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THE IMPACT OF DIGITAL ECONOMIC PROCESS ON SOCIAL AND ECONOMIC DEVELOPMENT

The digital economy is the main economic form after the agricultural economy and the industrial economy. It takes data resources as the key element, modern information networks as the main carrier, and the integration and application of information and communication technology and the digital transformation of all elements as important driving forces to promote fair and A new economic form with more unified efficiency. With the advancement of informatization and digital technology, the digital economy has increasingly become an important driving force for social and economic development, affecting the sustainable development, social production and consumption, and economic development of various countries. The digital economy has an inestimable future. After the development of information platforms, social platforms, and e-commerce platforms, the digital economy has reached the stage of deep integration with traditional industries and promoting the digital transformation of traditional industries. New financial methods driven by the digital economy have flourished, and the world is accelerating into the era of digital economy.

Keywords: digital economy, economic development, digital economy scale, digital economy growth rate

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ВЛИЯНИЕ ЦИФРОВЫХ ЭКОНОМИЧЕСКИХ ПРОЦЕССОВ НА СОЦИАЛЬНОЕ И ЭКОНОМИЧЕСКОЕ РАЗВИТИЕ

Цифровая экономика является основной экономической формой после аграрной экономики и индустриальной экономики. Он использует ресурсы данных в качестве ключевого элемента, современные информационные сети в качестве основного носителя, а также интеграцию и применение информационных и коммуникационных технологий и цифровую трансформацию всех элементов в качестве важных движущих сил для продвижения справедливой и новой экономической формы с более единой эффективностью. С развитием информатизации и цифровых технологий цифровая экономика все больше становится важной движущей силой социально-экономического развития, влияя на устойчивое развитие, общественное производство и потребление, экономическое развитие различных стран. У цифровой экономики неопределенное будущее. После развития информационных платформ, социальных платформ и платформ электронной коммерции цифровая экономика достигла стадии глубокой интеграции с традиционными отраслями и содействия цифровой трансформации традиционных отраслей. Новые финансовые методы, основанные на цифровой экономике, процветают, и мир с ускорением вступает в эру цифровой экономики.

Ключевые слова: цифровая экономика, экономическое развитие, масштаб цифровой экономики, темпы роста цифровой экономики

The digital economy is an economic form in which humans identify – select – filter – storage – use through digital knowledge and information to achieve high-quality economic development. Digital economy, as a relatively broad concept, directly or indirectly uses data to guide resources to play a role, and economic forms that promote the development of productivity can be included in its category [1]. At the technical level, it includes emerging technologies such as big data, cloud computing, Internet of Things, blockchain, artificial intelligence, and 5G communications. The digital economy is developing rapidly, has a wide range of coverage, and has a profound impact. It is driving profound changes in production methods, lifestyles, and governance methods, and has become a key force in reorganizing

global factor resources, reshaping the global economic structure, and changing the global competition pattern. In the digital economy, the ability of human beings to process the quantity, quality and speed of big data has been continuously enhanced through the continuously upgraded network infrastructure and information tools such as smart computers, the Internet, cloud computing, blockchain, Internet of Things and other information technologies, promoting the human economy. The transformation from the industrial economy to the information economy, knowledge economy, and smart economy greatly reduces social transaction costs, improves the efficiency of optimal allocation of resources, increases the added value of products, enterprises, and industries, and promotes the rapid development of social productivity. Sexual development provides the technical foundation.

1. Analysis of the process and prospect of digital economy on social and economic development.

As countries around the world pay more attention to the digital economy, a series of development strategies have been introduced one after another. For example: the United States has formulated the «Data Science Development Strategy», «Federal Cloud Computing Strategy», «American Advanced Manufacturing Leadership Strategy», etc.; «Artificial Intelligence Strategy», etc.; Germany released the «Digital Strategy 2025»; the United Kingdom launched the «Digital Charter» plan; Russia formulated the «National Objectives and Strategic Tasks for the Development of the Former Russian Federation in 2024». At the 2016 G20 Summit, China proposed the «G20 Digital Economy Development and Cooperation Initiative», which listed the digital economy as an important part of the innovative economic growth plan [2]. China's digital economy is developing rapidly, and the scale of the digital economy ranks second in the world. The field of digital economy has also become an area where China has created high economic value in recent years. In 2018, the scale of China's digital economy reached 31.3 trillion yuan, accounting for 34.8 % of GDP, more than one-third, and contributing 55 % to GDP growth. Since 2013, a series of important measures such as «Broadband China», «Internet Plus», «Made in China 2025» and «Big Data Development» have been successively promulgated to ensure the development of the digital economy. In December 2021, the Circular of the State Council of China on Printing and Distributing the «14th Five-Year» Digital Economy Development Plan (State Council Bulletin No. 3, 2022) During the 14th Five-Year Plan period, China's digital economy has turned to a new stage of deepening application, regulated development, and inclusive sharing.

2. Market Scale and Development Prospects of the Global Digital Economy Industry in 2022.

The scale of the digital economy accounts for more than 40 % of the global GDP, and the scale of the global digital economy exceeds US \$32 trillion.

Benefiting from the development of new-generation information technologies such as the Internet, big data, and cloud computing, and the digital transformation of traditional industries, the scale of the global digital economy will continue to rise from 2018 to 2020. In 2020, the scale of the global digital economy will reach US\$32.61 trillion, a year-on-year nominal increase of 3.0 %, accounting for 43.7 % of GDP (Fig. 1).

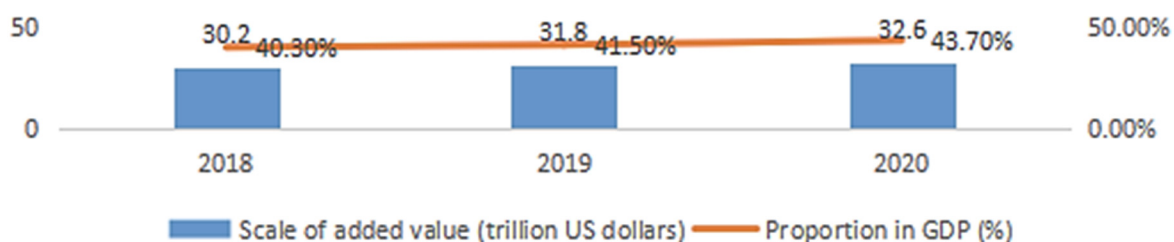


Fig. 1. GDP change

Note: The countries included in the statistics of CAICT include the United States, China, Germany, Japan, the United Kingdom, France, South Korea, India, Canada, Italy, Mexico, Brazil, Australia, Russia and other 47 countries.

The growth rate of the digital economy far exceeds that of GDP? Affected by the epidemic in 2020, the global economy will decline. The average year-on-year GDP of the 47 countries covered by the statistics decreased by 2.8 % year-on-year; the digital economy has become the main engine of the global economy, and the nominal growth rate of the global digital economy year-on-year is 3.01 %, which is 5.8 percentage points higher than the GDP growth rate.

The proportion of industrial digitalization is rising? Industrial digitalization is the leading force in the development of the global digital economy. Industrial digitalization represents the integration and penetration of the digital economy in the real economy. It is a key component of the digital economy and has huge development potential. The proportion of digital industrialization has stabilized and the proportion of industrial digitalization has gradually increased. It is a general law of the development of the global digital economy.

In 2020, the proportion of global digital industrialization in the digital economy will be 15.6 %, and the proportion will decrease; the proportion of industrial digitization in the digital economy will reach 84.4 %, and the proportion will increase. Industrial digitization has become a key leading force driving the development of the global digital economy.

The digital economy of the service industry accounts for 43.9 %? The digital transformation of the global service industry is faster than that of industry and agriculture. Affected by industry attributes, service industries with low fixed costs and high transaction costs are more likely to undergo digital transformation. In 2020, the digital economy penetration rate of the global service industry will reach 44 %; industries with high fixed costs and low transaction costs are more difficult to digitally transform. In 2020, the penetration rate of the industrial digital economy is 24 %; while the digital transformation of agriculture, whose production and operation are heavily dependent on natural conditions, has more constraints, and the penetration rate of the agricultural digital economy in 2020 is only 8 % (Fig. 2).

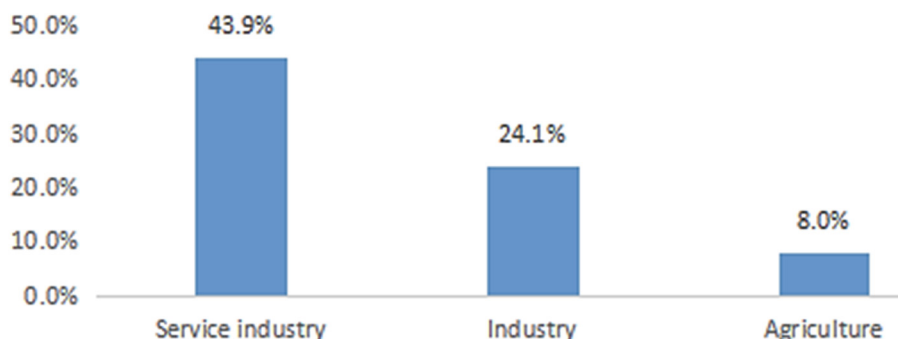


Fig. 2. Data refer to «Analysis Report on Market Prospect and Investment Planning of China's Digital Economy Industry» by Prospective Industry Research Institute

The digital economy is expected to account for 62 % in 2023. As a new economic form, the digital economy has become a driving force for transformation and upgrading, and has also become the commanding height of a new round of global industrial competition. According to IDC's forecast, by 2023, the output value of the digital economy will account for 62 % of the global GDP, and the world will enter the era of the digital economy, and the prospects of the global digital economy are optimistic.

3. Influences and problems faced in the development of digital economy. Data is an important production factor in the digital economy era and an important support for building a new development pattern [3]. Strengthening the supply of high-quality data elements, accelerating the market-based circulation of data elements, and innovating the mechanism for the development and utilization of data elements will help accelerate the formation of a data element market. It is of great significance to promote the high-quality development of the digital economy.

The deep integration of the digital industry and the inspection, testing and certification (TIC) industry can promote the transformation and upgrading of the industry with data as the main production factor. On the one hand, the TIC industry will become a network-based and data-centric emerging business. With the rapid advancement of the application of information technology, information between machines, between production systems and operating systems, and between upstream and downstream of the supply chain will be further opened up, and the TIC industry will gradually complete the process of replacing institutional trust with machine trust. Among them, the self-trust system of blockchain technology, the real-time online and offline communication of Internet of Things technology, and the deep learning of artificial intelligence have particularly significant changes to the TIC industry.

Mining application scenarios, innovating the development and utilization mechanism of data elements The integration of the digital economy and the real economy is increasingly close, and data helps manufacturing enterprises to achieve «scale production» to «scale customization», effectively supporting personalized customization, experiential manufacturing, and network manufacturing. Equal flexible new manufacturing state. In many fields related to people's livelihood, such as medical care, education, and transportation, the full use of data elements promotes the development of related applications in the direction of digitalization and intelligence, and promotes the improvement of people's happiness in life. The value of data elements is increasingly reflected in the promotion of reducing production costs, improving production efficiency, and improving living standards. It is necessary to maximize the potential of data elements by closely focusing on market needs and application needs.

Due to the overall technological innovation of information technology and its wide application in various fields, many Internet companies focus on the development of multiple technologies at the same time and penetrate multiple industries, and their influence is not limited to the Internet field. For example, Google has developed web services, media entertainment, operating systems and intelligent computing, and has now officially entered the field of automation through automated vehicles, artificial intelligence technology, robotics and advanced computing technology. Moreover, these companies have massive data and professional data processing capabilities, even surpassing the state, and may even gradually evolve into supranational actors, exerting a significant influence on the digital economy and even social development. How to better play the role of digital economy enterprises and strengthen enterprise autonomy is a prominent problem faced by digital economy governance.

In addition, the digital economy still faces problems such as digital divide and data security in the process of development, and there is an urgent need to strengthen and innovate the governance of the digital economy. The digital divide includes both the divide in the infrastructure of the digital economy and the divide in the digital literacy of citizens. In terms of infrastructure, 4 billion people around the world still do not have access to the Internet, most of them in developing countries. Even within a country, due to economic development and other reasons, there is still a big gap. There is a clear digital divide in terms of network access between eastern and western China and between urban and rural areas [4]. In terms of digital literacy, many countries also have insufficient digital skills. Relevant EU data shows that up to 47 % of the EU population lack sufficient «digital capabilities», which has become the biggest obstacle to European digital development. At the same time, with the development of the digital economy, security threats are also increasing. Research shows that the annual loss of various cyber attacks to the global economy can reach as high as 400 billion US dollars, and the existence of security problems also hinders the development of the digital economy to a certain extent. Narrowing the digital economic divide and ensuring network and information security have gradually become new challenges and requirements for digital economic governance.

Conclusions. The development of the digital economy is characterized by its large scale and rapid development. The digital economy has become an important driving force for economic growth in

China and the world. Under the new situation, the digital economy is a new driving force for revitalizing the real economy and accelerating industrial transformation and upgrading.

As a key task of economic work, the digital economy should tap the potential of the digital economy by accelerating the improvement of the construction of new digital infrastructure and promoting the integration of digital technology and traditional industries, so as to further improve the development level of the digital economy. In the process of promoting the development of the digital economy, it should be based on the development of the digital industry, focusing on how to play the role of big data, artificial intelligence and other digital technologies to penetrate, and promote the digital and intelligent development of traditional industries. The focus of digital economy construction is to reduce the manufacturing costs of various data processing and information transmission, to encourage innovation in service models and business models driven by digital technology, to replace the advantages of labor scale with digital information advantages, and to improve the scale efficiency of the digital economy. At the same time, increase investment in scientific and technological innovation, break through cutting-edge digital technologies and key core technologies, push the boundaries of innovation possibilities, and boost high-quality economic development.

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