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**WORLD MARITIME UNIVERSITY**

Shanghai, China

# **Marketing Model of Freight Forwarding Basing on Information Technology**

Author **LI Yang**

Tutor **ZHONG Beihua**

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

**MASTER OF SCIENCE**

**(INTERNATIONAL TRANSPORTATION AND LOGISTICS)**

**2011**

## **DECLARATION**

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

**The contents of this dissertation reflect my own personal views, and not necessarily endorsed by the University.**

**(Signature):** \_\_\_\_\_

**(Date):** \_\_\_\_\_

# Menu

List of Tables and Figures .....	6
Abstract .....	8
1 Introduction .....	10
1.1 Background and Significance of Research .....	10
1.1.1 The Change of Structure of Market Competition .....	10
1.1.2 Diminishing Margin of Gain in Traditional Freight Forwarders .....	11
1.1.3 The Development Trend of China's Freight Forwarders.....	11
1.2 Research Aim .....	12
1.3 Structure and Innovation of Research.....	13
1.3.1 Structure of Research .....	13
1.3.2 Innovation of Research.....	15
2 Literature Review .....	16
2.1 Research on Traditional Marketing Channels and Network Marketing Channels.....	16
2.2 Literature Review on Logistics Information Technology .....	17
2.2.1 Literature Review on E-commerce and Its Model .....	17
2.2.2 Literature review on the Logistics Information Platform .....	18
2.3 Literature Review on the Choice of Decision Methods .....	19
2.3.1 Delphi Method.....	19
2.3.2 AHP Method.....	20
2.3.3 GA Law .....	20
2.3.4 Model Analysis Method Seemingly To Be Adopted In the Paper ...	20
3. Restructuring of Information Flow in International Logistics at Network Information Era.....	22

3.1	The Traditional Information Flow Model .....	22
3.2	The Role and Characteristics of Information Flow in International Logistics .....	23
3.2.1	The Role of Information Flow in International Logistics .....	24
3.2.2	Characteristics of the International Logistics Information .....	25
3.3	The Cost Analysis of the Traditional Information Flow .....	26
3.3.1	Under the Traditional Model, Multi-Links of Information Flow Has Led To Rising Costs .....	26
3.3.2	The Traditional Model of the Dynamic Flow of Information Processing Has Led To Rising Costs .....	28
3.3.3	Reconstruction of the Information Flow .....	30
3.4	Main Body of Information Flow Reconstruction .....	32
3.5	Summary .....	33
4	Analysis into Status Quo of the Marketing Channel in the International Freight Forwarding Enterprises and Design of Marketing Model in Network Combination On The Basis Of Information Technology .....	34
4.1	Transformation in Marketing Model of International Freight Forwarding Enterprises in Current Situation .....	34
4.1.1	The Traditional Model of International Freight Forwarding .....	34
4.1.2	International multimodal transport mode .....	35
4.1.3	Logistics Model .....	36
4.2	Category of Marketing Channel in International Freight Forwarding Business .....	37
4.2.1	Direct Channels and Indirect Channels .....	37
4.2.2	Fixed Channel and Mobile Channels .....	38
4.2.3	Long Channel and Short Channel .....	38
4.2.4	Wide Channels and Narrow Channels .....	39

4.3	Problems in Marketing Channels of International Freight Forwarding Business .....	39
4.3.1	Long Distribution Channels, Information Transmission Is Not Smooth .....	40
4.3.2	A Single Service Mode and the Lack of Value-Added Services .....	40
4.3.3	Applications of Information Technology and Low Level of Network .....	41
4.3.4	Information Flow and Cash Flow Management Fail To Meet the Needs of Shippers .....	41
4.3.5	Lack of Highly Qualified Personnel and Shortage of Training on Staff .....	42
4.3.6	Weak Sense of Teamwork .....	42
4.3.7	The Low Level of Customer Relationship Management .....	42
4.4	Network Marketing Channel Mode Design of International Freight Forwarding Business .....	43
4.4.1	Network Marketing Channel Model of International Freight Forwarding Business .....	43
4.4.2	Compared With Other Traditional Marketing Channels, the Model Has the Following Advantages .....	45
4.4.3	Explanations of the 6 Specific Models: .....	48
4.5	Summary .....	51
5	Case Analysis .....	53
5.1	General Conditions of Enterprises .....	53
5.2	Process Analysis .....	53
5.3	Solutions .....	54
5.3.1	Overview of The Solutions .....	54
5.3.2	Structure on Evaluation Indicator System of Marketing Model of Freight Forwarding: Figure 5-1 .....	55

5.3.3	Establish Pair-Wise Comparison Matrix to Calculate the Relative Weight of Various Levels .....	55
5.3.4	Calculation of Combined Weight of Indicators at All Levels .....	62
5.3.5	Experts Rate the Program Layer to Select the Optimal Network Marketing Model.....	63
5.4	Case Summary .....	67
6	Conclusion .....	69
6.1	Conclusion .....	69
6.2	Further Study .....	70
	Reference.....	72

## List of Tables and Figures

Figure 1-1 Paper structure .....	14
Figure 3-1 The Process of International Logistics .....	22
Figure 3-2 Traditional Information Flow Model .....	23
Figure 3-3 Internet Marketing Mode, the Flow of Information .....	31
Figure 4-1 The Traditional Mode of International Freight Forwarding.....	35
Figure 4-2 International Multimodal Transport Mode.....	35
Figure 4-3 Logistics Model .....	36
Figure 4-4 Network Channel Mode of International Freight Forward Enterprises .....	44
Figure 5-1 Company freight forwarders marketing model evaluation index system structure.....	55
Table 5-2 Definition of Scale .....	56
Table 5-3 Initial Matrix .....	57
Table 5-4 Table of Matrix after Adjustment.....	59
Table 5-5 Chart of Weight Calculation in the sub-rule layer.....	59
Table 5-6 Assessment into Relative Weight of Each Indicator in A1 .....	60
Table 5-7 Assessment into Relative Weight of Each Indicator in A2 by Experts	60
Table 5-8 Assessment into Relative Weight of Each Indicator in A3 by Experts	61
Table 5-9 Assessment into Relative Weight of Each Indicator in A4 by Panel...	62
Table 5-10 Scoring Criterion Chart .....	63
Table 5-11 Scoring of Experts on C1 .....	64
Table 5-12 Scoring of Experts on C2.....	64



Table 5-13 Scoring of Experts on C3.....	65
Table 5-14 Scoring of Experts on C4.....	65
Table 5-15 Scoring of Experts on C5.....	66
Table 5-16 Scoring of Experts on C6.....	66
Table 5-17 The Summary Each Mode Score .....	66

## **Abstract**

In the 21 century, the development of economic globalization has become increasingly fierce. International freight forwarding has penetrated into every area of international trade, and become an important part of it which is indispensable. After China's entering into the WTO, the national freight forwarding market is generally opening up. Foreign companies in China will rapidly expend the business with their management advantages, global network, capital and other advantages, and seize the market share in China's freight forwarding, and then cause great impact to the domestic freight forwarding companies. The profit margin in the traditional freight forwarding industry is narrowing somewhat, the maintaining of the original marketing model will certainly affect the development of the enterprise. In accordance with the development of information technology in the international freight forwarding, the transformation of marketing strategy becomes a core issue of the future strategic development. Therefore, studying of the network channels of international freight forwarding enterprises, coming-up of the design of the network marketing channels, and building of the corresponding network marketing model constitute a direct guidance for improving the competitive level, enhancing the core competitiveness and ensuring the sustainable development of the enterprises.

The information flow is spontaneous and random in the traditional model. The international logistic information has its wide distribution, great quantity and diversified varieties and dynamic trace. These sessions of the information flow results in the increase of cost, and the restructure of information flow becomes extremely urgent for the freight forwarders. Therefore, they then undertake the task of international logistics. The development of technology of information technology offers technical safeguard for the restructure of whole international information flow. Both the technology development and the concept of whole logistic service cause the change

of the marketing channel model of current international freight forwarders, which enable the availability of more choices and combinations for marketing models.

The dissertation analyzes the current marketing channel types of international freight forwarding, and raise the problems in them, which principally concentrates on the long circulation channel, hard information transfer and single-service formats and the lack of value-added service; little information technology application and low network degree; unsatisfaction of the consignor because of the management of information flow and capital flow management. Through systematic summary, I raise and illustrate six network marketing channel models' design basing on information technology. The dissertation carries out a decision analysis on the network marketing channel model of regional large-scale freight forwarding companies through the decision method combing with the Delphi Method and AHP(analytic hierarchy process). The model makes use of original marketing channel model to explore their business and maintain their clients, and expands target market with the advanced network platform, so as to raise the market competitiveness of international freight forwarders.

**Key words: Freight Forwarding, Information Technology, Marketing Model**

# **1 Introduction**

## **1.1 Background and Significance of Research**

Freight forwarding is an intermediary between the shipper and the carrier, broker and transportation organizer. In China, the international freight forwarding is a kind of burgeoning industry, is a "symbiotic industry "or" edge industry "between international trade and international cargo transport.

It can be seen from the basic nature of the international freight forwarding agent that freight forwarding principally refers to that they accept the request of the entrusting party, which mainly concerns transportation, transshipment, warehousing, loading and unloading. On the one goods, hand, the freight forwarder concludes the contract of carriage with the shipper of the cargo; and he will sign the contract with the department of transportation at the same time. For the shipper, the freight forward is the carrier of cargo as well. At present, the majority of cargo agents control various means of transportation and warehouses for housing, and their business covers goods transportation of seaway, air and land.

### **1.1.1 The Change of Structure of Market Competition**

With the opening-up of freight forwarding market, many transnational freight forwarding enterprises enter into China .They usually have great amount of cargo resource aboard ,even some of them in themselves are large traders . Besides that, many foreign invested ship companies will establish their own freight forwarding business, so as to directly and wholly control the flows of cargo, participating market competition. When the domestic ship company set up its agent, the foreign ship company gradually gets its operation rights of cargo agent, establishing sole companies, which may have qualifications for customs declaration, cargo collection and the use of freight forwarding special invoice. They are allowed to set up their subsidiaries. Therefore, with the further implementation of the policy of opening-up,

the foreign companies will accelerate the expansion of business. The shock will be created to the local freight forwarder with the foreign companies' advantage in management, global network, capital and etc.

### **1.1.2 Diminishing Margin of Gain in Traditional Freight Forwarders**

The traditional freight forwarding business in China principally includes the business of cargo agent (acting as agent) and the business of NVOCC(Non-vessel operating common carrier ) as principal .Their major income have the booking commission and the freight difference. Recently, the ship owner continuously lowers the proportion of booking commission, and even cancels the commission for near-sea shipping line. Therefore, the margin of commission for cargo agent is diminishing. At the same time, as the rapid development of e-commerce, they can get information of ship and cargo more quickly and easily. Due to the high circulation and share of information, the determination of freight becomes more transparent and public. All of these elements lead to the pass-away of golden years for the cargo agent to get the large freight different and the increase of competitors because of the policy of further opening-up, decreasing more the profit margin of the cargo agent.

### **1.1.3 The Development Trend of China's Freight Forwarders**

It is badly in need of the improvement of the comprehensive capacity of China's freight forwarding business. Until the end of 2010, there are 21000 international freight forwarding companies registered in Ministry of Commerce in China. In addition, the large-scale freight forwarding enterprises in China and other countries and transnational logistics companies in Global 500 with joint ventures and sole companies in China have 80% the freight forwarding market share in China. Most small and medium-scale freight forwarding enterprises just begin their career in this area. There are relatively large gaps between the world leading logistics companies and them in their entire strength and level of management. The economic crisis will provide an opportunity for the change of the logistic industry in China, and the industrial restructuring and upgrading may be accelerated and the resource integration of freight forwarders may be carried out. Therefore, the living environment

for the logistics industry can be improved. The upgrading of industry and the establishment of modern comprehensive logistics system will lead to the creation of a mature logistics industry.

Programs on Readjustment and Revitalization of the Logistics Industry has clearly indicates, the level of informationalization shall be increased, and the standardization system shall be improved, and the R&D and the application of new technology shall be strengthened.

For some logistics fields with the homogenization of traditional service, the level of informationalization of the freight forwarding company has become one of symbols of core competition, and the decisive element for the client to value the ability of the freight forwarding company. Therefore, the development of technology has exercised great influence on the freight forwarding company. The introduction and the development of new technology affect not only the controllability of internal performance, but the marketing as well. The freight forwarding company may take a good information system as the useful tool for their marketing.

## **1.2 Research Aim**

The freight forwarding industry in China has to carry out strategic readjustment and informationalization in the market. The dissertation points out the development tendency of the freight forwarding enterprises, basing on discussion of market rules in internet informationalization. In addition, it raises the significance and necessity of the reform of marketing models of traditional cargo agent, and possible problems in the freight forwarding industry and its solutions.

Through the analysis on the information flow in traditional sea export trade and the traditional marketing models and new network marketing channels, it explores the network marketing model that the modern freight forwarding enterprises need. Finally, it gives a network marketing model suitable for company A through the case analysis and the decision-making techniques.

## **1.3 Structure and Innovation of Research**

### **1.3.1 Structure of Research**

I principally carry out the research on the network marketing model of international freight forwarding enterprises. The dissertation has six chapters: the first chapter is introduction to the background and significance of the subject, the structure and innovation of the research; the second is a literature review on the traditional marketing channels and the network marketing model, and the logistics information technology and ways of decision-making. Moreover, it points out the research method-model analysis, laid the theoretical basis for further writing; chapter three analyzes the information flow in international logistics, restructure of it in the network era, and the international freight forwarders—the subject of restructure as well; chapter four develops a model design plan for network channels of the freight forwarders through the comparison of current model of channels. It finally sets up a network marketing model suitable for the development of the enterprises basing on the analysis of influencing factors of channel design and the clarification of design standards and principles; chapter five mainly carries out the modeling and analysis on the options of marketing channel model under the information era, and then give its suggestions ; the last chapter is conclusion and proposed future study.

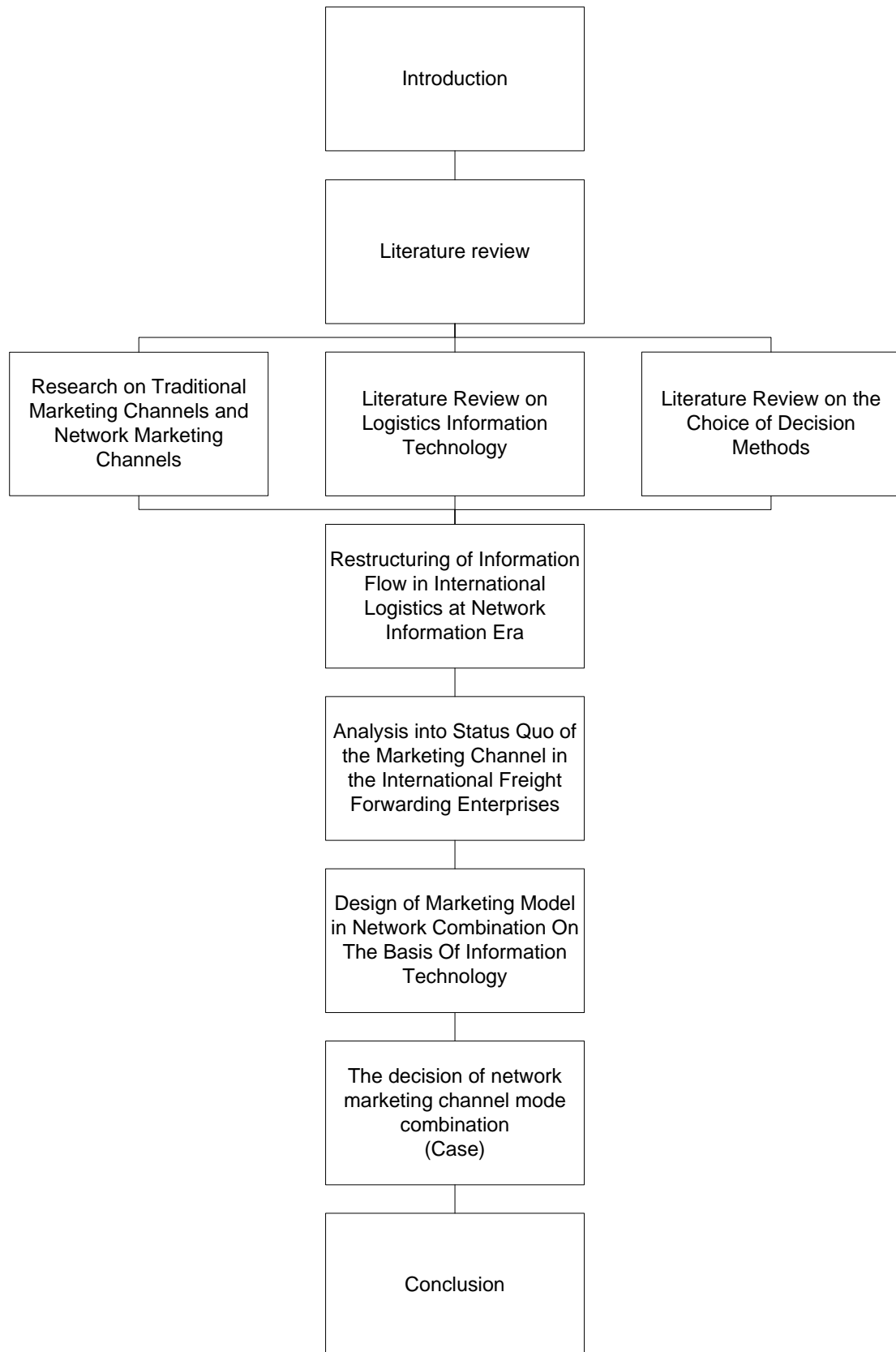


Figure 1-1 Paper structure



### **1.3.2 Innovation of Research**

This thesis has two innovation points:

(1) Analyzing the international logistics business process and each part of the flow of information in the role, summing up the characteristics of traditional logistic information flow in the main cause of rising cost analysis and putting forward the importance and necessity of the reconstruction of information flow, the solution is that should be the use of advanced logistics information technology to reconstruct the information flow. Summarized the traditional logistics information flow in the main cause of rising cost analysis, and put forward the importance and necessity of the reconstruction of information flow, the solution is that should be the use of advanced logistics information technology to reconstruct the information flow.

(2) Discussing the effective solutions for the freight forwarding company to ensure the effective implementation of network marketing strategy, so as to build a more reasonable and systematic network marketing model for the freight forwarder.

## **2 Literature Review**

### **2.1 Research on Traditional Marketing Channels and Network Marketing Channels**

The authority of the marketing in the United States, Philip Kotler marketing channels refer to all enterprises or individuals who obtain ownership of goods or service or help transfer of its ownership when some goods or service moves from the producer to the consumer; 他 o put it simply, marketing channels is the specific channel or path transferring the goods and services from producers to consumers. (Kotler, 2006)

As with traditional marketing channels, building of network marketing channels should also be centered on the three utility to complete the transfer and interaction of commercial flow, logistics, information flow, capital flow in the process of transaction.

In the traditional marketing channels, the intermediaries are the important part of the channel; The reason why the intermediaries play an important role in marketing channels is because businesses can maximize its efficiency through intermediaries in terms of providing a wide range of products and access to target markets; With its business relationship, experience, specialization, and scale of operation, the profits middlemen provide for enterprises are usually higher than the channels of its own operations; but the commercial use of the Internet makes the advantage the traditional marketing intermediaries obtain with geographical and other reasons replaced by the virtual nature of Internet; meanwhile efficient exchange of information on the Internet has been changing many links of the traditional marketing channels, which simplifies the intricate relationship to a single one, and the development of the Internet is changing the structure of marketing channels.

As there is tremendous limitation in the traditional marketing strategy, therefore, e-commerce arises. In the e-commerce environment, a significant improvement is visible in the development of enterprises. The geographical restrictions, sales limitation on development of enterprise will no longer exist, and besides, product promotion and product sales have been conducted through the network. Without limit and restriction of these factors, businesses can greatly reduce business costs and are also better able to develop a rational and effective strategy on product prices. In the e-commerce environment, companies can conduct their product sales, product promotion, business philosophy, after-sales service, business commitments online. Website becomes the main channel of displaying marketing strategies. Customer demand can be delivered through the network to the enterprise very quickly, which, to a large extent, accelerates the commercial operation.

## **2.2 Literature Review on Logistics Information Technology**

### **2.2.1 Literature Review on E-commerce and Its Model**

E-commerce refers to the business activities on the basis of electronic networks. Chinese and foreign scholars put forward quite a few definitions of e-commerce mainly from the perspective of academic research, the intense speculation on e-commerce is focused on characteristics, roles and trends of e-commerce and so on. For instance, People like (Ray Port & Sviokla, 1995) (RayPort & Sviokla, 1994), (Kalakota & Whinstone, 1997), offered the definition of e-commerce from their respective perspective of research.

Kalakota & Whinstone defined e-commerce as: "From the perspective of communication exchanges, e-commerce is to achieve information, products, services or transfer payments through the telephone line, computer network or other electronic means; From the perspective of business process, electronic commerce is business-oriented practice and application of workflow automation technology; From the perspective of service, e-commerce is a tool to help manufacturers, consumers

and management staff to cut service costs while improving goods and services quality; From the online perspective, e-commerce provided capabilities for procurement and sales of product and information through the Internet and other online services. " (Kalakota & Whinstone, 1997)

The definition of e-commerce by IBM: "e-commerce, or e-business, which consists of three parts: intranet, extranet, e-commerce in the enterprise. What it emphasized is application that combines buyers and sellers, manufacturers and collaborative partners in the Internet, Intranet and extranet applications. The key to achieve e-commerce is to solve the problem of 3C: Content, Collaboration and Commerce. "

### **2.2.2 Literature review on the Logistics Information Platform**

Logistics is an information-guided economic activity accompanied by a large number of information exchange activities, and information flow is the key to logistics operations, information collection and processing plays an important role in logistics management. In the management of the logistics, the need for order number, stock number, variety, quality, specifications, customer service, transportation optimization, and a large number of timely and accurate information, omission of any relevant information and errors will directly affect the effectiveness of logistics management, thereby affecting the logistics economic efficiency of enterprises. At the same time, the information allows management simplicity. Through the information network, business partners around the world can be handed together and placed on a single information platform, ensuring fast logistics information and reliable delivery, and improving work efficiency. Development of the Internet and advanced application of logistics information technology enable the logistics information platform to become the development trend of logistics industry.

"Logistics information platform is a virtual and open logistics network one built by the application of advanced information technology and modern communication technology, " (Zhang, Yang, & Guo, 2006) considered that the Logistics Information

Platform "is the basis of storage, flow and exchange for logistics information, and is to provide basic information for information systems of the logistics industry through the sharing of data collection," Sun & Liu think it's necessary and essential to meet the needs of enterprise information systems for public information, and to support the realization of various functions of enterprise information systems; it can integrate the logistics information resources, optimize the operation of logistics industry, and then to maximize the overall effectiveness of the social logistics system; At present, local governments and companies have realized the importance of information platform in logistics activities, therefore they have started to plan and develop the regional logistics information platform aiming to speed up the logistics turnover and to improve logistics facilities and equipment efficiency and reduce costs of logistics. (Sun & Liu, 2008) According to incomplete statistics, hundreds of web service providers are engaged in logistics information services. itemized the logistics public information platform: From the perspective of service area, supporting environment, technical elements and main operators, modern logistics public information platform can be divided into: public information platform of corporate logistics (including the logistics park), public information platform of port or industrial logistics, urban logistics public information platform and regional logistics public information platform. (Zhang J. , 2006)

## **2.3 Literature Review on the Choice of Decision Methods**

### **2.3.1 Delphi Method**

Delphi method was first proposed by RAND Corporation which was used to listen to experts' opinions on an issue, such as issues of selection on third-party logistics provider pharmaceutical manufacturers face, the first step of application of this technology is to find the corresponding experts to obtain their cooperation (such as university professors, researchers, and experienced management staff in the third party logistics), and then tell the key problems to be solved to the experts, ask them to air their views respectively. (Zhou & Lv, 2007) On this basis, what we need to do is to

consolidate views of the experts, then to ask the experts to do analysis for the second time and air their views again. In this process, if the experts differ largely in their views, then to get the experts with different views to discuss and integrate their views. Proposals from group of experts can eventually be formed after repeated discussion and integration. The number of experts had best be controlled in 8-15 persons.

### **2.3.2 AHP Method**

AHP (the analytic hierarchy process, AHP) is put forward by the famous T. L. Satty's, in the 1970s, Weber, etc. made the AHP respectively for vendor (partner) choice. (Lu & Chen, 2001) This method of qualitative and quantitative methods will be put together. The basic principle of AHP: the program is evaluated on the basis of the target with the hierarchical structure, sub-goals (criteria), constraints, departments, and the matrix is judged and determined through pair-wise comparison, and then determine the largest eigenvalue of matrix eigenvectors corresponding to the weight as the corresponding coefficient, and finally work out the integrated weight (priority) of each program. (Du & Pang, 2005) Since this method allows the evaluators to compare the function table of relative importance, gives the importance levels of factors pair-wise comparison, and thus it has high reliability and minor error.

### **2.3.3 GA Law**

GA method is a kind of reference biological laws of evolution (survival of the fittest, survival of the fittest genetic mechanisms) evolved from the randomized searching method. (Rao R.Venkata, 2007) In the 1960s the U.S. Professor Holland, University of Michigan put forward it, and the application of genetic algorithms have been developed rapidly in the mid-20th century, which is mostly for optimal calculation.

### **2.3.4 Model Analysis Method Seemingly To Be Adopted In the Paper**

Based on comparison of above-mentioned approaches, we can see that each method has its own pros and cons, the combination model of the Delphi method and AHP is intended to be adopted in the paper. By using Delphi method to determine the

weight in supplier evaluation system, which can avoid too many subjective factors affecting the accuracy of the final decision and make it more scientific and accurate. Then it just makes up the shortcomings of AHP, minimize the subjective influence, combine the quantitative and qualitative to make the program more feasible and operational. (Li Y. , 2002)

### 3 Restructuring of Information Flow in International Logistics at Network Information Era

#### Information Flow Restructuring of Freight Forwarding Business in Network Era

First, it is necessary to find out the whole process of international logistics, for the freight forwarding business is an important part of international logistics. In Figure 3-1, it briefly describes the entire process of international logistics, and along with the flow, logistics, information flow, capital flow are in multi-directional flow at the same time, which facilitates the easy operation of international logistics. From the perspective of ocean shipping companies, the impact of network marketing on old value system and some remodeling ideas are analyzed along with information flow and logistics lines in this chapter.

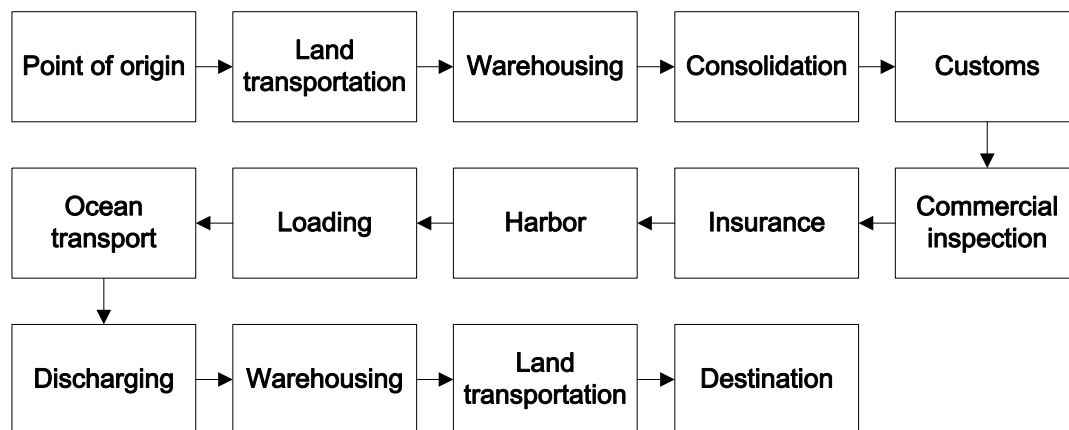


Figure 3-1 The Process of International Logistics

#### 3.1 The Traditional Information Flow Model

In the traditional mode, the information flow has a certain spontaneity and the exchange of information has some randomness, when there is agency the agent plays certain role of the information build-up, and here the agency is not a business concept, and it is more probable that many companies jointly complete it. Exports and



imports by land generally include road transport links, inland waterway, rail transport, warehousing and so on. Import and export sectors include customs, commodity inspection, distribution, concentration in port, loading, unloading and other links. Just like the Figure 3-2:

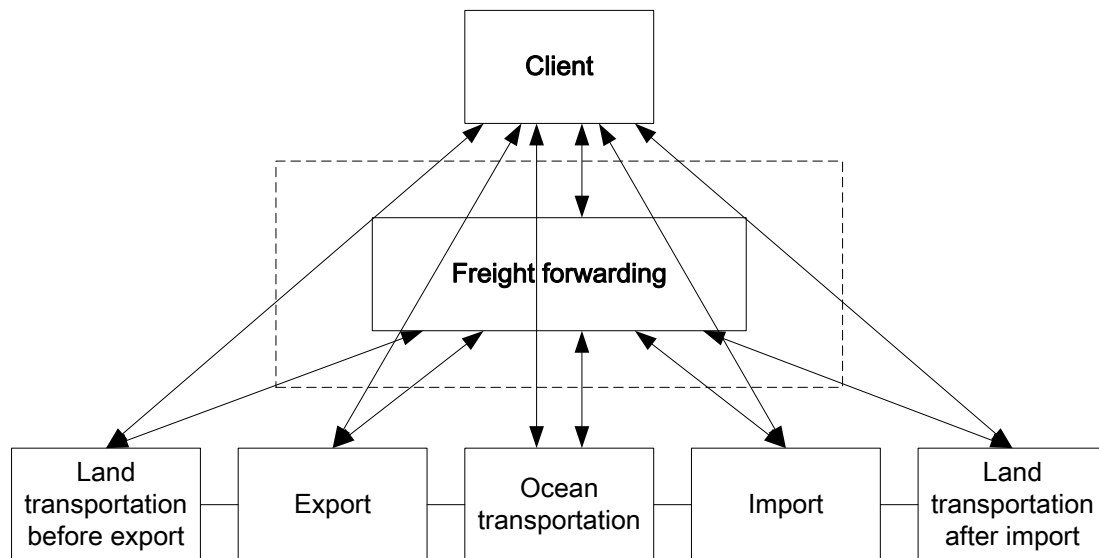


Figure 3-2 Traditional Information Flow Model

### 3.2 The Role and Characteristics of Information Flow in International Logistics

With the development of modern international logistics, the information flow has already become the important component in international logistics on the increase. International logistics information is reflection of the international logistics activities, as well as the basis of organizing and regulating the international logistics activities. Therefore, various countries in the world tighten information flow management international logistics, taking the improvement of information flow level and technology as the development strategy to reduce international logistics costs, improve service levels and quality, and enhance efficiency and operational reliability of international logistics.

### **3.2.1 The Role of Information Flow in International Logistics**

#### **1. Feedback and the Role of Control**

To strengthen the control of international logistics, there must have a feedback. The role of feedback is regulation and control, precaution against out-of-control for cost-effective operation of international logistics. Facing a growing, changing and complex international logistics large system, sensitivity, accurateness and timely feedback of the information flow is essential, just like the central nervous system of body, once the feedback effect fails to work, then the international logistics system maybe in a confusion and paralysis; Quite the reverse, with the efficient and sensitive feedback, the international logistics system can be directed and coordinated to make it active and well developed.

#### **2. Supportive and Safeguarding Role**

International logistics is a complex and large and transnational system. Information flow offers functions of support and protection for the normal operation of large systems, which is mainly shown in two aspects: On the one hand, information is the basis and security of international logistics activities, if there is no information, such an international logistics with multi-link, multi-level, multi-factor subsystems is not working properly, for the input and output of each subsystem is the premise and basis for the running of a subsystem, is the support and protection for the large systems to communicate with each other and to regulate the operation, which is a key whether the international large logistics systems can run regularly. On the other hand, the information is protection and support of the international logistics system business decisions. Once the information is poor or distorted, it will lead to errors in decision-making, which may cause the company to fall into a passive or even failure.

#### **3. The Role of Resource**

Information is important resources in the international logistics system. In a sense, the international logistics activities can be considered as distribution and competition

of articles and resources in the international markets, and the basic conditions for such activities is to master all kinds of information related to use the existing items resources to achieve maximum efficiency. In order to avoid risks, in some cases information resources can be used to replace the inventory and operation of capital.

### **3.2.2 Characteristics of the International Logistics Information**

Information flow is an important component factor of international logistics, response of international logistics activities. It has the following characteristics:

1. Flow of information with the large number and varieties is widely distributed in the international logistics. Their coverage occupies the national geographical boundaries, not only dealing with all the levels, all the spaces, and all the links in international logistics, but also closely related with external conditions like relevant national policies, natural environment, development strategies and so on.

2. Information flow in international logistics is highly effective. As the scope of international logistics is very broad, not like the domestic logistics are so easy to control, then the information flow is highly timely. Arrival of the information too late or too early is likely to cause costs to increase.

3. Information flow in international logistics has the effect of a two-way feedback, in an extremely complex, long and extensive international logistics movement, if there is no information flow, it will only become the semi-enclosed international logistics system difficult to control, and two-way feedback of information flow, will make it possible for the international logistics system to be easily controlled, coordinated with rational and efficient operation to lower the total cost of international logistics.

4. Information flow in international logistics has features of dynamic tracking. Since International Logistics is an international movement of goods, then what need to be studied is not only to study the linkages within the international logistics system, but also to probe into the overall rationalization across the logistics, obtain the assistance of relevant countries and cooperation, which requires that we must always

grasp pulses and follow-up of the international logistics. The role of dynamic tracking of information flow solved the problem. In ocean shipping, when ocean-going ships leave the port the next day, information flow are respectively sent to the country of arrival and departure to inform the cargo shipping insurance application form and produce the report of freight, when the goods has been sent, the information flow will be sent in accordance with shipping schedule at the port to conduct the timely reporting of whereabouts, and to forecast the location, time of arrival and a variety of services, for instance, when the problem like other barriers occurs, information flow will be issued immediately as a warning message. This dynamic tracking of information flow, can not only keep track of the whereabouts of the international goods flow, but minimize the loss as well as maximize the largest profit.

### **3.3 The Cost Analysis of the Traditional Information Flow**

In the traditional mode, dynamic nature and many links in the information flow lead to a lot of rising costs, the following brief analysis is as follows:

#### **3.3.1 Under the Traditional Model, Multi-Links of Information Flow Has Led To Rising Costs**

As shown in Figure 3.2, the information flow began to happen from the process of international trade. Because general terms of international trade include delivery, delivery location and delivery time, and the signing of these terms is closely related with the international logistics information. Because no matter what kind of terms, a variety of costs arising from transportation will be calculated into the cost of cargoes, location and time of delivery will depend on the ability of international logistics. Along with the logistics, information flow is bound to be produced, besides the complexity of international trade and multi-link of logistics determines the multi-links and complexity of information flow. This multi-link flow of information has led to the cost of information transmission, and these costs mainly include the following:

##### **1. Time Cost**

Because each link needs to have some necessary information and access to these information is through fax, telex, manual transmission, or mail documents, telephone and other methods, which are mostly information transmission of one-way or two-way, and every transmission and processing are time-consuming. For example, if the buyer want to know what position the cargo is in the sea, he would ask the agent, and agency shall ask again ocean shipping company to get accurate position of the ship, which requires a feedback process of inquiry; and if ocean shipping company want to pass information to all shippers, there will arise more problems, for a ship may be loaded with cargoes belong to different owners, sometimes it will take a long time to inform the cargo owners one by one.

## **2. Information Processing Costs**

Internal re-processing of information will be conducted in each link of international logistics, and after processing, on the one hand, the required information for the internal management will be generated. On the other hand, the information required in the next link will also be generated. However, certain manpower and time are not only needed for the processing and handling of information, but there may be some loopholes, which will generate correction costs as well.

## **3. Coordination Costs**

Because information cannot be completely fully communicated, it will need some coordination caused by some incomplete information, such as storage, and if information is complete and coordination is rational, then storage costs may be reduced to a pretty low, and the premise of rational coordination must have complete information, if the information is not complete or timely, storage will be used to adjust.

These problems and cost will eventually be responded to end users by freight and quality of service.

### **3.3.2 The Traditional Model of the Dynamic Flow of Information**

#### **Processing Has Led To Rising Costs**

Dynamic processing of the information flow in the traditional model has led to rising cost

For the logistics, we know that the mode of transport, status of transport, means of transportation often change. The dynamic information of the logistics is very concerned about in many links, for these information will affect their service and business organizations. What needs to be noted here: first, these dynamic may be needed in many links, not just connected to the upstream and downstream links, such as much of the information, owner and agent of ocean transport sometimes are required to be known by the insurance companies. Second, the dynamic information is highly time-sensitive, that is to say, if relevant information cannot be delivered or obtained in time, it may lead to failure in the organization of logistics. For example, in ocean shipping companies, charter transportation mode is a non-scheduled one, access to many goods sources will be dealt with right after the signing of this contract. The provisions of the charter contract often stipulates the time and port a contract is completed in, and you must master the contract change at any time to complete cargo information in port, but also to keep abreast of the dynamic information of transport ship, of course, tariffs, prices are no exception, etc. Only through the combination of information acquired during the same effective period of time can a new contract be signed. And the final price may be directly linked with full and timely degree of information, and the outdated or invalid information will directly result in the wrong price or loss of the contract. The dynamic will have some costs likewise.

#### **1. The Cost of Access To Information**

Just as we know, it is different for access to dynamic information and static information and you must update the information you acquire on the basis of a reasonable period, otherwise these information is useless. In the links of the logistics, most of the links are to obtain logistics dynamic information with merely different cycle.

However, the more timely updates will inherently produce shorter information update cycle, and the times of access to information will be increased, which will inevitably lead to the increased cost of access to information. Of course, each link has its own cycle of update, but with end-users' requirements for services and prices, how to improve the service in low-cost backdrop will rely on some new technology or management means.

## **2. Integrated Dynamics Information Cost**

Integration with the obtained dynamic information is a very complicated matter, and many links of logistics are comprehensively judged by people, which create a learning problem. That is to say, the cost-effectiveness of the experienced and the inexperienced is totally different. Meanwhile, limited by the traditional technology, it is impossible to obtain the completely dynamic information and utilize it comprehensively in most cases, which requires people who is responsible for integrating the information to rely on experience to solve the problem of incomplete information. This situation has largely enhanced the difficulty of information integration and generated the risk of cost rise as well.

## **3. Incomplete Cost of Dynamic Information**

The multi-links and dynamic information in logistics may lead to the non-performance of decision-making due to incomplete information sometimes or high risk of decision-making. Because it has multi-links, it will eventually decline in the quality of logistics services and rise in costs in spite of the problems occur in each link. Also take charter transport for example, if information of some port or inspection is not complete when negotiating the contract, it could urge the ocean shipping companies to be determined to do transaction at a certain price, even to give up a contract. Or without taking into account information changes which have already taken place such as climate change, port capacity and so on when signing the contract, then it could lead to a failed contract.

### **3.3.3 Reconstruction of the Information Flow**

Many aspects of the logistics do not see that these costs do not exist, but many environmental, technical, managerial restrictions makes the traditional flow of information continue to exist. EDI technology is widely used in a lot of logistics in the mid 80's, and with the application of EDI technology, trade procedures have been simplified, and with the gradual standardization of information, related companies have also set up internal computer systems, and the customs, commodity inspection department, the port one after another also have used EDI standards to deal with international trade logistics documents. EDI allows more rapid and accurate information transmission, information flow cost of enterprise has been reduced, internal management and operation has been improved and competitiveness has been enhanced. After entering the 90's, show-up of INTETNET has led to a global revolution, and the network marketing model is put forward and applied quickly by enterprises, which has brought new challenges to the international logistics and transportation. Information flow must be reconstructed to be adapted to this new business model.

Information-based network has brought many benefits for clients engaged in international trade, such as in the past a small business with small annual export volume, but as long as there is only one time, it must enter into international trade contracts and deal with the international transport of goods, obviously it's hard to image for such a small company to complete so many complex links independently, so many trading companies and agents appeared, and they will help these companies to complete the relevant link of the logistics, of course, they will certainly derive some benefit from the process. Network marketing has had a tremendous impact on model of the traditional approach. There have already been so many international trade conducted online, and this model in the future may substitute the traditional model. Since the contract can be made online, then the mode of transport will be correspondingly changed, then users may get the so-called "one-stop services" with low cost. To meet this demand, reconstruction of international logistics will occur. Users can obtain logistics information services on e-commerce platform of entering



into international trade contracts. For users, what he may face is not a land transport company, not a shipping company, but a body of integrated logistics business, and what he only needs to do is to deliver the goods and request to the integrated logistics operation business, and he will get his due service - the transport of goods and information feedback.

In order to meet the demand of customers, integrated logistics business will be shown up and the existing basis of the integrated logistics business is reconstruction of information flow. This entity will not actualize all links of logistics itself, but instead he will control all links of information shown in Figure 3-3:

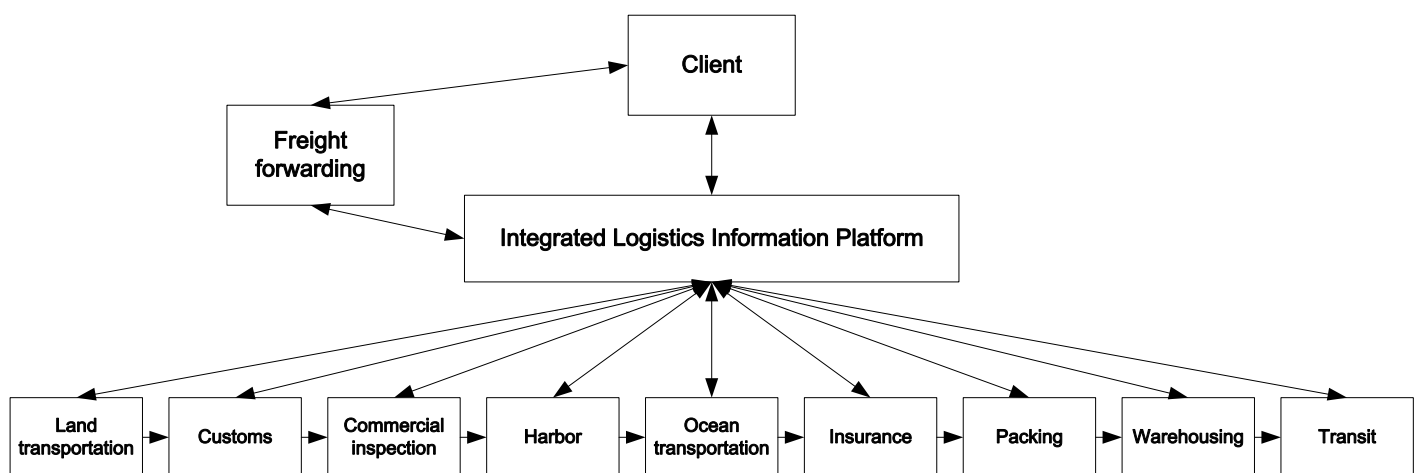


Figure 3-3 Internet Marketing Mode, the Flow of Information

For customers, the complexity of international trade has been as simple as call a taxi on the road, and it's clear that the quality of service has been improved, then those costs of traditional model has also been reduced to some extent?

The time cost caused by multiple sectors has apparently been reduced. Because each link passes a small amount of information to and obtains the complete information from the integrated logistics business, and in the meantime much of the information can be directly and automatically acquired within the integrated logistics management, then the large amounts of repeated input, information verification and processing, etc. have been reduced. Due to the completeness of information, coordination costs will also be reduced accordingly. Moreover, the warehousing and

storage time will possibly be reduced to a large extent in the integrated logistics management body through rational coordination, which will directly decrease in cost.

Likewise, the cost of dynamic information flow will be reduced accordingly owing to the reconstruction of information flow, and this model reduce the cost for information sharing greatly, so the amount of information available to be obtained increased a lot under the unit cost (time, cost).

Internet itself is a low-cost information exchange, while the reconstruction of the information flow is built on the Internet in the model of network marketing, so transfer costs for all of the information would be greatly reduced accordingly.

Technically speaking, to build such information flow must be based upon some information standards, and it will take a very long duration and high costs for the formation and establishment of this standard. It is EDI that precisely provides basic criteria of information exchange for the information flow in the network marketing model. So with the development of network marketing, the reconstruction of this information flow will gradually become mature.

### **3.4 Main Body of Information Flow Reconstruction**

In each link of the logistics we may want to use this opportunity to build an integrated logistics business, and now are being done in many links, but for the international trade, who probably or who is most likely to have the strength to complete the reconstruction?

Obviously the large-scale freight forwarding companies with developed marketing channels have financial strength and some of physical network with initial shape-up, but the effect is not that optimistic. Especially for area-based freight forwarding company with less strength, whether to abandon the traditional marketing model or to participate in the network established by large-scale freight forwarding companies, the writer will do further analysis into this issue.

### **3.5 Summary**

In the traditional mode, the information flow has certain spontaneity, randomness, as the international logistics information with characteristics of wide distribution, large quantities, varieties, time-sensitive and dynamic tracking, so in the traditional mode, multi-link in information flow led to an increase in cost, then freight forwarders is in urgent need to reconstruct the flow of information and serve as the main body in the reconstruction of international logistics. However, the reconstruction is highly demanding for the overall strength of the company, especially for the area-based freight forwarding company with less strength, then whether to give up the traditional marketing model to establish an integrated logistics information platform, or to join the network established by large freight forwarding companies, the writer will conduct further analysis in this issue.

## **4 Analysis into Status Quo of the Marketing Channel in the International Freight Forwarding Enterprises and Design of Marketing Model in Network Combination On The Basis Of Information Technology**

### **Model in International Freight Forwarding Enterprises**

The increasing maturing of information technology provides technical support for reconstruction of the entire international logistics information flow by the freight forwarding companies. Development of information technology, the concept of comprehensive logistics makes the whole the marketing channel mode of international freight forwarding business at present witness drastic changes, which enables the freight forwarding companies to have more marketing options and combinations. In this chapter the writer will analyze the current situation of marketing channels of international freight forwarding company and put forward network combination marketing model.

### **4.1 Transformation in Marketing Model of International Freight Forwarding Enterprises in Current Situation**

The marketing model of international freight forwarding business is divided into three categories, which reflects the upgrade process of the international freight forwarding business.

#### **4.1.1 The Traditional Model of International Freight Forwarding**

It refers to the practice of charging a commission on condition that goods are delivered from the owner or consignor to the carrier. Freight forwarding business play

a simple intermediary role in the above-mentioned process, and it is commonly referred as to the role of freight forwarding. Figure 4-1

It just as follows:

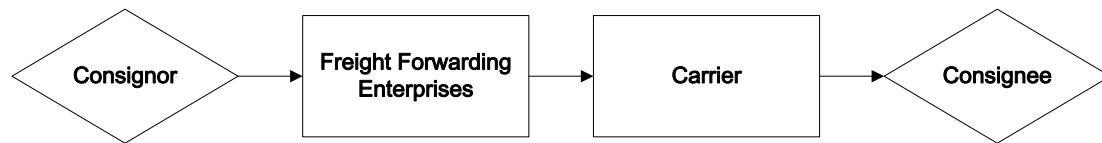


Figure 4-1 The Traditional Mode of International Freight Forwarding

#### 4.1.2 International multimodal transport mode

International multimodal transport is in accordance with the multimodal transport contract, the goods are carried by the multi-modal operator from the place where goods are received in one country to the designated place where the goods are delivered in another country through at least two different modes of transport. The multimodal transport operator uses their own transport vehicles or others to complete the task of transport in the process of transport, during which the freight forwarding companies bears full rights, responsibilities, obligations and risks of freight. In 1970s, the introduction of container transport brought along the advancement of the international multimodal transport, which have made international goods more smoothly, thus it has contributed to the development of international trade. International multimodal transport model shown in Figure 4-2



Figure 4-2 International Multimodal Transport Mode

### 4.1.3 Logistics Model

The development of the logistics has experienced a couple of stages: of distribution stage where the products or finished products are in the seminal state, the traditional logistics management phase focusing on the inventory management, to the current integrated logistics management phase to provide third-party and even the fourth party logistics services, which is not only a continuous integration process, but also an innovative breakthrough in the traditional mode of transport. First, logistics service is the improvement and development of multimodal transport, which builds up the independent means by land, sea and air in accordance with scientific and reasonable circuit under the traditional mode of transport, thus ensure the best transportation routes, the shortest transit time, the highest transport efficiency, the most secure transport insurance and lowest cost of transportation for our customers; Second, it has broken the industrial boundaries of the transport link independent of the production processes, established the planning and control of supply, production and distribution process through the supply chain theory, and completed the overall establishment and operation of the optimized production system, which enable suppliers, manufacturers, vendors, logistics service providers and ultimately consumers to achieve the win-win situation. Therefore, the logistics service is the highest form of international freight forwarding business, and the organizational work can be infiltrated into the entire process of production, circulation and consumption. Shown in Figure 4-3:



Figure 4-3 Logistics Model

In China, multimodal transport and even the traditional channel or model is still in the dominant position, while on the contrary the logistics model is merely in its initial stage. For the time being, there are three categories in concurrent co-existence in the model or channel of freight forwarding business, however, its supply-demand

relationship with customers is gradually changing from the linear model to the network mode. Selection of marketing model and their own hardware and software factor of forwarding businesses, geographical location of forwarding businesses, level of economic development, level of science and technology as well as industrial structure and other factors related.

## **4.2 Category of Marketing Channel in International Freight Forwarding Business**

Channel distribution strategy is one of the four elements of marketing make-up, and is also the only factor in the design of external agencies. Products (services) in freight forwarding company can be delivered to the hands of the owner or user only through various channels, then the marketing process is completed. Selection of channels by freight forwarding business will have a direct impact on freight rates levels and marketing effect. At present, marketing channels of freight forwarding business in China are mainly the following:

### **4.2.1 Direct Channels and Indirect Channels**

Direct channel is the freight forwarding companies provide the direct freight forwarding services for the demand side, without middleman involved. In this way, freight forwarding companies can directly conduct interest concessions to the demand side under the same conditions, which is easy to control freight rates, also to establish close relations between the two sides, to keep abreast of dynamic market information, thus to create the conditions for providing the freight forwarding companies various services. However, it tends to less efficient due to restriction of some factors such as personnel, capital and the like.

Indirect channel is freight forwarding business provides freight forwarding services for the demand side through intermediaries. In this way, rich experience and extensive network of relationships of middleman can be availed of so that ample source of goods can be constituted and the freight scale expanded as well. Indirect

channels facilitates the freight forwarding enterprises to improve efficiency, which is conducive to simplifying procedures between the freight forwarding and the demand side; but the disadvantage is the freight forwarding companies cannot find out the information of market demand, which has certain market risks, besides, the profit of each shipment will be decreased owing to some reasons like most of the freight forwarding business implement a discount price, preferential policies and the like.

#### **4.2.2 Fixed Channel and Mobile Channels**

Fixed channels are freight forwarding business meet consumer demand for freight forwarding through certain fixed place. Generally, freight forwarding companies have a fixed place of service, the demand side for freight forwarding will come over to do the formalities, and actually these places are often the beginning of product (service) displacement. Mobile channel is the freight forwarding business provides freight forwarding services based on the needs of consumers anytime, anywhere, without a fixed place of service.

#### **4.2.3 Long Channel and Short Channel**

Due to the factors like intermediaries involved, many distribution spots over a broad area, obviously it can effectively cover the market and expand the scope of services in the long channel, thus freight forwarding companies can reduce the number of human, material and financial resources. But when the channel is extended too long, the link will be increased, which will lead to increased costs, slow feedback, high distortion rate, not conducive to an accurate grasp of market prices by the freight forwarding. With its less links the short-channel can reduce the misplay and distribution costs resulted from unnecessary links, but due to the factors like directly facing the user, the market coverage is relatively smaller, and there are some limitations.



#### **4.2.4 Wide Channels and Narrow Channels**

Wide channel is the number of intermediaries with the same type used by the freight forwarding business at every level, the more lateral part of links, the wider the channel and vice versa. Wide channels have certain advantages, because of its many selection of intermediaries, so they can quickly promote the products (services) of freight forwarding companies, besides, the efficiency of intermediaries can be comprehensively assessed for the survival of the fittest, which facilitates competition between middlemen, however, If many intermediaries are selected, once the external environment changes, and the basis of the relationship is not solid, then the breakdown of cooperative relationship will do damage to marketing of freight forwarding business. Merits of the narrow channel are that freight forwarding companies and middlemen share a very close relationship, but because of too much dependence on middlemen, freight forwarding companies will be controlled by middlemen in a certain period.

### **4.3 Problems in Marketing Channels of International Freight Forwarding Business**

Competition in the market of China's freight forwarding business can be divided into two categories: one category is such as Sino-trans, COSCO and other large transportation companies, with much investment and large scale, high requirements for information technology, and such enterprises are using information and internet to intensify their strength, and it gradually makes transition from traditional freight forwarding business to the integrated logistics service providers; another is small and medium-sized freight forwarding companies accounting for 70% of the total number of freight forwarding business, which is mainly engaged in simple agency business, with less investment, higher level of competition and the like. However, two companies in marketing channels commonly have the following questions:

#### **4.3.1 Long Distribution Channels, Information Transmission Is Not Smooth**

The basic business processes of traditional freight forwarding are: making connections, inquiry, quotation, counter-offer, booking, documentary, cargo tracking. In the specific operational procedures, the import differs from the export. However, in this process, because of more relevant departments involved, the exchange of information between freight forwarding companies and the related sectors in upstream and downstream rely mainly on traditional sales manners by freight forwarder without advanced information, therefore the information is difficult to be achieved in a timely and equivalent manner, on the other hand, human error rate is very high.

#### **4.3.2 A Single Service Mode and the Lack of Value-Added Services**

Freight forwarding industry belongs to the services sectors. The services scope of majority of our freight forwarding business are still limited to cargo collection, booking, customs declaration, inspection services and other intermediary services, which still lingers in the concept of agency, and the price difference and the booking commission is still its main source of income, which doesn't have an independent value-added services capacity. In particular, part of the freight forwarding businesses with state-owned nature, although there is no lack of branches nationwide, the parent company will not operate an industry strategically. In the transaction, among the owners entering into service contracts with the freight forwarding businesses, usually those who are not familiar with the trade and transport, and the service they need is not only the transportation, but a complete logistics chain services. As a service provider, freight forwarding companies have some experience for each individual service, and so in face of customers' demand, what companies need to address is how to organize the content of these individual services together organically, relying on scientific and professional services programs and value-added services program to get more orders.

### **4.3.3 Applications of Information Technology and Low Level of Network**

The so-called informatization of many freight forwarding businesses in China is merely through e-mail, instant messaging software and the use of office software to create simple form document, and ability of computers application for information collection, storage, management and utilization capacity is comparatively weak, which is still mainly relied on the telephone plus fax and fail to form their own core strengths. According to some related statistics, more than 80% of the freight forwarding business lack IT products in China, and 85% of small and medium-sized freight forwarding businesses remain in the stand-alone business applications in terms of IT applications, such as document production, online access to information, etc. Owing to the lower level of corporate computer networks, the shortage of investments in information technology, therefore the information management pattern is so backward, and other internet-based technology services like cargo tracking and rapid response mechanism lags behind to some degree.

### **4.3.4 Information Flow and Cash Flow Management Fail To Meet the Needs of Shippers**

While freight forwarding companies are conducting operation on commodity flow, they also participate in the information flow and capital flow management in international trade, such as document production, feedback transportation and inventory information, replaceable negotiation for letter of credit and the like. In the management of capital flow, advance some costs in the process of international trade, including freight, miscellaneous fees and tariffs is the part and parcel of third party logistics operation. Cargo owners wish freight forwarding businesses to advance the above-mentioned three charges, but the freight forwarding business lags behind the owner's needs in this area.

#### **4.3.5 Lack of Highly Qualified Personnel and Shortage of Training on Staff**

Talent is the key to the enterprise's success and competitiveness. Due to lack of professionals engaged in the freight forwarding business management and the professional team in the research of freight forwarding business and specific logistics operations, and lack of overall planning and irrational distribution in personnel training and the reserves, and it results in the soaring high costs of agency, and the imbalance of personnel supply and demand. In order to survive in the environment of integration with the global economy, talent pool should be run through the whole process of enterprise development in our freight forwarding business, corporate training for competitive, efficient and more responsible talents should be introduced into the business, which provides strategy services of talent supply for long-term development of companies, constantly improving standards of corporate services.

#### **4.3.6 Weak Sense of Teamwork**

In the freight forwarding companies, many marketers are independent of one another, develop their own business and take the goods, which is in a decentralized state and lacks teamwork spirit. This way of standing apart can only be used to embrace some small clients, and for larger consumers then it need to set up the project marketing team to play the role of teamwork. Only when all members connected together to form a network entity, sharing resources, integrating marketing power can play the whole effect.

#### **4.3.7 The Low Level of Customer Relationship Management**

The essence of relationship marketing is to establish the non-trade relationship in transaction relationship, and the freight forwarding business should bring three advantages to owners: namely, reducing the overall cost of international logistics, improving their competitiveness on the core business and reducing investment in the logistics activities. However, in China, the practice of long-term partnership between

the freight forwarding business and the owner is pretty less, and only 20% of the owners shares more than 2-year co-operation agreement with the freight forwarding company; merely 25% of the owners concentrated their relationship with 1 to 2 freight forwarding business services. Apparently, freight forwarding companies still have a long way to go in the customer maintenance and should pay attention to the importance of relationship marketing and customer relationship management.

#### **4.4 Network Marketing Channel Mode Design of International Freight Forwarding Business**

##### **4.4.1 Network Marketing Channel Model of International Freight Forwarding Business**

Network marketing channel model of international freight forwarding business refers to standard form of marketing channels selected by freight forwarding companies. In order to transfer such services of freight forwarding to the customer conveniently, freight forwarding companies should select the model of the optimal network marketing and distribution channel, and conduct timely adjustment and updating to meet the requirements of the freight forwarding market. In order to expand their own market and to enlarge the number of targeted customers, freight forwarding enterprises should hunt for reliable distribution partners in addition to building on their network marketing channels by self-reliance, and achieve their own marketing objectives with low-cost way by virtue of its mature and stable marketing network to. Accordingly, the following mode of network marketing channel designed for freight forwarding business is just as shown in Figure 4-4:

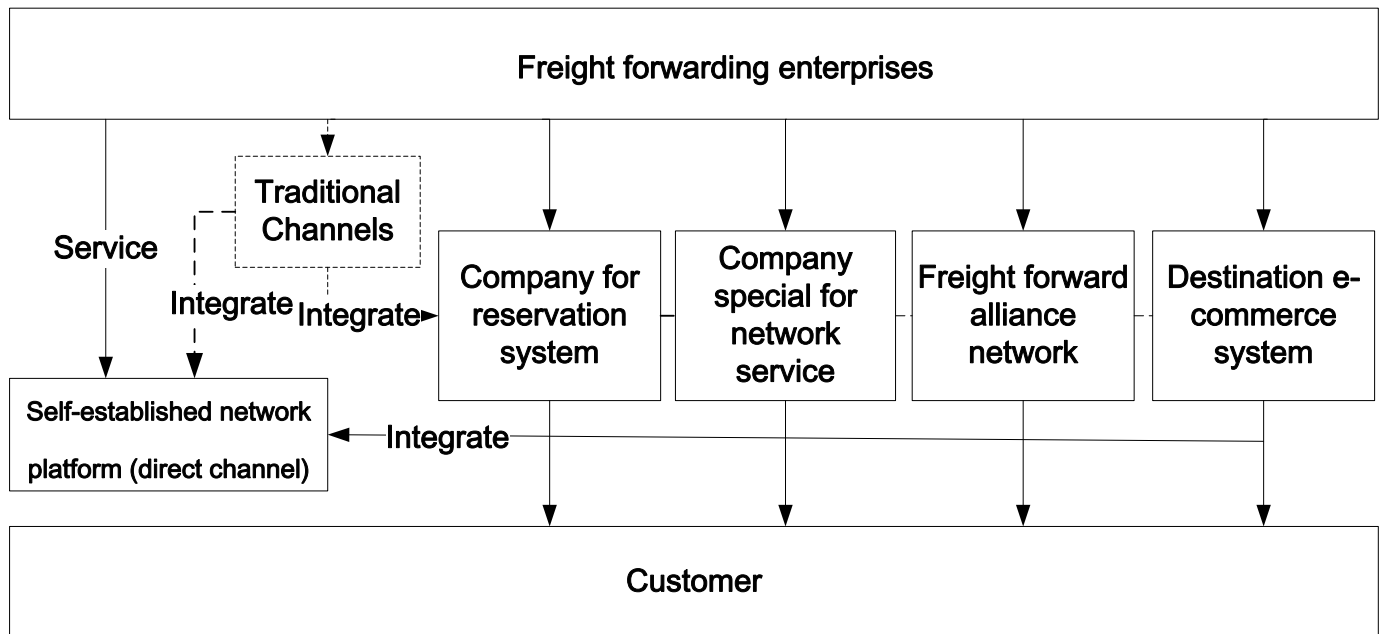


Figure 4-4 Network Channel Mode of International Freight Forward Enterprises

In the network marketing channel mode of international freight forwarding business, 15 ways were designed to reach the users, the network marketing channel model reflected the characteristics of flattening and diversification in marketing channels. This marketing channel model enables companies to communicate with marketing channel members and users quickly and efficiently and low-costly, and meanwhile, it improves distribution efficiency. As online transactions greatly has accelerated the speed of user feedback, and thus also indirectly improve the loyalty of customers.

In Figure 4-4, the traditional marketing channels is shown by a dashed line, it simply serves as an aided marketing channel to the network marketing channel, while the solid line indicates network marketing channels that lead from the enterprises to the users. In this model, companies can either use a marketing channel, or can use several marketing channels at the same time. In the network model of direct marketing channels, through building of its own e-commerce website, the enterprises conduct business promotion on the web site, publish a variety of service information,

and do transactions with customers. In addition to using the network channel for direct marketing and indirect marketing, freight forwarding companies can also make the integration of the two modes, which can also be integrated with traditional marketing channels.

#### **4.4.2 Compared With Other Traditional Marketing Channels, the Model Has the Following Advantages**

##### **(1) A Stronger Integration**

The model is not only conducted on the integration between the traditional marketing channels systems and network marketing channel system, but also the network integration between the marketing channels. On the one hand, integration between traditional marketing channels systems and network marketing channel system, the business can be expanded and the market can be developed as well as customers are maintained by means of the original system of marketing channels familiar to companies, but also can take advantage of new network marketing channel system to expand the scope of the target market, and provides better freight forwarding services to customers using a variety of advantages of online marketing channels by improving the speed of response to customers on the basis of internet merits; On the other hand, integration between network marketing channel system is one of the major advantages of this mode, for international freight forwarding business takes advantage of the network marketing channel to deliver services to customers, and there is a gap in levels of network construction for different clients: some customers need direct network marketing channels, while some indirect, but network integration between marketing channels precisely cater to the needs of different clients, thereby enhances the customer satisfaction. Integration of different marketing channels system in the new model is not only conducive to market development, but also can reduce the conflict between different marketing channel systems.

##### **(2) Cover a Wider Range**

The traditional mode of marketing channels tend to choose only one or two marketing channel systems, which makes it difficult to fully cover the freight forwarding business target market. With the advance of network technology, more and more customers are willing to get through network marketing channels to get a variety of freight forwarding services they need. The traditional mode of marketing channels may not choose a variety of online marketing channel system, and then the requirements of many customers will not be met. The model was the integration of multiple marketing channels systems, can both meet the needs of traditional customers, but that of customers for the network marketing channels, so the new model can expand the coverage of the target market and promote business expansion compared with the traditional model.

### **(3) Faster Response to Customers**

A feature of the network marketing channel is the ability to greatly enhance the speed of response to customers, provide customers with a variety of services in the shortest time needed. The model is not only applied to deliver services to customers through self-built network platform freight forwarding business, but also put into the use together with the reservation system companies, specializing network services company, freight forwarding network as well as destination network marketing system and fast and efficient network middleman, which share a common feature, that is, the ability to receive customer information quickly and timely process information, and then follow the customer's request to provide various services. The application of network marketing channel system is quicker than the speed of response to traditional marketing channels on the one hand, while the integration and application of multiple network platforms are quicker than the average speed of response to customers.

### **(4) A Higher Level of Service**

This model can be used to provide a higher level of service with online integrated marketing channels system. With the advancement of freight forwarding industry, customer service requirements for the freight forwarding business are growing, they



are not only satisfied with the access to this single freight forwarding services, but also demand various services related to freight forwarding provided by freight forwarding companies. Customers demand professional freight forwarding services, then companies can use specialized network service companies of freight forwarding to deliver it to customers; customers demand comprehensive freight forwarding services, and then freight forwarding companies can use Network Alliance to provide services to customers. The model has a number of marketing channels with a variety of services to meet customer requirements. Comprehensive services and quick response together form the advantages of high level of service in this mode.

The model not only has all the advantages mentioned above, but also reflects the various principles of network marketing channel design. Self-built networks platform and the choice of network intermediaries are based on a convenient and efficient network, able to ensure to provide customers with all the required services within the shortest time, which reflects the principle of being rapid and efficient; The purpose of the model is to offer a fast and efficient services to customers, the multiple online marketing channels systems in the model have different functions with different services catering to needs of different customers, which reflects the customer-oriented principle; Due to the international freight forwarding companies are relatively strong in terms of capital and strength, besides, the model of network brokers choose a number of intermediaries as well, which requires enterprises to pay more human, material and financial resources, and at the same time, the design of the pattern starts from the actual needs of international freight forwarding enterprises, follows the characteristics of international freight forwarding business, and reflects the principle of applicability; The model is not only conducted for the integration of the traditional marketing channels and online marketing channels, but also the integration between network marketing channels, maintaining the original target customer on one hand, expanding the scope of the target market, which reflects the principle of moderate coverage; network intermediaries in the model selected by freight forwarding companies are partners enjoy a certain reputation in the market, and can

perform stable cooperation with companies to commonly provide customers with various services related to freight forwarding, and meanwhile different marketing channels system assumes different functions, focus on target market is also somewhat different, which is conducive to coordination of freight forwarding companies, reducing unnecessary marketing channel conflicts, reflecting the principle of being stable and controllable, coordinated and balanced.

#### **4.4.3 Explanations of the 6 Specific Models:**

The first mode is self-built network platform model by business, in this mode, freight forwarding companies build their own network platform which belongs to a network direct marketing channels. On one hand, enterprises promote the company and services through website, and on the other hand, perform the sale of services through this platform, complete the online order, contract, payment and delivery. The merits of this mode are: the first is convenience for customers, customers can get access to a wide range of freight forwarding services anytime and anywhere through the website; the second is to develop new customer group, customers interested in network technology and want to try advanced network transactions can trade with enterprises on the website. However, the requirements of this model for technology infrastructure are relatively higher with very high construction costs, and in the meantime it requires the high brand awareness of enterprises, and customer need to maintain adequate trust and loyalty of enterprises, which generally applies to large-scale and well-known freight forwarding companies.

The second model is the freight forwarding companies can use the network system of reservation System Company, integrated freight forwarding network services companies, freight forwarding alliance network and destination network marketing system to achieve agency services. Reservation system in network system is the freight forwarding companies together with air company and the airlines and the network system of shipping are to establish an interface, which allows businesses to keep track of arrival information of goods source in the freight forwarding companies,

and to make reservation on agency with the companies accordingly; Comprehensive freight forwarding network services company is engaged in a variety of integrated network middlemen of comprehensive business with freight forwarding services, comprehensive freight forwarding network services company provides trading platform with a variety of business transaction and looks for the ideal freight forwarding services, and the freight forwarding services take advantage of service expansion to hunt for target customers, and customers can also find an ideal freight forwarding business through the platform; freight forwarding network refers to a number of freight forwarding companies jointly build a network platform, which is responsible for resources distribution of all freight forwarding businesses, and the appropriate freight forwarding services are transferred to customers through the acquired market information; The destination network marketing system is customers use governmental e-commerce website to find forwarding freight companies with cargo transportation destinations, for the freight forwarding companies on the destination are familiar with the local situation, plus relatively low agency fees, so the freight forwarding companies can take advantage of the network platform to sell their services.

The third model is while the freight forwarding companies establish their own companies, the freight forwarding companies draw support from network system of the reservation system company, integrated freight forwarding network services companies, freight forwarding alliance network, destination network marketing systems, for instance in virtue of network system of the reservation system company, whose companies of reservation system includes airlines, shipping companies and so on. Freight forwarding business networking platform can be connected to all major airlines, shipping companies to establish an interface among the switchboard, and freight forwarding companies can acquire arrival time of any airline or shipping company, and then the information feedback was given by the airlines and shipping companies through the network to the freight forwarding companies for self-built network platform, then the freight forwarding business conduct agency services

accordingly. The biggest advantage of this model is able to accurately grasp the time and improve the efficiency of freight forwarding services.

The fourth model is network platform self-built by the company to integrate with traditional patterns. Establishment of their own network platform realizes the direct connection and communication between enterprises and ultimately consumers. Online sales differ from direct sales. Although networks shorten distances of communication, it did not shorten the physical distance between customers and services. After e-commerce, the service mode and the method has changed, but the role of intermediaries is still necessary, and the implementation of full functionality on internet direct marketing channels requires the participation of other organizations. This model not only builds their own delivery and sales of service through network platform, but also retains the traditional marketing channels, that is, non-network intermediaries at all levels. This pattern is characterized by: one to keep the original development of the traditional marketing channels to expand the market, and the other is to carry out online transactions through advanced internet technology, expanding the scope of the target market, enriching the means of the marketing and further boosting the marketing activities effect of freight forwarding companies.

The fifth model is the mutual co-ordination between the traditional marketing channels of business and reservation system's network, integrated network services of freight forwarding companies, freight forwarding network alliance, and destination e-commerce system. For the majority of freight forwarding businesses in China, it's still more difficult to build their own network platform, for the establishment and maintenance of the platform requires a lot of financial support, so to draw support from network marketing channel intermediaries is a wise choice based on retaining the traditional model marketing channels. Enterprises can publish their own business information and provide the services for customers, and capture business opportunities and further achieve better service sales through online intermediaries. Advantage of this model is: on the one hand, the original marketing channels intermediaries can be used to expand the market, and on the other hand the

popularity of marketing network intermediaries and its marketing network can be used to open up new markets.

The sixth mode is the freight forwarding business comprehensively utilizes its self-built network platform, reservation network system, integrated freight forwarding companies, freight forwarding alliance network and the destination network marketing system, and meanwhile maintains the traditional marketing channels. In this mode, freight forwarding companies not only use the originally traditional marketing channels to expand and develop market, but also use their network platform and network of intermediaries to promote and advertise the business. The advantage of this model is to integrate the traditional marketing channels with network marketing channel combining the advantages of two marketing channels, to expand the scope of the target market, help freight forwarding companies promote business development. But the freight forwarding business need to manage a large number of marketing channel members, meet with many and complex marketing channel conflict and need to pay higher management fees, which will consume the resources of the enterprise and require the enterprise to have strong strength to manage and control.

## **4.5 Summary**

The gradual growth of the information technology, and the comprehensive mentality of international logistics makes international freight forwarding companies shift in marketing model at this stage, the author carried out analysis into existing types of marketing channels in international freight forwarding, and put forward some problems in marketing channels of the international freight forwarding business, which is mainly concentrated on the long distribution channels and unsmooth information transmission; single-way services type and the lack of value-added services; low in information technology applications and network level; failure of information flow and cash flow management to meet the needs of shippers. Through summary of the system, the author proposes six international freight forwarding business and network marketing channel models on the basis of information technology to illustrate.

However, how to select the six models for a particular business, which will be explained in the following chapter combined with cases.

## **5 Case Analysis**

The writer put forward six network portfolio channel models in the chapter four, however, there are 21,000 international freight forwarding businesses in China, businesses certainly vary from one another in mode choice, and the writer will probe into how to use network marketing combination channel mode using decision-making techniques for a regional large-scale freight forwarding company.

### **5.1 General Conditions of Enterprises**

The A Company is a leading integrated logistics solution provider. We partner with clients in all sectors and regions to identify their highest-value opportunities and serious challenges across the entire supply chain and transform them into real competitive advantages.

A specialized in Ocean Freight, Air Freight, Landside Services, Dangerous Goods Transportation and Contract Logistics. We have over 1,500 exceptional employees and expertise all around the world. Our services have reached over 20,000 locations, covering more than 120 countries. By carefully select the 1,200 qualified global agents, we have extended our service network to meet and exceed customers' needs and expectations.

### **5.2 Process Analysis**

(1). To determine whether the corporate self-build networks business platform or reserve network system of companies, integrated network services companies, freight forwarding alliance companies, the destination network marketing system, or then retain the originally traditional marketing channels.

(2). Establish an index system selected by network marketing model.

(3). Set up an expert panel for scoring.

(4). Expert conducts pair-wise comparison between rule layer level and sub- rule layer and get the initialized matrix and do consistency test.

(5). Combine views of the experts to get the relative weight of each index.

(6). According to the mutual relationship between various levels and get the combined weights of various index.

(7). Experts rate the program layer and calculate the final score of network marketing model program and determine the final selection of the program.

## **5.3 Solutions**

### **5.3.1 Overview of The Solutions**

Through the analysis, induction and sum-up of the network marketing model above, six network marketing models are obtained and respectively analyzed. For freight forwarding company A, based on its existing scale of assets, operational strength, marketing network, strategic alliance and many analysis into its attributes, combined with the Delphi method and AHP method, select one marketing model to conduct the reform on company's existing marketing pattern.



### 5.3.2 Structure on Evaluation Indicator System of Marketing Model of Freight Forwarding: Figure 5-1

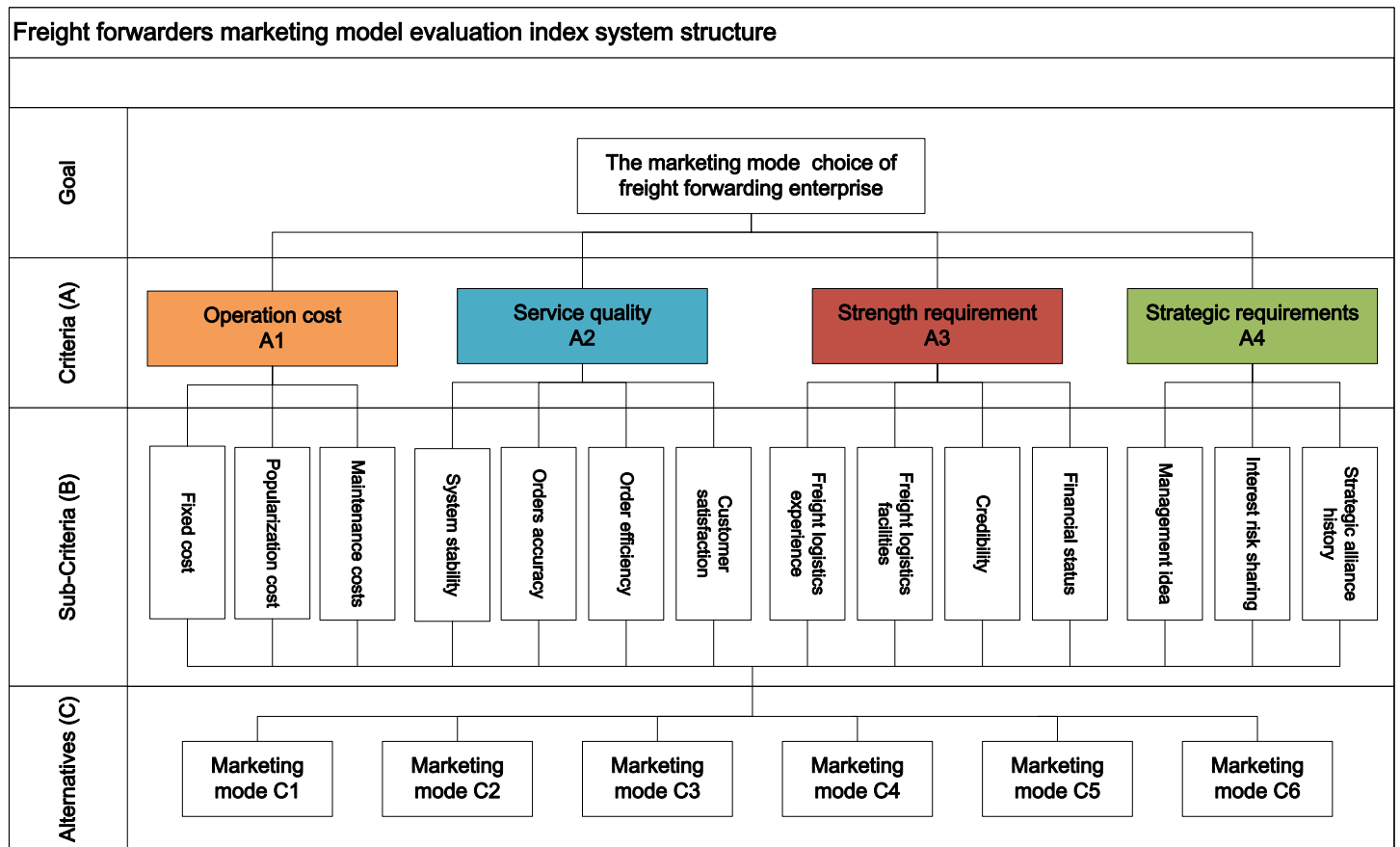


Figure 5-1 Company freight forwarders marketing model evaluation index system structure

### 5.3.3 Establish Pair-Wise Comparison Matrix to Calculate the Relative Weight of Various Levels

Design evaluation scale table as shown below, and send the corresponding evaluation scale to experts (eight experts were selected in this paper), so that they can compare importance of indicators according to the scale from 1 to 9 (For instance, in Table 5.3, on the rule layer and sub-rule layer indicators, score and establish pair-wise mutual comparison matrix, and then to do consistency test on the matrix given by experts.

Calibration	Means
1	Means two elements, have the same importance compared.
3	Means two elements, the former than a important than the latter.
5	Means two elements, the former than obvious important than the latter.
7	Means two elements, the former compared strong important than the latter.
9	Means two elements, the former compared to the extreme importance than the latter
2,4,6,8	Means the adjacent intermediate values.
Reciprocal	If the importance ratio of element $i$ to $j$ is $a_{ij}$ , then the importance ratio of element $j$ to $i$ is $a_{ji} = 1/a_{ij}$

Table 5-2 Definition of Scale

The form of comparative matrix is

$$A = \begin{pmatrix} a_{11} & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & \dots & a_{nn} \end{pmatrix}$$

Calculation of Weight

1. Taking into account the typical and representative features, take expert 1 for example (for scoring of sub-layer level), and it describes the application method of comparative matrix, and others can be conducted in similar calculations in reference to Expert 1. (Table 5.4)

	Operation cost A1	Service quality A2	Strength requirement A3	Strategic requirement A4
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Operation cost A1	1	1/5	1/3	3
Service quality A2	5	1	3	7
Strength requirement A3	3	1/3	1	5
Strategic requirement A4	1/3	1/7	1/5	1

Table 5-3 Initial Matrix

## 2. Consistency Test

In weight calculation of a single vector, we have the consistency test. Because in the process of scoring, our experts may also be inadvertently negligent by causing  $A < B$ ,  $B < C$ , but  $A > C$  is such a result does not meet the passing. If the consistency test is not conducted, then it is not very likely that a confused matrix that cannot withstand scrutiny may lead to errors in decision-making, and if matrix deviates too far from consistency of comparison, its reliability will be suspected, therefore, it is very necessary to proof-test the consistency of the matrix.

The specific method of consistency check-up: calculate the largest eigenvalue of matrix A  $\lambda_{\max}$ , if the  $\lambda_{\max}$  is greater than  $\lambda_{\max 1}$ , the consistency of various elements  $a_{ij}$  matrix A is too bad, which cannot pass consistency test and need to recalculate the  $\lambda_{\max}$  after adjustment of the element  $a_{ij}$  in matrix A until the  $\lambda_{\max}$  is less than  $\lambda_{\max 1}$ . Upon inquiry of related data, we can see that  $\lambda_{\max 1} = 3.116$  corresponds to 3 order matrix,  $\lambda_{\max 1}$  corresponds to 4 is 4.07

$$|A - \lambda I| = 0 \quad (\text{The formula for calculating the maximum eigenvalue})$$

Then matrix array is

$$A = \begin{bmatrix} 1 & 1/5 & 1/3 & 3 \\ 5 & 1 & 3 & 7 \\ 3 & 1/3 & 1 & 5 \\ 1/3 & 1/7 & 1/5 & 1 \end{bmatrix}$$

The characteristic value is 4.0501 < 4.07, by consistency test.

3. The following formula is used to calculate the relative weight of each index

$$C_{ij} = \frac{a_{ij}}{\sum_{i=1}^4 a_{ij}}$$

$$W_i = \frac{\sum_{j=1}^4 C_{ij}}{4}$$

	Operation Cost A1	Service Quality A2	Strength Requirement A3	Strategic Requirement A4	Relative Weights (W <sub>i</sub> )
Operation Cost A1	3/28	21/176	5/68	3/16	0.122
Service Quality A2	15/28	105/176	45/68	7/16	0.558
Strength Requirement A3	9/28	35/176	15/68	5/16	0.263
Strategic Requirement A4	1/28	15/176	3/68	1/16	0.057

Sum	1	1	1	1	1
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Table 5-4 Table of Matrix after Adjustment

Through the same steps above, the scoring by 8 experts was respectively collected, the relative weight of their own was calculated, as shown in Table 5.6

And the use of confidence interval in probability theory can be used to judge its credibility (degree of confidence is 0.95)

	A1	A2	A3	A4	
P1	0.122	0.558	0.263	0.057	1
P2	0.105	0.581	0.258	0.056	1
P3	0.129	0.379	0.371	0.121	1
P4	0.245	0.235	0.465	0.055	1
P5	0.193	0.368	0.368	0.071	1
P6	0.246	0.539	0.166	0.049	1
P7	0.23	0.36	0.3	0.11	1
P8	0.375	0.375	0.125	0.125	1
Average value	0.209125	0.405125	0.305375	0.080375	
variance	0.085869	0.108761	0.11656	0.032566	
Confidence lower limit	0.137	0.314	0.208	0.053	
Confidence upper limit	0.281	0.496	0.403	0.107	

Table 5-5 Chart of Weight Calculation in the sub-rule layer

No experts were excluded, so the weight are respectively as follows:

$$A1 = 0.209 \quad A2 = 0.405 \quad A3 = 0.305 \quad A4 = 0.081$$

Likewise we can calculate the relative weight of sub-layer, only the results of calculation are shown here to avoid the cumbersome

	B1	B2	B3	
P1	0.177	0.382	0.441	1
P2	0.45	0.45	0.1	1
P3	0.17	0.385	0.445	1
P4	0.162	0.539	0.299	1
P5	0.281	0.577	0.142	1
P6	0.156	0.624	0.22	1
P7	0.272	0.608	0.12	1
P8	0.101	0.225	0.674	1
Average Value	0.221125	0.47375	0.305125	1
Variance	0.110379	0.138487493	0.201543	
Confidence Lower Limit	0.129	0.358	0.137	
Confidence Upper Limit	0.313	0.69	0.474	

Table 5-6 Assessment into Relative Weight of Each Indicator in A1

From the above chart it can be shown that expert 8 was excluded, the relative weights can be obtained by the calculation on average value of the first seven experts B1, B2, B3 are:

$$B1=0.238 \quad B2=0.509 \quad B3=0.253$$

	B4	B5	B6	B7	
P1	0.148	0.152	0.32	0.38	1
P2	0.091	0.097	0.255	0.557	1
P3	0.156	0.167	0.167	0.51	1
P4	0.128	0.28	0.312	0.28	1
P5	0.056	0.106	0.258	0.58	1
P6	0.147	0.154	0.302	0.397	1
P7	0.177	0.157	0.263	0.403	1
P8	0.17	0.17	0.302	0.358	1
Average Value	0.134125	0.160375	0.272375	0.433125	
Variance	0.041339	0.055474	0.049705	0.104848	
Confidence Lower Limit	0.099	0.114	0.231	0.345	
Confidence Upper Limit	0.167	0.207	0.314	0.521	

Table 5-7 Assessment into Relative Weight of Each Indicator in A2 by Experts

No experts were excluded, so the weight of each index is as follows:

B4=0.134    B5=0.160    B6=0.272    B7=0.434

	B8	B9	B10	B11	
P1	0.156	0.392	0.055	0.397	1
P2	0.106	0.246	0.147	0.501	1
P3	0.225	0.304	0.115	0.356	1
P4	0.23	0.257	0.101	0.412	1
P5	0.128	0.28	0.28	0.312	1
P6	0.125	0.375	0.125	0.375	1
P7	0.125	0.125	0.25	0.5	1
P8	0.146	0.378	0.091	0.385	1
Average Value	0.155125	0.294625	0.1455	0.40475	
Variance	0.0471121	0.0892411	0.078834	0.0662285	
Confidence Lower Limit	0.116	0.22	0.079	0.349	
Confidence Upper Limit	0.195	0.369	0.211	0.461	

Table 5-8 Assessment into Relative Weight of Each Indicator in A3 by Experts

No experts were excluded, so the relative weight of each index is as follows:

B8=0.155    B9=0.295    B10=0.146    B11=0.404

	B12	B13	B14	
P1	0.243	0.624	0.133	1
P2	0.23	0.648	0.122	1
P3	0.355	0.429	0.216	1
P4	0.375	0.5	0.125	1
P5	0.261	0.626	0.113	1
P6	0.328	0.411	0.261	1
P7	0.289	0.515	0.196	1
P8	0.324	0.475	0.201	1
Average Value	0.308857143	0.514857143	0.176286	

Variance	0.051644388	0.091329857	0.056768	
Confidence Lower Limit	0.256	0.451	0.125	
Confidence Upper Limit	0.345	0.606	0.217	

Table 5-9 Assessment into Relative Weight of Each Indicator in A4 by Panel

Expert 2 was excluded, so the weight of each index is the average value of the remaining seven experts, it can be obtained by the following calculations:

$$B_{12}=0.311 \quad B_{13}=0.511 \quad B_{14}=0.178$$

### 5.3.4 Calculation of Combined Weight of Indicators at All Levels

When the relative weight of factors at all levels is determined, it is necessary to calculate the relative weight of factors at all levels based on the relationship between various levels in the hierarchical model. Because there are no other indicators on the target, relative weight of each index is the combination weight of indicators in rule hierarchy, so only the sub-criteria layer need to calculate the combined weight, calculated as  $B_i'$ , then

$$B_1' = A_1 * B_1 = 0.209 * 0.238 = 0.049742$$

$$B_2' = A_1 * B_2 = 0.209 * 0.509 = 0.106381$$

$$B_3' = A_1 * B_3 = 0.209 * 0.253 = 0.052877$$

$$B_4' = A_2 * B_4 = 0.405 * 0.134 = 0.05427$$

$$B_5' = A_2 * B_5 = 0.405 * 0.160 = 0.0648$$

$$B_6' = A_2 * B_6 = 0.405 * 0.272 = 0.11016$$

$$B_7' = A_2 * B_7 = 0.405 * 0.434 = 0.17577$$

$$B_8' = A_3 * B_8 = 0.305 * 0.155 = 0.047275$$

$$B_9' = A_3 * B_9 = 0.305 * 0.295 = 0.089975$$

$$B_{10}' = A_3 * B_{10} = 0.305 * 0.146 = 0.04453$$

$$B_{11}' = A_3 * B_{11} = 0.305 * 0.404 = 0.12322$$

$$B_{12}' = A_4 * B_{12} = 0.081 * 0.311 = 0.025191$$

$$B_{13}' = A_4 * B_{13} = 0.081 * 0.511 = 0.041391$$



$$B14'=A4*B14=0.081*0.178=0.014418$$

### 5.3.5 Experts Rate the Program Layer to Select the Optimal Network

#### Marketing Model

1. Brief introduction of the program layer

This marketing mix in a total of six models (C1, C2, C3, C4, C5, C6)

As noted above, C1 is the enterprise self-built

2. Experts rate these three suppliers respectively

As identical with the above, here we give the same rating scale

Judgment value	1	2	3	4	5
Means	worse	bad	average	good	excellent

Table 5-10 Scoring Criterion Chart

Exclude respective evaluation of network marketing model by expert 2 and expert 8, which is just as follows:

Assuming that  $a_{ihj}$  is the scoring on the  $j$  sub rule-layer of No.  $h$  a network marketing model by expert No.  $i$  and  $b_k$  indicates that the combined weights of the indicator No.  $k$  on sub-criteria levels.

$$\text{The total score of No. H network marketing model} = \frac{\sum_{i=1}^6 \sum_{j=1}^{14} a_{ihj} * b_k}{6}$$

Exclude the evaluation of the alternative network marketing model by expert 2 and expert 8, which is just shown in the following:

C1	P1	P3	P4	P5	P6	P7
B1	2	3	2	2	3	2
B2	3	2	3	3	2	1
B3	2	1	2	2	2	3
B4	3	4	5	4	5	4
B5	4	3	4	3	4	3

B6	3	4	3	4	3	3
B7	4	3	3	3	4	3
B8	2	1	1	2	1	1
B9	3	1	2	1	1	1
B10	2	2	1	1	2	1
B11	1	1	1	3	1	2
B12	2	1	3	1	3	3
B13	3	2	3	3	2	3
B14	2	2	3	3	2	2

Table 5-11 Scoring of Experts on C1

**C1=2.524285**

C2	P1	P3	P4	P5	P6	P7
B1	3	2	3	4	3	3
B2	4	3	2	3	4	4
B3	3	4	3	4	3	3
B4	1	2	3	1	2	3
B5	3	3	2	3	3	2
B6	2	2	1	3	2	2
B7	3	2	2	3	2	3
B8	4	2	4	3	2	3
B9	3	4	3	4	5	4
B10	2	4	3	2	3	2
B11	3	3	4	2	4	2
B12	3	3	3	3	2	3
B13	2	2	2	2	2	2
B14	3	3	3	3	3	2

Table 5-12 Scoring of Experts on C2

**C2= 2.791314**

C3	P1	P3	P4	P5	P6	P7
B1	2	2	2	3	2	2
B2	3	1	3	2	1	1
B3	1	3	1	3	2	3
B4	4	5	4	5	5	4
B5	4	5	5	4	5	5
B6	5	5	3	5	4	4
B7	5	4	5	4	5	5

B8	2	1	1	1	2	1
B9	1	1	2	2	1	1
B10	1	2	1	2	1	2
B11	2	1	1	1	2	1
B12	1	1	1	2	1	1
B13	2	2	2	1	2	2
B14	3	1	1	2	1	1

Table 5-13 Scoring of Experts on C3

**C3= 2.802596**

C4	P1	P3	P4	P5	P6	P7
B1	3	2	2	3	2	3
B2	2	3	2	2	2	2
B3	3	2	2	3	2	3
B4	5	4	5	5	4	5
B5	4	5	5	4	5	4
B6	4	5	4	5	5	5
B7	4	4	5	4	4	4
B8	2	3	3	3	1	3
B9	2	3	2	1	3	2
B10	2	4	1	1	2	2
B11	2	3	3	2	1	1
B12	3	2	3	2	3	3
B13	3	4	3	3	2	2
B14	3	3	3	2	3	3

Table 5-14 Scoring of Experts on C4

**C4= 3.15229**

C5	P1	P3	P4	P5	P6	P7
B1	4	2	4	4	3	2
B2	2	4	2	4	2	3
B3	4	4	3	3	3	4
B4	3	2	2	2	3	2
B5	2	3	3	3	2	3
B6	3	3	2	3	3	3
B7	3	3	3	3	3	2
B8	4	3	4	3	4	3
B9	3	2	3	3	1	3

B10	3	2	2	2	3	2
B11	2	3	3	2	3	2
B12	2	2	2	1	2	1
B13	1	3	2	3	1	2
B14	2	2	2	3	3	2

Table 5-15 Scoring of Experts on C5

$$C5=2.714326$$

C6	P1	P3	P4	P5	P6	P7
B1	1	1	1	2	2	3
B2	2	2	2	3	3	2
B3	3	2	2	2	2	1
B4	3	3	4	3	3	3
B5	3	2	4	5	3	5
B6	5	3	3	2	4	2
B7	3	4	3	4	3	1
B8	1	1	1	1	2	1
B9	2	1	2	1	1	1
B10	1	1	1	2	2	1
B11	2	1	2	1	1	2
B12	1	2	1	2	2	1
B13	2	1	2	1	2	2
B14	1	3	1	2	1	1

Table 5-16 Scoring of Experts on C6

$$C6= 2.270207$$

C1	C2	C3	C4	C5	C6
2.5242853	2.7913143	2.8025963	3.1522895	2.714326	2.270207

Table 5-17 The Summary Each Mode Score

It can be seen from the above calculation the optimal solution is C4, that is, the mode of corporate self-built network information platform integrated with the traditional marketing channels.

## 5.4 Case Summary

We can see that the scoring by experts for selection of suppliers in this case is a very critical factor. So we must have to make a detailed investigation into its professional standards, research scopes before invitation of experts. For example, in this case, eight experts are required to be familiar with the features of freight forwarding network marketing model in determining the combined weight of each index on the sub-criteria layer. On solution layer, the selected six experts are supposed to be very familiar with the situation of three marketing models and advantages and disadvantages of marketing model after combination.

With the continuous development of freight forwarding logistics industry, companies continue to conduct self-improvement to move forward. This is a dynamic process, future development trend is oriented towards large-scale and integrated development of information network platform, and much more personalized and custom-made services are offered while providing services to the homogenization. It is not difficult for us to see through cases that the fourth model is more conducive to customer service and increase ability to win orders for large-scale regional freight forwarding businesses. However, the single network marketing model does not meet the needs of different customers, at the initial stage of development, for regional large freight forwarding company, its business diversification is the multi-functional integration of the ship-owners in the region, shipping agency, booking agent, NVOCC, near ocean and inland shipping carrier, container yard and the like, with multiple goods supply structure of network containers, bulk cargo and project cargo as well as better network in the region, which makes the enterprises need to adopt a combination of two marketing models. However, the combination of various marketing mode will inevitably produce the integrated problems, so on the basis of capacity of integrated operation in the company, no more integration of the marketing model will be chosen.

What particularly needs to be noted is that the freight forwarding information system, development of network platform is not the bottleneck of company integration system, and in fact for these companies walking in the forefront of the industry, which become a difficult problem. In this process existing staff are required to be trained to be familiar with the skilled use of the new system, which is bound to affect the company's capabilities of order processing, which further directly affect the normal operation of the company. In addition, the traditional customers is more adapted to the originally traditional marketing model, the marketing model based more on interpersonal relationships in the early development of the industry in China is relatively acceptable, and no freight forwarding companies can give up this huge traditional market. Therefore, it is more suitable for regional large-scale freight forwarding company A to use the fourth network marketing combination model. How to deal with the relationship in the model will be problems the further to be solved by company.

## **6 Conclusion**

### **6.1 Conclusion**

With the information era's coming, it is doubtless that the network marketing model will replace the traditional marketing model. The growth of international trade from economic globalization and trade liberalization is considerably quick, which bring both opportunity and challenge to the freight forwarding enterprise in China. The companies in China have to make full use of favorable factors, using the charge of the competitive environment and rules because of network marketing, so as to complete the strategic transfer from shipping agent to global logistics service basing on sea transportation. The strategic transformation will result in closer contact between the freight forwarding company in China and the client, lower cost and ability to provide one-step service, and rise in value for the informative, and then to gain the long-term competitive advantage in the fierce competition.

In order to achieve such change, the analysis on the shock must be carried out from the height of international logistics and the perspective of the freight forwarding company. The shock is principally characterized by the tendency of vertical integration under network marketing model reflected in all sessions of logistics. It is also reflected as the change of role of foreign competitors from single session performer through various way, and the participation of them in international logistics area. The ocean shipping company in China must adopt the strategy of information integration instead of comprehensive integration to achieve semi-integration controlling the logistics strategy and then to face such challenges and gain competition advantage.

However, we can see that the network market model of informationlization, especially one with highly-integrated global information platform and the integrated logistic service, for the freight forwarding companies in China, is a goal to achieve in a long way. Due to different network structure of every company, different market players, various scale of companies and other element, there are various ways to adopt network marketing model, and then the traditional models can be transformed. Under such circumstance, practicable and effective combined network marketing model may be created from a strategic perspective with the consideration of actual situation of the company and all related elements, which will combine the traditional one and the network model, find a road for supporting each other. For example, it can be seen that the choice of combined network marketing model of company A in chapter 5 demonstrates the integration of traditional marketing model and self-constructing network information platform. It occupies its original market through the application of traditional model on the one hand, and also provides delayering service for the client through their own network information platform, and so as to improve the ability to get orders. Company A attracts many small and medium freight forwarders to its platform, increase its controlling ability to these agents, which makes it more active and complete the transition to network marketing model.

## **6.2 Further Study**

During the writing, I took a great amount of documents in China and other countries, and collected much data and materials. However, from the perspective of theoretical innovation, I have not discussed some specific and detailed methods for international freight forwarders to effectively use network marketing channels because of the complexity of model construction and my limited experience. There are many problems for these companies to exercise network marketing channel strategy, e.g. the efficiency of channel management. Besides that, the efficiency of model I designed has not been checked by the practice, and I will make efforts on the following aspects in further study:



(1) Combining the practice with theoretical innovation, using the practice to inspect and value the level of efficiency of network marketing channel model of the freight forwarding company, and then to improve its theory.

(2) Discussing the effective solutions for the freight forwarding company to ensure the effective implementation of network marketing strategy, so as to build a more reasonable and systematic network marketing model for the freight forwarder.

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