

# Research on Business Model Innovation of Logistics Enterprises

Yanhong Liu

Beijing Wuzi University, Beijing, China

Email: 1329273987@qq.com

**How to cite this paper:** Liu, Y.H. (2016) Research on Business Model Innovation of Logistics Enterprises. *Modern Economy*, 7, 1720-1727.

<http://dx.doi.org/10.4236/me.2016.714150>

**Received:** November 5, 2016

**Accepted:** December 16, 2016

**Published:** December 19, 2016

Copyright © 2016 by author and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

---

## Abstract

At present, the business model innovation has become the mainstream of enterprise innovation; logistics enterprises must carry out the business model innovation in the face of environment change. Firstly, this paper analyzes the evolution and connotation of business model and lays theoretical foundation. Secondly, it analyzes the influence of environmental change on the logistics enterprises business model. Finally, it puts forward 5 kinds of logistics enterprise business model innovation: cross-border business model, mutually beneficial business model, open business model, supply chain integration services business model and multiple platform business model. These provide a reference for the logistics enterprises to carry out the business model innovation.

## Keywords

Logistics Enterprise, Business Model, Innovation

---

## 1. Introduction

Modern logistics industry is a new industry in China; it is an important industry to promote economic development. At present, Chinese logistics enterprises can be divided into three categories from the function: 1) transport type: mainly engaged in the transportation of goods, including express delivery service or transport agency services; 2) storage type: mainly engaged in warehousing business, providing customers with cargo storage, safekeeping, transfer and other storage services; 3) integrated service type: engaged in a variety of logistics services business, providing customers with transportation, freight forwarding, warehousing, distribution and other logistics services. From the point of logistics services object, logistics enterprises can be divided into self logistics enterprises, third party logistics enterprises and the fourth party logistics

enterprises. But at present, the logistics enterprise's business model has the problems such as homogeneous competition, single profit model, lack of the deep mining of customer demands. In addition, with the constant change of customer demand, the rise of electronic commerce, the era of big data, as well as the supply-side reform and other changes in the environment, the competition in logistics industry is becoming increasingly fierce. These changes of environment have encouraged logistics enterprises reform and innovation. Nowadays, the position of business model innovation in the enterprise innovation is increasing day by day. Logistics enterprises should fully analyze the business model, enhance the core competitiveness of enterprises through the continuous innovation of business model, promote the ability of sustainable development and clear the way for the enterprises development. This paper will comprehensively analyze the impact of current environmental changes on the logistics enterprise business model, and then put forward the new direction of logistics enterprise business model innovation, it can provide some guidance and reference for logistics enterprises business model innovation.

## 2. The Connotation of Business Model

With the rapid development of e-commerce, business model innovation has become an important way to enhance the core competitiveness of enterprises. Currently, the business model has not yet a mature theory, scholars have different views on the connotation of the business model, the definition of the concept of the business model is not clear.

### 2.1. Evolution of Business Models

The definition of business model was first proposed by TIMMERS PAUL, and then scholars began to study the meaning of the business model. Wen Cheng *et al.* has reviewed the evolution of business model theory systematically and deeply. On this basis, the author studies three stages of the development of business model theory further.

#### 1) The first stage: the business model that focus on a single level

Due to the different levels of concern about the meaning of business model, scholars have different views on the definition of business models and formed different point of view. From an operational point of view, the business model describes how companies operate, this perspective of business model generally includes business processes, organizational design, as well as business actors and other elements. From the profit point of view, many scholars believed that business model is a method to make money, to gain more advantage than the competitions. At this point, the business model mainly includes the source of income, cost structure and other elements. Finally, the connotation of business model gradually extended from the operational level, economic level to the strategic level. Scholars focused their attention on the provision of value, customer segmentation, and so on, business model refers to what products and services companies use to provide customers with value. At this point, business model mainly includes the value proposition, the core business, customer segmentation and other elements [1].

### 2) The second stage: the business model based on system theory

After the development of the previous stage, scholars recognized single level of business model can not highlight the nature of the business that in order to survive and develop in the competitive environment and easy to ignore the impact of other factors to the enterprise. At this stage, scholars regarded the business model as integration of different levels of operation, strategy, and profitability. Scholars known that business model is a complex combination of all elements, but there were not much research on its internal logic. This phase of business model is the organic combination of all elements in the first stage.

### 3) The third stage: the logic analysis of the business model

After a lot of research on the elements of business model, at present, conceptual model of business model has become the mainstream of the concept of business model research, most scholars defined business model from multiple perspectives, they considered business model includes a series of elements, and its core content is whole of the coordination and matching of these elements. The author found that four constitutive model proposed by HAMEL, nine factor model proposed by OSTERWALDER, three dimensional model proposed by Jingwei Zhang *et al.* were currently cited with high frequency. One of the most attention is the nine factor model proposed by OSTERWALDER, the basic principle of OSTERWALDER business model describes how to create value, transfer value and obtain value, it reflects the process of business operations, the source of profit and strategic positioning perfectly. But the author thinks that the business model concept model contains more elements, the logical relationship between elements is too complex, so it increases the difficulty of the application [2].

## 2.2. The Connotation and Characteristics of Business Model

By combing business model development stage, the content of business model is more clear. In short, business model contains a series of elements and their logical relationship, through combing with the various elements proposed by scholars, the author summarizes a good business model at least contain the following 8 elements: value proposition, consumer target groups, distribution channels, customer relationship, value allocation, value chain, partnership, core resources. Enterprises achieve customer value proposition and sustainable profitability through the mutual coordination and operation of all elements.

The business model is a system that enterprises create and deliver customer value and enterprise value. It is a tool for enterprises to obtain and maintain competitive advantage, which accurately describes the effective integration of internal strategic positioning, operation mode, and revenue mechanism, as well as the cooperation mechanism between external and stakeholders [3]. This paper presents the following 4 characteristics of business model:

#### 1) Systematic

The business model is an overall concept and system, it contains a series of elements

and these elements must have certain internal links which link up all elements together and form an organizational structure system [4].

#### 2) Dynamic

Business model includes operation model, profit model and strategic positioning of enterprises, so that business model is not static, enterprise needs to change its strategic position, profit and operation mode according to the dynamic environment.

#### 3) Sustainability

As an architecture system, the composition of the elements of business model need have consistency: Including the consistency of enterprise internal activities and the structure rationality under the given external environment, namely the external consistency. A successful business model need bring sustainable development of competitive advantage for enterprise.

#### 4) Uniqueness

Nowadays, it is necessary to carry out the business model innovation, and create a unique business model for themselves business if an enterprise wants to survive and develop in the increasingly competitive environment.

### 2.3. The Relationship between Business Model and Other Models

In order to further clarify the concept of business model, the author analyzes the relationship between business model, operation model, profit model and logistics model. Business model has the characteristics of integration, and other models service the business model [5]. Details are shown in **Table 1**.

## 3. The Influence of Environmental Changes on Logistics Enterprises Business Model

### 3.1. To Promote Cross Boundary Management

“Big data” is not only a kind of new technology, it is also a way of thinking, it has changed the resource environment, technology environment and demand environment needed by enterprise survival, it has also caused the reconstruction of the resources, the value, the structure, the relation and the boundary of enterprise. In the era of increasingly sophisticated Internet technology, enterprises begin to redefine the boundary range under the application of Big Data technology. Cross boundary management has become one of the forms of business model innovation. Such as SF EXPRESS, SF EXPRESS became the express industry giant with the characteristics of advanced logistics technical equipment and the fast distribution speed, and conducted in-depth cooperation with e-commerce giant Alibaba. With the SFbest.com on-line in 2012, SF crossed into the field of electronic business and expanded the boundaries of the enterprise. Under the background of big data, the boundaries between enterprises become more and more blurry, logistics enterprises should not only pay attention to the industry competition and expansion, but also need to expand the study to the entire industry chain and free competitive market, to achieve cross boundary operations [6].

**Table 1.** Links and differences between business model and other models.

Links		Differences
Business model		The business model is to make money through what channels and ways, The main path is to meet the customer's value proposition, emphasize the realization of the sustainable development of enterprises.
Operation model	Business model is the organic integration of operation model, profit mode and strategic positioning, business model has the characteristics of integration, and other models service for it.	Simply speaking, operation model is the mode of business operation, Its basic functions are financial accounting, technology, production and operation, marketing and human resource management. Operation model is to carry out the overall management of these five aspects. The main path is to reduce operating costs and improve operational efficiency.
Profit model		Profit model is the specific means of enterprises to obtain profits, is the specific channels to make money, Profit model makes reasonable allocation with other elements of business model for the purpose of achieving maximum profit. Secondly, simply said, profit model decides a good channel for enterprise profits, business model decides how much profit and ultimately profitability.
Logistics model		The logistics business model is that logistics enterprise combines with their internal and external resources, optimizes its organizational processes and business settings, forms an efficient and sustainable solution to achieve customer value proposition. Logistics business model pays more attention to the logistics operation and logistics management mode.

### 3.2. To Emphasize Multilateral Party Cooperation

Participants in the traditional value network only have customers and enterprises, and now, the use of IOT (Internet of Things) in the logistics enterprise makes all the participants in the complex relationship. Logistics enterprises need to make technical development and maintenance in platform layer or application layer and different levels in order to seek outsourcing suppliers or partners. After the penetration of ERP (Enterprise Resource Planning), EDI (Electronic Data Interchange) and other information technology into the traditional value network, logistics enterprises can improve logistics efficiency, share information resources, and ultimately realize the value co-creation. In addition, in the traditional logistics industry, there are some problems which can not meet the needs of users, and the resources of some logistics enterprises are idle. IOT technology enables logistics enterprises to cooperate with each other, achieve the matching of vehicles and goods, and jointly promote the development of logistics industry.

### 3.3. To Pay More Attention to the Value Chain Management

The essence of enterprise business model is the combination of stakeholders in the value chain. The performance of logistics enterprise's value chain management is the supply chain management, and the logistics is the most important part of the supply

chain. Logistics enterprises make rapid organization of logistics equipment to provide services according to the market demand, and meet user requirements through the appropriate channels. However, due to the constantly changing of environment and user's requirement, the value chain management of logistics enterprise becomes more important and difficult. Therefore, logistics enterprises must maintain a good relationship with the stakeholders through the business model innovation, providing a fast response and high quality logistics services [7].

### **3.4. To Change the Enterprise Profit Model**

The application of IOT in the logistics industry has been relatively mature, and it promotes the development of modern logistics to intellectualized and networking direction. IOT has a great impact on the infrastructure network, logistics information network and logistics organization network of logistics enterprises. It enables any person, anything, any time and any place to achieve interconnection. So that logistics enterprises can optimize the business process and organizational structure, make effective integration of basic resources and upstream and downstream enterprises, change the business model, organization mode, profit mode and so on [8].

## **4. The Direction of Logistics Enterprise Business Model Innovation**

### **4.1. Cross-Border Business Model**

Logistics enterprises can cross boundary in two aspects to promote logistics enterprises to carry out cross-border business model: 1) The development of electronic commerce needs an efficient logistics system, so that logistics enterprises with perfect logistics system and advanced technology can carry out the business of electronic commerce. The most typical example is the SFbest.com. But it's difficult to cross boundary for logistics enterprises, because the promotion requires a lot of time and effort to promote the brand, then its shot of electronic business platform management experience, logistics enterprises cannot control the user traffic and services properly, and increase the difficulty of success. 2) Logistics enterprises can carry out the logistics financial services, provide financial services to small and medium customers that financing difficult. Such as China Storage and Transportation Company, COSCO (China Ocean Shipping Company), P.G.LOGISTICS GROUP CO., LTD, etc. They have already carried out the logistics financial services, logistics finance has become the main source of profit [9].

### **4.2. Mutually Beneficial Business Model**

Logistics enterprises need regard customer value as a guide in the construction of their own business model. As a logistics service provider, it promotes the value creation in the exchange knowledge with outsourcing and consumers. In service process, customers participate in the value co-creation through continuous dynamic interaction with enterprises, and enterprises meet the consumers needs through the collection of customer's demand information and integrate it, then create value added services for cus-

tomers to achieve customer satisfaction and loyalty, finally realize the value co-creation of enterprises and customers. The real-time logistics information tracking is a example.

### **4.3. Open Business Model**

In the open business model, logistics enterprises obtain a great deal of value through the use of key resources, assets or business advantage. Such resources, assets and business advantages are not only their own, but also other enterprises. Logistics enterprises can share idle warehouses, transport vehicles and other infrastructure with other enterprises through the open business model innovation, expand the scope of its own innovative technology and make the equipment and technology of logistics enterprise create more value, so that logistics enterprises can share the value [10].

There are three ways for logistics enterprises to choose open business model: First of all, part of the open, it mainly refers to the logistics enterprises themselves with less resources, technology, equipment, logistics enterprises can obtain the right to use the resources of other enterprises through open business model, and provide the logistics service; Secondly, some open, it mainly refers that cold chain logistics enterprises have more idle resources, such as vehicles, cold storage, etc. they rent or sell the right to use enterprise resources, and reduce the excess capacity of logistics enterprises; Finally, fully open business model, logistics enterprises can strengthen their own business model and increase the profitability of the enterprise rely on external resources, at the same time, they can also share resources with other companies to obtain additional cash flow and to create revenue for themselves.

### **4.4. Supply Chain Integration Services Business Model**

Supply chain integration services business model is mainly to do a good job of customer positioning. Logistics enterprises integrate the upstream resources, internal resources and downstream resources of the supply chain by forming partnerships with the core business, suppliers, distributors of supply chain of a certain industry, and providing integrated services for the supply chain. This requires logistics enterprises to master a large number of customer resources, have good management and control capabilities, to provide customers with high quality services, to promote the value added of service enterprises and to enhance the competitiveness of enterprises.

### **4.5. Multiple Platform Business Model**

Platform business model can promote multiple party transactions. Logistics enterprises gather together the demand side, supply side, financial institutions, software providers and other subjects by gathering resources to meet the needs of all subjects and gain revenue. JinZhong Energy International Logistics Group Company's multiple platform business model innovation has a good achieve [11]. Multiple platform business model is the integration of multiple platforms, this innovative business model have higher requirements to logistics enterprises in the information technology, human resources, management capabilities and other aspects, but the revenue is also huge.

## 5. Summary

The first part introduces the research background, logistics enterprises currently exist homogenization of competition, single profit model, lack of the deep mining of customer demands and other issues, and changes of the environment also urge the logistics enterprise to be in urgent need of the business model innovation. The second part analyzes the connotation of the business model in detail, which lays the theoretical foundation. The third part analyzes the impact of big data, Internet of things, the supply side and e-commerce environment on the business model of logistics enterprises, this paper summarizes the four points. In the fourth part, the author puts forward five directions of the business model innovation of logistics enterprises, it hopes to provide some reference for the logistics enterprises to carry out the business model innovation. The innovation of this paper is that it summarized the four-point impact of the environment on the logistics enterprise business model and put forward five logistics enterprise business model innovation direction. The deficiency of this paper is that only the theory analysis and macro development directions are put forward. Later scholars can carry on the detailed analysis to the logistics enterprises business model innovation.

## References

- [1] Cheng, W., Wang, Y.J., Gao, J.Y. and Zhang, J.W. (2014) A Review of the Evolution of Business Model Theory. *Chinese Journal of Management*, **3**, 462-468.
- [2] Cheng, Y. and Sun, J.G. (2013) Theoretical Model of Business Model: Elements and Their Relationships. *China Industrial Economics*, **1**, 141-153.
- [3] Wei, J., Liu, Y. and Ying, Y. (2012) The Connotation of Business Model and the Construction of Research Framework. *Science Research Management*, **5**, 107-114.
- [4] Li, J.Z., Jiang, T. and Shi, Y.Y. (2014) Development Environment Analysis and Business Model Selection of Logistics Enterprises in the High Competitive Environment. *China Economic & Trade Herald*, **29**, 15-18.
- [5] Li, F.G., Yu, L.W. and Cai, H. (2012) The Relationship between Business Model and Other Models. *Modern Enterprise*, **1**, 26-27.
- [6] Xu, N.Z. and Meng, B.C. (2013) Study on the Business Model Innovation of Logistics Enterprises in China during the Period of Economic Transformation. *China Logistics & Purchasing*, **5**, 70-71.
- [7] Jiang, J.H. and Shen, Y. (2016) The Effect Mechanism of Value Proposition Innovation to Create Value in the Service Oriented Business Model—A Case Study of TGOOD. *Science & Technology Progress and Policy*, **13**, 22-26.
- [8] Cui, X.Y. (2011) Analysis on the Profit Model of Logistics Enterprises Based on Internet of Things. *Commercial Times*, **28**, 36-37.
- [9] Li, Y.H. and Dong, Q.L. (2015) The Winning Way of Logistics Enterprises Trans-Boundary. *Contemporary Economic Management*, **6**, 13-17.
- [10] Chesbrough, H. (2010) *Open Business Model*. The Commercial Press, Beijing.
- [11] Zhang, R.H. and Li, J.Z. (2014) *Research on Business Model Innovation of the "Dual Platform" of Jinzhong Energy International Logistics Group Company*. China Economy Press, Beijing.





**Submit or recommend next manuscript to SCIRP and we will provide best service for you:**

Accepting pre-submission inquiries through Email, Facebook, LinkedIn, Twitter, etc.

A wide selection of journals (inclusive of 9 subjects, more than 200 journals)

Providing 24-hour high-quality service

User-friendly online submission system

Fair and swift peer-review system

Efficient typesetting and proofreading procedure

Display of the result of downloads and visits, as well as the number of cited articles

Maximum dissemination of your research work

Submit your manuscript at: <http://papersubmission.scirp.org/>

Or contact [me@scirp.org](mailto:me@scirp.org)