

# Research on Collaborative Growth of E-business and Logistics Enterprises under the Background of Digital Economy

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**Abstract:** Under the background of digital economy, this paper deeply discusses the coordinated growth of e-business and logistics enterprises, constructs a theoretical model of coordinated growth of e-business and logistics enterprises, and analyzes its present situation in detail. It is found that although the coordinated growth of e-business and logistics enterprises has many benefits, there are still some problems in actual operation, such as information islands, conflicts of interest, trust crisis and legal gaps. In order to solve these problems, this paper puts forward some strategic suggestions, such as strengthening the construction of information system, establishing a fair benefit distribution mechanism, consolidating the trust relationship and improving the legal and regulatory environment. The optimization strategy suggestions put forward in this paper can provide useful guidance for e-business and logistics enterprises, promote their coordinated growth and improve their competitiveness. At the same time, this paper can also provide useful reference for policy makers to formulate more effective policies and promote the healthy development of digital economy.

## 1. Introduction

With the rapid development of information technology, the global economy is undergoing a profound change[1]. In this process, the digital economy, as a brand-new economic form, is gradually rising and leading the development trend of the global economy[2]. With its unique advantages, including high speed, high efficiency and high connectivity, the digital economy is profoundly changing the traditional economic model and promoting the sustainable innovation and development of the global economy[3].

In the wave of digital economy, e-business and logistics enterprises play an important role. E-business conducts business activities through electronic means such as the Internet, realizing the global trading of goods and services, and greatly improving the efficiency and convenience of trading[4]. Logistics enterprises, on the other hand, ensure the smooth progress of e-business transactions through efficient and accurate logistics services, and realize the rapid and safe delivery of goods from sellers to buyers. The coordinated growth of both is an important support for the development of digital economy[5].

However, under the background of digital economy, the coordinated growth of e-business and logistics enterprises is also facing some challenges[6]. For example, how to integrate the resources of the two more effectively, improve synergy efficiency, reduce operating costs, and how to cope with the rapidly changing market environment. Therefore, this paper aims to discuss the coordinated growth of e-business and logistics enterprises under the background of digital economy in order to provide useful reference for related enterprises and policy makers.

## 2. Theoretical basis

### 2.1. Basic concepts and operation modes of e-business and logistics enterprises

Digital economy is a broad concept, which usually refers to economic activities promoted by digital technology and information network. Figure 1 shows its main features.

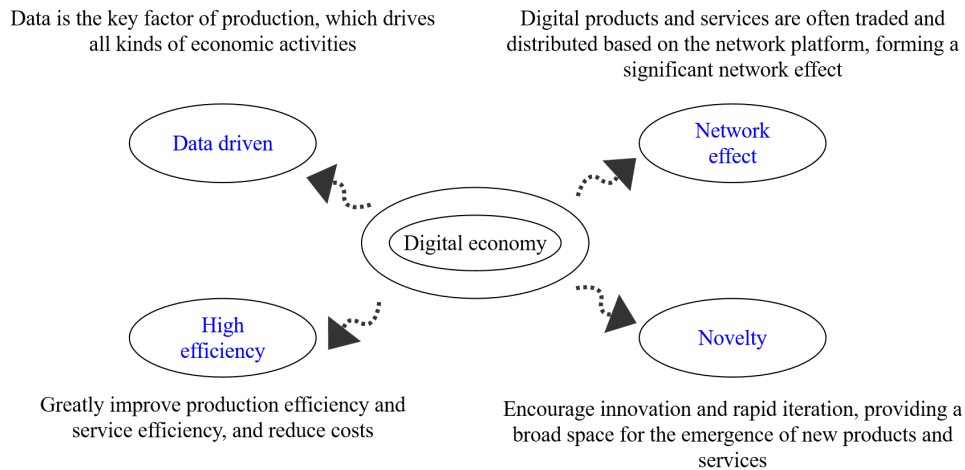


Figure 1 Characteristics of digital economy

E-business is a commercial activity based on the Internet or other electronic means. Its main operating modes include B2B (business-to-business), B2C (business-to-consumer) and C2C (consumer-to-consumer). E-business enterprises usually display and sell goods or services through electronic platforms and complete transactions by means of electronic payment[7]. Logistics enterprises focus on the physical flow process of goods from suppliers to consumers[8]. They provide a series of services, such as transportation, warehousing, packaging, distribution and information management, to ensure that goods can reach consumers efficiently and accurately.

## 2.2. The theoretical basis of coordinated growth

Collaborative growth refers to the process that different organizations or individuals achieve common development through cooperation and coordination. Under the background of digital economy, the coordinated growth of e-business and logistics enterprises is particularly important. Its theoretical basis mainly includes the following points:

(1) Resource dependence theory: Enterprises and organizations need to obtain external resources to maintain and develop their business activities. Through coordinated growth, e-business enterprises and logistics enterprises can share resources and reduce costs and risks.

(2) Transaction cost theory: Collaborative growth can reduce transaction costs, such as search costs, negotiation costs and supervision costs, thus improving economic efficiency.

(3) Competitive advantage theory: Collaborative growth can bring competitive advantages to enterprises, such as sharing knowledge, skills and experience, and coping with market challenges together.

## 3. Analysis of existing circumstance

### 3.1. Analysis of the current situation of e-business development

In recent years, e-business has shown explosive growth on a global scale. With the continuous innovation of internet technology and the increasing demand of consumers for online shopping, the scale of e-business market continues to expand[9]. Major e-business platforms have increased technology investment, optimized shopping experience and launched innovative services to attract more consumers. At the same time, e-business enterprises are also actively expanding overseas markets and promoting the facilitation of global trade. However, the development of e-business also faces some challenges. For example, increased market competition leads to decreased profits, compliance risks caused by imperfect laws and regulations, and consumers' concerns about privacy and safety.

### 3.2. Analysis of the Development Status of Logistics Enterprises

Responding to the rapid development of e-business, logistics enterprises are constantly improving service quality and efficiency. Automation, digitalization and intelligence have become

the main development trends of the logistics industry. The application of advanced technologies such as unmanned aerial vehicles, self-driving vehicles and robots has greatly improved the efficiency and accuracy of logistics. In addition, green logistics has gradually become the consensus of the industry to reduce the negative impact on the environment. But the development of logistics enterprises also faces some difficulties. For example: rising costs, pressure on profit margins, challenges brought by complex supply chain management, and increasingly stringent environmental regulations.

### 3.3. Analysis of the collaborative growth of e-business and logistics enterprises

With the development of e-business and logistics industry, the synergistic relationship between them is getting closer and closer. Many e-business enterprises have begun to establish their own logistics systems to ensure that goods can be delivered to consumers on time and accurately. At the same time, some large-scale logistics enterprises also actively cooperate with e-business platforms to jointly build an efficient supply chain system. The benefits of coordinated growth are obvious, such as improving operational efficiency, reducing costs and enhancing market competitiveness. However, there are also some problems and obstacles in collaborative growth, such as asymmetric information, uneven distribution of benefits, and trust in cooperation.

### 3.4. Problem diagnosis: find out the problems existing in the coordinated growth of e-business and logistics enterprises

After analyzing the current situation, this paper finds that there are the following main problems in the coordinated growth of e-business and logistics enterprises:

- (1) Information island phenomenon: the information systems between e-business enterprises and logistics enterprises are often incompatible, which leads to the smooth flow of information.
- (2) Conflict of interest distribution: It is often difficult for both sides to reach a consensus on the interest distribution in the coordinated growth, which may lead to the breakdown of cooperation.
- (3) Trust crisis: Due to the uncertainty and risks in cooperation, there may be a trust crisis between the two sides, which will affect the further promotion of coordinated growth.
- (4) Imperfect laws and regulations: In the process of coordinated growth, some gaps or vague areas of laws and regulations may be involved, which will bring compliance risks to both parties.

In order to solve the above problems, this paper will put forward targeted strategic suggestions in the next section. At the same time, in order to guide the practice of collaborative growth of e-business and logistics enterprises, this paper constructs a theoretical model of collaborative growth of e-business and logistics enterprises under the background of digital economy. The model is shown in Figure 2.

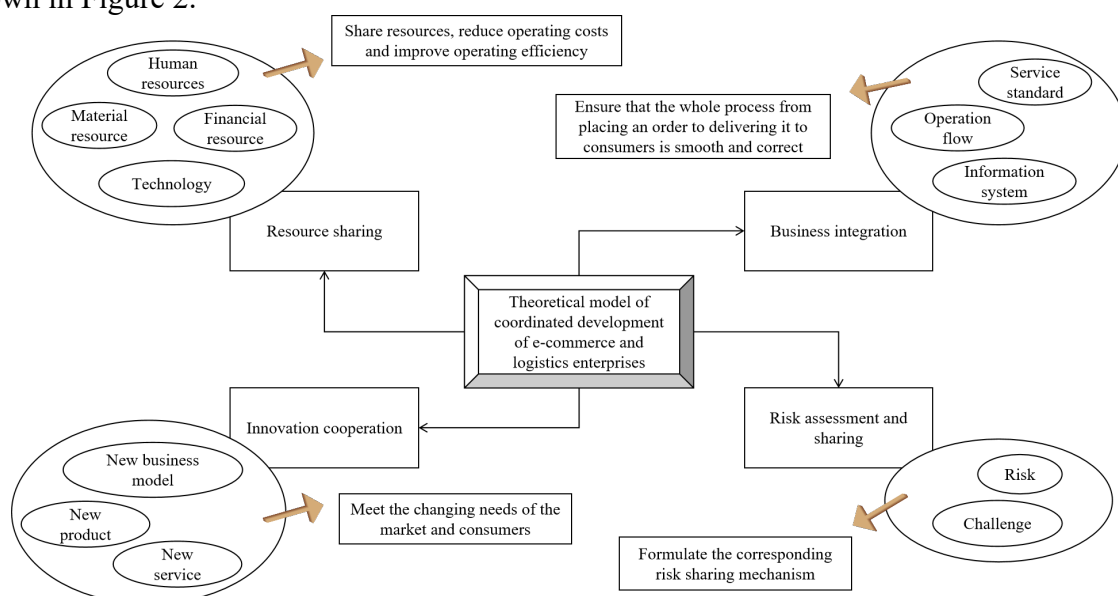


Figure 2 Theoretical model framework

Through the synergy of four key components: resource sharing, business integration, innovation cooperation and risk assessment and sharing, e-business enterprises and logistics enterprises can achieve common development under the background of digital economy and provide consumers with better service experience and value.

#### **4. Collaborative growth strategy**

##### **4.1. E-business and logistics enterprises coordinated growth path analysis**

In order to realize the coordinated growth of e-business and logistics enterprises, this paper analyzes the following possible paths of coordinated growth:

(1) Vertical integration: E-business enterprises downward integrate logistics links and establish their own logistics system. This path can ensure the direct control of logistics links, thus improving service quality and efficiency. However, it also requires a lot of investment and management resources.

(2) Horizontal cooperation: E-business enterprises and logistics enterprises establish strategic cooperative relations and share resources and markets together. This path can complement resources and markets and reduce operating costs, but it may also face trust and risk problems in cooperation.

(3) Platform collaboration: By establishing a unified platform, information sharing and business collaboration between e-business enterprises and logistics enterprises can be realized. This path can improve the transparency and circulation of information and promote the deep cooperation between the two sides, but it also needs to solve the problems of platform construction and maintenance.

##### **4.2. Development strategies and suggestions**

Based on the analysis in the previous section, this paper puts forward the following suggestions on the coordinated growth strategy:

(1) Strengthen the construction of information systems: e-business enterprises and logistics enterprises should jointly invest resources to establish compatible information systems to ensure the smooth flow of information. By adopting unified data standards and interfaces, information sharing and exchange can be realized.

(2) Establish a fair benefit distribution mechanism: both parties should clarify the principles and methods of benefit distribution at the initial stage of cooperation to ensure the fair distribution of benefits. Fixed proportion distribution and distribution according to contribution can be adopted, and corresponding supervision and restraint mechanisms can be established at the same time.

(3) Establishing a trust mechanism: by establishing a long-term cooperative relationship, jointly investing in R&D and sharing risks, the trust of both parties will be enhanced. We can establish a cooperation evaluation mechanism, evaluate and feedback cooperation regularly, and solve problems and obstacles in time.

(4) Improve the legal and regulatory environment: the government and relevant institutions should strengthen the construction of laws and regulations for the coordinated growth of e-business and logistics enterprises, clarify the rights and obligations of both parties, and reduce compliance risks. At the same time, it can also provide certain policy support and financial support to promote the process of coordinated growth.

(5) Promoting technological innovation and application: Both parties should jointly invest in R&D and innovation, and develop new business models, products and services to meet the changing needs of the market and consumers. Technological innovation alliances can be established, R&D resources and achievements can be shared, and the continuous innovation and development of the industry can be promoted.

Through the implementation of the above strategic suggestions, e-business enterprises and logistics enterprises can achieve more effective coordinated growth under the background of digital economy and provide consumers with better service experience and value.

## 5. Conclusions

In this paper, the collaborative growth of e-business and logistics enterprises under the background of digital economy is discussed in depth, and it is found that the two sides face problems such as information islands, conflicts of interests, trust crisis and legal gaps in the process of collaborative growth. In order to solve these problems, this paper puts forward a series of strategic suggestions, including strengthening the construction of information systems, establishing a fair benefit distribution mechanism, consolidating trust relations and improving the legal and regulatory environment. These strategies are helpful for e-business and logistics enterprises to overcome the existing difficulties and achieve more efficient and coordinated growth. By promoting the coordinated growth of e-business and logistics enterprises, we can improve the efficiency and convenience of transactions and reduce transaction costs, thus providing better services to consumers. At the same time, the coordinated growth of the two can also create more employment opportunities and promote economic development and social progress. Theoretically, this study provides a reference framework and strategic guidance for the coordinated growth of e-business and logistics enterprises. In practice, the research conclusion is helpful for enterprises to identify the problems in collaborative growth and formulate effective solutions. In the future, the research can be further extended to the coordinated growth of other industries under the background of digital economy, and in-depth strategic analysis and empirical research can be carried out with specific cases to improve the practical guiding value of the research.

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