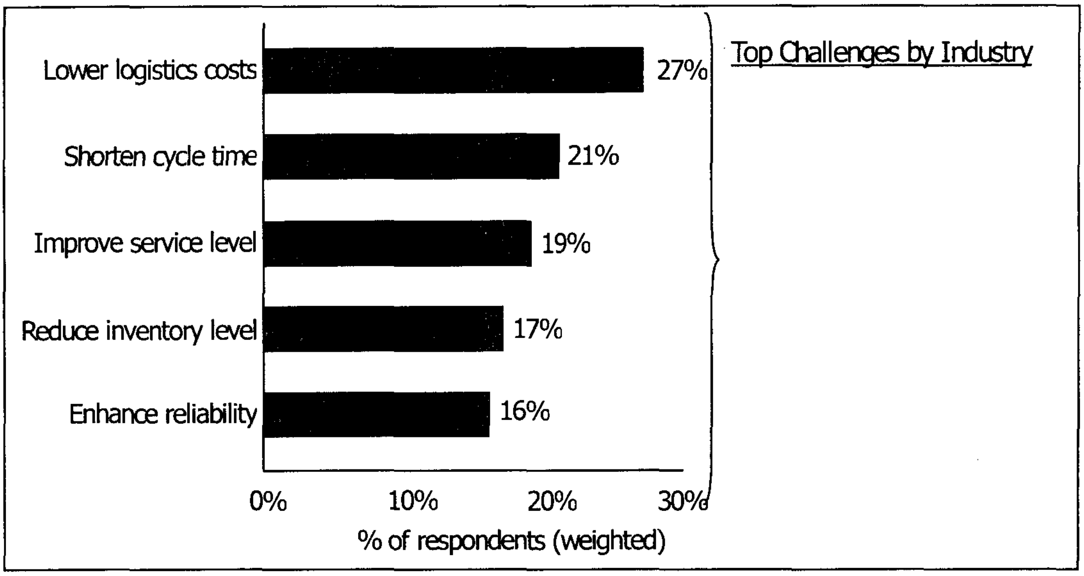
Source: Drewry, 2003.

3. CURRENT STATE OF CHINA'S LOGISTICS SERVICES MARKET

According to Mercer Management report (2002), the outsourcing of logistics and transportation will continue to expand by roughly 25 percent annually through 2005 because of stronger global interest and demand for third-party logistics (3PL) services. There are, however, significant difference in behavior outsourcing between Chinese companies and MNCs. Although 70 percent of MNCs are contracting their logistics business to 3PL providers, only 16 percent of Chinese shippers are doing. Therefore, most demand for 3PL service in China currently comes from MNCs. It's because they have sophisticated logistics needs and experience with high-quality subcontractors in other countries. Meanwhile, traditional state-owned enterprises (SOE's) do not heavily rely on 3PL providers, as they have the in-house assets and people to handle logistics. They also lack experience in managing external vendors and do not realize the benefits of logistics outsourcing. As a consequence, overcoming outsourcing barriers is critical for the growth of 3PL services, given the size and reach of these companies in the Chinese market.

It should be noted that the outsourcing behavior between Chinese companies and MNCs are substantially different. MNCs outsource 70 percent of their logistics services, whereas 16 percent of Chinese companies do so. By industry, IT andtelecommunication, consumer electronics, and automotive show higher rates of logistics outsourcing. In contrast, apparel chemical, and food and beverage companies show lower rate than average.

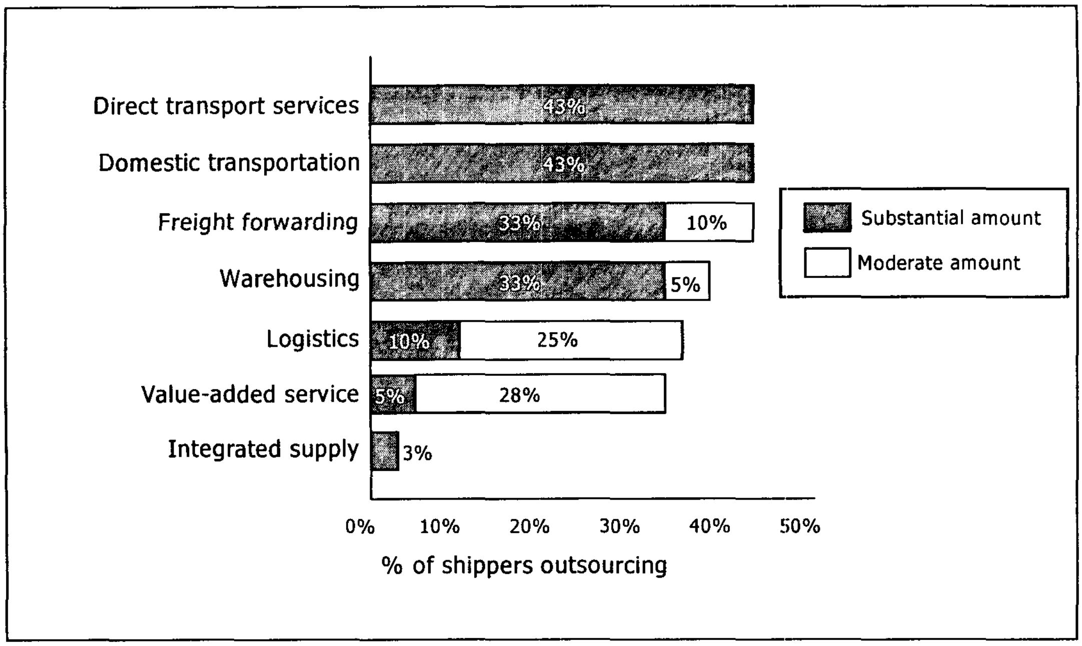
According to Mercer survey (2003), A third of all shippers cited pressure to reduce logistics costs as a key challenge, and this is the top reason given for outsourcinglogistics. Figure 2 shows other logistics challenges for shippers, which include the need to shorten cycle time, reduce inventory levels, and improve service/reliability. It is noted, however, top challenges are different depending on industry. For automotive industry, reducing inventory level is cited as top challenge.



Source: Mercer China 3PL Survey, 2003.

Figure 2. Shipper's Key Logistics Challenges

Most demand for 3PL services in China currently comes from MNCs. Mercer report shows that 88 percent outsource their direct transportation needs. In contrast, only about 48 percent outsource logistics services. See Figure 3. Consequently, 3PL services in China is relatively undifferentiated, with basic transportation and warehousing management accounting for the majority of logistics services outsourced and three-quarters of 3PL provider's revenues.These facts indicate that China will need increasing presence of high-quality foreign 3PL providers to raise industry standards on the supply side of logistics industry. As Table 3 presents, logistics services offered by foreign 3PL providers in China are diverse compared to their Chinese counterparts which provide only basic logistics services.



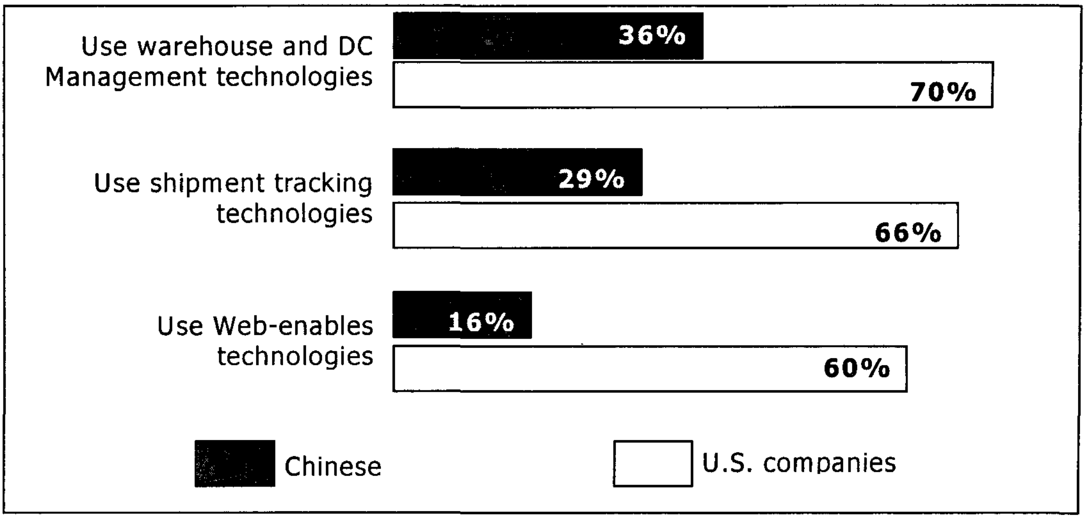
Source: Mercer China 3PL Survey, 2003.

Figure 3. Services Outsourced by Shippers

Table 3. Typical Logistics Services Provided by Foreign 3PL Providers in China

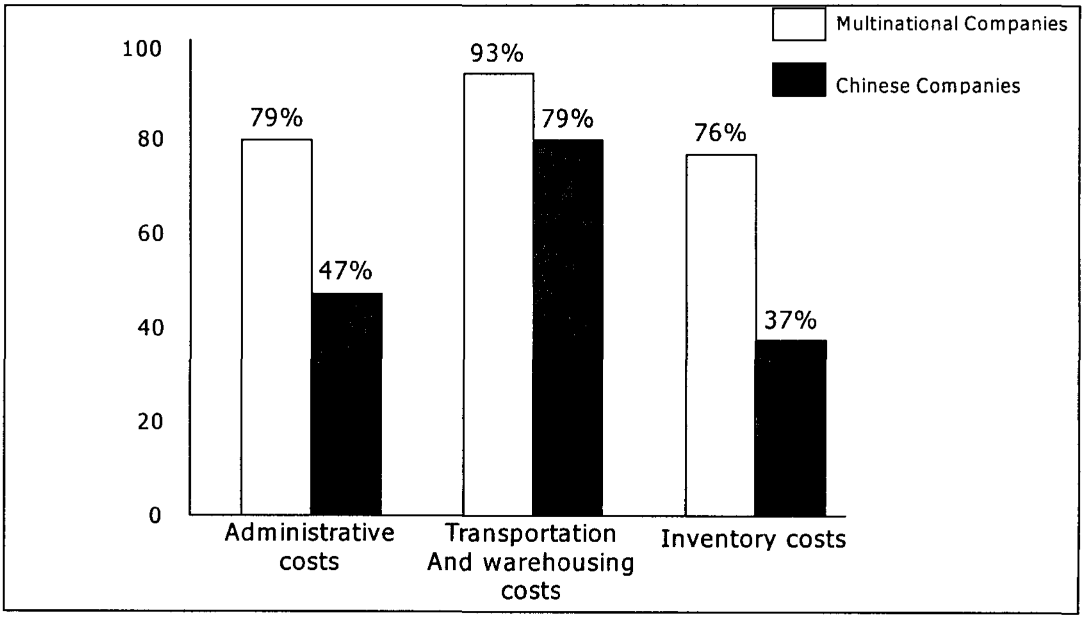
√	Bar code scanning	√	Quality control
√	Transloading	√	Pre-packing
√	Cross docking	√	Pick & Pack
√	Bonded warehousing service	√	Vacuum packing
√	Cold storage service	√	De-consolidation
√	Haulage	√	Disassembly
√	Trucking	√	Special Handling at Destination (SHAD)
√	Local drayage		
√	On-carriage	√	Collection of returns
√	Rail transport	√	Reverse logistics
√	Stripping	√	Transit cargo

Chinese manufacturers lag their U.S. counterparts in the use of logistics technology such as warehouse and DC management technologies, shipment tracking technologies and web-enabled technologies.



Source: Capgemini, Georgia Institute of Technology, and FedEx, 2003.

Figure 4. Comparison of the Use of Logistics Technology

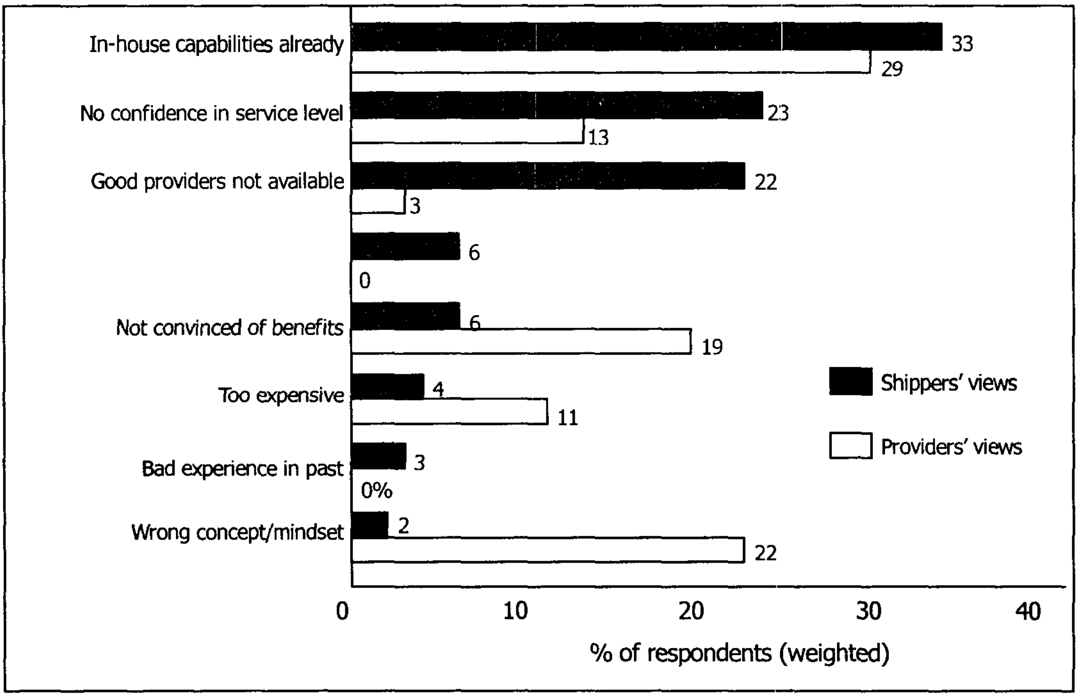


Source: Mercer China 3PL Survey, 2003.

Figure 5. Level of Tracking Logistics Costs by Function

Mercer survey (2003) finds that about 60 percent of Chinese companies do not track their own logisticscosts. This makes it difficult for them to fully appreciate the value of 3PL providers can offer. That is not surprising when China's logistics providers continue to lag in their use of IT and communications systems in logistics operations.

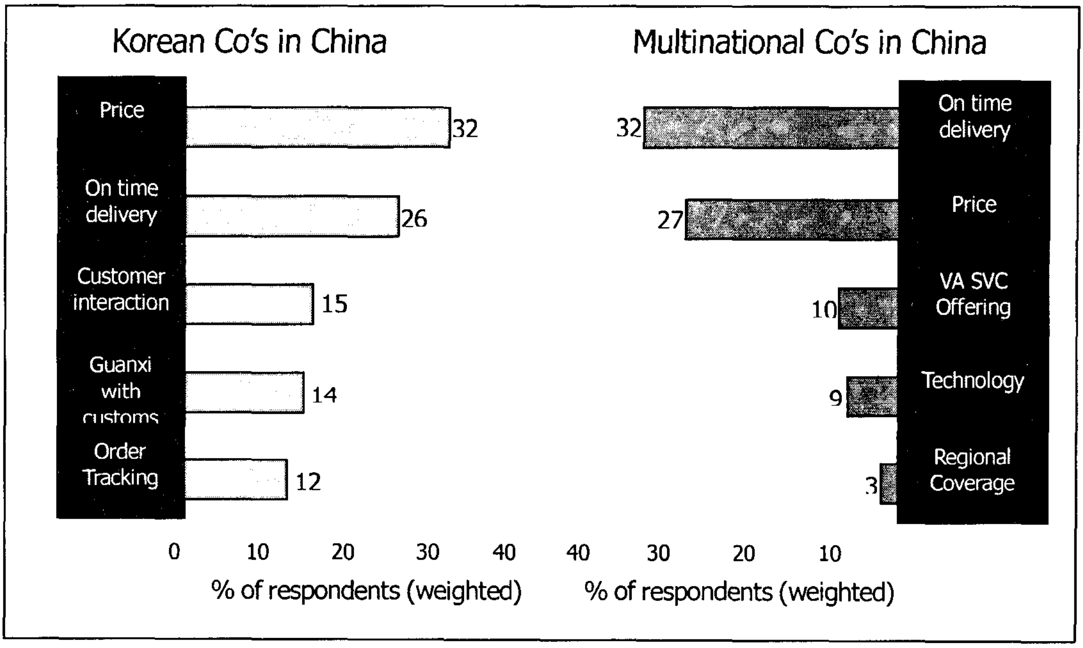
Mercer survey (2003) reports that nearly 70 percent of the logistics service providers believe that their clients are simply not ready for more outsourcing. The Figure 6 shows why Chinese shippers choose not to outsource. Shipper's significant in-house capability is listed top. Also reported are several other frequent reasons, including 'noconfidence in service level," good providers not available," and "not convinced of benefits." Interestingly, providers do not appear to have good an insight into rationale for not outsourcing. For example, there is a significant gap in perception of what logistics means as much more important to the outsourcing decision than may truly be the case for shippers.



Source: Mercer China 3PL Survey, 2003.

Figure 6. Reasons for Shippers Not Using 3PL Providers

Figure 7 provides information concerning the relative importance of factors for selecting logistics service providers between MNCs and Korean companies operating in China. Korean companies, like Chinese counterparts, cite the price as the most important factor. However, MNCs emphasize the service quality.

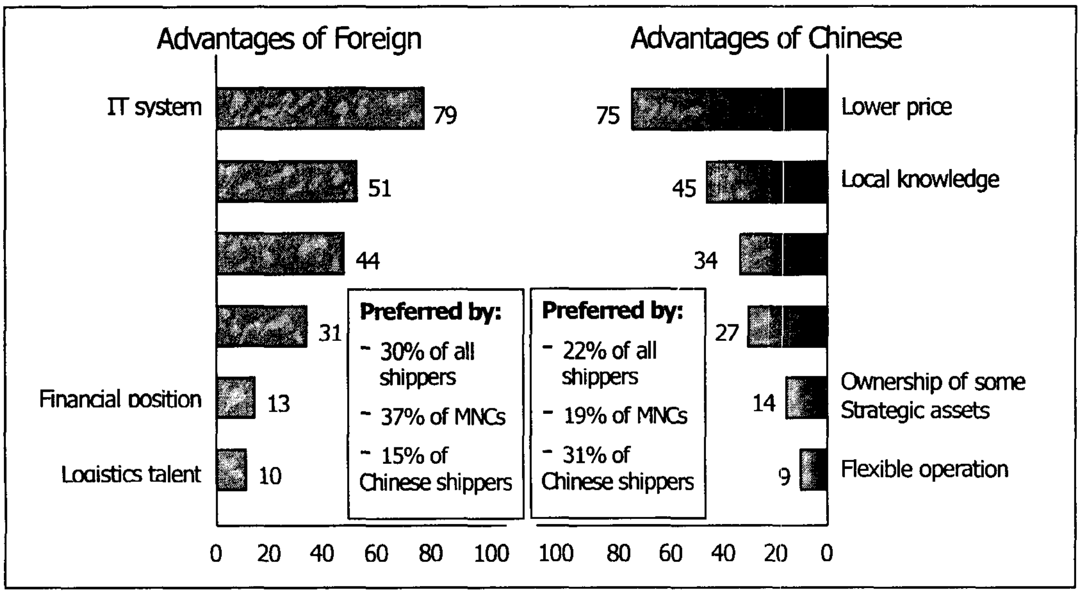


Source: Deloitte Consulting; provided by Samsung Logistics.

Figure 7. Key Criteria for Selecting 3PL Providers

About 30 percent of shippers in China, particularly MNCs, prefer to outsource to foreign providers, while 22 percent of shippers, particularly Chinese, prefer Chinese providers. For MNCs operating in China, 37 percent prefer foreign providers, while 19 percent prefer domestic providers. Although foreign 3PL providers receive nearly all of their revenues from MNCs, Chinese providers' revenues are nearlysplit among domestic clients and MNCs. However, 88 percent of their revenues come from domestic logistics opportunities, while foreign providers draw about 70 percent of their revenues from export/import-related logistics needsfor their global clients. Therefore, 98 percent of total revenues for foreign providers are drawn from their foreign clients. Foreign logistics companies say that "Since MNCs understand the logistics concept, it is notnecessary to spend lots of time to educate them. But some of Chinese clients still regard logistics as only transportation and warehousing. Internal restructuring is required before they can outsource."

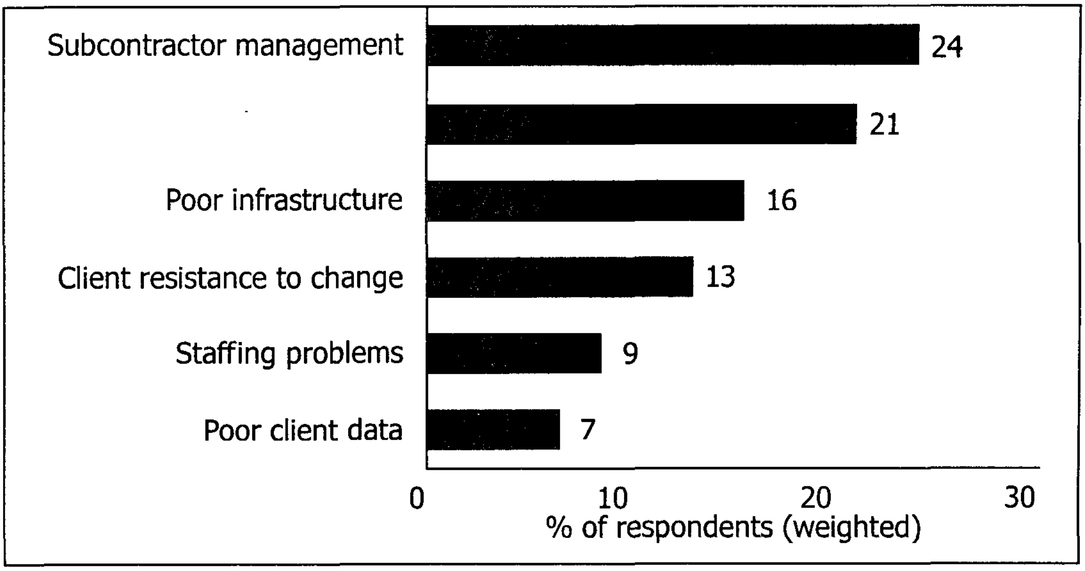
Foreign providers are viewed as offering sophiscated IT systems, industry/operational expertise, standardized operating processes, and international networks. Whereas, Chinese providers are considered to be strong in prices, local knowledge, domestic network coverage and government relationships.



Source: Mercer China 3PL Survey, 2003.

Figure 8. Shippers' View of Foreign and Chinese 3PL Providers

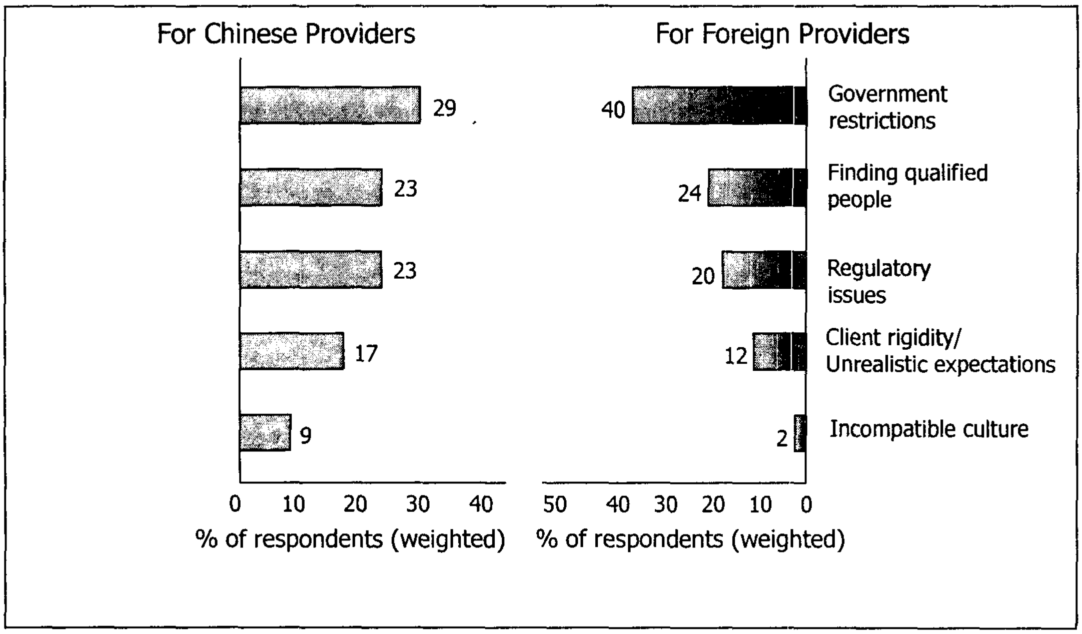
Mercer survey (2003) shows that 45 percent of 3PL providers reports issues such as managing subcontractors as well as client's requirements/expectations as major execution problems. See figure 9.



Source: Mercer China 3PL Survey, 2003.

Figure 9. 3PL Providers' Major Execution Challenges

With regard to 3PL providers' view on challenges to growth, complicated array of laws and regulations is clearly the top issue for foreign logistics providers. Meanwhile, Chinese logistics providers are facing the challenge of finding qualified people. Chinese providers further cite the cost of developing IT systems asconstraining, while foreign providers are concerned about clients'rigidity and "unrealistic" expectations.



Source: Mercer China 3PL Survey, 2003.

Figure 10. 3PL Providers' Challenges to Growth

4. THE CURRENT SITUATION OF LOGISTICS INDUSTRY AND 3PL PROVIDERS

In China's logistics industry, four distinct groups of different origins are entering where their competition is intensifying with each other.

1. Internal logistics departments of Chinese companies

A few of China's largest manufactures have transformed their in-house logistics division into a separate profit centers and have entered/are entering the 3PL business. Internal logistics departments of Chinese companies, such as Annto logistics, Haire logistics, Attend logistics, Ding Xin logistics, TCL, Bright Dairy&Food and Konka provide services for some external customers, but internal customers still dominate. Many have in depth knowledge of the industries that they serve and reasonable network coverage, but they are weak in sales and marketing. The fate of these players in uncertain, as their strategy and future position is strongly influenced by the parent company.

2. Emerging logistics companies

Emerging logistics companies such as EAS, St-Anda, PGL, Hurry Top, China Overseas logistics and Jinchuan Logistics are medium-size Chineselogistics providers emerged in the last 10 years. These firms have enjoyed the fastest growth in the market due to their light-asset nature and high efficiency. They are privately owned or joint ventures with more focused geographies, services, and customers. But they have problems in lacking sufficient financial support for market expansion and internal management mechanisms and effective organization to support high growth and profitability.

3. Traditional transportation companies

Traditional transportation companies, such as COSCO, Sinotrans, CMST, China shipping, China Resources, China Post, CRMLC and CRE are large standalone firms with national network and significant transportation and warehousing assets. In particular, the state-controlled ocean shipping companies, such as SINOTRANS, COSCO and China Shipping Group, offer a range of VA freight service to complement their standard liner activities.Traditional transportation companies typically maintain good relationships with central and provincial governments. The problems of these companies face include high proportion of excess employees and low efficiency. They have typically internally focused culture rather than customer- and performance-focused.

However, many of them are in the process of or about to start restructuring to improve efficiency and economics. It should be noted that some of them are upgrading their capabilities, such as IT systems, to enhance their competitiveness.

4. Foreign Logistics Companies

Global ocean carriers, such as APL and Maersk, and large global forwarding companies and integrators, such as Panalpina, Exel, Danzas, TNT, FedEx, UPS and DHL set up logistics companies to provide a full range of VA freight forwarding and logistics service. They are mostly handling international cargo. These global logistics providers possess strongoverseas network, advanced IT systems, industry expertise and experienced operations. Although many of them are characterizedby strong financial support from headquarters, they have limited operations in China, typically entering the country with their customers in an effort to service those customers'global needs. These players are being challenged by their high cost structures (compared to Chinese firms) and of lack of on-the-ground capabilities in China.

There are quite a number of foreign logistics companies engaged in China's logistics sector to reap a huge opportunity. Table 4 shows 30 groups of global logistics and transportation companies present in China. The list of very large industry players of US$2 billion-plus includes the world's top logistics service provider such as Deutsche Post World Network, UPS, FedEx and TPG. TPG acquired Shanghai Automotive Industry Corp. Group. With improving business conditions and strong international trade, these logistics and transportation companies should see their revenues rise in the years to come.

Table 4. The World's Top Logistics Companies Located in China

Ranking	Company	Main industry sectors	Country	Group revenue
1	Deutsche Post/ DHL/Danzas Group	Mail/forwarding	Germany	40,891
2	UPS	Integrator/logistics/forwarding	U.S.	31,372
3	FedEx	Integrator/logistics/forwarding	U.S	22,487
4	Deutsche Bahn Stinnes/Schenker	Railroad/forwarding	Germany	19,464
5	Nippon Express	Trucking/forwarding/logistics	Japan	12,824
6	TPG/TNT group	Mail/integrator/logistics	Netherlands	12,273
7	A.P. Moller/ Maersk group	Shipping/logistics/ports	Denmark	11,567
8	NYK	Shipping/logistics	Japan	10,393
9	Mitsui O.S.K Line	Shipping/logistics	Japan	7,573

10	Exel	Forwarding/logistics	U.K.	7,489
11	P&O	Shipping/ports/logistics	U.K.	7,289
12	Kuehne & Nagel/ USCO group	Forwarding/logistics	Switzerland	6,289
13	Bollore Investissement /Delmas/SCAC group	Shipping/forwarding/ trading	France	5,700
14	"K" Line	Shipping/logistics	Japan	5,264
15	Ryder System	Trucking/truck leasing/logistics	U.S.	4,776
16	CNF/Menlo group	Trucking/forwarding/logistics	U.S.	4,762
17	P&O Nedlloyd Container Line/P&ONL Logistics	Shipping/logistics	U.K.	4,659
18	Neptune Orient Lines/ APL group	Shipping/logistics	Singapore	4,642
19	Panalpina	Forwarding/logistics	Switzerland	4,549
20	Hays	Logistics/support service	U.K.	3,960
21	Hapag-Lloyd group	Shipping/logistics/forwarding	Germany	3,934
22	Pittston/ Bax Global group	Forwarding/security	U.S.	3,777
23	Geodis	Trucking/forwarding	France	3,386
24	C.H.Robinson	Trucking/logistics	U.S.	3,294
25	ABX Logistics	Trucking/forwarding	Belgium	3,023
26	CP Ships	Shipping/logistics	Canada	2,687
27	Schneider	Trucking/logistics	U.S.	2,600
28	OOIL	Shipping/logsitics	Hong Kong	2,458
29	Tibbett & Britten	Logistics	U.S.	2,447
30	Expeditors	Forwarding	U.S.	2,297

Source: American Shippers, October 2003.

Foreign logistics companies have established offices in key manufacturing, trading and consuming cities. Table 5 highlights the location distributionof these foreign logistics companies in major cities and provinces in China. Shanghai is founded to be the most popular business site because of its strategic significance of the Yangtze River corridor as China's chief transport and economic arena. Beijing, Guangzhou and Shenzhen also attract a significant amount of business. In addition, considerable presence of foreignlogistics firms is found in Qingdao, Dalian, Tianjin, Xiamen and Nanjing. As foreign logistics firms are actively expanding their office network, the number of cities served by direct presence will be increased.

Table 5. The Economic Situation of the Logistics Center Cities

Region	GDP 100million RBM (2002)	Export and import volume million dollars (2002)	The number of branches of foreign logistics firms (2004)	
Beijing	3,213	52,505	25	
Tianjin	2,051	22,812	20	
Sanghai	5,409	72,627	33	
Chongqing	1,971	2,023	6	
Guangdong	11,770	221,097	Guangzhou Shenzhen Zhuhai Zhongshan Zhangjiang Shantou	25 22 5 7 4 3
Zhejiang	7,796	41,956	Ningbo Wenzhou Hangzhou	15 2 7
Fujian	4,682	28,398	Xiamen Fuzhou	19 15
Shanxi	2,018	2,312	Wuhan Xian	7 6
Liaoning	5,458	21,745	Dalian Shenyang	20 8
Shandong	10,552	33,935	Qingdao Yantai	21 5
Jiangsu	10,632	70,288	Nanjing Suzhou	18 10
Sichuan	2,018	2,312	Ghengdu	7

5. CASES OF LOGISTICS COMPANIES

Case studies of distinguished logistics companies have proved a valuable tool in understanding and development of logistics management and strategy. Seven logistics companies operating in China are covered in this section.

1. Haier

Haier, No. 1 home appliance producer in China, adopted logistics management as important link in its "market chain business flow renovation." The management restructuring program focusing on improvement of information management for SCM began in 1998. Haier established two modern well-equipped physical distribution centers in Qingdao in 1999 and 2001 in order to improve the efficiency of product distribution process and to reduce inventory. For example, the Haier Information Industrial Park developedin 1999 houses facilities such as a multi-level material distribution warehouse, an information appliances manufacturing center, an advanced mold workshop, an electroniccontrol module workshop and Haier University. Consequently, it realized a integrated logistics system of whole process including purchase of raw materials, manufacturing, inspection, delivery and shipment.

It integrated all its function and operation related to logistics into its Logistics SBU in 2002. Owing to these efforts, they were able to reduce order cycle time from 6 days to 1 day, and to reduce nationwide distribution time from 36 days to 10 days. In 2001, the logistics management cost of Haier accounted for 7 percent of the total commodity cost, whereas the cost of competing firms in industry was 15percent. In 2003, Haier manufactures a wide range of household electrical appliance in 96 categories with 15,000 specifications.

2. EAS International Transportation

EAS was established in 1985 as a joint venture between Hua Tong Industrial Development of China and Hong Kong based EAS Datong Air Cargo (25%), principally as a air-freight forwarder. It is offering a full range of logistics services across its network of more 1,000 cities and has contracts with many of the MNCs present in China. Its business strategy is based on:

- Always adding value to the service, ie advising and designing SCM solutions and steering away from the capacity end of the market;
- Ensuring that quality service (fast, on-time, depending on customers individual requirements) is always provided;
- Building reliable information and communications networks, ie it pioneered an EDI network for Customs clearance;
- Ensuring that an essential inventory of asset are owned for back up, operational flexibility etc.; and
- Strengthening the network through strategic alliances.

3. Sinotrans

As China's largest freight forwarding company, 2nd largest shipping agent, and 3rd largest ship owner, plus significant presence in the trucking, warehousing, distribution and express/mail market, it is the best placed company in China to offer MNCs a full range of transport and logistics services. It has assets of RMB 24billion, 60,000 staffs and more than 263 Joint ventures.

Since it has strong nationwide network and maintaining good relationships with the central and the provincial governments, several of Sinotrans' leading business partners buy shares in the company (DHL, UPS, Exel, Nissin owns 10%). Its strategy is to expand further in the VA logistics sector by investing heavily in new IT system.

4. HPH/Hutchison Whampoa

As the largest investors and operators of container terminals in China, HPH is in an exceptionally powerful position to exploit opportunities, particularly given its strong customer contact base and its int'l network of port facilities. HW is already in the Chinese logistics business, having joined force with Tibbet & Britten Group to provide services for retail outlet in Hong Kong and Beijing.

HW has set up Line Information Network Enterprise (LINE) designed to facilitate the development of a range of integrated supply chain solutions and logistics services. LINE aims to fulfill the role as a LLP by delivering a value proposition for all participants in the supply chain. SUPPLY LINE is a joint venture with Yue Yuen, targeting contracts with MNCs engaged in the footwear, apparel and electronics industries. With these capabilities, HPH/HW is expected to become more involved in VA SCM solution in the next few years.

5. APL Logistics

American President Line, which is parent company of APL Logistics,is the 1st foreign deep-sea ocean carrier to be granted WOFE(Wholly Owned Foreign Entity) status in 1996. APLL is the first mover in China who is permitted to provide practices commercial processing and business consulting service and carry out NVOCC business for cargo import and export to China. As a consequence, it has one of the most extensive sales and marketing networks in China.

APLL has establisheda strategic presence in key industrial sectors, such as automobile, chemicals, electronics (including IT) and fashion.It is also permitted to direct engage in activities within Shanghai Waigaoqiao Free Trade Zone such as warehousing, transportation and distribution service.

APLL has established a number of alliances with local companies to expand into land-base transport activities and to widen its geographic coverage of the China market, particularly into the interior region, including:

- In 2001, most significant deals with state-owned Eastern China Railway Express and Shenyang Transportation Group (trucking service operator in Northeast region)
- A joint venture (CMAL) with Changan Automobile Group and Minsheng Industrial Company to provide automotive manufactures in China with modern and efficient supply chain coverage and
- A joint venture (APLL-ZHIQIN Technology Logistics Ltd.) with Legend Group Holdings have in providing supply chain services for IT businesses in China and Hong Kong.

6. Maersk Logistics

Maersk Logistics is the 1st European logistics companies awarded WOFE and operating license in 1998. It provides services of cargo consolidation, inland transport and distribution.It has been expanding its office network continuously, the most recent efforts being directed at improving its coverage of the interior (eg. at Harbin). Its network now spans 16 branches and representative offices with 1,500 employees holding more operating licenses than any other international logistics providers.

Investments and strategic alliances are complemented in more traditional sectors such as trucking and warehousing. Some of the most significant arrangements are:

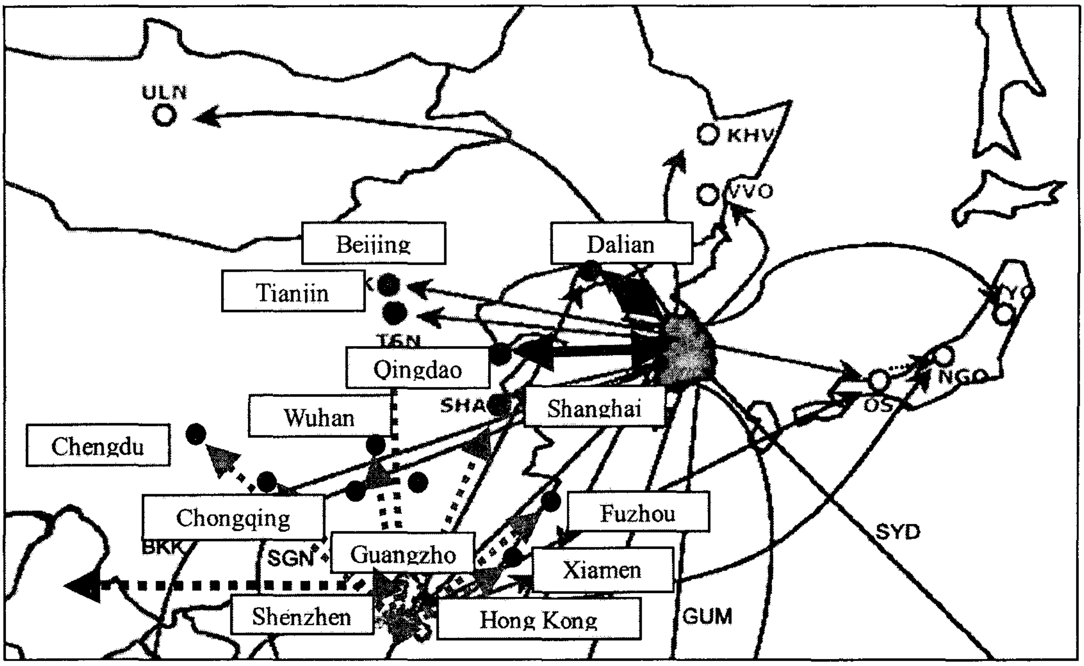
- Guangdong Orient Trucking (with Sinotrans)
- Shanghai Tie Yang Multimodal Transport Co. (a joint venture between MOR and Claraway Ltd.) and
- Development of national distribution center in Shanghai (handling import and export cargo consolidation).

7. DHL

DHL is the 1stforeign express delivery company to enter China in 1986 with a 50/50 joint venture with Sinotrans. Its business performance has grown almost 60 folds at an average rate of 40% in the last decade by developing a comprehensive service network covering 318 cities throughout China, with 50 joint venture offices and 160 facilities.

As becoming the largest strategic investor of Sinotrans by investing US$ 58million for a 5% stake, it plans to invest over US$ 215 million in China from 2004 to 2008 in an important strategic move to accelerate business growth by expanding its express service network and logistics centers.

To establish an extensive network serving Chinese market, DHLs in Korea, China, Hong Kong and Taiwan are effectively integrated by "Greater China and Korea Cross Border Initiative (GC&K CBI) project. See Figure 11. Under this project, express cargos to and from Dalian and Tianjin are transshipped through Incheon.



Source: provided by DHL

Figure 11. DHL Cross Border Network in Northeast Asia

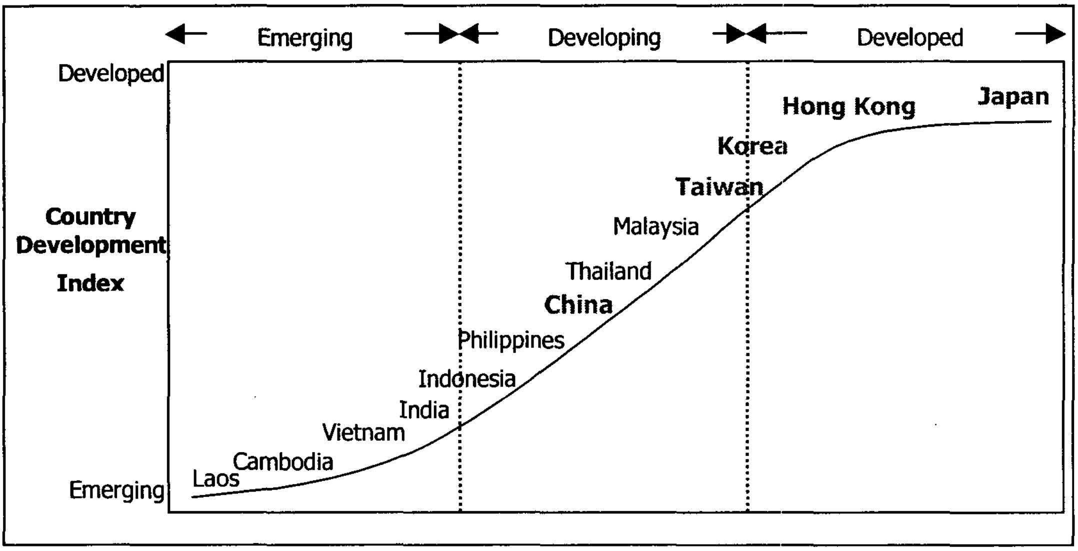
6. FUTURE TASKS FOR CHINA'S LOGISTICS MARKET

Figure 12 shows the country development stages in logistics market. China is in developing stage, while Korea and Taiwan are on the border between developing and developed stages. According to Gattorna (2003), key characteristics for supply chain management in developing stage are:

- Mix of traditional and modern distribution channels
- More demanding customers, increasing competition, consolidation and rationalization of industries
- Difficult to access sophisticated supply chain capabilities
- Technology, but varying levels of integration and
- Low to medium internet uptake

To enter the developed stage of the logisticsmarket, these barriers have to be overcome and following sophisticated characteristics should be challenged:

- Modern distribution channels
- Intense competition
- Demanding consumers
- Availability of sophisticated capabilities and technology
- Easier to attract quality labor
- Greater propensity to outsource
- High internet uptake
- Processes and infrastructure which support collaboration



Source: Adapted from Gattorna, 2003.

Figure 12. Stage of Logistics Market Development by Country in East Asia

From review of Chin's logistics industry, which is being pulled up by the market growth, we can identify some Chinese-specific issues related to logistics as follows:

- Keeping up with the pace of change in China's markets/consumer base
- Overcoming regulatory diversity and interpretations
- Diversity of markets, with different mixes of buying behaviors, by region
- The available local/regional infrastructure tending to determine the

sophistication of logistics solutions

- Lack of accurate information and tracking system (Not much standardization in the collection of data and sharing information)
- Achieving critical barriers to required change in organization structure and key performance indicators and
- Going beyond traditional logistics outsourcing to newer business models that deliver greater and faster benefits.

With regard to Chinese logistics providers, they are struggling to emerge from the fragmented scene as larger and dominating players due to a number of factors:

- They seek to grow through merge and acquisitions but find it difficult to execute these transactions;
- They struggle to provide the complex in-bound side of demanding sector such as automotive and
- Their national networks are less strong and integrated than appear, due to decentralization, which makes integrated national solutions difficult to execute.

Whereas, foreign 3PL providers have significant expansion plans in China, reflecting its fantastic growth and unique position as the world's top manufacturing center. Despite the physical and regulatory restrictions, they consider China to provide a huge opportunity. However, many 3PL foreign providers are still cautious about making large investments, and are looking for alliances (from equity JVs to arms-length partnerships) that can provide complementarities. Foreign 3PL providers are looking for Chinese counterparts providing customer relationships in China and strategic network coverage. Chinese logistics companies also want to form deep cooperative relationship with foreign providers, who can provide overseas networks, financial support, management experience, and other complementary functions. However, in reality, both sides find it difficult to form strategic alliances in which two or more companies cooperate and willingly modify their business objectives and practices to help achieve long-term goals and objectives, because each side has the goal of coming out on top and does not want to relinquish control to the other.

Another salient feature of foreign and domestic 3PL providers' strategy is to take over the transportation assets and warehousing of major Chinese manufacturers and distributors. In response to Chinese shippers'reluctance to outsource logistics service given their existing logistics assets, many Chinese and foreign logistics firms are negotiating deals with Chinese shippers to form JVs to manage the in-house logistics assets. For the logistics providers this is a way to move the shippers towards outsourcing, while the shippers areable to lower their logistics coasts without difficulty. COSCO Logistics have formed Attend Logistics, a JV with home appliance manufacturers Kelon in Guangdong and Little Swan in Shanghai using their existing warehousing. TNT Logistics have formed a JV with home electronics market leader Haier, utilizing Haier's assets. ACS has formed an auto logistics operation with Changan Auto in Chongqing.

This model has the attractiveness of creating a strong long-term customer relationship and locking in large volume. However, the downside of such arrangements is that it may be difficult to expand the JV to provide services to competing shippers. Using the JV for competing shippers may only be possible once the 3PL gets overwhelming equity control. In the meantime, the 3PL may have to form additional JV to service other shippers, which may create substantial inefficiencies and ineffectiveness due to duplication of functions.

In conclusion,as Chinese logistics market evolve into developed market, the route to success for logistics companies is to develop extensive global and domestic networks and providing integration, cost optimization and value-added services through a combination of sophisticated technology, skill and physical assets.

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