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## THE FUTURE DETERMINES THE PRESENT: A NEW ERA IN THE GLOBAL FUTURE ECONOMY - DIGITAL ECONOMY

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The world today is in a transitional period when the digital economy and the industrial economy meet and undergo changes. With the rapid development of a new generation of information technology, new methods of leaping development are taking shape, and new industries and economic models will emerge. All countries in the world are facing an important period of strategic opportunity. The digital economy has become a strategic high point for competition among countries and a new driving force for global economic growth in the new era. The paper attempts to theoretically analyze the basic connotation of the digital economy, including the basic definition, development history, transmission mechanism and development laws of the digital economy, summarize the current development of the digital economy, and explore and analyze the challenges and opportunities faced.

Keywords: digital economy; new era; opportunity; development; analysis.

# БУДУЩЕЕ ОПРЕДЕЛЯЕТ НАСТОЯЩЕЕ: НОВАЯ ЭРА В МИРОВОЙ ЭКОНОМИКЕ – ЦИФРОВАЯ ЭКОНОМИКА

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Современный мир находится в переходном периоде, когда цифровая экономика и индустриальная экономика встречаются и претерпевают изменения. С быстрым развитием нового поколения информационных технологий формируются новые методы скачкообразного развития, появляются новые отрасли и экономические модели. Все страны мира переживают важный период стратегических возможностей. Цифровая экономика стала стратегической высшей точкой конкуренции между странами и новой движущей силой глобального экономического роста в новую эпоху. В статье предпринята попытка теоретического анализа базовой коннотации цифровой экономики, включая базовое определение, историю развития, механизм передачи и законы развития цифровой экономики, обобщения современного развития цифровой экономики, а также исследования и анализа стоящих перед ней вызовов и возможностей.

Ключевые слова: цифровая экономика; новая эра; возможности; развитие; анализ.

In the two decades after the 1990s, due to the success of the IT revolution, the Internet and mobile Internet have become the new infrastructure of the global economy, and human economic ecology has undergone unprecedented changes. Almost at the same time, big data

and cloud computing are coming, and artificial intelligence has come into view again. In 2008, Bitcoin was born, and digital currency has formed an industry for more than ten years. In the middle and late stages of the second decade of the 21st century, economists, bankers, scientists, and entrepreneurs reached a «consensus» and called the new economy formed by the mutual influence of all these economies and technologies the «digital economy». According to the calculations of the China Academy of Information and Communication Sciences (CAICT), the scale of the global digital economy reached 31.8 trillion yuan in 2019, the global digital economy's GDP accounted for 41.5 %, and the global digital economy grew by 5.4 % year-on-year [1]. Numerous digital platform companies are also developing rapidly. In 2017, the total value of platform companies with a market value of more than US\$100 million is estimated to exceed US\$7 trillion, an increase of 67 % in 2015. Some global digital platforms have already occupied very strong market positions in certain areas. For example, Google owns approximately 90 % of the Internet search market. In China, WeChat (owned by Tencent) has more than 1 billion active users, and the combination of its payment solution and Alipay (Alibaba) dominates almost the entire Chinese mobile payment market [2]. What are the basic development trends of the global and Chinese digital economy?

# 1. The global layout of the digital economy

The global challenges brought by 2020 have exceeded our expectations or experience. Companies and governments have adopted digital technologies within a few weeks. Industrial digitization and digital industrialization have promoted the development of the digital economy. In the case of unpopularity, it may take years to adopt these technologies. By adopting digital tools and skills, these companies have survived the pandemic. In the future, digital tools and skills will provide us with greater flexibility and uncertainty. According to Accenture's calculations, the GDP share of most countries/regions in the digital economy is expected to grow by 3 % between 2015 and 2020, which is equivalent to a 12.5 % increase in global economic output. Digital wealth is concentrated on multiple platforms in the United States and China. 50 % of global IoT spending and more than 75 % of the global public cloud computing market. Perhaps the most striking thing is that they account for 90 % of the market capitalization of the 70 largest digital platforms in the world. Europe's share is 4 %, and Africa and Latin America's share is only 1 %. Among the world's top ten listed companies in 2020, the seven «super platforms» of digital economy companies - Microsoft, followed by Apple, Amazon, Google, Facebook, Tencent and Alibaba-accounted for two-thirds of the total market value. From a global perspective, the development of the digital economy presents the following trends:

Under the sweep of the digital wave, countries have successively launched a digital revolution to compete for the future industrial highland of the digital economy. By mid-2020, more than 60 countries (OECD) have formulated national artificial intelligence strategies. Priority areas include artificial intelligence-related research and development (Canada, United States, European Union), artificial intelligence applications (Finland, Germany, South Korea) and artificial intelligence skills (Australia, Finland, United Kingdom, United States); the United States has successively issued the «Federal Cloud Computing Strategy» and «Larger Data Research and Development Plan» to accelerate the deployment of technologies in the front-end fields of global network information such as cloud computing, big data, and artificial intelligence. Russia also issued the «Digital Economy Plan» in 2017 to promote the development of Russia's digital economy and the integration of the digital economy within the Eurasian Economic Union from the five aspects of standardized management, talent and education, information infrastructure and security. At the beginning of the new century, Japan formulated the «National Information Technology» strategy. India launched the «Digital India» strategy in 2015 to vigorously develop network infrastructure. China is in a leading position in blockchain and quantum computing R&D expenditure.

At the basic user level of the digital economy, the scale of global Internet users continues to expand, but the growth rate has slowed in recent years. The popularity of the Internet has changed from a period of rapid development to a period of slow growth. The economic growth of developed regions such as Europe and North America is nearing its peak, and Africa still has huge development potential. At the same time, with the maturity of 3G and 4G mobile communication technologies and the rapid development of smart phones, the mobile Internet has developed rapidly in the past decade and has become the mainstream of the Internet. The development of the mobile Internet is very active, and the number of Internet users matches the distribution of the regional population. According to ITU data in 2018, half of the world's landmarks (51.2 %) use the Internet to cover 3.9 billion people. ITU estimates that by the end of 2019, 40 % of the global population will exceed 51 %, or 4 billion, using the Internet [3]. In terms of the number of Internet users, the top three regions are Asia, Europe and Africa. Most of the growth in Internet usage in developing countries accounts for about 90 % of global growth, while the least developed countries have the highest growth rates.

From the perspective of the latest trends in the development of the digital economy, the basic industry of the digital economy - the integrated circuit industry is facing bottlenecks and the traditional Moore's Law is coming to an end. A generation of information technology is rising in an all-round way, leading lead the digital economy to a new stage of development. The ICT industry leads the development of the digital economy, and the ICT service industry has become the pillar of the digital industry. In the ICT field, the employment rate of computer services is usually higher than in other sub-sectors. As far as the information and communication technology service industry is concerned, the US information and communication technology service industry has the largest scale. The manufacturing industry dominates the ICT industry, and the global ICT manufacturing industry is highly concentrated. In 2017, the world's top ten ICT manufacturing economies accounted for 93 % of the global ICT manufacturing industry, and East Asia led by China accounted for 70 % of the total (China, South Korea, Taiwan, Japan, Singapore, Malaysia, Thailand). The export of ICT products is highly concentrated in a few countries, mainly from East Asia and Southeast Asia. Since 2017, China has been the largest exporter, accounting for 38 % of the global share [4]. Cloud computing has been fully developed in 2016 and has entered the stage of the deep application. Companies such as Microsoft, Amazon and Alibaba are temporarily leading the way in this field. With the advent of the mobile Internet, mobile terminals and data sensors, the big data market is growing at an incredible rate. According to the monitoring data of the International Data Corporation (IDC), in recent years, the global big data reserve has grown at a rate of about 40 % per year. In 2016, it even reached a growth rate of 87.21 %. In 2017, the global big data market reached 58.9 billion US dollars; in 2018, the global big data reserve reached 33ZB. According to the development of the global big data market in 2019, the global big data reserve in 2019 is about 42ZB. In the next few years, the growth rate of global data will exceed 25 % per year. Since 2015, artificial intelligence has received widespread attention. Under the background of breakthroughs in the three cornerstone technologies of deep learning optimization algorithms, big data technology development and AI chip performance improvement, it has begun explosive growth, such as recognition technology, unmanned driving, and artificial intelligence chips. A breakthrough has been made in this field. China Internet Network Information Center (CNNIC) data shows that as of 2019, the number of artificial intelligence companies in China has exceeded 4000, ranking second in the world. PwC data predicts that the global artificial intelligence market will be driven by the dual power of downstream demand and upstream technology shaping. The scale will reach 2 trillion USD. It is expected that the market will continue to maintain rapid growth in the next few years. By 2030, the global market will reach 15.7 trillion USD.

2. Opportunities, challenges and prospects for the development of the digital economy

At this stage, the digital economy has become a future industrial high point for global competition, and it is also a new driving force for countries to promote economic development under the current new crown epidemic. In the next period of time, the development of the digital economy will usher in new development opportunities, and at the same time, it will inevitably face new challenges. How can producers and innovators make good use of the opportunities of the data-driven economy and deal with problems well is important for the digital economy. The development of China will have important strategic significance.

### New opportunities for development

The large scale of network users provides a broad market for the development of the digital economy. The well-known Metcalfe law states that the value of a network is equal to the square of its number of nodes. Therefore, the more computers connected to the network, the greater the value of each computer, and the value-added part continues to grow exponentially. As of June 2020, the number of Chinese netizens is 901 million, ranking first in the world [5]. With the large-scale commercialization of 5G, global Internet users will still have a large room for growth, providing a broad market environment for the development of the digital economy, especially the Internet economy, which is also the one of advantage for the United States and China in the competition in the digital economy.

The «Digital Road» provides new growth space for the development of digital technology companies. One of the biggest characteristics of digital economy enterprises is their international layout. First, digital technology is less constrained by space, making the world closely linked and strengthening global ties. On the other hand, digital technology is relatively unified, and the paradigm of digital economy development is also highly replicable. Therefore, most digital economy companies are multinational companies, and overseas business plays an important role in corporate development. For example, Google owns about 90 % of the Internet search market. Facebook occupies two-thirds of the global social media market and is the number one social media platform in more than 90 % of the world's economies. Amazon occupies nearly 40 % of global online retail activities, and its Amazon Web Services has a similar share in the global cloud infrastructure services market.

Various countries around the world have introduced policies to support the development of the digital economy, creating a good environment. According to statistics from the OECD 2017 Digital Economy Outlook Report, two-thirds of the member states of the organization have launched their own independent digital economy development strategy agendas or projects. The government-led digital economy development strategy has become an important development feature of the world economy. The digital economy development strategies of developing countries, including China, India, Russia, Mexico, Indonesia, etc., all show a more obvious color of state intervention.

## New challenges facing

From the above analysis, it can be seen that the digital economy has become a new driving force for global economic growth in the future, and it will have a lot to do in the construction of a modern economic system in developing countries. However, it must be clearly recognized that for most countries, especially developing countries, digital transformation will face severe challenges of capital and technology shortages, and there is still a considerable gap between developed countries such as Europe and the United States.

The ability of independent innovation is not strong, and the core technology is restricted by others. At this stage, the economic development of developing countries is characterized by market-driven development, with more application innovations and relatively few technological innovations. Especially, relying on the huge network user base and broad market scale, the application layer Internet companies are developing rapidly. The development of core technology is lagging behind.

*Competition for talent is intensifying, and high-end talent is scarce.* The digital economy is a typical knowledge-intensive enterprise, and the demand for talents is particularly prominent. With the development of artificial intelligence, low-skilled talents with strong repetitiveness are gradually replaced by machines, and the demand for highly-skilled talents with strong creativity continues to rise. The digital industry's demand for traditional labor has been greatly reduced, and labor costs are no longer an important factor affecting the investment layout of multinational companies in developing countries.

Digital transformation has a long way to go, and inclusive development has not yet been realized. The digital economy is not only a new economic format, but also a new type of social lifestyle and social skills. At this stage, there are still many places in the world where digital literacy is still generally low, and a large number of people still do not enjoy the dividends brought by digital technology. The information infrastructure is not fully covered, and the problem of «digital divide» is prominent. The relatively backward construction of information infrastructure in Africa and developing countries has prevented a considerable number of people from enjoying the digital dividend.

# **Prospects and countermeasures**

For the development of the digital economy in the future, the following points are worth focusing on.

Attach great importance to basic research and accelerate independent innovation. Basic research is the forerunner of technological progress and the source of independent innovation. Only with in-depth and solid basic research as a backing can the improvement of core innovation capabilities find a fulcrum. Japan's setbacks in the information industry in the 1990s provided us with a lack of emphasis on basic research and independent innovation.

New typical case. We must keep abreast of the latest trends and technological frontiers of the global information industry and realize independent innovation of key technologies. Specifically, breakthroughs in applied technology products such as mobile Internet, cloud computing, big data, and the Internet of Things should be achieved in the short term, and breakthroughs in basic technology fields such as operating systems, integrated circuits, basic software, and basic algorithms should be committed in the long term.

Pay close attention to the changes in market technology, pay attention to the efficient docking of industry, university and research, and focus on the application of market technology

The development experience of the Taiwan Industrial Technology Research Institute in Taiwan (China) and the Silicon Valley of the United States are typical cases of emphasizing market technology. The Taiwan Industrial Technology Research Institute has promoted the rapid development of the optoelectronic and semiconductor industries in Taiwan through its sensitive grasp of market technology. In the United States, California Silicon Valley is currently the most mature emerging industrial park for global technology marketization. The important experience is based on university scientific research institutions as the key support, market-oriented, fully realizing the integration of production, teaching and research, and the rapid transformation of scientific research results for social productivity.

Attach great importance to talent work, create a social environment that accommodates geniuses, and cultivate human capital for the digital economy. In any country, in any business, talents are fundamental to determine the success or failure of the prosperity and decline. Strategic emerging industries are determined by their characteristics, and require more innovative

talents. History has proven that without the joint efforts of a group of technological entrepreneurial elites, innovative management masters, and venture capital, the US information industry cannot grow rapidly. In the early development of Silicon Valley, American universities have provided Silicon Valley companies with a steady stream of high-quality scientific and technological innovation talents, and cultivated a number of well-known companies such as (HP, Cisco, Apple, Yahoo, and Google). Provide sufficient intellectual reserves and sources of innovation for the development of the digital economy.

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### FINANCIAL STATEMENTS ANALYSIS FOR EFFECTIVE INVESTMENT DECISION MAKING IN HUAWEI

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The role of the financial statements analysis in making effective investment decisions is defined, the main directions of financial statements analysis in the company «Huawei» are presented, additional areas for analysis in investing are outlined.

Keywords: financial statements; analysis; assessment; company; investment decisions; profitability.

# АНАЛИЗ ФИНАНСОВОЙ ОТЧЕТНОСТИ ДЛЯ ПРИНЯТИЯ ЭФФЕКТИВНЫХ ИНВЕСТИЦИОННЫХ РЕШЕНИЙ В КОМПАНИИ «ХУАВЕЙ»

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