# New development of logistics industry under the background of "Internet +"

Qian Wang <sup>a</sup>, Yifeng Wang <sup>b</sup> Xidian University, Xi'an 710071, Peoples R China; <sup>a</sup>wqian16@163.com, <sup>b</sup>wyf0005@126.com

# Abstract

Internet economy has become an important part of China's economic structure, especially the prevalence of online shopping. It has an especial impact on China's economic development. In this context, the logistics industry has become a key factor in the Internet economy, and logistics can even directly determine the development of Internet companies. This paper mainly analyzes the impacts and challenges of the Internet economy on the logistics industry. And this paper does a quiet analysis on the new situation of logistics development in the background of "Internet +".

# Keywords

Internet +, Internet economy, Internet and Logistics.

# 1. Introduction

In November 2014, Li Keqiang, when he attended the first World Internet Conference, pointed out that the Internet was a new tool for public entrepreneurship and innovation. In March 2015, Ma Huateng, deputy to the National People's Congress, submitted " proposal on promoting China's economic social inovation and development driven by 'Internet +' ". He called on us to continue with "Internet +" as the driving force to encourage industrial innovation, promote cross-border integration, benefit the people's livelihood, and promote China's economic and social innovation and development. Ma Huateng said that "Internet +" refers to the use of the Internet platform and information and communication technology to combine the Internet and a variety of traditional industries, to create a new ecology in the new field.

On July 4, 2015, the State Council issued "action guidance on the positive promotion of 'Internet +'" (Hereinafter referred to as "Guidance"), which is approved by Premier Li Keqiang. This is an important initiative to promote the Internet expand from the field of consumption to the production sector, to accelerate the level of industrial development, to enhance the innovation capacity of various industries, to build new advantages and momentum of the development of economic and social. "Guidance" put forward the strategic deployment of the "Internet +" efficient logistics. Then the logistics industry will enter the "new normal" which network and organized service as mainly services.

# 2. The status of the logistics industry

### 2.1 The status of the logistics industry

In recent years, the scale of China's logistics industry has grown rapidly. In 2016, China's total social logistics amounted to 229.7 trillion yuan, up 7.4% year-over-year. The national logistics industry added value of 2.31 trillion yuan, an increase of 7.3%. With the logistics industry in the national economy to occupy an increasingly important position, the state has introduced a series of policies and guidance to vigorously promote the development of logistics information. In March 2009, the State Council promulgated the "Logistics Industry Adjustment and Revitalization Plan", among which many mentioned to improve the level of logistics information, construction of public information platform project, improve and promote, including logistics information systems and logistics-specific information technology Logistics and new technologies, which will bring more

opportunities for the logistics information market, but also provides a good opportunity for telecom operators to enter the field of logistics information.

#### 2.2 The development dilemma of the logistics industry

China's logistics enterprises in the face of fierce market competition, need to enhance the core competitiveness through information technology, its main performance in the following two aspects.

On the one hand, the cost of logistics is high, while the efficiency of resource utilization is low. According to the statistics, the proportion of the total social logistics cost to GDP in 2017 is 15%. It is 9% of the developed country, and is about 11% of the global average level. The cost of China's warehousing accounts for about 8% of GDP, while the United States accounts for only 2.5-3%. In 2013, the national average automated stereoscopic storage system penetration rate was only 20%, while that of developed countries was 80%. In warehousing, transportation and other logistics sectors, management is not precise and information asymmetry exists, resulting in partial idle storage resources and high altitude load of vehicle transportation. According to the statistics, the high vacant rate of freight cars exists for a long time. The empty drive has already occupied nearly 35% of the transportation flow, and the waste of resources is serious.

On the other hand, the level of management is insufficient and the degree of intelligence is low. According to the current market situation, most of the logistics enterprises still remain in the traditional manual operation stage, and the level of automatic storage is not high. In terms of transportation and distribution network, the comprehensive transportation system has not yet been fully formed. Different transportation modes are difficult to achieve information sharing and effective convergence, and comprehensive transportation hub construction is lagging behind.

In addition, the traditional logistics industry in China also have other problems, such as nonstandard management mechanism, legal environment is not perfect, logistics talent shortage and a series of other problems. These problems show that the traditional mode of operation of low input high-yield has greatly restricted the development of the logistics industry in china.

#### 3. Transformation of the logistics industry under the background of Internet +

#### **3.1** The change of logistics business model

The development of the Internet encourage the transformation and upgrading of traditional enterprises to adjust and optimize the structure of traditional industries, so as to promote the popularization and development of the intensive mode of development in economy as the core of the platform. Extending to the field of logistics, it is logistics platform as the core of the economic structure. O2O logistics enterprises have gradually occupied the leading position in the logistics market, Didi taxi mode, vehicle distribution pattern, LTL model, platform bidding mode, become the Internet model into the traditional logistics business model. "Internet plus logistics", will promote the logistics industry from the scale economy to the individuation and diversification, differentiation evolution, will not only improve the efficiency of logistics operations, but also to promote the development of the associated enterprises.

#### **3.2** The change of logistics service model

In the big data era of the Internet, the logistics industry has changed the service mode of the service side and the demand mode of the demand side. Internet logistics is a consumption experience based on client driven and personalized customized. Logistics service demand is also dominated by high frequency, small batch and multiple batches. Information instead of inventory is the transformation of logistics service mode. The rise of cross-border e-commerce and international logistics, and the overall pattern of online and offline integration have brought about a comprehensive reform of the mode of logistics service.

#### **3.3** The change of logistics technology facilities

Under the background of "Internet +", the use of big data and cloud computing applications in the logistics industry, which bring intelligent systems and automation, mechanical equipment into the

logistics system, has brought the change of logistics technology facilities. In the manufacturing industry, many modern manufacturing enterprises vigorously promote logistics automation, standardization, mechanization and flexibility. In the freight industry, there are more than 1000 public logistics information platforms based on vehicle matching and information service, and some enterprises that integrate the freight market also achieve rapid development.

### 4. Challenges the logistics industry faces under the background of Internet +

"Internet + logistics" is not simply the sum of the two, but with the power of the mobile Internet, to promote the information sharing of financial payment and operations management. Thinking of using the Internet and information technology means to improve the reconfiguration of the logistics industry, to create a new ecological model.

# 4.1 Accelerate the integration of logistics and Internet technology, to create a "new normal" under the new business model

In the logistics industry, the application of the Internet can not only effectively reduce the information asymmetry, bring more business opportunities, but also can maximize the potential market to meet consumers growing demand for personalized products. At present, many small and medium-sized logistics enterprises relie on the traditional logistics distribution mode or forwarding mode, had not form their own unique brand of logistics service, professional ability and stable customer resources. With the rapid development of the Internet and big data, large enterprises at home and abroad launched logistics socialization application such as "car" and "taxi drops", which have a certain impact on the part of small and medium-sized enterprises logistics business. In order to promote the development of the enterprise itself , logistics enterprises need to explore new forms of innovation that is more suitable for the domestic logistics business model.

# **4.2** Expand the scale of logistics information technology platform, formate data engine of industry

With all kinds of "Internet + logistics" platform matured, to a certain extent, there are more intensive accumulation of user data, vehicle data, logistics data and location & track data. By data driven, these platforms will provide a sticky product service for the market and accumulate more logistics resources. This also directly forms the scale effect and improves the market concentration. Through the accumulation and precipitation of data, the digital logistics model is formed, and intelligent prediction is gradually realized.

# **4.3** Build an interconnected logistical infrastructure network rely on the Internet information platform

At early application of the Internet in logistics, apart from a handful of advanced logistics system, some advanced manufacturing enterprise logistics system and advanced transportation information system, most of the logistical system and company are still in the initial stage. The language entity network of information did not achieve interoperability, not yet the docking and fusion of the real network and information network. The application of technology and equipment of intelligent logistics system mainly concentrated in three aspects. First is the intellectualization and networking of traditional logistical facilities and equipment, which is the foundation of the equipment Internet. Second is the automation and standardization of logistics equipment, which is the foundation of the logistical operation Internet. Third is the application of intelligent tracing system, which is the basis of logistics system and information interoperability.

#### **5.** Conclusion

The new model of logistics management based on the Internet has many advantages. In the age of the Internet, because of the use of information technology, the time and space distance between the various objects of the transaction is very small. The Internet makes the management of logistics enterprises more intelligent and can be controlled automatically. By the application of the Internet, the acquisition and purchase of enterprises will be very smooth and convenient. The status of

distribution industry is clearly strengthened. Goods stored in warehouses are transferred from the warehouse of enterprises to the distribution centers, and the transportation process is also very concentrated. In a word, the service mode in the future social is a huge system centers on the logistics Internet, which including production, service and consumption.

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