

The role of digital economy in promoting high-quality development

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Abstract: With the continuous development of Internet technology, artificial intelligence and blockchain applications, the development of the digital economy has reached an unprecedented height. The integration of Internet technology has given birth to the real economy. In the "14th Five-Year Plan", China will "accelerate digital development and build digital China" as a separate chapter, and clearly point out that it is necessary to accelerate the development of the digital economy. By introducing the digital economy and its related concepts of promoting high-quality economic development, this paper elaborates on the current difficulties faced by China's high-quality economic development, and then puts forward the practical path of promoting high-quality economic development with digital economy.

1. Introduction

This article takes the digital economy to promote the development of the manufacturing industry as an example to prove the great advantages of China's digital economy, better empower the manufacturing industry, and promote the high-quality development of the manufacturing industry. In the era of digital economy, digital technology has become the primary productive force. On this basis, the driving effect and role path of digital economy in the high-quality development of manufacturing industry are analyzed, which provides certain scientific guidance for the huge dividends brought by the digital economy and the promotion of the digital transformation of the manufacturing industry. In every era, there are corresponding core asset elements.

2. The connotation of digital economy and high-quality development

2.1 The connotation of the digital economy

The digital economy has an impact on boosting consumption, stimulating investment, and creating jobs. In the context of Chinese society entering the new normal of digital economy, digital economy has become an important support point for China's economic development. According to the White Paper on the Development and Employment of China's Digital Economy released by the China Academy of Information and Communications Technology, the scale of China's digital economy will reach 39.2 trillion yuan in 2020, a year-on-year increase of 20.9%, accounting for 46.8% of GDP.

In the digital economy, data is not only the data of individuals, but also data at the enterprise level and data at the public level. In this context, an information exchange platform has been established, which will make the communication between the two sides more convenient, through the platform to communicate, you can find that with the support of the platform, access to data has become simpler[1-2].

2.2 High-quality development

At present, high-quality development is the main theme of our country, and the 20th National Congress also proposed that China should take the road of high-quality development, especially the high-quality development of China's manufacturing industry is also particularly important. Manufacturing industry occupies a pivotal position in China's economic development. Therefore, we must insist on improving quality and expanding quantity, improving efficiency, innovation-driven, promoting the deep integration of manufacturing and digital economy, and promoting the high-quality development of manufacturing industry in the context of digital economy[3].

2.3 The mechanism of high-quality development of manufacturing industry in the context of digital economy

The digital economy can directly promote the efficiency of the manufacturing industry, and in the process of using digital technology, manufacturing enterprises can effectively improve the work level of the industry, so that the manufactured products are more high-quality, so as to provide better services for consumers. In this context, manufacturing enterprises can also reduce waste in the production process, which is also to meet China's current dual carbon goals.

With the help of the platform built by the Internet, traditional manufacturing enterprises build a bridge of communication with consumers through digital technologies such as comprehensive analysis of data information, solve the imbalance of information between the two sides, and solve the difficulties of communication. Enterprises can understand the needs of consumers in many ways, produce according to customer preferences, improve the production efficiency of enterprises, and improve the quality of products and services of enterprises. At the same time, the digital transformation of the manufacturing industry can reduce environmental pollution.

The mechanism can be mainly understood from the following aspects: First, the R&D investment of enterprises is more focused on digital transformation, and traditional industries can always learn new digital technologies to achieve production efficiency and product quality improvement. Second, in the digital economy environment, it can effectively improve the efficiency of the company's internal operation and the government's external governance. In this context, the internal communication of the enterprise is also more convenient, improve the communication efficiency, and reduce the communication cost[4-7].

In terms of investment in research and development, in recent years, China has been more supportive of high-tech industries, and can also reflect the state's support in taxation, for example, the state is a tax reduction for high-tech industries, and the tax rate of enterprise income tax is reduced to 15%, which is a significant reduction from 25% of the normal tax rate. Therefore, the investment in related R&D shows an increasing trend, the R&D investment is increasing, and the innovation level of the enterprise is also increasing.

3. The mechanism of digital economy to empower high-quality development

The digital economy empowers the quality transformation mechanism of high-quality economic development. In addition to improving the quality of the mechanism, it can also improve the

efficiency of the operation process: the macro level is for the entire economy, and the micro economy is for the enterprise[6-8].

3.1 Macro level

Empowering high-quality economic development at the macro level is mainly carried out from three aspects.

First, high-quality development is manifested in the digital economy era, new infrastructure, new production factors and other aspects have great advantages. For example, 5G base stations are in the digital economy mode and play a role in improving economic operation efficiency. Data is a new factor of production, which breaks the limitation of the scarcity of traditional factors of production and enables users and producers to use it indefinitely; Its value is reflected in all its possible uses, breaking the traditional definition of opportunity cost of production factors.

Second, the economic operating environment is an important influencing factor for the long-term stable operation of the economy, and as far as the ecological environment is concerned, the digital economy improves the ecological environment by improving efficiency, the amount of completion in the same time. In terms of institutional environment, the digital economy rationally allocates resources through big data analysis, optimizes the management capabilities of management institutions, and implements precise governance.

Third, stability and coordination of its operation over a long period of time. In the long run, the market relies on the cloud platform, through big data, artificial intelligence and other technologies to accurately adjust the allocation of resources, and use the spillover effect of high-productivity industries on low-productivity industries, so that the production efficiency of low-productivity industries has been further improved in the pattern of digital economy, so that the efficiency of resource allocation and utilization has been further improved.

3.2 Micro level

Empower high-quality development of enterprises at the micro level. Enterprises are an important micro subject in China's economic development, and their development level directly affects the development level of China's economy. In the context of the digital economy, data has been fully integrated into all aspects of society and economy, the use of digital technology, the company's business mode has also changed, in the process of data analysis, the company's innovation ability has also been continuously improved, so that the company's development quality has been improved.

The effectiveness of the company's operations is reflected in the effectiveness of the company's communication. Traditional communication is too costly, and communication between different companies is also very difficult. The digital economy plays a role here, allowing companies to learn about the overall market situation and formulate the company's business strategy according to the market situation. The management of the enterprise is divided into modules for communication in the context of the digital economy, which can effectively improve the communication efficiency within the enterprise.

4. The difficulties encountered in China's high-quality development

4.1 Institutional mechanisms are not perfect

At present, there are no institutions and departments in China that specialize in high-quality economic development. The implementation of the relevant work is also not coordinated enough, and the degree of implementation is insufficient. The previous high-quality development index system

and related indicators may no longer be used for evaluation in the context of the digital economy, and need to be further improved.

To this end, all parties should continue to work hard to create a good institutional environment for high-quality development. In the increasingly fierce international market, China's economic growth rate has slowed down on the whole, and if it cannot guide the development of various places, it will have an adverse impact on China's overall international competitiveness. On the whole, there is still a big gap in China's innovation ability, competitiveness and the construction of a flexible and orderly economic system with market mechanism.

4.2 Uneven development

China's high-quality development and the development of the digital economy continue to be stable, but the development is uneven. At present, many problems have arisen with regard to the modalities of development. For example, China's real economy has not been well developed, and the creativity of the whole society has not yet been fully developed. The development of the digital economy is growing steadily, but the development of the real economy has not kept up with the development of the digital economy, if the real economy can keep up with the development of the digital economy and develop together, then China's overall economic development will be a step higher.

From different levels, Guangdong, Beijing, and other first-gradient cities play a leading role in the high-quality development of high-tech manufacturing and promote the economic development of other regions. The second tier of provinces accounts for about 70%, because of its large number, if the overall level of high-quality development needs to be improved, it is necessary to focus on the high-quality development of second-gradient cities.

4.3 Regional Differences

The development of the digital economy in different regions of China has a positive relationship with the level of regional economic development, the development of the digital economy between regions has a positive relationship with the level of economic development between regions, and the "digital divide" between regions still exists. Regions with high levels of economic development, relatively complete conditions in "hardware" and "software", relatively mature and relatively developed regions have relatively large advantages in digital development. Beijing, Shanghai, Guangdong, the proportion of digital economy in GDP is 49.7%, the proportion of GDP is 48.9%, accounting for 40.8%, ranking third in the country.

The development of the eastern and western regions is obviously different, and due to the lack of prerequisites for the development of the digital economy, the level of digital economy development in Tibet, Qinghai and other provinces is relatively low. The "Internet" has had a great impact on traditional industries in backward areas, hitting many industries and retail entities, resulting in a poor environment for entrepreneurship and innovation, and a large outflow of high-tech talents, thus forming a vicious circle. Therefore, taking the digital economy as an important support for promoting coordinated regional development, while giving full play to the advantages of each region, it can also form a new regional coordinated development model, thereby narrowing the differences in the development of the digital economy between regions[8][9][10].

5. Relevant suggestions for achieving high-quality development through the digital economy

5.1 Strengthen research and development of key core technologies

The heavy weapon of the country must be in one's own hands. The development of the digital economy must make breakthroughs in key core technologies in order to truly reach the forefront of the world. Take Shandong as an example, the national high-tech industrialization base of Jinan Institute of Quantum Technology has formed a certain scale, and has achieved relatively good results in some aspects, which needs more support from the government and more technical support to them. The lesson from the trade war between China and the United States is that we still have a long way to go in several key basic areas such as integrated circuits, high-end software and chips, so the government should give more support in terms of capital and environment, especially to introduce and train more talents, so as to form our own core competitiveness, so as to make the digital economy continue to develop.

It is also necessary to further improve the new infrastructure of the digital economy to provide strong support for the development of industrial digitalization and digital industrialization. At the same time, regarding the introduction of talents, China should strengthen strategies such as "strong talent city" and "talent strong province", integrate advantageous resources, and attract more talents to join. It is necessary to attach importance to the cultivation of talents, establish an index system to evaluate the level of China's high-quality development, cultivate talents for the weaknesses and problems of high-quality development, and consider the introduction of talents, use a better salary mechanism, attract more talents to join China's high-quality development, and establish a better incentive mechanism, so that employees can have more motivation to carry out the construction of China's high-quality development.

At the same time, in the context of the digital economy, because the digital economy has hidden characteristics, the results of China's high-quality development should also be further supervised, so that the digital economy can continue to develop and continuously provide energy for China's high-quality development. It is urgent to make breakthroughs in core technologies in terms of basic theory, core algorithms, and core equipment to promote the development of digital industrialization.

5.2 The two sides will promote the construction of digital economy infrastructure

With the advent of the 5G era and the popularization of IPV6 networks, it is necessary to deploy a new generation of networks as soon as possible and accelerate the construction of a new generation of networks, such as the industrial Internet and the space Internet, to ensure a smooth transition of existing networks. For example, taking Shandong as an example, the existing "National Jinan Center" and "National Health and Medical Big Data North Center" in Shandong are at the leading level in China, and their functions can be further expanded to achieve the construction of a platform "for the government, for enterprises and for the public."

There are many regions where data resource transactions are carried out, and the establishment of a trading center for evaluation and financing can be considered. After carrying out the evaluation and financing of the trading center, you can understand the specific situation of the market, through the market situation, formulate your own strategy, according to the strategy, in the high-quality development of the enterprise timely adjustment, and continuously improve the level of innovation of the enterprise, according to the needs of the market, in the market needs to increase research and development, targeted to improve product quality, so as to greatly improve the production efficiency and product quality of manufacturing enterprises. Improve emerging digital infrastructure, rely on 5G and other digital technologies, conduct research and application, and provide technical support and basic guarantee for the digital transformation of the manufacturing industry. After the infrastructure

is improved, the foundation of the digital economy will be more consolidated, and high-quality development will be more guaranteed[8].

5.3 Implement regional differentiation strategies

Because of the different factors such as GDP level, digital economy, and people's acceptance of the digital economy in various regions of China, its role in promoting regional green development is also quite different. If a one-size-fits-all strategy is adopted, it will only work for the regions that apply the one-size-fits-all strategy and achieve the desired results, but for the regions that are not applicable, adopting such a strategy will be a misallocation of resources and cause waste. Then we should formulate their own strategies according to the development of each region, increase investment and support for areas with backward levels of digital economy development, arrange certain safeguard measures for economically backward areas, so that they can keep up with the current level of balanced development, for areas with good development of digital economy level, targeted strategies, for their weak development, targeted development can be, and areas with excellent development can give certain guidance and help to areas with backward development. At the same time, the regions with high development can also use the spillover effect of the development of the digital economy to help the regions that are lagging behind. For example, China's eastern region, high-quality development is relatively perfect, the current breadth of its development has reached, then it should use the technology of the digital economy to dig into the depth of its development, find out the advantages in the development process, continuously expand the influence of advantages, and provide technical support for backward areas.

The macro sector can implement more targeted and differentiated digital economy development policies, gradually narrow the development gap between north and south, east and west, and constantly strive for balanced development. These measures can satisfy the balanced development between regions. The strengths of each region can be complemented, as can the weaknesses. The development situation is coordinated development, so as to take more targeted measures in accordance with local conditions, promote green development of digital economy, promote coordinated regional development, and narrow regional development differences[3][10].

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