# Study on the Selection of Logistics Distribution Mode of B2C Electronic Commerce Enterprise

Zhang Xiaolei School of Economic and Management Shengyang Aerospace University Shengyang China 32682661@qq.com

Abstract—B2C e-commerce businesses in order to solve this problem, several common logistics by mode of presentation and analysis, preliminary to achieve not only improve the level of logistics services, and reduce the logistics sector to achieve the target cost, the logistics and distribution patterns become B2C the advantages of e-commerce businesses, the ultimate goal is to find some of the distribution model for enterprise development, B2C companies make better and faster development, making B2C model become a popular favorite kind of consumption patterns.

Keywords-B2C;Electronic;business;enterprise;Distribution model; SWOT analysis

#### I. INTRODUCTION

E-commerce logistics refers to that logistics enterprises provide related electronic commerce application service for consumers with the four advantages including capital flow, business flow, logistics flow and capital flow with the core as logistics as core on the basis of realizing logistics electronization

### A. Great Role of logistics on E-commerce

The role of logistics on development of electronic commerce is significant. The online information transmission, transactions, settlement, logistics distribution are the four parts of the whole process of electronic commerce. The integrity of business activities will involve the flow steps including capital flow, business flow, logistics flow and information flow.

### B. Logistics is the Basis for E-Commerce to Display Its Own Advantages

In the background of e-commerce and in the whole process of commodity exchange and production, without logistics distribution, the sections from production and processing to market products cannot be realized. Logistics happens after business flow and serve the business flow. In the trading behaviors of B2C, customers complete transaction behaviors through the shopping website. This is only the transfer of ownership of goods, namely, business process flow.

# C. Rapid Development of E-Commerce Needs Logistics as Support

According to the present situation, each country pays more and more attention to logistics industry. A lot of advanced technology such as GPS, GIS, EDI and RF are applied in the logistics system and practical operation. In the continuous upgrading of the logistics system, logistics plays a more and more important role in electronic commerce. The great supporting role of logistics makes it obtain great improve on the index of transaction quantity, this further improves the efficiency of B2C electronic commerce, and the economic profiting has increased.

### D. Problems of Chinese B2C Electronic Commerce Development

First of all, the distribution operation in the economic environment is not mature, and it lacks the e-commerce business logistics information system fitting the modern distribution networks. The logistics in China is mostly played by transportation enterprise or traditional warehousing service providers.

Secondly, delayed logistics distribution and inaccurate rate causes high distribution costs. The difference between traditional and electronic commerce is that the influence of distribution on the B2C electronic commerce mode of enterprise is profound. The actual operability of logistics influences realization of final transactions to a large extent. In fact, often a variety of error conditions happen. It is that the distribution is not timely or that the delivery point is wrong or the mail is not customer' purchase.

Finally, uncertainty of customer needs causes difficult management of logistics distribution activity management. Shopping randomness and dispersion characteristics often lead to the development of distribution toward small batches, multi levels and high frequency. While considering the high level of service and small logistics cost, there must be a higher requirement on reasonable use of vehicles, the dispatch of distribution schedule and distribution routes.

### II. ANALYSIS OF CHINA'S EXISTING B2C E-COMMERCE LOGISTICS MODE

### A. Self Operated Logistics Mode.

The self run logistics mode refers to that electronic commerce enterprises achieves a functional mode including control management, coordination and organization through investment funds, material and human resources to build a certain size of the warehouse, distribution center, transportation and other infrastructure with the purpose of achieving the enterprise strategic planning. This mode not only increases the integration of enterprise sales, production and supply, which is useful for

improvement of the systematic level. This can also reduce the cost of enterprises and meet complete distribution requirement and can also make full use of the enterprises to distribute resources and to expand the external market.

### B. Third Party Logistics

The third party logistics refers to that production enterprises take the purpose of concentrating core competences, entrust its logistics business to logistics companies with the form of contracts, and keep in contact with cooperators through the information system to achieve management and control of the whole logistics process. The third party logistics is the main form of specialized logistics with the development of the logistics industry as foundation.

### C. Common Distribution Pattern

In the actual operation of the process, due to differences in common distribution and cooperation forms, environment and customer service, there are large differences in the operation process of common distribution. In electronic commerce, the common distribution operation is shown in Fig. 1.

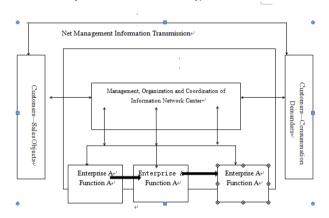


Figure 1. Ordinary Operation Course of Common Distribution

### D. Strategic Logistics Alliance Mode

A logistics alliance is an organization form between independent enterprises and market transaction relationship, and it is a relatively stable, long-term contract relationship formed due to the need to reach some aspects of the development. There are many forms of strategic alliances. There are many reasons for occurrence of the forms. They are specifically displayed in the forms of asset independence management. asset and misappropriation. Table 1 summarizes different types of existing alliances.

TABLE I. CAUSES AND TYPES OF STRATEGIC ALLIANCE

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ą.	Poor market relationship↓	Contractual relationship₽	Formal ownership⊖	Formal integration¢
Forms of Alliance	Network organization↔ Opportunistic alliances↔	The sub-contracting management, licensed management and privilege management.	Joint venture₽	Acquisition and merger∂
Influence on Asset Management∂	Assets Don't need joint management∂	Asset management can be separated.ಳ	Assets need joint management $\wp$	
Asset independence	Assets can not be independent	Asset / Technology+ Independence√	Assets <u>can not</u> be independent $\varphi$	

### III. METHODS FOR CHOICE OF B2C E-COMMERCE LOGISTICS DISTRIBUTION MODES

### A. Determination-Type Decision Method

Determination-type decision making is that a distribution pattern has only a kind of determination results, and the decision on which distribution mode can be chosen can be made only with plan comparison. These issues are generally target decisions. At this time, enterprises can choose logistics distribution modes through value analysis. The value formula V=F/C (where V stands for the value coefficient, F function, and C cost) is used to calculate the value coefficients of self operation, the third party logistics and common distribution mode. According to the formula of value, if the V of a logistics distribution mode is larger, the distribution value of the model more is larger. According to the value of V, best distribution mode of an enterprise can be chosen.

### B. None-Certainty Type Decision Making Method

None-certainty decision making refers to the decision making with great subject with distribution results and probability unknown. There are three items of main conditions, namely, the first are two or more than two alternative distribution modes can be chosen, the second is the clear expectations of the decision maker, the third is that there are many cases unchanging with the decision makers' will. As a decision method, the uncertainty decision making has strong subjective arbitrariness. However, there are also some recognized decision criteria for enterprises to make choice of delivery modes.

### C. Risk-Type Decision Making Method

Risk-type decision making refers to decision making according to the results and probability obtained through prediction. Because the natural state cannot be controlled by decision makers, the result of decision has some risks. The risk-type decision making takes the expectation value criterion. Generally, the first is to calculate the expectation value, and then decision is made according to expectation results through the calculation and the nature of the index.

### D. SWOT Analysis Method

The SWOT method is that through comprehensive consideration of various factors in external environment and internal conditions, the system is valued and the best operation strategy is chosen.B2C e-commerce enterprises should choose distribution patterns according to the SWOT analysis method. The following main factors should be considered, the first is the potential internal advantages, such as the talent advantage of logistics enterprises, the

distribution advantage chosen, distribution infrastructure advantage, etc, the second is the potential internal weaknesses, such as backward logistics facilities, the contradiction between the advanced logistics management experiences and lacked professional logistics management talents, high distribution cost etc, the third is the potential external opportunities, such as the support encouragement of logistics by macro-economic policies, increasing logistics distribution transactions, etc, the fourth are potential threats such as poor economic environment, reduction of competitors' logistics cost, contradiction between advanced logistics management talent supply and demand, etc. When the SWOT analysis method is used to select the method of the distribution mode, the internal and external factors should be found according to the strategic goals of enterprises. These factors severely restrict the B2C enterprise distribution activities and development. According to a unified standard, the factors should be evaluated, and the disadvantages, advantages, threat and opportunities which B2C enterprises faces can be found. Finally, the distribution mode can be chosen for enterprises. Distribution Mode Selection Optimization

### 1) Powerful Large Enterprises Select Self Operational Distribution Mode

For I-type enterprises, such enterprises have many external opportunities and good internal advantages. The logistics service level directly affects the company's core competitiveness, self-operational logistics mode makes the enterprise firmly control its own core competitiveness, and the mode provides powerful support for production, sales and management of enterprises. The actual conditions of Chinese enterprises show that large manufacturing factories, home appliance chain businesses and other retail companies have their own huge marketing channels with many years of operating in the country and have advanced logistics and first-level logistics team. With rapid development of network technology and economy, the enterprises can make integration of their own resources for great absorption of external resources, construction of logistics network and formation of a suitable logistics distribution system.

### 2) Logistics Outsourcing is Best Choice to Enhance Core Competitiveness of Enterprises

Many small and medium sized enterprises, enterprises are in type III. That is to say, they have has certain disadvantages and faces great threat. The enterprises should reduce the internal weaknesses, and avoid external threat. Outsourcing mode of logistics service can reach concentration of various resources and enhancement of core competitive ability. If distribution centers are made in unclear circumstances, cost of objects, property and talent would be wasted.

Outsourcing and Self Operation Combining Mode Makes Enterprise Operation More Flexible

IV-type enterprises have the corresponding internal advantages. For example, they have their own warehouses, purchasing departments and their own regional distribution centers. However, with the continuous development of business, enterprises are facing corresponding uncertain external factors, If the expansion of the enterprise logistics system is made in blind status, the enterprises' investment risk will increase. The ultimate goal of distribution has a too large range, the logistics operation process is complex,

and most small and medium sized e-commerce enterprises entrust distribution business to the third-party logistics distribution company for processing. Because the operators consider strategic need, inventory cost, data information and stock loss in emergency and other factors, production enterprises may set up their own logistics centers. Through combination of self-operation logistics with the third-party logistics, enterprise operation can meet the flexibility requirement and further strengthen customer loyalty.

## 3) Common Distribution is Main Trend of Distribution Enterprise by B2C Enterprises

Type-II enterprises have great external advantages. However, these enterprises have obvious weakness, and they cannot display the enterprise scale benefit. How to use the huge external advantages and to avoid their disadvantages is becoming the problem for most B2C enterprise to solve. The enterprises should take the road of logistics strategic alliances and choose common distribution mode to establish a joint body of distribution, to avoid unnecessary competition among enterprises and to improve the bargaining power with suppliers. Reducing purchasing cost of enterprises, and choosing the mode of common distribution can also achieve the optimal allocation of logistics resources and apply the advantages of combination bodies for improvement of efficiency, reduction of logistics cost and avoidance of extensive wasting behaviors.

#### IV. CONCLUSION

Based on study about choice of logistics distribution modes for B2C electronic commerce enterprises, first of all, the description of the background of electronic commerce logistics is made, the definition and characteristics of ecommerce is summarized, e-commerce model is further subdivided, and brief introduction of logistics development situation of the B2C mode in China is made to find out the problems to solve. Logistics distribution mode of B2C enterprises is studied, the existing problems of selflogistics, third-party logistics, operation distribution, logistics strategic alliance, etc are analyzed and experiences are obtained. Choice of the logistics distribution mode suitable for the enterprise is the key to for the enterprise to develop electric business, which reflects importance.

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