

# Digital Economy and China's High Quality Development

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**Abstract:** It is commonly believed that since the beginning of the industrial age, human beings have experienced three technological and industrial revolutions. These are: mechanization marked by the invention and use of the steam locomotive; Signs of electrification; Information technology represented by electronic technology. Every change in science, technology and industry has had a profound impact on the development of the world economy over the past decades and even centuries. As we all know, our country failed to seize the opportunities presented by the first two technological revolutions and economic globalization. Since the reform and opening up, followed by the third science, technology and industrial revolution, China has realized the leap-forward in the new round of economic globalization. With the emergence of new technologies such as artificial intelligence, cloud computing, big data and blockchain, the digital economy around the world has seen rapid development. Digitalization and intelligentization are the representatives of the digital economy. The new round of scientific and technological revolution and industrial revolution have attracted extensive attention from all over the world. Developing digital economy is of great strategic significance in promoting the high-quality development of Chinese economy and building new advantages of open economy.

**Keywords:** Digital Economy; High Quality Development

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## 1. How does the Digital economy affect the global economy

First, the digital economy makes it easier for countries to participate in the international division of labor. In the era of digital economy, data has become the most important production factor in the world, and its influence on the global division of labor is mainly reflected in the following two aspects: first, compared with physical factors such as capital, the transmission of data is mainly through the Internet, which breaks the limitations of time and space and has greater flexibility; Second, using factors breaks down quantitative boundaries. Except for a few areas such as personal privacy and national security, the collection and use of most data are not exclusive, and the same data will be repeatedly collected and used by different economic units. It is clear that data has become a factor of production, greatly enhancing the variety of means of production that can be circulated across borders. Countries and regions have more choices in the process of achieving a "combination of strengths", thus making it easier and more accessible for countries to use their strengths elements for international division of labor.

Second, with the continuous popularization of digital technologies such as mobile Internet, big data and cloud computing, traditional industries are constantly being replaced by digital technologies, and new industries, new models and new economies are also emerging. Digital economy is an important component of digital economy, it is a new impetus of economic development in our country. In promoting the development of productive forces at the same time, but also constantly affecting the traditional employment system, employment direction, employment concept and employment field. Like capital, labor and land, numbers play an important role in the development of productivity. According to the report of the 19th National People's Congress, we should adhere to the principle of "putting people first", strive to improve the quality of life and employment, and turn every worker's labor into fruits for the development of the Party and the country. China's digital economy created 191 million people in 2018, accounting for 24.6 percent of the country's total, up 11.5 percent from a year earlier, according to the 2019 White Paper on China's Digital Economy Development

and Employment. With strong absorptive capacity, the digital economy has become an important force in optimizing the employment structure and promoting high-quality employment.

Finally, the digital economy is an important part of promoting the modernization of industrial systems and an important factor in building new competitive advantages. Digital economy is characterized by innovation, permeability and wide coverage, which is not only an emerging economic growth point, but also the fulcrum of traditional industrial transformation and upgrading, which is an important driving force in China's modernization construction. Digital technology and digital economy will become the focus of a new round of global economic competition; Developing the digital economy is an important measure to realize the new advantages of the open economy and win the commanding heights of future development.

## **2. The digital economy leads innovative development**

On the one hand, due to the development of the digital economy, the cost of finding information is greatly reduced, which reduces the information asymmetry and optimizes the user's choice space to the greatest extent. If an enterprise wants to gain an advantage in the fierce market competition, it must continuously improve its production capacity. To improve the investment in scientific and technological innovation is an important way to improve the technological level of enterprises, improve the quality of products and promote economic development. In the digital economy, most of them are knowledge-intensive enterprises with rich innovation resources and strong innovation ability, which can continuously improve the level of technological innovation. In the digital economy environment, the competition form of enterprises is a market with great uncertainty. In product R&D, design and production, diversified and personalized demands of consumers are reflected in product development, design and production, and at the same time, it will promote the transformation of business process, organization management and operation mode. So that the organizational structure, management environment more conducive to product and technology innovation. Secondly, the empowerment of digital economy on industrial innovation is based on the association and convergence effect of industries. First, the digital economy can create new business forms, operating data, data leasing, analysis and prediction, decision outsourcing, etc., with its own strength. Second, while promoting the transformation of traditional industries into digital, intelligent and service-oriented industries, digital technology supply interacts with the demand of integrated industrial development, and promotes the innovation and upgrading of digital equipment manufacturing and digital technology service industries. Third, the digital economy stimulates regional innovation and entrepreneurship with the ecological effect of innovation. Digital technologies, data resources, and digital infrastructure are innovative creations that allow individuals, groups, and organizations to co-create services, applications, and content, creating an enabling environment for technological innovation. Because digital technology can break through the limitations of time and space and make it an operational resource. Enterprises with a high degree of digital technology implementation (wide and deep) can use differentiated and personalized products or value-added services to enhance their innovation potential. Second, the rapid development of digital products in terms of price performance has provided strong positive feedback for promoting digital innovation and technology promotion. Cloud computing has improved the use and diffusion of resources, while also facilitating the spread of advanced digital technologies such as artificial intelligence and big data analytics. Third, on the digital platform, high debt level of assets and liabilities can not only reduce the innovation cost, shorten the R&D cycle, but also reduce the entrepreneurs' perception of risk. At the same time, the innovation environment "siphons" the resources of the surrounding area, forming the agglomeration of talent, technology, capital and other factors, which has a certain impact on the innovation activities and innovation performance.

## **3. Digital economy promotes green development**

With the rapid development of digital economy, it also brings great impact to the ecological environment. Many scholars agree on the dampening effect of the digital economy on the environment and point to its direct or indirect impact on ecological civilization. First of all, it has the characteristics of low emission and low energy consumption, which is of great significance for improving the environment and promoting the coordinated development of economy and environment. In the context of circular economy and sustainable development, information technology can be divided into three categories: first, cloud computing, big data and blockchain can help enterprises track funds and improve resource utilization efficiency; The second is to help enterprises reduce production and

production costs and reduce the impact on the environment, such as 3D printing, robotics, energy recovery and processing, module construction and nanotechnology; The third is to get enterprises out of biotechnology such as bioenergy, biomaterials, catalysts, hydroponics and air culture. The application of these technologies will directly affect the development of the company's energy saving technology, as well as the demand for energy. Secondly, due to its high permeability, it is fully integrated with various industries, so as to indirectly improve ecological benefits through the influence of structure and technology. In the process of digital economy development, structural factors play an important role. On the one hand, as the funds and services of ICT in industry continue to increase, manufacturing industries with high pollution levels will reduce the scale of production, thus reducing environmental pollution. At the same time, with the aid of big data and cloud computing technology, can accurately identify the real identity of lenders, and the loan risk and credit for careful evaluation, which leads the financial capital flows more efficient, more environmental protection industry, already can "blood transfusion", and to increase the environmental benefits, realize the benign cycle of economy and environment. On the other hand, the digital economy, through the intelligent transformation of traditional industries, has greatly improved the efficiency of the use of resources, and achieved resource saving and pollution emission. E-commerce will significantly reduce packaging and advertising, which accounts for a third of municipal solid waste. In terms of technical effect, the adoption of ICT technology infrastructure improves the production efficiency and the added value of products, thus promoting the transformation and upgrading of enterprises, thereby reducing energy consumption and playing a positive role in energy saving and emission reduction.

## 4. Conclusion

As shown in the above data, it can be seen from previous studies that with the development of digital economy, the connotation of energy consumption is gradually deepening, its efficiency is also gradually improving, and energy consumption is also more and more inclined to low-carbon and green. Digital economy is an important part of the digital economy, which can effectively promote energy conservation, and digital economy can play the effect of reducing carbon emissions, providing a strong guarantee for the development of green and low-carbon economy.

## References

- [1] Jing WJ, Sun BW, Digital Economy Promotes High-quality Economic Development: A Theoretical analysis framework. *Economic Scientia Sinica*, 2019(2) : 66-73.
- [2] Zhang H, Shi L. Digital economy: A new driving force in the New Era [J]. *Beijing Jiaotong University (Social Sciences Edition)*, 2019,18(02) : 10-22.