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WORLD MARITIME UNIVERSITY

Shanghai, China

**THE RESEARCH ON THE DEVELOPMENT OF
SMALL AND MEDIUM SIZED LOGISTICS
ENTERPRISES IN CHINA**

By

Qiu Danyun

China

A research paper submitted to the World Maritime University in partial
Fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

In

International Transportation and Logistics

2008

DECLARATION

I certify that all the material in this research paper that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this research paper reflect my own personal views, and are not necessarily endorsed by the University.

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Last but not the least, my thanks to my lovely parents. They are really painstaking and taking care of me during this period while great support was give to me at the same time.

ABSTRACT

Title of Dissertation: **The Research on the Development of Small and Medium Sized Logistics Enterprises in China**

Degree: **MSC**

This paper is mainly focus on the development of small and medium sized logistics enterprises which play an important role in the logistics industry of our country. In effect, the group of small and medium sized logistics enterprises has amounted to an abundant quantity. The influence of it should not be omitted, as it is a driving force to the development of the country. In this dissertation, I firstly intend to find out the possibilities and probabilities for them to competing with large logistics enterprises through practical and theoretical analyses. The characters and current situation of logistics industry are deliberated from several aspects including the analysis on environment of market, and the supply and demand situation of logistics market. In addition, marginal-cost analysis is applied to make comparison with the one of large logistics enterprises to illustrate the rationality of existence of the small and medium-sized logistics enterprises. While SWTO analyses are used to find out the advantages and disadvantages and make brief conclusion of the above illustration. Then countermeasures are brought forward in accordance with the analyses elaborated above. Marketing strategies, resources integration and internal management is my three solutions on the problem raised above.

Key words: small and medium sized logistics enterprises; development; strategy; integration; management

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LIST OF ABBREVIATIONS

ASP	Application Server Provider
AS/RS	Automated Storage and Retrieval System
ASS	Automated Sorting System
GPS	Global Positioning System
MNC	Multinational Corporation
RMB	Ren min bi
SMLE	Small and Medium-sized Logistics Enterprise
TPL	Third Party Logistics
WTO	World Trade Organization

1 Introduction

1.1 The objectives of the research paper

For a start, it is obvious that the logistics industry in China is in its burgeoning and booming stage especially after the country's accession to the World Trade Organisation (WTO). The vast domestic market potential, low cost of manufacturing as well as the increasing ability of purchasing of the burgeoning middle class has attracted multinational corporations to invest in China. Thus tremendous challenges and opportunities are provided.

Prior to the WTO, domestic logistics industry was protected by policies as foreign participation was regulated in many sectors, such as freight forwarding, trucking, shipping, aviation and customer brokering. Therefore, the main competitor of the small and medium sized logistics enterprises (SMLEs) is the domestic large companies.

Post WTO, many rules and regulations are to be eased and foreign logistics enterprises are allowed to set branches in domestic and run as single venture. This means they would have "greater flexibility and better control over the number and type of services they wish to provide.", and "be able to cater to MNCs searching for high-quality logistics solutions." (Mark G. & Charlene L., 2003) Many foreign logistics enterprises such as TNT, UPS, and DHL, have all adjusted their strategies to China, and announced to invest more in future. Hence there will be another competitor of much stronger and larger for the SMLEs to compete with.

Pre-WTO	Post-WTO
<p><i>Freight forwarders (F/Fs)</i> F/Fs need "Class A" licence to issue bills of lading (B/Ls), invoices and to collect payments Foreign F/Fs have to be in business for at least 3 years to qualify for a first joint venture (JV) of maximum 50 per cent share and are required to invest at least US\$1 million Foreign F/Fs have to wait five years before forming a second JV, and a year before establishing branches. An investment of US\$120,000 is required for each new branch</p>	<p>Licensing requirements will be phased out Majority ownership in JVs is allowed a year after accession Wholly owned subsidiaries are allowed 4 years after accession Within two years of accession, a second JV is allowed</p>
<p><i>Ocean carriers</i> Ocean carriers require permission from the MOC to offer new services Issue of B/Ls, invoices and collection of payments is only allowed at a limited number of licensed branch offices Ocean carriers can only operate container terminals, warehouses, trucking and inter-modal services through JVs</p>	<p>Carriers will be free to offer single-source logistics management</p>
<p><i>Ground transportation providers</i> Only Chinese nationals and Chinese-owned companies are permitted to conduct ground transportation JV partnership is required for foreign participation in cross-boundary operations with Hong Kong</p>	<p>For road transport, foreign transportation providers can establish JVs upon accession, hold majority shares within two years, and be free of restrictions within four years For rail transport, foreign transportation providers can establish JVs upon accession, hold majority shares within a year, and be free of all restrictions within three years</p>
<p><i>Express operators</i> Foreign express operators are prohibited from taking a majority share in a JV, and need to invest at least US\$1 million in an entity whose term may not exceed 20 years There is a one-year waiting period for establishing branches and five years for forming a second JV</p>	<p>Commitments include land-based international courier services and all services related to an international shipment handled by express operators Majority ownership in JVs will be allowed a year after accession Wholly owned subsidiaries will be allowed four years after accession</p>
<p><i>Storage and warehousing providers</i> Foreign firms are permitted to own warehouses in foreign trade zones, only if such warehouses are required to store materials necessary to their production and service activities in China</p>	<p>Foreign providers are allowed to have minority ownerships in JVs upon accession and hold majority equity shares within one year Restrictions to be phased out within three years</p>

Table 1-1 Pre-and-post WTO rules and regulations

Sources: Asia Information Associates Limited (2002), Gooley (2002) and Loo (2002)

On the other hand, besides the great opportunities, there also exist various kinds of difficulties such as the difficulty to finance, lack of human resources, insufficient effective demand, low level of informatization, scarcity of long-term strategic plans, and so on. So when facing such cruel competition, how to survive and achieve steady and rapid growth is a tough problem for the SMLEs to solve. This paper endeavors to find ways out based on the analysis on the broad situation of the logistics industry, and the main objectives are as follows:

- To find out the possibility and probability of competing with large logistics enterprises
- What are the obstacles to the development of SMLEs
- What are the proper strategies for the growth of SMLEs

1.2 Main contents and methodologies

Chapter 1 mainly tells the brief introduction of the thesis, while the definition of small and medium-sized logistics enterprises is elaborated. Chapter 2 is the literature review

and my own opinion would be raised after reading, at least, above 50 relative articles on this subject. Chapter 3 mainly discusses on the possibilities and probabilities for the SMLEs to compete with large logistics enterprises. Practical analyses on the characteristics and current situation of logistics industry are applied. In contrast, I performed some theoretical analyses in Chapter 4 while SWOT analyses on SMLEs, marginal-cost analysis are applied. Chapter 5 focuses on the counterpart solutions. Strategies and management, especially the market positioning strategy and the management of human resources is my two cores which will spend time to illustrate. Chapter 6 is subsequently the conclusion about all I have deliberated above.

1.3 The concept of small and medium-sized logistics enterprises

To start with, in order to identify effectively, the former national economic and trade committee, former national development program committee, treasury department, and national statistics department formulate, issued and implemented, in Feb, 29, 2003, Temporary Regulations on Classification of Small and Medium-sized Enterprises, applicable to all types of enterprises of various kinds of ownerships and organizations legally founded in China. And the definition standards on small and medium-sized enterprises are as follows (Actually, there are five classification of industry, construction, wholesale and retail, transportation and post, and accommodation and catering in this table. For short, I chose the transportation and post only which is relative to the main topic.):

classification	Definition on small and medium-sized enterprises
Transportation and post	For transportation, small and medium-sized enterprises must confirm to the following qualifications: number of employees is less than 3000, or sale is smaller than 300,000,000. Meanwhile, medium enterprises must cater to the following extra qualifications: number of employees is not smaller than 500, sale is not smaller than 30,000,000; and the rest are small enterprises.

	<p>For post, small and medium-sized enterprises must confirm to the following qualifications: number of employees is less than 1000, or sale is smaller than 300,000,000. Meanwhile, medium enterprises must cater to the following extra qualifications: number of employees is not smaller than 400, sale is not smaller than 30,000,000; and the rest are small enterprises.</p>
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Table 1-2 The definition standards on small and medium-sized enterprises of our country

Resources: Notice on Issuing Temporary Regulations on Classification of Small and Medium-sized Enterprises, No.143 Document on Small and Medium-sized Enterprises [2003] by National Economical and Trade Committee issued by former National Economical and Trade Committee on Feb. 29th, 2003.

Actually, “the result of first economic census also announced that the small and medium-sized companies are the main proportion in Chinese logistics companies.”(Liu W., Li W., Wang W., 2006, p. 116) And nearly all research papers I’ve read confirm that a vast majority even up to 99% of enterprises in China belong to small and medium-sized logistics enterprises. Whatever one thing is clear that SMLEs are a powerful driving force to the development of economy. Besides, they are at the same time facing all kinds of challenges and obstacles which would suffer them tremendously and bring with them great tribulation.

2 Literature Review

After reading a set of materials, I finally formed some own ideas, which are mainly based on existing researches about the development of small and medium sized logistics enterprises. First of all, after analyzing the current logistics market, we can see that there are various kinds of difficulties standing by to be solved though the small and medium sized logistics enterprises have been an important supporting force to the development of the national economy and playing a significant role in the logistics industry of our country. Second, there still are numerous opportunities burgeoning one by one. So, on the other hand, according to the characteristics and situation of logistics industry we can see obviously the possibilities and probabilities of competing with large logistics enterprises of both domestic and international, especially after some reform of relative concepts on, such as, making appropriate strategies and strengthen internal management and so on. The literature review is as follows:

Du Hailing (2006) said in her article that though the small and medium sized 3PL enterprises are embracing diverse opportunities to have better development, they still are facing challenges from such as finance, human resources, foreign capital enterprises, scarcity of efficient market demand, and so on. And she brought forward several, at last, suggestions on searching ways for the development of small and medium sized 3PL enterprises.

Li Fang (2006) gave the outlook of the current situation of small and medium sized logistics enterprises of our country follow with some simple analysis on SWOT, and pointed out the importance of planning specific strategies, providing specialized services as well as establishing information system.

Li Kai (2007) pointed out in his article the necessity of implementing centralization strategy and puts forwards two feasible methods of implementing centralization

strategy. He said logistics industry is in an initial development stage and small and medium sized logistics enterprises are the overwhelming majority of logistics enterprises in China. Facing to sharp competition situation, to select which kind of business patterns is the key to the existence and development of small and medium sized logistics enterprises.

Hong Bo (2005) deliberated in his article that with the coming of the transitional period after WTO, many medium and small logistics enterprises are facing double pressures: the system reform and the open market. They will encounter fierce unprecedented competition. Through analyzing the reasons why the competitiveness of the medium and small logistics enterprises is weak, the essay poses the ways of improving the comprehensive competitiveness of small and medium sized logistics enterprises by the following aspects: speeding up establishing the system of integrating enterprise resources; improving the ability of technology and service innovation; strengthen the establishment of informatization.

Bin Hou (2005) depict in his article that with China's entry to WTO and forming of buyers' market, most domestic small and medium sized logistics enterprises are facing unprecedented furiously competition. So that how to improve the logistics managing level and strengthen information construction to provide a developing guarantee is a task for all the small and medium sized enterprises operator. The essay analyzes how to apply ASP into the small and medium sized logistics enterprises information construction. Finally it attains the purpose of satisfying customer's requirements, improving service level and efficiency and reducing cost.

Jiang Huiyuan, Yang Yang, Xie Wuahou and Wang Zheng (2003) introduced in the article the result of investigation of logistics cost of American companies, revealed the trend of the logistics cost through a series of data and graphs, analyzed the causes contributing to the change statistically and put forward countermeasures in controlling the logistics cost of our companies.

Chen Qiong and Xu Jie (2006) talked about in the paper the development of logistics companies both at home and abroad and utilizing the intergrowth theory discusses the development of logistics companies should be on both all-around and specialization. Then it goes deep into the intergrowth pattern, brings forward that the small and medium sized logistics enterprises can do better in the specialization, and also pays much attention to the intergrowth development, in hope to be a good future.

Wang Pengji (2003) investigated the competition situation of small and medium-sized logistics in the market. With the analyses on the characters of logistics industry and market situation of China, he illustrated the opportunities for them to survive and develop and concluded at last that small and medium-sized enterprises should avoid over competition with similar scale of enterprises in order to compete with large logistics enterprises. And if they wish to have a continuous development, they are recommended to introduce market positioning strategy.

Liu Wei, Li Wenshun, Wang Wen, (2005) point out directly that modern enterprises performance in operation does not depend on how many resources the enterprises have but how many resources they can integrate even though they do not have all ownership of the resources. And such cognitional changes force enterprises, especially small and medium-sized enterprises, to regulate the structure of their organization and try to manage their business eagerly by inter-industry, trans-regional and inter-cooperative networks. Based on the research finding and theory of enterprises cooperation, and in view of the features of small and medium-sized enterprises, the thesis takes a positive study of the cooperation of small logistics companies, its consequence, motivation and interrelationship, using structural model with the analysis of primary element. And the result shows that an input in or devotion to the cooperation between small logistics companies will influence each other in strategic value, economic benefits and intangible assets and equity, subsequently companies' acquirement of economic benefit from the cooperation will influence the companies'

input in or devotion to the cooperation.

Deng Chuanhong, (2005): this thesis analyzes the current situation of logistics talents in small and medium-sized logistics enterprises, and points out the reason of talent crisis and gives some advices including the intensive mechanism, the training to the staff, favorable atmosphere and so on for manpower resources management system.

Liang Juan, (2005): considers that the key to transform form traditional storage and transportation enterprise to modern logistics is the resources integration and core competence. Then it describes the advantages and disadvantages of traditional storage and transportation enterprise, introducing the specific strategies of transition.

In a conclusion, many researches on the development of small and medium-sized logistics enterprises confirm the rationality of existence and through various solutions and strategies, this group would find out its own space in the market to compete with large logistics enterprises. The relationship between them is symbiosis.

3 Practical Analyses

Statistically, in developed countries, the total cost of external logistics accounts for only 12% of the GDP. In contrast, the total cost of logistics in our country occupied 16.7% of GDP. Hence, “if China’s logistics expenditures could be lowered by 10%, or US\$24.5 billion would have been translated into lower prices for consumers, better profit margins for businesses, and even to the extent of uplifting overall standard of living.”, said by Dr Fu Yuning, the president of China Merchants Group, in the speech to American Chamber of Commerce 14th Leadership Series Luncheon, in 2003, and he also pointed out that, multinationals have sophisticated logistics needs and lack of experience in managing local logistics. So that it also provides the domestic enterprises favorable and tremendous opportunities for developing. And among the domestic companies, about 99%, as has mentioned above, of which are small and medium-sized logistics, whose quantity and quality is surging rapidly, moreover.

According to the China Third Party Logistics Market Report, 2006, China external logistics reached a total value of RMB 48 trillion in 2005 with a yr-on-yr growth of 25.2%, which was a little lower than the previous year but still remained a rapid increase. The total value of China external logistics amounted to RMB 26.8 trillion in the first half of 2006, rising 15.3% compared to the 1st half of 2005. The total expense of China external logistics was RMB 1678.6 billion in the first half of 2006, rising 14.7% compared to the 1st half of 2005, and its growth rate increased by 1.2%. It was mainly because of the sharp rise of energy cost that caused the common rise of transportation fee. However, the ratio of the total expense of external logistics to GDP continued to drop from 18.6% in 2005 to 18.4% in the first half of 2006, down by 0.2%.

Year	Transportation Expenses	Storage Expenses	Management Expenses	Total Expenditure of Logistics
1991	133	7.5	3.2	240
1992	127	7.2	3.1	230
1993	128	6.6	3.0	224
1994	11.6	6.8	3.1	214
1995	106	7.3	3.2	212
1996	107	7.2	3.2	211
1997	104	7.4	3.3	211
1998	103	6.7	3.2	202
1999	106	6.0	3.3	199
2000	101	6.0	3.2	194
2001	99	5.9	3.1	188
2002	100	6.1	2.9	189
2003	104	5.9	2.6	189
2004	106	5.6	2.6	188
2005	102	5.8	2.5	186
2006 H1	102	5.8	2.4	184

Table 3-1 Ratio of Total Logistics Expenditure to GDP since 1991 (%)

Sources: China Third Party Logistics Market Report, 2006

Thus we can see obviously a decreasing trend of the total expenditure of logistics. Moreover, this report also pointed that the market scale of China third-party logistics in 2005 exceeded RMB 100 billion, rising about 30% compared to the previous year. More and more global logistics corporations began to establish bases or distribution centers in Asia Pacific, such as UPS, FedEx, DHL, TNT, Exel, APL, BAX, Maersk, and Schenker etc. As for the total revenue of Asia Pacific's third-party logistics market in 2003, China accounted for 40%, Japan and Australia accounted for 18% respectively, India accounted for 9% and the other countries accounted for 15%. It is forecasted by the end of 2006, China will account for 38%, Japan and Australia for 14% respectively, India for 12% and the other countries for 22%.

“Meanwhile, due to the rising price of petroleum and the increasing investment in facility and technology, the operation cost of logistics enterprises will increase

dramatically; on the other hand, the intensive competition led to the common decrease of logistics service charges(price war), therefore, the profit margin of the TPL market decreased universally in 2005. The services of the logistics enterprises become more and more professional in order to improve their profitability and competitiveness. Therefore the TPL market is segmented continuously according to industry, regions and products”.

Last but not least, the report deliberated that there are about 16,000 logistics companies with an industrial output value of more than RMB 39 billion in China. It is forecasted that the output value will reach RMB 1.2 trillion by 2010. The huge market has attracted many freight transportation giants to join in. China logistics industry will maintain the rapid growth in the following several years. The promising logistics market in China will provide the investors with great opportunities.

Furthermore, the China Logistics Industry Report, 2006-2010, also declared that during the 10th Five-Year Plan period, China's logistics industry witnessed rapid growth. According to the statistics of National Development and Reform Commission, National Bureau of Statistics of China and China Logistics and Purchasing Association, during the 10th Five-Year Plan period, the total amount of social logistics reached RMB 158.7 trillion, increasing 1.4 times compared with that of the 9th Five-Year Plan period, with an average annual growth of 23%, which is much higher than the GDP growth rate of 9.5%. The ratio of the total amount of social logistics against GDP dropped from 19.4% in 2000 to 18.6% in 2005. In 2005, the amount of China's logistics exceeded RMB 1.2 trillion, with a yr-o-yr increase of 12.7%, took 16.6% of the added values of servicing industry.

“As investment in logistics infrastructure is increasing in China, and logistics technique and equipment is enhancing, the logistics industry is booming”. “With an enlarging scale and rapid growth speed, China's modern logistics is enhancing its operating efficiency, performing more obvious functions in supporting and promoting economic development. ”, and it is also forecasted that “during the 11th Five-Year

Plan period, China's logistics industry will keep an annual growth of 20%. From the year of 2006 to 2010, the basic frame and main functions of China's southern international logistics center will come into being. The proportion of logistics cost in GDP will decrease more than 3%. The third party logistics will share up to 23% in the logistics market.”

Hence, at least, see from the statistics, there is no doubt about the potential of China's logistics business and market. And the contribution of logistics industry to the whole economy is undeniable and continuous.

3. 1 Characteristics of logistics industry

First of all, see from the aspect of technology-wise and the characters of investment, modern high-tech applications, such as GPS, barcode technology, AS/RS and ASS, only can be introduced when the scale of operation is large and throughput is high enough. Thus the inseparability of technology and input makes it possible, to some extent, that there is increasing return to scale in logistics industry. And that makes it clear the large logistics enterprises' superiority in cost and technology. Nonetheless, logistics service, as a service product, asks for specialties like route design, transportation arrangement, sorting and packaging and so on, to meet the custom-made demand, which favors small and medium-sized logistics enterprises of more flexible to deal with the customization a lot.

Second, the character of demand itself enables the coexistence of both large enterprises and SMLEs in the logistics industry. Moreover, another condition for them to survive together is that the logistics service has to take networks and regional things into consideration. That is to say, as the distribution and transportation usually take place in a short distance, the location of warehouse is uttermost important to the customer-wise enterprises, because different warehouses of different locations can not be substituted by each other, furthermore, the difference between regions always last long while competitors hardly can imitate each other. All of these create conditions for

SMLEs to growth.

The third character is the multi-level of demand market, which means we can segment the market into several levels from low end which suits SMLEs to exploit to high end fit for large companies to develop. Different enterprises of different scale could compete with each other when aiming at different target markets.

The last one is that logistics products can be divided into many sub-products which can be transported, stored, distributed, and applied to custom respectively by different enterprises. This is also a significant importance to the survival of SMLEs.

3.2 The current situation of logistics industry

3.2.1 Analysis on environment of logistics market

(1) The Olympic Logistics

Guofeng Wang, the president of the Beijing Logistics Association, said, “The total demand of Olympic-wise for logistics amounts to about RMB 43.3 billion, which could be the biggest one compared to previous Olympics.” (Fenglian G. & Mincun Z, 2006) Therefore, tremendous challenges and opportunities would be produced and introduced. And with the fulfillment of the strategy of western development drive, more and more projects for developing the transportation and communication have been put into west regions, which will accelerate immensely the growth rate of western regions’ economy, enlarge the throughput of logistics, bring frequent floating of commodities, hence increasing the demand for TPL. Moreover, holiday economy and exhibition economy would breed new opportunities. (Fenglian G. & Mincun Z, 2006).

(2) Rules and Regulations

In Aug. 2004, the nine ministries and commissions had drawn up relative policies, including relaxing restrictions on admittance to market, simplifying administrative approval process, normalizing economy order of logistics industry, adjusting logistics taxes and fees, supporting specialized logistics enterprises in developing themselves, advocating logistics standardization, establishment of informatization, accelerating the opening-up, simplifying the entries, widening financial channels, relief of logistics enterprises' burdens, and so on to develop the country's logistics industry. And related documents, like The Outline of the Program for Chinese National Logistics Development were compiled.

In Feb. 2005, the state council issued Resolutions on Encouraging, Supporting and Guiding the Development of the Individual and Private Economy, in which restrictions for non-public economy entering into market was loosened, non-state-owned enterprises and enterprises of other types of ownership could be treated impartially on investment approval, financial service, fiscal and taxation policy, land utility, foreign trade and economical and technical cooperation and so on. And this would help to provide legal security for small and medium-sized private enterprises entering into various kinds of industries including logistics.

(3)The situation of our country

As is known to all, our country is abundant in natural resources, which spread in disequilibrium all over the country, so does the economic development, the level of maturity of logistics market, and the local logistics program, which again create the space for SMLEs to breathe and survive. Take those local SMLEs specified in subsidiary agricultural products and roughly finished products for example, it favors more of them to develop in regions less convenient to reach, having peculiar landforms, improper to introduce machinery works and so on rather than large enterprises, because they are more familiar with the local situation and have their own experience and expertise to deal with every changes of the local market which should be a vacuum to the large companies.

3.2.2 Analysis on supply and demand of logistics market

3.2.2.1 Analysis on demand

(1) Analysis on the demand structure of the logistics market

According to The 6th Survey Report on Supply and Demand Situation of Logistics Market in China, 2005, among manufacturing enterprises, their logistics of dealing with raw materials is mainly charged by the providers, occupying 56% of the total amount, while in-house 25% and the third party logistics enterprises 19%. (See figure 3-1) It shows that the major undertaker of logistics of handling raw materials is the providers and the manufacturing enterprises themselves, who together accounted for 81% of the total amount. It increased compared with last year.

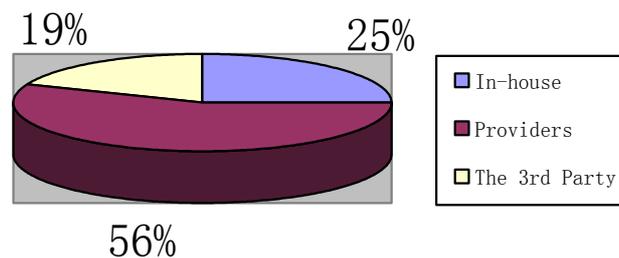


Figure 3-1 The undertakers in charge of logistics of handling raw materials in manufacturing enterprises

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

Among manufacturing enterprises whose logistics of tackling finished goods, 16% of them have their own apartment for logistics, whose percentage decreased compare to the result of the 5th survey; 31% of them outsourced to the third party logistics totally, whose proportion greatly increased compared to the last survey; 53% of them outsourced part of logistics business to the third party logistics enterprises while the rest is done by themselves, and this operation mode did not change much compared to the 5th survey. (See figure 3-2) It manifested that enterprises are prone to outsource

logistics business to the third party logistics enterprises gradually as the specification of logistics works is more and more clear.

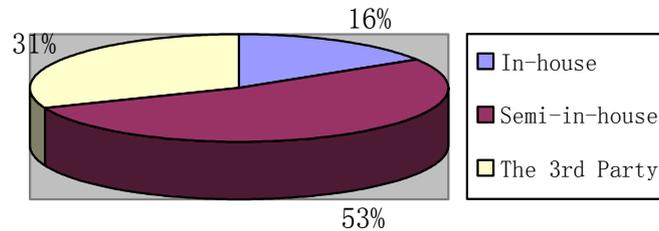


Figure 3-2 The undertakers in charge of logistics of handling finished goods in manufacturing enterprises

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

Among those commercial enterprises, 17% of them outsourced their logistics business to the third party logistics enterprises, the proportion of whom declined a lot compared to the last survey; 5% of their logistics business was undertook by their providers while 78% of them chose to deal with the business for themselves, and this percentage ascended a lot after comparison. (See figure 3-3) Meanwhile, according to the relative data based on analysis, the reasons why the majority of commercial enterprises choose to manage the logistics business by themselves are that because of the low profit ratio, multi-variety of complex operation of logistics, as well as the cost-oriented concept on logistics business outsourcing, most of the logistics enterprises are hardly to accept and manage the business, rather than making profit from it. Thus most of the commercial enterprises have to deal with it by themselves, and this part is only taken as rear services to their trade business without fewer objectives on making profit.

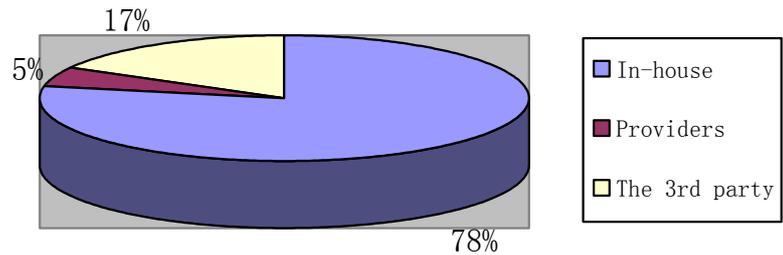


Figure 3-3 The undertakers in charge of logistics business in commercial enterprises
Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

Statistically, the main outsourcing logistics business of manufacturing enterprises and commercial enterprises is concentrating on the trunk movement followed with inner-city distribution. Compared with the data of the 5th survey, the proportion of trunk movement and inner-city distribution of the commercial enterprises has mounted up a lot. (See figure 3-4)

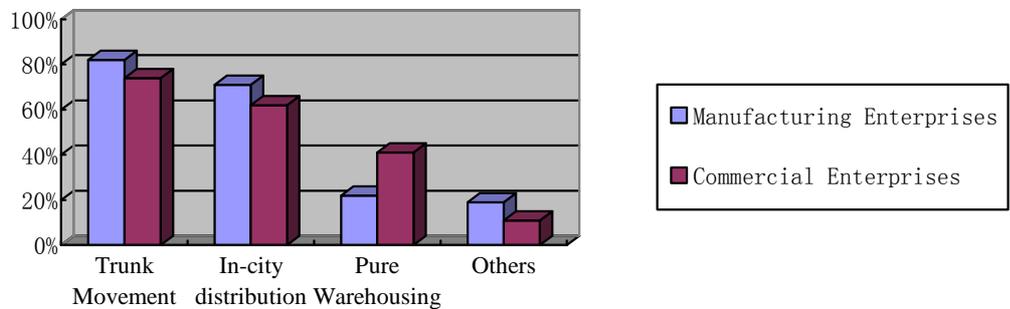


Figure 3-4 The proportion of each kind of business to the logistics services of manufacturing enterprises and commercial enterprises

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

Meanwhile, the demand for integrated logistics services in terms of outsourcing logistics are escalating. For instance, the proportion of manufacturing enterprises' demand for logistics enterprises that can provide logistics services of at least three kinds of business even up to 73%.

(2) Analysis on the degree of satisfaction to the modern logistics

The data in this survey shows that the satisfaction and non-satisfaction of the manufacturing enterprises to the TPL and in-house logistics were declining, while the less-satisfaction to them increased a lot. This can be attributed to the development of the manufacturing logistics services. And we can infer that on one hand, the declining of non-satisfaction tells the improvement of the logistics service; while on the other hand, the manufacturing enterprises require higher ability, which could not be reached absolutely, of the TPL. (See figure 3-5)

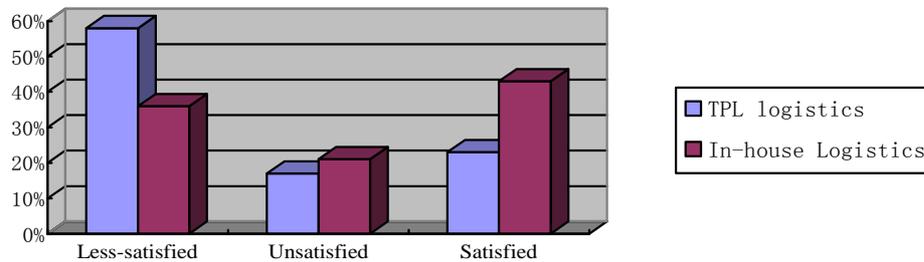


Figure 3-5 The degree of satisfaction to TPL and In-house Logistics (Manufacturing enterprises)
Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

Among commercial enterprises, the proportion of less-satisfaction to logistics service is the highest followed with satisfaction to the service. In contrast, their non-satisfaction to the logistics service is much lower while the proportion of satisfaction accrued. That tells the great betterment of the logistics service. (See figure 3-6)

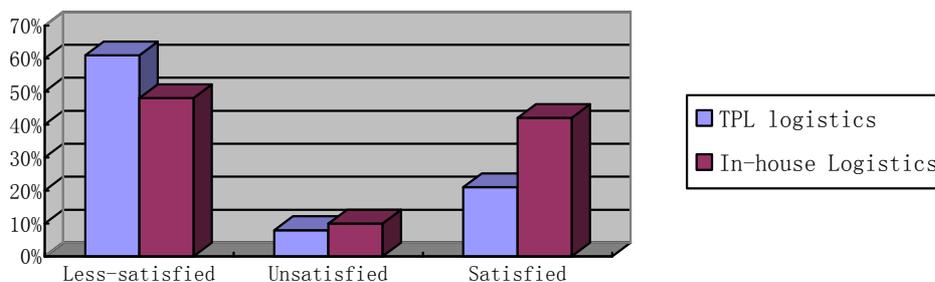


Figure 3-6 The degree of satisfaction to TPL and In-house Logistics (Commercial enterprises)

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

Another investigation shows that, among those manufacturing enterprises adopting TPL, the reasons, first of which, why they were not satisfied with TPL is the incomplete logistics contents and the failure to provide the integration of supply chain; second is the inaccuracy and sub-in-time of information and high error-ratio of operation. (See table 3-2) These data changed a lot compared with the ones of last survey. Accordingly, the requirements of upstream companies to the logistics are increasing in recent years while cost has not been the point making them feel the most unsatisfied.

Elements	Manufacturing Enterprises	Commercial Enterprises
High operation cost	22%	45%
Inaccurate and sub-in-time information	35%	32%
Low speed of operation	13%	20%
Inadequate service contents	39%	21%
High ratio of cargo damage	30%	4%
High error-ratio of operation	35%	9%
Terrible attitude	26%	7%
No network service	26%	10%
Fail to cater to the fluctuation of demand	32%	27%
Fail to provide the integration of supply chain	39%	18%
Fail to provide service on management and consultation	30%	17%
Others	4%	10%

Table 3-2 The main reasons of the upstream companies' non-satisfaction to the operation of TPL

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

(3) Analysis on the new expected subjects of logistics service

On the basis of the figures of the 6th survey, the manufacturing enterprises wishes the fresh logistics enterprises to raise services mainly on trunk movement, inner-city distribution, logistics management and consultation, reform on logistics system as well as warehousing and storage. We can see that besides the basic logistics services which still belong to their main requirements, logistics management and consultation and reform on logistics system have been paid more attention by the enterprises. (See figure 3-7)

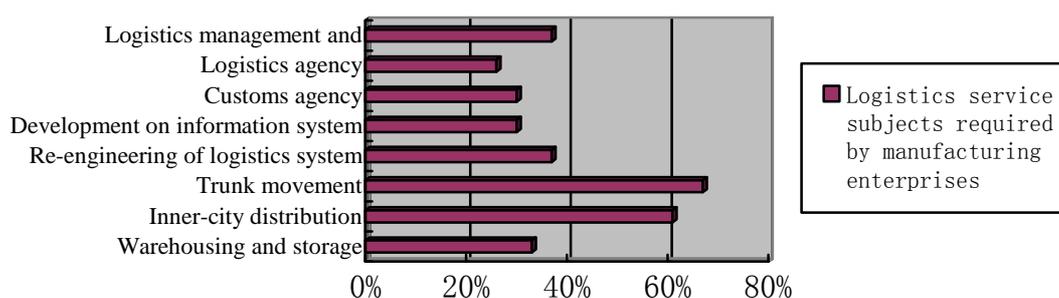


Figure 3-7 Logistics service subjects required by manufacturing enterprises

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

In contrast, the main demands of commercial enterprises focus on the inner-city distribution and warehousing and storage, which show that the operation of their logistics mainly runs regionally, so that they would rather pay more attention to the warehousing and storage of the homo-city.

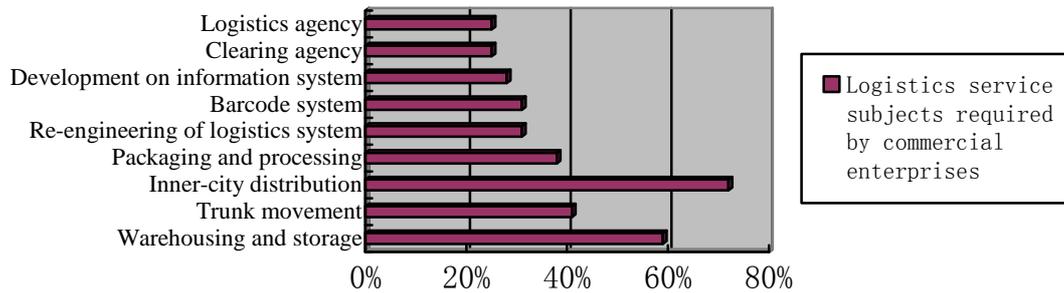


Figure 3-8 Logistics service subjects required by commercial enterprises

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

(4) Analysis on the criteria of selecting logistics enterprises

	Manufacturing enterprises	Commercial enterprises
Economy	17%	35%
Scale of the company	4%	3%
Ability to provide integrated logistics	52%	30%
Operation quality	27%	32%

Table 3-3 Criteria of selecting new types of logistics agencies

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

According to the figures, manufacturing enterprises focus on the ability to provide integrated logistics when choosing new types of logistics agencies while commercial enterprises pay more attention to the economy followed with the operation quality.

3.2.2.2 Analysis on supply

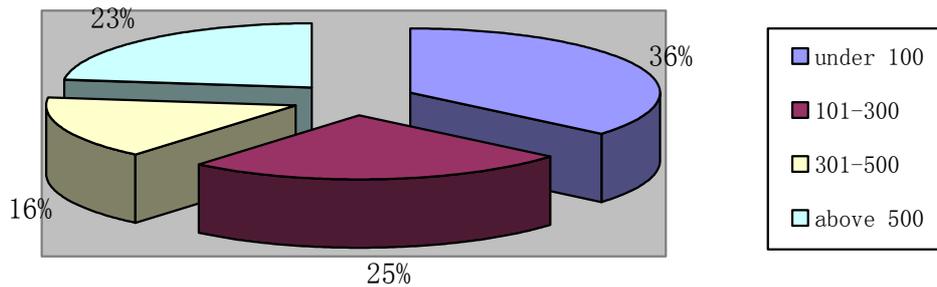


Figure 3-9 The proportion of every scale of logistics enterprises

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

First of all, through this investigation, we could see in this report that the scale of the logistics enterprises raised a lot. Enterprises whose employees amounting above 500 occupied 23% of total sum, up 12% compared to 11% of the 5th survey. However, the majority of the enterprises which should be SMLEs having employees of only beneath 500. (See figure 3-9)

Resources	Warehousing acreage	Forklift	Truck	Lifting equipments	transportation vehicles	special rail	Van
Volume (average)	150,000m ²	32	65	12	53	2495m	78

Table 3-4 Other supply capabilities of logistics enterprises

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

Second, according to the statistics, the supply capability of warehousing and relative equipment utilization is higher than before. Nonetheless, the recent supply capability could not match with, even higher than that of the demand market. The scale of most logistics enterprises are not large enough which then resulted in the low capability of transportation, warehousing and distribution, and they are consequently hard to satisfy the demand.

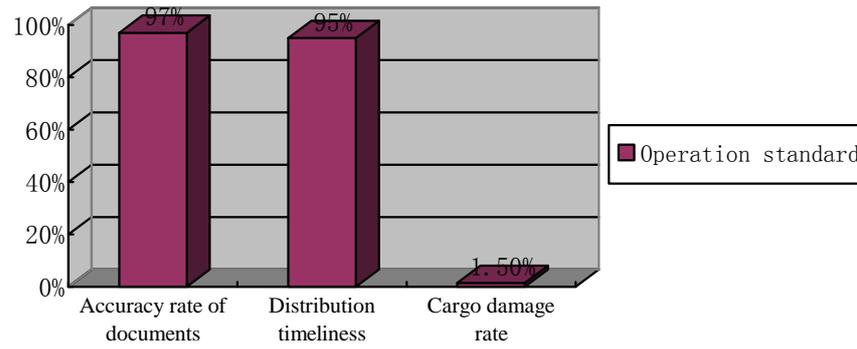


Figure 3-10 The real operational capability and quality of TPL enterprises

Sources: The 6th Survey Report on Supply and Demand of Logistics market in China, 2005

At the end, in terms of the report, the above figure was formulated based on the estimation of questionnaires collected from upstream companies. Accordingly, they are basically satisfied with the accuracy rate of documents and distribution timeliness of their TPL enterprises.

4 Theoretical Analyses

4.1 Analysis on marginal-cost compared with large logistics enterprises

Generally speaking, in order to elaborate more specifically of this point, I'd rather deliberate from two aspects: the competition inside the local space and inter-regional competition. For a start, provided that the marginal-cost of the SMELs' business is λ_1 and marginal-cost of large enterprises' business is λ_2 .

(1). Inner-regional Business competition

Generally speaking, because of the geographical and cultural advantages enjoyed by the local SMLEs, they will not be at disadvantage during the competition with large logistics enterprises. The reason is that geographical and cultural advantages will save the cost: $\lambda_1 = C_1(\text{the actual business marginal-cost}) - K_1(\text{cost-saved by the geographical advantages, which should be quite low}) - K_2(\text{cost-saved by cultural advantages, which should be very low}) \leq \lambda_2 = C_1(\text{the actual business marginal-cost})$. While, with the rising volume of the business, the actual business marginal-cost will decrease, which can be contributed to the producing of profit brought by the enlarged scale, in this essay, it is simply described as inverse proportion function of $C_1 = \frac{1}{x}$, but the cost saved by geographical and cultural advantages remains un-changed, therefore, after integral, λ_1 will definitely be smaller than λ_2 by a wide margin. So, in the inner-regional competition, small and medium-sized logistics enterprises hold the competitive advantages, and the specific function formula is as following:

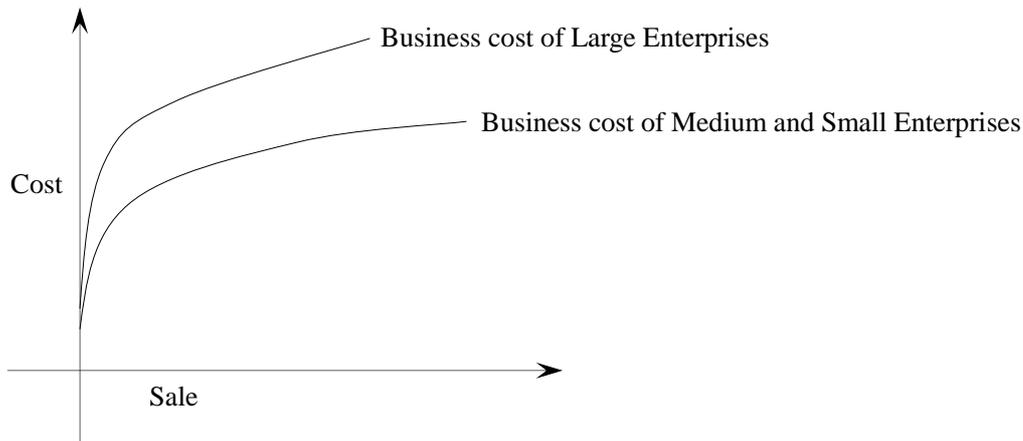
$$\int \lambda_1 dx = \int (c_1 - k_1 - k_2) dx = \int \left(\frac{1}{x} - k_1 - k_2 \right) dx = \ln x - k_1 x - k_2 x + C$$

And for large enterprises, the function formula is:

$$\int \lambda_2 dx = \int C_1 dx = \int \frac{1}{x} dx = \ln x + C$$

For the comparison, refer to the following Charter 4-1:

Charter 4-1: Inner-regional business cost relationship between SMLEs and large enterprises



From the above chart, it can be concluded that with the increasing of the business, the increase of cost of large enterprises is larger than that of the small enterprises by a wide margin.

(2). Inter-regional Business Competition

In the inter-regional business, as the large enterprises featuring with the characteristics of large scale, multi-location sites and wide outlets covering, the inter-regional business has little influence on its cost; but for the SMLEs, they have no way of competing with large ones on the covering of networks. Once they deal with the inter-regional business, it will increase the marginal-cost of the SMLEs, and lead to the inferior position in competition. As supposed above, provided that the marginal-cost of large enterprises is $\lambda_2=C_1$ (the actual business marginal-cost is in inverse proportion with business sale, and simply describe it as $C_1 = \frac{1}{x}$); and marginal-cost of SMLEs is $\lambda_1=C_1$ (the actual marginal-cost) + K1 (business cost brought by the inter-regional business, which is very small). We can get, after integral, the business cost of SMLEs:

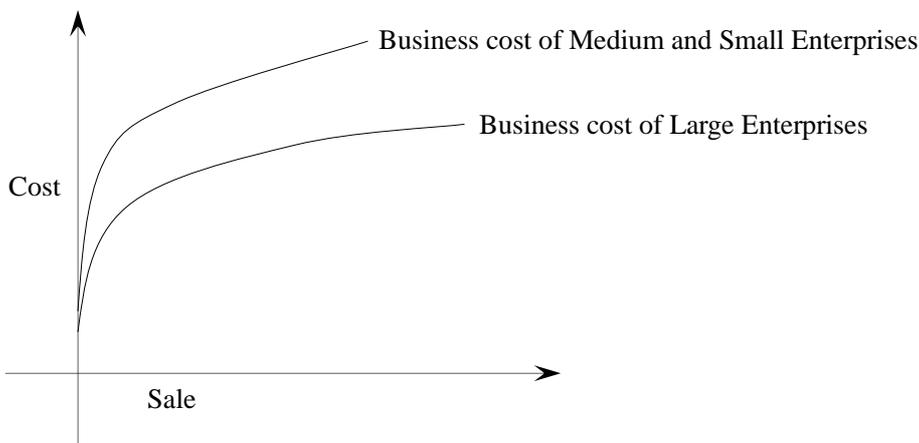
$$\int \lambda_1 dx = \int (C_1 + K_1 dx) = \int \left(\frac{1}{x} + K_1 \right) dx = \ln x + K_1 x + C$$

Business cost of large enterprises:

$$\int \lambda_2 dx = \int C_1 dx = \int \frac{1}{x} dx = \ln x + C$$

For the detailed comparison, refer to the following Charter 4-2:

Charter 4-2: Inter-regional business cost relationship between SMLEs and large enterprises



Thus we can briefly summarize that recently the small and medium-sized logistics enterprises are still in their booming stage with small scale and weak competitiveness and having not been established long. However, they have their own preponderance. For the reason of small scale and flexible running; if horizontal union can be conducted out effectively, on the condition of the large demanding of logistics in China, SMLEs will be able to develop rapidly.

4.2 SWOT analysis on small and medium-sized logistics enterprises

4.2.1 Analysis on strength

Firstly, SMLEs have flexible forms of business organization. As the specialized SMLEs have very simplex service function, they could establish a kind of particular relationship which could be translated as trading formally while keeping in touch and

inter-related inside the organization with logistics agencies. This pattern combines both of the priorities of their specialties and flexibility to level up the integrated logistics ability especially after the sharing utilization of equipments, technologies, operation networks and so on to compete with large TPL enterprises.

Secondly, as has mentioned above about the regional, geographical and cultural priorities which are all the time one of the strength, I would rather spot it than omit it.

Thirdly, the management cost of SMLEs is much lower. It is obvious that SMLEs are always related with words of small, simple as well as low---small scale, simple organization, and low cost for communicating followed with rapid floating and circulating of information. Moreover, we should also notice that they have specific division of works for functional apartments. All of these peculiarities cut down greatly the management cost.

Fourthly, they are more agile to answer to every changes and challenges. As organizational structure is simple, and the leader of the company is always the only authority of the company, he can make decisions and arrange everything directly, so that things are usually accomplished effectively and expeditiously.

4.2.2 Analysis on weakness

Of all things, SMLEs are weak in its small scale and limited service capability. Most of our SMLEs are transformed from traditional storage and transportation enterprises. Besides the above two points, most of the SMLEs still covers low proportion of networks or holds few independent spots lack of cooperation and communication. “Because each local branch is a profit centre, they are difficult to cooperate and collaborate. When one business was allocated and arranged, regional branches would exploit it vertically, thus keeping the price up high to some extent.” (Kai, W & Kai, L, 2005, p. 56) For most of the time, those spots spread broadly over the city or even country, are taken more as a temporary operating place. Once business finished, the

spot would left as an independent one and it has seldom connection with other spots let alone cooperation.

On the other hand, nearly all of these enterprises have more sense of competitiveness than cooperation. Thus they are more willingly to contend for markets, develop new channels, build their own logistics networks, and purchase own logistics facilities to compete with other logistics enterprises of the homo-region full of customers and resources. Whereas, the final consequence is that in some place, because of the duplication of similar projects, it results in surplus facilities and buildings and waste of resources; while in other place of fewer customers, because of the inadequate establishment, the demand of the local people yet can not be satisfied. They are always in scarcity of strategic planning and probe into both of the market and the enterprises itself.

Next comes the low operational efficiency and high operational cost which can be two barriers throttling the development of the company. Generally speaking, the rationality of transportation dispatching, optimization of the lines, utilization ratio of space of trucks and container Lorries are usually checked up to appraise the operational performance. Actually, because of the weakness on installations and technologies and inefficient management, in practical business running, the subsequent wastes, low utilization ratio and resources in idle would then generate high operational cost. Statistically, the average unloaded ratio of freight vehicles in our country is 49%, among which, 17.2% of the logistics enterprises occupies 50%. Moreover, since May, 2004, the total profit of logistics industry declined to some extent. And with the surging of oil price, the cost-wise problem would become more and more severe.

Furthermore, the inefficient management is a “soft spot” commonly existing among all the SMLEs. First of all, for most of the time, and for most of the operators, they all have not formed a modern logistics management concept. They prefer to pay more attention to the cost-control and marketing rather than adopting logistics management

which should be a significant method for raising competitiveness. Second, the structural organization has not been suitably set up, especially among those SMLEs, they have not set specific logistics management department to formulate relative logistics program, let alone adopting some operation mode fit perfectly for them to manage. Last but not least, the key point is the difficult to build perfect management systems, such as cost-control management system, supply-chain management system and evaluation system. Particularly, in most SMLEs, most of their staff does not acknowledge clearly their duties; at the same time, there is no effective incentive mechanism, so people of such company would not feel delighted and be full of dynamic to service the company, thus bring down the loyalty to enterprise.

Another counterpart problem is lack of humane resources specified in logistics. Nowadays, the official training on logistics professionals is still in its baby boom. It is hard to cultivate logistics human resources in short time while experienced logistics experts are mainly servicing for large companies. Therefore, SMLEs have to or even willing to (cost-oriented) employ managers of low level of education background which directly result in the backward concept and low level of management, which again can not attract talents to join in and hence restrict the development of SMLEs.

Subsequently, I have to mention about the problem of informatization. Recently, most of the SMLEs do not have their own information platform which attracts lots of investments with long return cycle, let alone holding corollary information management system. Then again, the software which is suit for the SMLEs to use is limited. That is to say, either it is too expensive, or not applicable to the real state of SMLEs. In addition, there also is in short of professional technical personnel to manage the fresh management mode which could arouse conflict with the on-going management mode.

At last, let's say something about the difficulties in financing. Generally speaking, most of the logistics resources are occupied by large companies. SMLEs are restricted by scarcity of capitals. Most of the SMLEs can not gain loan capital from the banks.

Only minority of them can borrow enough capital from bank. That is because “the recent economy policies of our country are favor more or less, now and then of large enterprises, and that is unfair to the small and medium-sized logistics enterprises.” And “under the condition of the country’s specialized banks’ transforming into commercial banks and financial risk prevention, SMLEs are hard to entre into the indirect financial market, let alone the direct market.” (Hailing, D, 2006, p. 131) And some financial constitution set different conditions to different enterprises of different ownership and scale. Usually, there are more restrictions of non-state-owned enterprises than that of state-owned enterprises; more of SMLEs than that of large enterprises. “Capital to company is as blood to body, once you are anaemic, you will not feel comfortable, so does the enterprises, once they are in scarcity of capital, they would feel hard to operate, let alone developing.” (Hailing, D, 2006, p. 131)

4.2.3 Analysis on opportunities

Actually, the upstanding trend of the development of logistics industrial would undeniably create thousands of opportunities for them to growth; relative policies and documents encouraging the development of logistics industries have been issued by government; the situation of the logistics market is flourishing; all of these having been elaborated specifically above, thus I’d rather not say too much here as it is obvious that the opportunities do emerge a lot especially after our access to the WTO. Meanwhile, with the development of network technologies, their disadvantage in the information management is declining which also could be taken as a kind of opportunity.

4.2.4 Analysis on threat

Broadly speaking, there can be three main threats: threat from the domestic large logistics enterprises; thereat from the expansion of multinational companies; and threat from substitutes. With the development of the logistics industry, domestic large companies have jointed in nearly every aspect of the industry, including transportation,

warehousing, and packaging, etc. They have adequate capitals, excellent managers, sophisticated equipments, advanced concepts, management ways, service, as well as technologies, which are nearly the same as the multinationals of high competitiveness.

As to the threat from substitutes which means the threat from the enterprises provide same or even better service, but much lower price. These companies may not have advantageous on scale and equipments, but they are more competitive in service and price even though they are more or less the same as what you are.

5 Researches on relative solutions

5.1 Market positioning strategy

(1) Positioning on single-function lower-end market

Multi-level of logistics-demanding market and divisibility of the logistics products provide the small and medium-sized logistics enterprises with market opportunities. Logistics products can fall into electronic products, transportation, warehousing, distribution, Clearance, system designing and so on, which can be completed, by one company; or respectively, by different companies. This kind of divisibility decides the demanding of the logistics service and multi-level of its supplying. In accordance with the comprehensiveness of the logistics products, it can be divided into several markets as the following Chart 5-1:

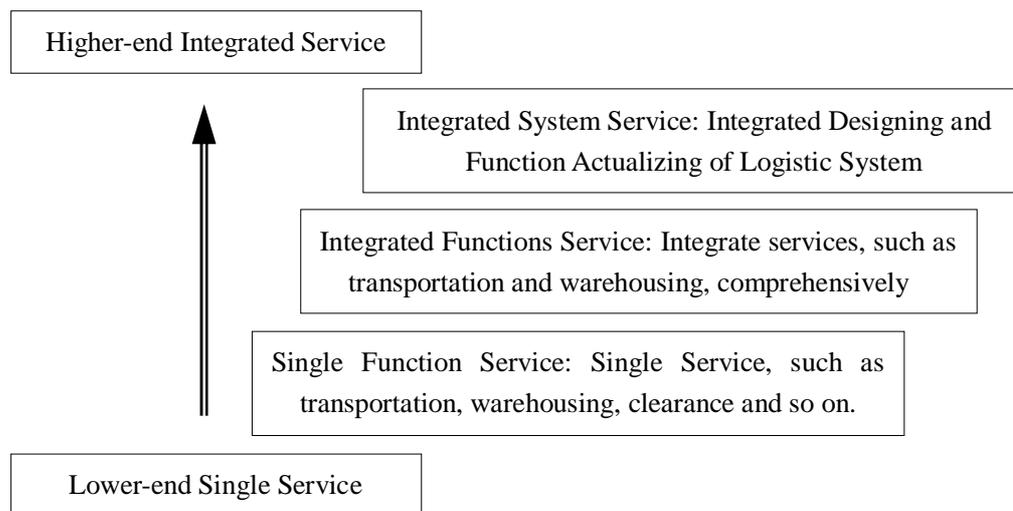


Chart 5-1: Logistics Service Products Market

The divisibility of the market caused by the divisibility of the products decides that the logistics has a large effective scale. Higher-end market demanding serves for the integrated logistics which need large investment, and is adopted for the large enterprise to pioneer. And the lower-end market serves for the single function logistics with small scale, whose needs the small and medium-sized enterprise can meet.

In accordance with the result of the The 6th Survey Report on Supply and Demand of Logistics market in China, 2005, as showing in Figure 4-1 and Figure 4-2, only 29% of the industries hope that logistics companies can provide general agent service, 7% logistics system designing, and the rest single service with the in-city distribution, trunk line transportation and warehousing take the largest proportion, respectively as 29%, 21% and 21%. Meanwhile, agent on clearance, logistics information sourcing and logistics system designing take the same proportion of 7%. While, for commercial companies, there are no needs of general logistics agent, 20% of them are in need of logistics system designing, and the rest are in need of single logistics service with warehousing and code bar collecting as the largest proportion of 13%.

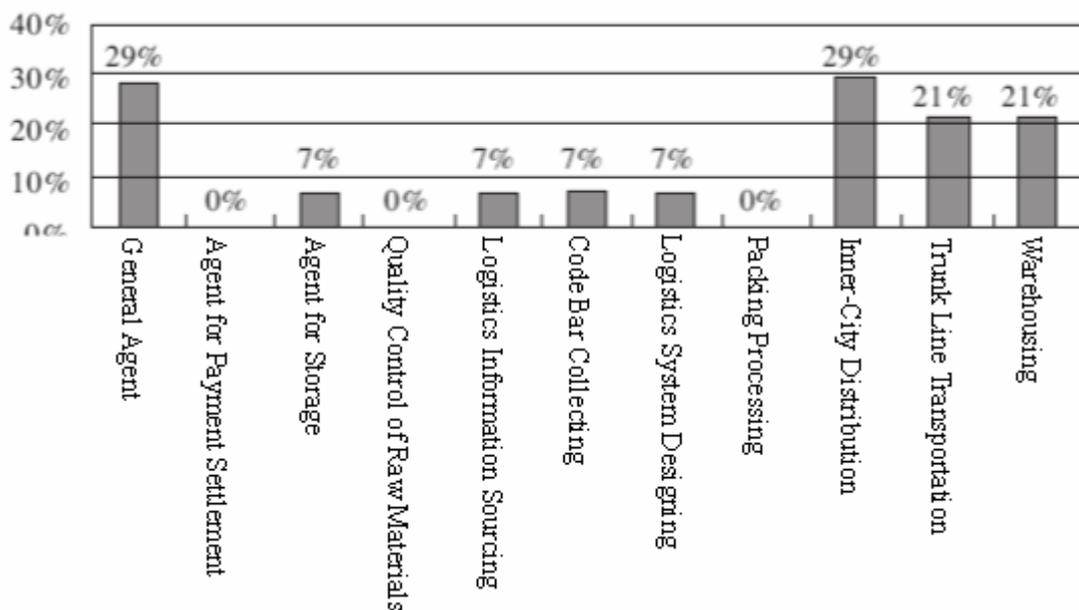


Figure 5-1: Logistics demanded by Industries and Companies

Resources: Supply and Demand Conditions of Logistics Market in China - The 6th Survey Report on Supply and Demand of Logistics market in China, 2005, Chinese Logistics Association

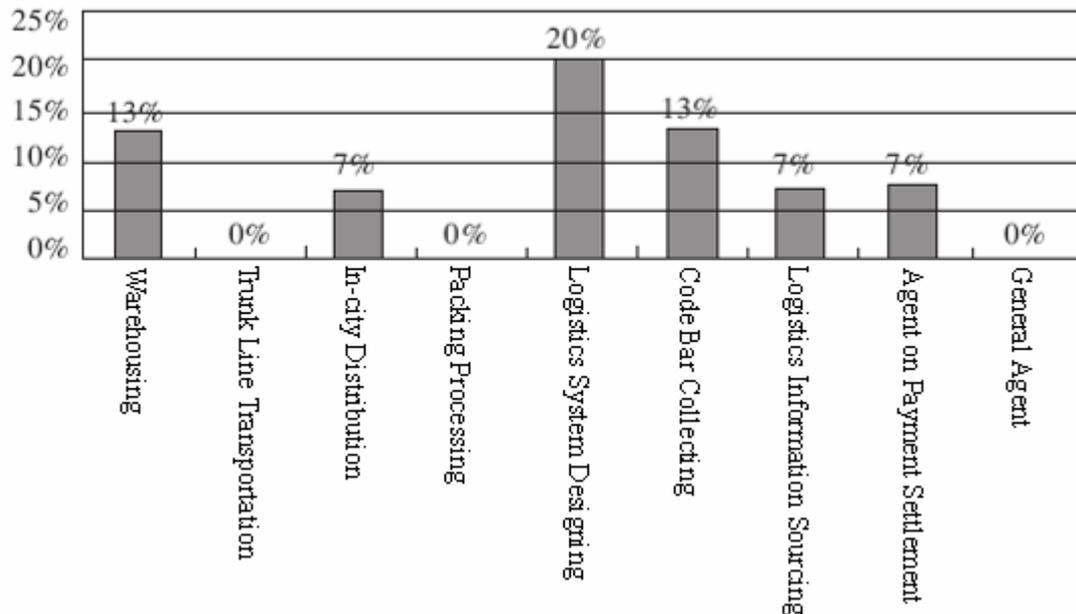


Figure 5-2: Logistics demanded by Commercial Companies

Resources: Supply and Demand Conditions of Logistics Market in China - The 6th Survey Report on Supply and Demand of Logistics market in China, 2005, Chinese Logistics Association

This just clearly shows the multi-level of the demanding on the logistics service in Chinese Logistics market, and the single function lower-end logistics service hold certain proportion of the market. Therefore, small and medium-sized logistics enterprises can position their products on the lower-end market with single function.

(2) Positioning on Customized Products Market

Logistics service, as one kind of service products, always have customized requirements on routine designing, vehicle arranging, distribution timing and tallying and packing, and this customization is in favor of flexible small and medium-sized enterprises. On the demanding part, most of the industries have a relative low level of centralization, and except several naturally monopolized industries, such as petrochemical, steel, water supply and so on, centralization of other industries are all under 10%. These kinds of industries with small scale meet the features of small scale, frequent orders and outstanding region of logistics, so they do not require for much on the scale of logistics service, but on diversity of the service. Especially for the

commercial companies in China, in accordance with The 6th Survey Report on Supply and Demand of Logistics market in China, 2005, 87% of them deal with commodities about 1 to 100,000 kinds, and another 7% retails companies with varieties more than 100,000. Diversity of the commodities, plus zero-storage requirement, means that majority of the retails companies should have unique tallying and distribution features, and that the logistics should be featured with small scale and diversity. This decentralization requirement of logistics provides the small and medium-sized enterprises with opportunity of supplying individualized service to gain the competition advantages.

(3) Positioning on Regional Products

Nets construction and real-time supply required by logistics brings about the market opportunities for small and medium-sized enterprises. Logistics service includes long-distance transportation and short-distance transportation. The former one requires that logistics supplier have wide-range transportation and warehousing nets, which contributes to the favor of the large logistics enterprises; and at the same time, logistics service is of outstanding region, and transportation of the distribution is short-distance, so the clients are usually focusing on the location of the warehouses. Warehouses in different locations are un-replaceable, and it is better that value-added processing service is close to the clients. This difference of region has a strong durability, so it is hard for competitive counterpart to follow, which endows the small and medium-sized enterprises with survival margin. In accordance with analyses of sampled companies from The 6th Survey Report on Supply and Demand of Logistics market in China, 2005, 43% of the manufacturer companies run their business on national scale, and 57% of them on inter-national scale. And the sale of the most companies needs the support of the logistics service nets internationally, which posts the requirements on the improvement of the trans-regional operation capability of logistics constructions. But, the current large logistics enterprises are not able to meet these large-scale and networking requirements. In accordance with The 6th Survey

Report on Supply and Demand of Logistics market in China, 2005, in view of market share, the largest supplier among the visited companies only hold 1.4% of the market share, and none of the logistics companies holds more than 2%. This condition will provide the small and medium-sized enterprises with opportunity of taking their local advantages to take part in the service procedure of the large enterprises and bid for the sub-contract of logistics service from large companies. From the Figure 4-1 and Figure 4-2, it is clear that industrial companies have demand on in-city distribution and warehousing as much as 29% and 21%, respectively; and the in-city distribution, warehousing, clearance agent and so on with regional characteristics, need by commercial companies, are good market chances for small and medium-sized enterprises with regional advantages, good client relationship and individualized service experiences. They can gain market opportunities through the form of outsourcing or directly bid for local service. What the writer want to point is that, except the traditional logistics service in the Figure 4-1 and Figure 4-2, logistics procedure management, logistics decision-making, data collecting and other information service are being taken more and e more serious. Logistics Consultant Management companies which centralize on system designing and information consulting will develop into main fields of the logistics supplier. But these service products, including software design and consecution and system designing service, are belong to the products of experiences, which need high business credit to have the trust from clients. On this part, small and medium-sized enterprises do not have advantages, but for them, bid for part outsourcing is feasible. Therefore, small and medium-sized enterprises should better position themselves on the items, such as regional distribution, processing, clearance agent, which have low requirements on scale, networks and capital, but high requirements on region and individualization.

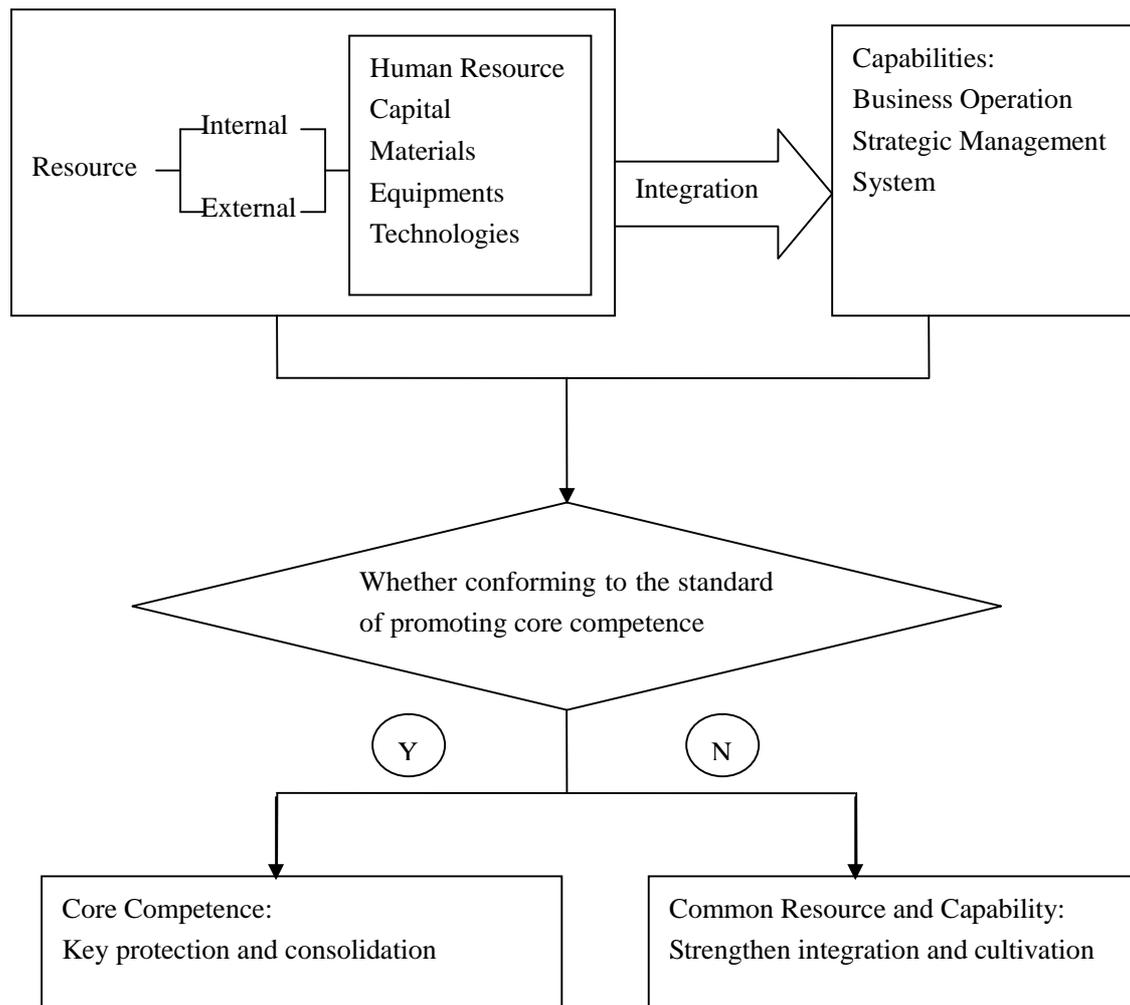
Small and medium-sized business bodies account for the majority of the logistics market players, but they are weak. They are confronted with the bigger market share of the large logistics enterprise, but also suffer the excessive competitions from so many small logistics firms. However, that does not means there is no market chance

for them to survive and develop. If the small and medium-sized firms can find the gap of the market and position the marketing reasonably, they can harvest the relatively stable market share.

5.2 Functional resources integration

(1) Vertical Integration

The first and key step for an enterprise to implement functional resources integration is to investigate various kinds of its resources, and then the analysis on the available capabilities followed with the final step of integration of them two, according to which we can judge whether they are conforming to the standard of promoting the core competence. The specific progress is followed:



Charter 5-2 The specific judging progress of resources integration

Generally speaking, the main purpose of the integration is to improve and enhance the core competence, which would endure for four periods---gestation, promotion, maturation, and recession (Liang Juan, 2005, p. 2), for which the enterprise would experience, too. Nonetheless, one thing is a little bit different. That is to say, once the core competence is mature, it can be imitated and stay unchanged. Therefore, we have to work out different specific objects for integration of different stages.

- Gestation period --- Resources integration in primary stage

In this period, the primary thing is to find out the core elements for competition through resources integration of the enterprise, whose managers and staff should all be acknowledged of this conception. Meanwhile, the main the task is to settle stable relationships with clients with specialized and individualized services and standardized operation to improve the degree of satisfaction of clients.

- Promotion period --- Cultivating the core competence

In another word, this period can be called as the period of development. After analyzing on the SWOT, enterprise should have an intact, clear and profound understanding of the whole company. Then relative countermeasures should be brought out to strengthen advantages while avoiding weakness, seize opportunities while coping with challenges. Moreover, platform for communication, operation, management, etc. should be set up through modern technologies and methods as soon as possible while counterpart systems like information and performance appraisal system be settled at the same time. The expansion and enhancement of capabilities is to provide better service for clients. In this period, the objective is pursuing stable and speedy development on specialization and integration.

- Maturation period --- Strengthen the core competence

In this period, all what we should do should have been founded based on a definite strategic development program. And the next thing is to effectively implement it to strengthen and enhance the core competence, moreover, to increase the capability of preventing outer risks.

- Recession period --- Developing the core competence

This is a key point for the development of enterprise when it is in this period. Stagnation means regression. As it has been developing for some time, its development mode can be duplicated. In terms of this, we should further integrate the enterprise's resources, exploit new elements to the core competence and then prolong the life-cycle of the core competence. Thus a new circulation begins.

(2) Horizontal Integration

As SMLEs are usually limited in and restricted by resources for development, one effective way is to cooperate with other companies to share resources , enlarge total scale, increase and enhance influence, decrease malicious competition among SMLEs, and learn from each other, etc. And there mainly are three patterns of cooperation:

Patterns	Characters	Advantages	Disadvantages
Collaboration	Temporary, Unstable	Flexible in pattern	Less stable
League	Long-lived, Dependent on one side	Low risks	Restricted to the league
Alliance	Long-lived, Stable, Dependent on each other, Selectable	Stable and equal in position	Difficult to coordinate

Table 5-1 Comparison between three cooperation patterns

Firstly, collaboration is a flexible pattern. Some enterprises would adopt it as a

temporary cooperation, because they are always considering of short-term interests rather than long-term interests. For some time, such behavior of short-term-oriented would hurt the long-term interests. The relationship between the two parties is not stable. As it is temporary, they two would even compete with each other at any time once their business works are finished. In my opinion, this pattern can be adopted when there are special business works or urgent matters to be dealt with.

Secondly, league is a pattern of having clear and definite objectives and parties. The most advantage of it is the low risk. Once you want to join in a league, this one should be a famous and successful modern logistics enterprise of abundant management experience and stable business volume. So the risk to you is very low, because you are under the shelter of the league, actually. However, there always exist some conditions to the quasi-members. Therefore, only those enterprises conforming to the conditions can be accepted and recognized while they have to accept some severe conditions and be restricted in some area at the same time.

Thirdly, alliance is much more stable in the relationship of two sides. It is selectable. That means enterprises are free to choose any other companies to build alliance with them, and they are all dependent on each other. The position of each member in this alliance is equal. There is no subordinative relationship among them. Consequently, how to keep balance of the rights allocation by coordination is a difficult problem. Moreover, it is also a sensitive question of how to keep their own capability of core competence for them.

In a conclusion, every logistics enterprise should adopt the right cooperation pattern in terms of its own character, operation situation, as well as the specific business works.

5.3 Strengthen internal management

5.3.1 Informatization

(1) ASP

ASP, known as Application Server Provider means the companies who rent the utility system running on their own server to client and charge the rent fee from the same. ASP, centralizing on the web-net, provides their clients with multi-utility functional service, such as market information, sale management, accountant settlement, electronic payment, personnel management, salary management, mail management and so on; and also provides all kinds of information technology services, such as support facilities setup, utility system management, utility software maintenance, specialized technology consulting and so on. What the companies need are not the expensive utility server, data bank server and related equipment to support information system. When companies need this service, and if they are accessible to terminal equipment and scanner, they can get through to the service website through the web-net, and enjoy all software and service after confirmation of the identification. ASP has a flexible way of charging, on the software used, or data throughput, or data storage, and or monthly.

By way of ASP, small and medium-sized enterprises can deduce the cost of running their logistics information system, which can help to solve the problems of purchasing, developing and maintaining the information system by small and medium-sized enterprises. Most of the technological works are on part of supplier of the ASP. At the same time, ASP has enough safety, reliability and utility, which can be designed in accordance with different requirements from different clients distinctively.

(2) Cooperation

Small and medium-sized logistics are of small scale with not much capital. And it will cost much to build the information system and platform; therefore, it is urgent for

small and medium-sized enterprises to build the common logistics information platform from the way of cooperation by joint investment, development, utility and maintenance. Currently, planning, studying and establishing of this kind of information platform is just beginning in China.

(3) Logistics Park and base

Most of the small and medium-sized logistics enterprises are transformed from the traditional transportation and warehousing companies, and those who taking part in transportation maybe have only a few trucks. So it is quite difficult for them to develop or purchase the information system independently, and at the same time they have no conditions to cooperate with other companies to this system, they can take advantage of information platform supplied by Logistics Park or base to conduct the high effective operation. For example, Chuanhua Logistics Base, integrating trader center, information center, transportation center, warehousing center, distribution center, transfer center as a whole, is an important public logistics operation base in Hangzhou Bay and Yangtze River Delta Area. Till now, Chuanhua Logistics has introduced about 400 small enterprises. Information system of Chuanhua Logistics Base consists of Cargo Transportation Trade System, Warehousing Management System, Parking Management System and other sub-system to provide the membership logistics companies with information platform and guide them to use modern technology to run business and achieve procedure management, safety management and transportation management of the business, which can help to extend the business and decies the cost.

(4) Unification between Universities and Companies

For most of the small and medium-sized enterprises, there are many requirements on individualization for them, but there are little standardized procedure and information system for their development in the market, which lead to the cost increasing in

executing informationization. And most developers believe that small and medium-sized enterprises have low level of informationization, mainly on level of basic informationization, but rare in high level application, such as promoting the improvement and optimization of the business procedure, supporting decision-facilitating system, integrating resources and so on. In view of foreign experiences in the logistics information development, logistics information system has no value of development in lower-end market. From the angle of business operation, small and medium-sized enterprises are not able to develop their informationization efficiently with low cost and low risk. Therefore, this condition provides conditions for cooperation between universities and companies. Generally, small and medium-sized enterprises have a relative easy business procedure, so the development of the information system is also a little easy. For universities, in order to improve education qualification and enhance students' practical skills, they can encourage students, using knowledge learnt and guided by the teachers with experiences, to develop, cheaply and liably, the logistics software need by the small and medium-sized enterprises. On one side, this will help to enhance the development experiences of the students; and on the other side, it can meet the needs of individualization form the companies, achieving the win-win result for small and medium-sized enterprises and universities.

5.3.2 Human resources management

Besides other aspects of management problems, I consider human resources management as the uttermost important one. Because human are always more flexible than the “dead” things. It is sure that other management problems of cost-control, performance appraisal, operation management, etc. are also significant to the development of company; they are all related with human practice and have to be implemented by people. In my opinion, once you manage successfully the human resources, you are successful in, to a great extent, the management of the entire company. And this is particular important to and fit for the SMLEs to build this idea.

Most small and medium-sized logistics enterprises are family firms---actually, most of the companies in the world are family firms---except those successful ones most of which are even multinationals, many rest of the family firms especially the SMLEs, are adopting the old management method of family workshop without little modern management concepts. Actually, in previous years, this old concept was still effective in management as orders directly from the boss to the staff can be implemented effectively and efficiently; moreover, the cost, most of which is occupied by the human, can be controlled and kept in a low level. However, as the competition is more and more intense, once a company intending to enlarge the scale, it has to change his management concept, especially his human resources concept which should be a fundamental problem. In terms of these, I bring forward some recommendations on improving the human resources management.

(1) Cultivating favorable enterprise culture

“Enterprise culture is an attitude and concept forming gradually through the process of dealing with market, clients, and things inside the company, as well as a key element for strengthening the centripetal force of it.” (Deng, C.H., 2006, p. 19) A favorable enterprise culture would produce a win-win effect for both of the enterprise and the staff. First, it should accord with the social regulations; then it should be accepted by all of the staff whose private objectives should be integrated well with the objectives of the company. Their sense of devotion and ownership could produce great cohesion. Favorable mechanisms of insensitive, compensation, talents allocation, and criticism, etc. will help to build a shared vision for both of the company and people. In addition, labor contract formulated in accordance with relevant regulations would tie the enterprise with the people based on a trustful and commitment relationship.

(2) Change the management concept with knowledge innovation

Previously, a prevailing system adopted by the managers was Patriarchal System, which means the boss is forever right to do anything, and “if you find the boss’s

mistakes, please see the first line (---the boss's forever right.)" heard once upon a time from a company manual. Thus there is little democracy and equal between the two parties, and the people would feel like as they were just a tool of the manager to only implement the business works as they do not have to ponder for things. So this asks the managers to change his concept first and moreover, pay more attention on the knowledge innovation as it will help to update their management concept to keep abreast with changes or even make them going ahead.

(3) Choose the right people for the right position

One current situation for most SMLEs is in scarcity of specialized talents while on the other hand, most of their business works are of low technology. Therefore, I recommend that for those jobs asking for professional technologies such as the reforming of the total logistics system, building of the information system, logistics programs, and location ,planning and design of the distribution centre could be assigned to those professionals while practical works such as carrying and handling, loading and unloading, packaging, sorting and simple processing, etc. could be done by common employees having been trained about the practical operation. For this, the enterprise could save labor-cost on one hand, and make full use of the human resources on the other hand, and hence enhance the sense of devotion and loyalty.

(3) Provide favorable services for the talents.

Generally speaking, once enterprises hired employees, many of the enterprises wish, of course, every employee to work by great effort, even devote more than claimed. Nevertheless, they are neglectful of their staff's safety, career planning, and living aspects for most of the times, and win little loyalty from their employees. So if the employees are talented enough after years' practicing, they would choose job hopping. And there are three recommendations on retaining excellent talents:

- Meeting with the demands

Fulfill the necessities of employees by establishing competitive compensation and value-sharing system. Set no limitation on the sharing of profit, knowledge and

experience. Make them feel respected and realized of self-value.

- Providing opportunities of participation in management

This means give proper rights and responsibilities to the right person to build a sense of ownership to make them feel as they were one family member of the enterprise. And enterprises on the other hand should provide them with prospect of their career development, so that they would be encouraged to take great effort to service for the enterprises.

- Providing value-added services

Knowledge-learning is not only a effective way to increase productivity, but also a important method to enhance the competitiveness. Whether the work is challengeable; whether we can learn new knowledge and skills from the enterprise, have been a significant standard for staff to judge whether it is worth servicing for any longer. Therefore, if one enterprise intends to attract, retain, build loyalty of the excellent talents, they should have to continuously exploit the human resources and give staining to them to raise the human capital value.

6 Conclusions

With the development and open-up of China, all industries are flourishing currently, including the logistics, which is becoming a significant supporting force for the development of economy. So that is why it has attracted so much attention from people. In my opinion, large enterprises have their own life characters which are stable and developing all the time. They are more likely to be stronger during the fierce competition. However, the small and medium-sized logistics enterprises are different. They are more fragile to be eliminated. So I choose this topic as my research subject.

As has been analyzed by all kinds of methods, I concluded that the demand for logistics is undeniably increasing, while higher requirements are brought forward to them. And the logistics enterprise performance is improving, too, because they are eager for enhancing the capabilities as the competition is becoming fiercer and fiercer. Once they are standing by, they are losing competitiveness, and would be then eliminated by the market. So every enterprise is struggling for survive, actually.

However, if they intend to strengthen the competence, there should many things to prepare: first of all, the update of management concept, then the logistics program design, and the operation system and information system building with the implementation of human resources management. In addition, after the step for enhancing the capability, they should search for more space in market, so that, alliance, leagues and collaborations would be chose to fulfill in order to share and integrate resources to compete with large enterprises.

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