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SHAPING THE FUTURE: EXAMINING THE IMPACT OF INPUT-OUTPUT TECHNOLOGY ON CHINA'S DIGITAL LOGISTICS TRANSFORMATION

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Abstract:
The global digital economy is experiencing rapid growth, reshaping global competition dynamics and prompting governments worldwide to embark on digital transformation initiatives. In 2021, the scale of China's digital economy reached $7.1 trillion, yet it still lags behind the United States, which reached $15.3 trillion during the same year. Recognizing the significance of digitalization, China has incorporated digital development into its 14th Five-Year Plan, harnessing the potential of digital factors as a burgeoning production force. The interplay between digitalization and logistics is central to China's economic landscape. Modern logistics serves as a cornerstone for expanding industrial chains, elevating value chains, and fortifying supply chains. It plays a pivotal role in promoting domestic market circulation, fostering high-quality economic development, and enhancing the socialist market economic system. Driven by policy incentives and market forces, the logistics industry has emerged as a prime domain for the digital transformation of China's industrial economy. This paper, employing an input-output model, scrutinizes the symbiotic relationship between the digital economy and the logistics industry. Its goal is to facilitate the intelligent digitalization of modern logistics, foster seamless integration of information technology with logistics transportation, construct enterprise-centric supply chain logistics and financial systems, augment operational efficiency, bolster core competitiveness, and ensure both qualitative and quantitative advancements in the logistics transportation sector.

Keywords: Digital Economy, Logistics Industry, Digital Transformation, Supply Chain Integration, Economic Development

Introduction and literature review

1.1 Introduction

With the invention and popularization of computers and the Internet, the global digital economy has entered a stage of rapid development, which has changed the competition pattern of countries all over the world, and governments all over the world have begun to formulate relevant digital transformation and upgrading plans. According to the report on the development of digital economy in China released by China Institute of Information and Communication, the scale of digital economy in 2021 reached 7.1 trillion US dollars, and that of the United States reached 15.3 trillion US dollars in the same year, ranking first in the world and more than twice that of China. Digital construction has become an important part of China's 14th Five-Year Plan. Digital factors, an emerging factor of production, have grown at a high speed in the era of Internet big data, and the vitality of digital economy has been greatly released. In 2023, the government work report mentioned "logistics" five times and "digital" six times. Both digital economy and logistics industry are important industries in China's economy. Modern logistics has become an important support for extending the industrial chain, upgrading the value chain and building the supply chain, and plays a strong supporting role in promoting the domestic market circular strategy, high-quality economic development and improving the socialist market economic system. Driven by both policy and market, the logistics industry has become an important landing direction and practical scene for the digitalization of China's industrial economy. With the development of economy, the scale and growth rate of logistics industry are increasing, and the logistics industry has become an indispensable part of the national economic sector, and the logistics industry is constantly exploring the road of digital transformation. It has been three years since the promulgation of the medium-and longterm planning for the logistics industry in 2020. The overall logistics cost in China tends to decline, and the logistics industry has opened a new chapter in high-quality development. However, the problems of resource mismatch, such as "strong east and weak west", customer service and information island, need to be solved urgently, and the digital revolution provides opportunities to solve these problems. Under this social background, based on the input-output model, this paper analyzes and studies the correlation between digital economy industry and logistics industry, in order to promote the intelligent digitalization of modern logistics industry, promote the deep integration of modern information technology and logistics transportation industry, build supply chain logistics and finance systems that meet the development needs of enterprises, improve the operational organization efficiency of logistics transportation industry, enhance the core competitiveness of enterprises, and achieve steady improvement in quality and rapid growth in quantity.

1.2 Literature review

Digital economy is the main social and economic structure after agricultural economy and industrial economy. It is a new economic form with big data resources as the core element, modern information network services as the main carrier, information and communication technology integration and application, and digital transformation of all factors as the important driving force to promote fairness and efficiency. Since 2016, articles on the topic of digital economy have exploded, and the digital economy has gradually become one of the hottest topics inside and outside the academic circle. With the development of the digital economy to a new stage, it is a matter of great concern to fully understand the new trends and changes brought about by these new factors and to further judge and grasp the development trend of digital economy. This paper focuses on issues related to the interaction effect between digital economy industry and logistics industry. The following is a simple classification and summary of relevant literature from the scope of digital economy and the correlation effect between digital industry and logistics industry, with the purpose of mastering existing research results and laying a solid foundation for the study of this paper.

Firstly, the definition of digital economy by scholars is summarized. To study an industry, it is an essential step to make the definition. Tapscott[1] first put forward the term "digital economy" in 1996. Bukht put forward three definitions of digital economy: digital sector, real digital economy and digital economy. [2] Xu Xianchun (2020) divided the formation factors of digital economy into four parts: digital empowerment infrastructure, digital transactions, digital economic transaction products and digital media [3]; Guan Meijuan (2020) thinks that digital economy industry includes five categories: digital equipment manufacturing, digital information transmission, digital technical services, digital content and media, and Internet applications and related services [4]. Jin Xingye (2020) thinks that digital economy includes the following four kinds: digital economy infrastructure and service industry, E-commerce industry, digital information industry and digital production activities [5]. The Statistical Classification of Digital Economy and Its Core Industries (2021) divides the digital economy into five categories: digital product manufacturing industry, digital product service industry, digital technology application industry, digital factor driving industry, and digital efficiency improvement industry. Before 2021, the criteria for determining the digital economy were in a state of contention until the National Bureau of Statistics issued a document clarifying what scope the digital economy covered, providing a comprehensive guarantee for further efficiently promoting the accounting and statistics of the scale of the digital economy.

Secondly, it briefly reviews the relevant literature on the industrial correlation effect. Yu Dianfan et al. (2011) divided the industrial correlation effect into multiplier effect, feedback effect and spillover effect, arguing that economic growth mainly relies on spillover effect, while the feedback effect is not very obvious to economic growth [6]. Zhong Junjuan (2013) analyzed with the grey relational analysis model that the penetration and integration of the secondary industry and the logistics industry is the best, followed by the primary industry and the tertiary industry. By calculating the influence coefficient and sensitivity coefficient, it is concluded that the influence of the logistics industry on the national economic sector is greater than that of the national economic sector [7]. Yu Dianfan (2013)[8] analyzes the integrated development mechanism of manufacturing and service industry from three aspects: multiplier effect, spillover effect and feedback effect, and concludes that the pulling effect of manufacturing on economy is far stronger than that of service industry, and the multiplier effect of manufacturing and service industry is dominant. Liang Hongyan and Wang Jian (2013)[9] used the input-output method to measure the industrial correlation effect between logistics industry and manufacturing industry in eight typical countries in three years, and found that manufacturing industry was still in a dominant position in the interactive development of these two industries. Zhu Heliang (2018) According to the analysis of inputoutput technology, the driving and promoting effect of circulation industry on other industries is smaller than that of other industries. [10] Huang Yan [11](2019) classified catering distribution as logistics industry, and analyzed the industrial correlation by using structural decomposition technology, and concluded that the static and dynamic spillover effect of logistics industry is the strongest and increasing, followed by multiplier effect. Tian Jinfang [12](2022) refers to the structural decomposition technology of Yu DianFan, and concludes that the spillover effect of digital economy industry sector is the largest in 2018, followed by internal multiplier effect and feedback effect. Liu Bo (2022)[13] analyzed with the input-output model that the digital development of industry is better than digital industrialization, and the digital transformation of transportation and warehousing industry (logistics) is slow. Wu Xiaoting et al. (2022)[14] analyzed the integration degree of digital economy industry and manufacturing industry, and concluded

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that there was asymmetry in the integration of digital industry and manufacturing industry, and manufacturing industry played a more significant role in digital economy industry. Han Jun et al. [15](2022) analyzed the industrial correlation effect of digital economy industry at the city level in China province through input-output technology and found that there were regional differences in digital economy effect. Xie Xinyu [16](2023) measured the integration level of logistics industry and digital economy, and the results showed that the integration level of logistics industry and digital economy in China was strong in the east and weak in the west in geographical space, with obvious regional differences.

To sum up, by summarizing and combing the existing literature, China scholars have written thousands of articles on digital economy, which has laid a solid foundation for the development of digital economy industry. However, few articles focus on the integration of digital economy industry and logistics industry. The marginal contributions of this paper are as follows: firstly, according to the classification standard of digital economy industry by National Bureau of Statistics, the input-output table including digital economy department and logistics industry is compiled by using separation coefficient; secondly, this paper deeply understands the characteristics of deep penetration of digital economy industry and logistics industry, and uses input-output technology to calculate and analyze the integration degree of digital economy industry and logistics in 2017, which is helpful to statistics and analysis of digital economy industry and logistics industry. To sum up, it is very necessary to analyze and study the correlation effect between digital economy and logistics industry, and the research on this issue has certain practical significance in the 14th Five-Year Plan period. This paper provides a reference for promoting the integration of digital economy industry and logistics industry.

2. Structural decomposition technology and data description

2.1 Structural decomposition technology

In the study of the relationship between digital economy industry and logistics industry, most studies focus on the application of econometric model, but the limitation of this method is that it is difficult to reflect how the two departments interact with each other. Input-output technology, as a sharp weapon to study industrial correlation, plays an irreplaceable role in analyzing the correlation between industries. Referring to the structural decomposition technology of Miller and Blair[17], this paper focuses on the analysis of the correlation effect between the divided digital economy industry and the logistics industry, and describes the characteristics of their integration on the basis of this research. The input-output model based on 125 departments can be expressed by the following formula:

$$\begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1125} \\ a_{21} & a_{22} & \cdots & a_{2125} \\ \vdots & \vdots & \ddots & \vdots \\ a_{1251} & a_{1252} & \cdots & a_{125125} \end{bmatrix} \times \begin{bmatrix} X_1 \\ X_2 \\ \vdots \\ X_{125} \end{bmatrix} + \begin{bmatrix} Y_1 \\ Y_2 \\ \vdots \\ Y_{125} \end{bmatrix} = \begin{bmatrix} X_1 \\ X_2 \\ \vdots \\ X_{125} \end{bmatrix} \quad (1)$$

$$AA = \begin{bmatrix} aa11 & aa12 & \cdots & a_{1125} \\ aa21 & aa22 & \cdots & a_{2125} \\ \vdots & \vdots & \ddots & \vdots \\ aa1251 & aa1252 & \cdots & a_{125125} \end{bmatrix}, X = \begin{bmatrix} X_1 \\ X_2 \\ \vdots \\ X_{125} \end{bmatrix}, Y = \begin{bmatrix} Y_1 \\ Y_2 \\ \vdots \\ Y_{125} \end{bmatrix} \quad (2)$$

Where A is the matrix of direct consumption coefficient, where $aa_{ii,jj}$ is the direct consumption coefficient(i,j=1,2,…,125), which indicates the direct consumption of the unit product produced by the j department to the i department, and reflects the technical and economic relationship between the j department and the i department at a certain technical level. X is the total output, and XX_{ii} represents the total output of the i department. Y is the final demand, and YY_{ii} represents the quantity of the products of i department as the final demand (consumption, capital formation, net export). The above formula can be expressed as:

$$AAXX + YY = XX \quad (3)$$

$$XX = (II - AA)^{-1}YY \quad (4)$$

$(II - AA)^{-1}$ is called Leontief's inverse matrix, and it is denoted as $\tilde{B} = (I - A)^{-1}$, which shows the intricate economic relations among various sectors of the national economy.

In terms of industrial correlation decomposition, Leontief inverse matrix can be decomposed into the product of intra-departmental multiplier effect, inter-departmental spillover effect and inter-departmental feedback effect [18]:

$$\tilde{B} = \begin{bmatrix} F_{11} & & & \\ & F_{22} & & \\ & & \ddots & \\ & & & F_{125125} \end{bmatrix} \begin{bmatrix} I & S_{12} & \cdots & S_{1125} \\ S_{21} & I & \cdots & S_{2125} \\ \vdots & \vdots & \ddots & \vdots \\ S_{1251} & S_{1252} & \cdots & I \end{bmatrix} \begin{bmatrix} M_{11} & & & \\ & M_{22} & & \\ & & \ddots & \\ & & & M_{125125} \end{bmatrix} \quad (5)$$

$M_{ii} = (I - A_{ii})^{-1}$ is defined as the multiplier effect within the department, which reflects the circular growth mechanism within the department. $S_{ij} = (I - A_{ii})^{-1}A_{ij}(i, j = 1,2 \ldots 125)\ (i \neq j)$ are defined as inter-departmental spillover effects, indicating the spillover effect of department j on department i, and the impact of the final demand change of department j by one unit on the output level of department i.

$F_{ii} = (I - S_{ij}S_{ji})^{-1}(i \neq j)$ is defined as inter-departmental feedback effect, which means that an increase of one unit in the final demand of department i affects other departments, which in turn affects the output of department i.

Therefore, the Leontief inverse matrix [19] can be expressed as:

$$\tilde{B} = FSM \quad (6)$$

Furthermore, the above formula is converted into an addition form:

$$\tilde{B} = M + (S - I)M + (F - I)SM \quad (7)$$

$$
= \begin{bmatrix} M_{11} & & & \\ & M_{22} & & \\ & & \ddots & \\ & & & M_{125125} \end{bmatrix} + \overset{\tilde{B}}{\begin{bmatrix} 0 & S_{12} & \cdots & S_{1125} \\ S_{21} & 0 & \cdots & S_{2125} \\ \vdots & \vdots & \ddots & \vdots \\ S_{1251} & S_{1252} & \cdots & 0 \end{bmatrix}} \begin{bmatrix} M_{11} & & & \\ & M_{22} & & \\ & & \ddots & \\ & & & M_{125125} \end{bmatrix}
$$

$$
+ \begin{bmatrix} F_{11} - I & & & \\ & F_{22} - I & & \\ & & \ddots & \\ & & & F_{125125} - I \end{bmatrix} \begin{bmatrix} I & S_{12} & \cdots & S_{1125} \\ S_{21} & I & \cdots & S_{2125} \\ \vdots & \vdots & \ddots & \vdots \\ S_{1251} & S_{1252} & \cdots & I \end{bmatrix} \begin{bmatrix} M_{11} & & & \\ & M_{22} & & \\ & & \ddots & \\ & & & M_{125125} \end{bmatrix}
$$

The influence of industrial linkage is divided into three parts: the first is the intra-sectoral multiplier effect, which indicates that a unit change in the final demand of sector i can cause a change in the output level of the sector, reflecting the sector's self-cycling ability; the second is the spillover effect, which indicates that changes in the output of a sector cause changes in other sectors of the national economy; and the third is the feedback effect, that is, one department first affects other departments, and then in turn feeds back this influence. It can be observed that both spillover and feedback effects are influenced by multiplier effects. The advantage of this decomposition is that not only can we understand the level of development of each sector, but also we can observe the intrinsic relationship between different sectors that are closely linked.

2.2 Data description

According to Statistical Classification of Digital Economy and Its Core Industries (2021), this paper divides the digital economy into four core industries: digital product manufacturing industry, digital product service industry, digital technology application industry, digital element driving industry. Because it is difficult to measure the digital efficiency improvement industry, the digital economy industry in this article does not include the part of industrial digitalization. According to the documents of the Social Logistics Statistical Survey System in 2019, the logistics industry should include railway transport industry, road transport industry, water transport industry, air transport industry, pipeline transport industry, loading and unloading and other transport services, warehousing industry, postal industry, wholesale industry, retail industry, business service industry and packaging service industry. On this basis, referring to Huang Zhang's article, because the catering distribution industry realizes the supply chain management and distribution service of catering products through logistics links, the catering distribution industry should belong to distribution logistics, so it will be included in the logistics industry. The data source of this paper is mainly the input-output table of competitive 149 sectors in 2017. The first thing to do is to separate the digital economy industry from the logistics industry according to the Statistical Classification of Digital Economy and Its Core Industries (2021) and the 2018 Economic Statistical Yearbook, based on the accounting method of separation coefficient added value. Multiply the departments related to the digital economy industry in the input-output table of 149 departments by the separation coefficient, and merge the digital departments of the departments. In the same way, do the same for the logistics industry. [20] There are several points to pay attention to in the stripping process. First, retail, wholesale and business services need to be divided twice. First, wholesale and retail are multiplied by the sum of the separation coefficients of digital product service industry and digital factor driving industry, and then multiplied by the corresponding proportion, and the remaining part is attributed to the logistics industry. Similarly, for the business service industry multiplied by the sum of the separation coefficients of the digital factor driving industry and the logistics industry, the corresponding proportion is multiplied during the second split. Secondly, the Internet and related services include two core sectors of the digital economy: digital technology application industry and digital factor driving industry (Internet platform). After the split and merger, the new input-output table, which includes the digital economy industry and the logistics industry, has 125 sectors and the digital economy has 4 sectors.

3. The industrial correlation effect between digital economy and logistics industry in China

According to the above formula, this paper calculates the internal multiplier effect, spillover effect and feedback effect according to the structural decomposition technology, as shown in the following table

Table 1: Structural decomposition results of China's digital economy and logistics industry.

	Effect	Digital economy	Logistics industry
Digital economy	Self-multiplier effect	1.50252	-
	Spillover effect	-	0.077485
	Feedback effect	-	0.054114
Logistics industry	Self-multiplier effect	-	1.113289
	Spillover effect	0.096505	-
	Feedback effect	0.080598	-

In terms of the overall effect, the total effect of the digital economy industry is 20.98, indicating that a one-unit increase in final demand in each sector of the national economy can create an output of 20.98 for the digital economy industry through the intra-sectoral circulation mechanism as well as the intersectoral association effect. The total effect of the logistics industry is 24.29, and the total effect of the logistics industry is greater than the total effect of the digital economy industry. It is easy to see that both the logistics industry and the digital economy industry are important industries that drive economic development.

According to Table 1, from the internal point of view of the effect, the development of the digital economy industry and logistics industry mainly relies on the self-multiplier effect, followed by the spillover effect and feedback effect. For the logistics industry, in the process of adding one unit of logistics industry to produce 1.290392 units of output to the national economy, 1.113289 units of output increase is caused by the internal industrial cycle of the logistics industry, while 0.096505 units of output increase is caused by the association between the logistics sector and the digital economy sector, and its output increment occurs in the digital economy sector, which is a driving force of the logistics industry to the digital economy sector. The other output increment of 0.080598 unit is fed back to the logistics industry through the interaction between the logistics department and the digital economy department, and its output increment occurs in the logistics industry. Meanwhile, the multiplier effect, spillover effect, and feedback effect of digital economy sector are 1.50252, 0.077485, and 0.054114, respectively. From the above data, it can be seen that the multiplier effect of digital economy industry and logistics industry are all much larger than the inter-sectoral association effect, and the contribution of multiplier effect is all greater than 85%. The research data reflect that the development of logistics industry sector and digital economy sector is relatively independent, and the contribution of endogenous development effect is relatively high, which means that the correlation between logistics industry and digital economy is not strong, and the development of each relies more on their own accumulation of positive rather than promoting each other, which has important reference significance for guiding the formulation of policies and practices related to logistics industry and digital economy.

In terms of spillover effects, the spillover effects of the digital economy industry with the logistics industry are mainly in the manufacturing sector, and the spillover effects are all greater than the feedback effects. In terms of the feedback effect, the logistics industry and the digital economy industry are also mainly fed back through the manufacturing sector. From the spillover effect of logistics industry sector, leather, fur, feather and its products, wood processing and wood, bamboo, rattan, palm, grass products, shoes, dairy products and other industries are in the front, and the spillover effect of the above sectors to logistics industry is higher than the mean value 0.086, and the overall spillover effect of digital economy sector is higher than the spillover effect of logistics industry. The above indicates that the driving effect of China's digital economy sector on the logistics industry is greater than the driving effect of the logistics industry on the digital economy sector. The spillover effect of the logistics industry is relatively small (less than 0.2), indicating that the development of the logistics industry is still lagging behind, which indicates that there is still a lot of potential and space for the development of China's logistics industry, and if the logistics industry can improve the correlation mechanism with the digital economy industry, it will play a fundamental role in the high-quality development of China's economy. Therefore, in terms of intersectoral linkage effects, the digital economy has little influence on the logistics industry, and the spillover and feedback effects of the logistics industry are limited. In promoting cooperation and development between the two sectors, more attention needs to be paid to the driving role of the manufacturing industry, while strengthening the innovation of the logistics industry itself upgrading and the deep integration with the manufacturing and digital economy industries.

Table 2: Structural decomposition results of China's unconsolidated digital economy and logistics industry.

	effect	Digital manufacturing	Digital product service industry	Digital technology application industry	Digital elements drive industry	Logistics industry
Digital manufacturing	Self-multiplier effect	1.853465	-	-	-	-
	Spill-over effect	-	0.04031	0.14363	0.07332	0.0115
		-	0.03386	0.03262	0.04657	0.0335

	Feedback effect					
Digital product service industry	Self-multiplier effect	-	1.01712	-	-	-
	Spill-over effect	0.004407	-	0.00397	0.00575	0.007
	Feedback effect	0.005244	-	0.00319	0.0045	0.0026
Digital technology application industry	Self-multiplier effect	-	-	1.17197	-	-
	Spill-over effect	0.03985	0.00796	-	0.02534	0.0157
	Feedback effect	0.017044	0.01369	-	0.01587	0.0109
Digital elements drive industry	Self-multiplier effect	-	-	-	1.06871	-
	Spill -over effect	0.015242	0.02343	0.03779	-	0.0268
	Feedback effect	0.022834	0.01669	0.01443	-	0.0138
Logistics industry	Self-multiplier effect	-	-	-		1.1133
	Spill-over effect	0.123849	0.07112	0.04585	0.0921	-
	Feedback effect	0.109952	0.06215	0.06572	0.09073	-

In order to analyze the correlation effect more deeply, we analyzed the digital economy industries that were not merged, as shown in Table 2 above. From the subdivision of digital economy sectors, generally speaking, the development of digital economy industry and logistics industry still mainly depends on self-multiplier effect, followed by spillover effect and feedback effect. And from within the digital economy industry, the self-multiplier effect, spillover effect and feedback effect of digital manufacturing sector are the biggest. Among the four digital economy sectors, the internal multiplier effect of digital manufacturing is the most significant, with an increase of 1 unit of final output creating 1.85 units of output for the economy, followed by digital technology application industry, digital factordriven industry, and digital product service industry. Among them, the digital manufacturing industry has the largest spillover to the logistics industry relative to other industries, reflecting that the digital manufacturing industry has the greatest role in pulling the logistics industry and the digital technology application industry has the least spillover to the logistics industry. This is mainly due to the fact that the logistics industry is closely related to the manufacturing industry, and it can be said that they are complementary to each other. The manufacturing industry needs logistics to provide it with timely supply of raw materials and components and to deliver products to the sales terminal after production is completed; and the logistics industry needs the manufacturing industry to provide it with transportation needs and higher quality, lighter weight products to further improve transportation efficiency and reduce costs; The logistics industry has the most spillover to the digital factor-driven industry, and the logistics industry has the most output levels coming back through the digital manufacturing industry. What we need to do next is to strengthen the digital empowerment of the logistics industry, continuously innovate technology and application practices, actively leverage digital elements to drive their own development, maintain a keen market awareness and forward thinking, continuously iterate on innovation and drive the upgrade and progress of the entire industry.

4. Summary and targeted opinions

This paper focuses on the multiplier effect, spillover effect and feedback effect to examine the industrial correlation effect of China's digital economy industry and logistics industry, and draws the following conclusions: First, each economic industry and logistics industry show the characteristics of multiplier effect is greater than spillover effect than feedback effect, and the multiplier effect occupies the absolute dominant position, which shows that the development channel of China's industry is still not smooth, and the interaction mechanism of industry needs to be improved and optimized. In terms of spillover effect, the digital economy industry is much higher than the logistics industry, and the logistics industry is less affected by other industries. Second, from the perspective of the industrial relationship between the four industrial sectors of the digital economy and the logistics industry, the multiplier effect is still greater than the spillover effect and greater than the feedback effect. Among them, the spillover effect of digital manufacturing industry to logistics industry is much higher than that of digital product service industry, digital technology use industry and digital factor-driven industry, and the pulling effect of digital manufacturing industry to logistics industry is the largest; logistics industry has the most output level back through digital manufacturing industry feedback.

Given the above analysis, this paper makes the following policy recommendations:

Promote IoT technology. Apply IoT technology to interconnect various physical devices and combine cloud computing and big data analysis technologies to monitor the status, flow and production process of goods in real time, thus improving logistics efficiency and accuracy. IoT technology can be combined with RFID tags, sensors and intelligent transportation facilities, and further obtain a large number of logistics data through IoT technology, sensors and other means, and analyze these data to form meaningful information, thus realizing the visualization and optimization of supply chain.

Promote the deep integration of logistics industry and digital manufacturing industry. By creating a manufacturing logistics service platform and strengthening real-time information collection and sharing in procurement, production and circulation, manufacturing enterprises, logistics enterprises, component suppliers and final consumers can be connected to improve key indicators such as quality management, distribution efficiency and customer satisfaction. Promoting the unified planning, design, construction and collaborative operation of industrial big data and intelligent logistics platform can effectively strengthen the connection and cooperation between manufacturing and logistics industries, thus forming a stronger impetus to the whole industrial chain. The integration and development of manufacturing and logistics industry is a future trend, and its core elements are data-driven and platform-enabled. Only by promoting the sharing of big data, the integration of logistics resources and operational synergy and other important initiatives can we effectively promote the synergy and win-win development between the manufacturing and logistics industries.

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