

# ***Research on the Development Path of Industrial Internet Eco-Platform in the Context of China's Economic Digitization***

Yiming Ni<sup>1,a</sup>, Yufan Li<sup>1,b</sup>, Yuheng Ren<sup>2,\*c</sup>

<sup>1</sup>Jianpan Kunlu Internet of Things Technology Research Institute (Xiamen) Co., Ltd., Xiamen, Fujian  
361100, China

<sup>2</sup>Xiamen Kunlu IoT Information Technology Co., Ltd.  
a. niyimm@163.com, b. solorev27@gmail.com, c. hoture@126.com

\*corresponding author

**Abstract:** The continuous innovation and promotion of digital technology represented by big data, cloud computing and artificial intelligence have accelerated the development of a new round of technological revolution. The new round of technological revolution presents intelligent and networked characteristics, digital economy and digital technology to empower China's economic form to digital transformation, giving rise to a number of new business forms, new models, and bringing new opportunities. However, China is still facing problems such as a large digital divide, digital security threats, difficulties in implementing digital taxes, serious non-tariff barriers, difficulties in the digital transformation of enterprises and a lack of digital talents. Therefore, relevant research on the connotation and characteristics of the digitalisation of China's economy should be strengthened to provide theoretical support for China's economic transformation and high-quality development.

**Keywords:** Industrial Internet eco-platform, digital economy, high-quality development

## **1. Introduction**

### **1.1. International factors: the world has not seen a major change in a hundred years**

The world is experiencing a major change not seen in a century, which has a profound impact on the digital development of China's economy. International factors are important factors that cannot be ignored in the context of China's economic digitalization development [1].

The in-depth development of social globalization and economic globalization has brought opportunities and challenges to the digitalization of China's economy. The opening up and competition in the global market have intensified the digital development needs of Chinese enterprises, while globalized cooperation and interconnection have provided Chinese enterprises with a broader market and more resources.

Technological innovation and the rapid development of information technology are also important drivers of international factors for the digital development of the Chinese economy [2]. Advances in information technology have accelerated the dissemination and exchange of information and facilitated the integration and optimization of the global industrial chain.

At the same time, the rise of tech giants has changed the global economic landscape and driven the rapid development of the digital economy. In addition, unstable factors such as global trade

wars and financial crises have challenged the digital development of China's economy. The uncertainty and volatility of these factors have had an impact on the digital development of Chinese companies, and the need to strengthen the ability to monitor and respond to the global economy.

In short, international factors play an important role in promoting and constraining the digital development of China's economy, and it is necessary to actively respond to and grasp the opportunities and challenges brought about by changes in the international situation. It is only through international integration and strengthening cooperation and exchanges with other countries that a virtuous cycle of digital development of the Chinese economy can be realized and the international competitiveness of the Chinese economy improved.

## **1.2. The China factor: building a new development pattern of double-cycling**

The connotation and context of China's digitalized economic development is one of the important components of this study. This section will focus on China's new development pattern of building a double cycle.

Constructing a new development pattern of double-cycle refers to a development pattern in which the Chinese general cycle is the main body and the Chinese and international double-cycles are mutually reinforcing [3]. Among them, the China Grand Cycle refers to the Chinese market as the main driver of economic growth, relying on domestic demand [4]. China's international double cycle refers to the two-way interaction between the Chinese market and the international market, driving industrial upgrading and innovative development through the demand of the Chinese market, while relying on the advantages of resources and market scale of the international market.

The background for building a new development pattern of double cycle mainly includes the following aspects. First of all, international factors are one of the important driving forces for building a new development pattern of double-cycle. At present, global development is facing a great change that the world has not seen in a century, protectionism and unilateralism are on the rise, and the international trade and investment environment is facing uncertainties. Against this background, building a new development pattern of double-cycle can reduce dependence on the external environment, improve risk resistance and realize sustainable development.

Secondly, the China factor is also an important support for building a new development pattern of double-cycle [5]. In recent years, China's economic development has shifted from the stage of high-speed growth to the stage of high-quality development, the traditional economic growth momentum has weakened, and the economic structure and power transformation need to be upgraded urgently. The construction of a new development pattern of double-cycle will promote the organic integration of internal and external markets, and improve the self-sufficiency and power of economic development.

The core of the new double-cycle development pattern lies in the construction of a stable and sustainable internal cycle, which will be centered on the growth of residents' incomes, the sustained increase in investment and the further expansion of consumption. By raising the level of residents' income, increasing people's purchasing power, increasing investment, fostering new economic growth points, and promoting consumption upgrading, industrial upgrading and economic development will be realized. At the same time, China's international double cycle supports and promotes each other, and through the introduction of international advanced technology and services, it meets China's market demand and improves the quality and scale of domestic demand.

Overall, building a new development pattern of double-cycle is necessary to adapt to the current situation outside China and to realize high-quality economic development. By building a new development pattern of double-cycle, China will better adapt to the changes in China's external environment, realize sustainable economic development, and promote the digitalization of China's economy in terms of content and development.

## **2. Study on the connotation of digitization of China's economy**

### **2.1. Connotation of economic digitization**

Economic digitization refers to the wide application and deep integration of digital technology in economic life. Compared with the traditional economic model, the connotation of economic digitalization is more comprehensive and diversified.

First of all, economic digitization does not only refer to the application of digital technology in the economy, but also emphasizes the profound change of digital technology on the economic model and business model. The wide application of digital technology has made economic activities more efficient and smarter, and has greatly facilitated industrial innovation and upgrading.

Secondly, the digitalized economy also emphasizes the mobility and shareability of information. Through digital technology, information is no longer limited by space and time, and can be rapidly disseminated and shared. This provides economic participants with greater opportunities and more choices. In a digital economy, individuals, businesses and governments can access and utilize information resources more flexibly, thereby promoting more rapid economic development.

In addition, the digitalization of the economy also emphasizes the profound adjustment and restructuring of the economic structure by digital technology. The application of digital technology not only plays a role in traditional industries, but also brings about new industries and new economic models. Through digital technology, new production methods and business models are born, further promoting economic innovation and development.

In general, the connotation of economic digitalization not only involves the application of digital technology in economic activities, but also emphasizes the profound changes and reconstruction of digital technology on economic models, business models and economic structure. As the core of the digital economy, economic digitization will have a broad and far-reaching impact on economic development and social change.

### **2.2. New changes in the digitalization of the economy**

The completely new transformation of the digitalized economy refers to the fundamental changes and transformation of economic activities and economic systems under the trend of the digital economy. This transformation is mainly reflected in the following aspects.

The development of the digital economy provides a completely new model and mechanism for economic activities. While traditional economic activities mainly rely on physical assets and human resources, digital economy introduces information technology and network technology on this basis, making economic activities more convenient, efficient and comprehensive. Through digital means and platforms, enterprises and individuals are able to carry out information transfer, business cooperation and value creation more conveniently.

The development of the digital economy has led to a profound change in the mode of industrial organization. In the past, traditional industries were mainly centered on enterprises, with relatively independent supply and value chain relationships. In contrast, the development of digital economy connects enterprises with consumers, suppliers and other relevant stakeholders in depth, forming a more open and diversified industrial organization model. In the digital economy, enterprises achieve resource sharing and win-win cooperation through the establishment of an Internet ecological platform, which improves the efficiency and flexibility of industrial organization.

The development of the digital economy has also brought about a brand new change in the economic model and business model. While the traditional economic model mainly focuses on production and exchange, the digital economy pays more attention to the value and utilization of data. In the digital economy, enterprises and individuals achieve a precise grasp of consumer

demand and personalized services through the collection, analysis and use of big data. The digital economy also encourages and supports innovation, providing a favorable environment for the rapid rise of emerging industries and new business forms.

The new changes of the digital economy are also reflected in economic policy and governance. The development of the digital economy requires the government to formulate appropriate policies and norms to guarantee data security and privacy protection, maintain a fair and competitive market environment, and promote the integration and development of the digital economy and the traditional economy. In addition, the brand-new change of the digital economy also requires the relevant departments to increase support for talent training and technological innovation, and improve the development level and strength of the digital economy.

The brand-new change of economic digitization is a major change in economic activities and economic systems under the development trend of the digital economy. This new change is reflected in the mode of economic activity, industrial organization, economic model and governance, providing an important support and driving force for the innovative development and high-quality growth of the economy.

### **3. New features of China's economic digitization**

#### **3.1. Platformization, Scale and Scope of Industrial Organization Models**

In recent years, with the rapid development of the digital economy, industrial Internet eco-platforms have gradually become a new force driving economic development. This section will focus on the three aspects of platformization, scaling and scoping of the industrial organization model.

The platformization of industrial Internet eco-platform refers to the transformation of traditional industries into open and shared digital platforms in order to realize the synergy and integration of the industrial chain. By building an open platform, the industrial Internet eco-platform is able to connect suppliers, producers and consumers, share data and resources, accelerate innovation and improve efficiency. This platform-based organizational model can promote the integration and optimization of each link in the industrial chain, achieving efficient resource allocation and cost reduction.

The scale of industrial Internet ecological platform refers to expanding the industrial Internet platform from around enterprises to around the scope of industries and forming the effect of economy of scale. By realizing the scale of operation, the industrial Internet ecological platform can better meet the needs of users, reduce transaction costs, and improve the quality and competitiveness of products or services. Scalability will also bring more data and users, providing more resources and opportunities for the operation and development of the platform.

The platformization, scaling and scoping of industrial Internet eco-platforms is an inevitable development path in the digital development of China's economy. By building an open and shared digital platform, expanding the scale of the platform, and cooperating and innovating across fields, the industrial Internet eco-platform is able to realize the synergy and integration of the industrial chain, improve the efficiency of resource allocation, accelerate innovation and industrial upgrading, and promote China's economy towards digital transformation.

#### **3.2. Digitization of social governance systems**

The digitalization of the social governance system is one of the important aspects of China's economic digital development. With the continuous development and application of digital technology, the traditional way of social governance has been difficult to meet the needs of social management in the new era, and digital governance has gradually become a key means to improve the efficiency of social management and the level of service.

The digitization of the social governance system has given the government a more accurate and efficient management capability. Through the application of digital technology, the government can realize the rapid collection, integration and sharing of information, and improve the science and accuracy of decision-making. In the response to emergencies, digital governance enables the government to quickly access real-time data and gain a comprehensive understanding of the occurrence and dynamics of the event, so that it can make quick decisions and take measures to improve the effectiveness of governance. Digital governance can also make use of technical means such as big data and artificial intelligence to achieve an accurate perception of social conditions and public needs, providing a scientific basis for government decision-making.

The digitization of the social governance system is an important aspect of China's economic digital development. Through the application of digital technology, the government is able to enhance the precision and efficiency of governance, closely interact and cooperate with all sectors of society, and expand the channels and means of public participation in governance. The implementation of digital governance will further enhance the quality and level of social management and provide strong support for China's economic development.

### **3.3. Deep digital integration of the economic system**

The deep digital integration of the economic system is an important aspect of the new features of China's economic digitization. With the continuous development and application of digital technology, the boundaries between traditional and digital industries are becoming increasingly blurred, and digital technology is not just an auxiliary tool, but has become an important driving force to promote economic transformation and upgrading. In the context of deep digital integration, traditional industries have realized all-round upgrading of production, management and operation by combining with digital technology.

In the deep digital integration of the economic system, the integration between traditional industries and digital industries has also become a new development trend. Through cooperation and integration with digital industries, traditional industries have realized the complementarity of their respective advantages and the sharing of resources. Through the introduction of digital technology, traditional industries continue to expand the boundaries of their products and services and provide richer and more diversified products and value-added services. The digital industry, on the other hand, applies its technology and platform capability to the traditional industry through cooperation with the traditional industry, and jointly promotes the innovation and development of the industry. The deep integration of traditional industries and digital industries not only strengthens the synergy and integration of industrial chains, but also promotes the upgrading and transformation of industries.

The deep digital integration of the economic system is a new feature of China's economic digitization, which promotes the upgrading and transformation of traditional industries through deep integration with them. Under the development trend of the digital economy, the industrial Internet ecological platform can give full play to the advantages of digital technology and promote the digital transformation and innovative development of traditional industries. The development path of industrial Internet eco-platform should focus on innovation and synergy, actively promote the integration of traditional industries and digital industries, realize the optimization and upgrading of the industrial chain, and provide a new engine and support for the development of the digital economy.

## 4. Conclusion

This paper examines the domestic and international factors of China's economic digitalisation development. It is found that with the deepening of economic globalisation, the digitalisation of China's economy faces a more intricate and complex environment, and the construction of a new pattern of double-cycle development is an important measure for China to cope with this environmental change. On this basis, the paper defines the conceptual extension and connotation of China's economic digitisation, and finds that the digitisation of China's economy is characterised by platformisation and the mutual promotion of the digitisation of the governance system and the economic system.

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