Proceedings of the 2nd International Conference on Management Research and Economic Development
DOI: 10.54254/2754-1169/85/20240862

# *Analysis of the Current Status and Future Prospects of Digital Economy in China and the United States*

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***Abstract:*** As the world grows increasingly digitally connected, digital technology is demonstrating its benefits and possibilities in an increasing number of industries. Numbers have a significant impact on the economic sector. As a result, researching the digital economy is essential and will only become more so in the following decades. Using China in Asia and the United States in North America as case studies, this essay first examines the current state of growth of the digital economies in each of these two nations. The policies that China and the US have released on the digital economy are also listed on this page, along with an analysis and comparison of them. Next, the strengths, weaknesses, possibilities, and threats of China and the US in the area of the digital economy are examined using the SWOT approach. In conclusion, this essay examines the opportunities for collaboration and rivalry in the global digital economy, highlighting the significance of candid communication and teamwork in tackling shared issues.

***Keywords:*** Digital economy, e-commerce development, digital trade, sharing economy, digital transformation

## 1. Introduction

In recent decades, with the continuous development of information technology and the improvement of Internet penetration, China's digital economy has been expanding at a rapid rate and has formed greater competitiveness. This makes China become an indispensable part in the digital economy field in the world.

The size of China's Digital Economy grew to 50.2 trillion yuan in 2022, ranking second on the global scale and making up 41.5% of GDP [1]. In order to stabilize economic growth and promote transformation in China, the Digital Economy became a key engine.

The United States is one of the most economically powerful countries in the world today. This also reflects in the digital economy. To enhance the primary national income and product accounts, the Bureau of Economic Analysis has built a satellite account that offers a reliable indicator of the digital economy. The satellite account helps to show that the digital economy is a significant and growing portion of the American economy. From 2005 to 2020, the digital economy's proportion of the added value of the economy in total rose from 7.8 percent to 10.2 percent[2]. This indicates that the digital economy holds a significant position in the overall US economy and requires specialized tools and indicators to evaluate it. Simultaneously, the sustained growth of the digital economy in the US

DOI: 10.54254/2754-1169/85/20240862

suggests that it may continue to expand in the future. Therefore, the digital economy is an inevitable part of US economic life.

## 2. Policy Comparison

### 2.1. China

The Chinese government has made a strong commitment to the role of digital economy in national economies and is placing great emphasis on developing policies related to this field. It is vital to note that policies related to the digital economy and high-quality development have been regularly addressed in China's main National Plans for several years now[3].

The digital economy is causing significant changes in production, lifestyle, and governance, according to the 14th Five-Year Plan for the Development of the Digital Economy. It is also significantly influencing the restructuring of global factor resources, the reshaping of the global economic structure, and the modification of the global competitive landscape. While all of this is going on, China's priorities are as follows: improving and modernizing digital infrastructure; utilizing data elements to the fullest extent possible; actively advancing industrial digital transformation; accelerating the pace of digital industrialization; steadily increasing the level of digitalization of public services; strengthening the framework for digital economy security; improving the system for digital economy governance; and successfully expanding international collaboration in the field of digital economy [4].

In addition to the domestic digital economy market, China is also building an international cooperative digital economy, with the help of some policies like Digital Silk Road and RCEP.

This reflects that Chinese leaders have a broad vision and foresight. They see the digital economy as the main way to drive economic growth in the new era. They have placed a very important position on the digital economy in their policies.

### 2.2. United States

The growth of the digital economy is also very vital to the US government. New Digital Economy Agenda was presented, which aims to help enterprises and consumers realize the promise of the digital economy to enhance prosperity and chance. It is centered around four main goals: encouraging an open, free Internet for all people globally; fostering online trust; guaranteeing access for families, businesses, and laborers; and stimulating innovation[5]. To guarantee the seamless functioning of the digital economy, the US government will concentrate on building digital infrastructure. The US government is working hard to continue being a dominant force in the digital economy.

### 2.3. Policy Comparison

Readers can see that the two governments regard the development of the digital economy as an indispensable means of economic growth. This precisely illustrates the unshakable position of the digital economy in the information age. China and the United States also hope that the digital economy can maintain high-speed and high-quality growth under a series of policies, and also hope that the proportion of the digital economy in the gross domestic product will continue to increase. Therefore, both China and the US are vigorously investing in the construction of digital infrastructure to promote the development.

The existing policies indicate that China intends to exert greater influence on the international stage of the digital economy. China is cooperating with more and more countries in the digital economy, such as Central Asian and African countries. The United States seems to be issuing policies that are more in line with its interests, which may directly or indirectly harm the interests of other

DOI: 10.54254/2754-1169/85/20240862

countries, to maintain a leading position in competition with economies such as China, Russia, and the European Union.

## 3. Evaluation

In this paper, the author is going to use the SWOT analysis to further analyze the digital economy in both countries.

### 3.1. China's Strengths

#### 3.1.1. Huge Market Scale

China has the largest Internet user group in the world, providing a broad market space for the development of the digital economy. By June 2023, there were 1.079 billion Internet users in China, up 11.09 million from December 2022, and the country's Internet penetration rate was 76.4%[6]. This proves that China has a large number of Internet users. It has consolidated the foundation of China's Internet economy. It is this huge number of Internet users that makes the digital economy have a huge market scale and promotes the rapid development of the digital economy. Hence, China's digital economy development has great potential.

#### 3.1.2. Technological Innovation

China's current industrial structure has evolved primarily due to advancements in technology. Achieving high-end development in industrial value creation requires finding a breakthrough in the current wave of technological advances through the cross-integration of developing technologies. Technological innovation, the primary engine of superior economic development, is crucial in fostering the augmentation of industrial value, accomplishing the aim of producing high-end industrial value, and steadily establishing the primary position of domestic circulation [7]. The digital economy can effectively influence the upgrading of the industrial structure by stimulating scientific and technological innovation. This suggests that the two-wheel drive created by the digital economy and mass innovation can quicken the industrial structure's transition [8]. Therefore, technological innovation is conducive to the formation of China's digital economic industry system and promotes the establishment of a sound digital economic industry system in China. Progress has been made in fields such as artificial intelligence, blockchain, and cloud computing, providing technical support for the development of the digital economy. The growth and innovation of online businesses have an impact on the industry's growth and innovation. Simultaneously, the integration of mobile payment systems and artificial intelligence has innovative prospects for internet-based businesses, namely in the e-commerce sector [9]. These technological innovations have strengthened the position and role of digital technology in production and life, providing necessary prerequisites for the future of the digital economy.

#### 3.1.3. Perfect Industrial Chain

China has a completed digital economy industrial chain, covering hardware, software, Internet and other fields. For example, upstream includes hardware production and software design, midstream includes software and hardware sales, and downstream includes software and hardware consumption.

Take E-commerce as an example, E-commerce is an important component of China's digital economy. The annual online retail sales reached 15.42 trillion yuan, an increase of 11%, becoming the world's largest online retail market for 11 consecutive years. The proportion of physical goods online to social zero has increased to 27.6%. The combined sales of online tourism, online entertainment, and online catering contributed 23.5% to the net zero growth, driving the net zero

DOI: 10.54254/2754-1169/85/20240862

growth by 2.6 percentage points. The annual online retail sales of rural and agricultural products reached 2.49 trillion yuan and 0.59 trillion yuan, respectively, with growth rates faster than the overall online retail sales [10]. This proves that China's digital economy has a significant influence on upstream raw material production and supply, midstream processing and sales, and downstream consumption, further proving that China's digital economy has a perfect industrial chain.

## 3.2. China's Weakness

### 3.2.1. Regional Development Imbalance

There is a problem of regional development imbalance in China's digital economy, with some regions experiencing relatively lagging digital economy development. Simultaneously, the digital economies of some industrialized nations and China differ significantly in terms of their spatial distribution and level of development. According to the data, China's digital economy is still developing at a low overall level, with clear regional variations. The regions that make up the Northern, Eastern, and Southern part of China all have higher levels of development than the entire country. On the other hand, the level of the Northeast part, Middle Yangtze River part, Southwest part, and Northwest part is significantly lower than the national average [11]. How to ensure coordinated regional development of the digital economy and how eastern provinces and cities drive the development of central and western provinces and cities has become the key to China's next step in developing the digital economy.

### 3.2.2. Talents Shortage

The problem of talent shortage has gradually become prominent, lacking high-end technical and market talents as digital economy grows at a rapid rate. The "China ICT Talent Ecology White Paper" released by Huawei Technology Co., Ltd. in 2022 predicts that the ICT talent gap will reach 21.35 million by 2025. Compared with the predicted talent gap in 2020 (12.46 million) in Huawei's 2018 "China ICT Talent Ecology White Paper", the talent gap in 2025 will nearly double, and the situation is severe [12]. The readers can see that there is a severe shortage of talent in the digital field in China.

China's digital economy is experiencing a talent scarcity not just in terms of a sheer number of talent but also in terms of skills and composite talent, particularly in terms of cross-border composite talent with experience in other industries and digital technologies [13].

Talents cannot be cultivated in a day. Next, China must focus more on bolstering the development of elite digital talent in strategic domains, fully improving digital talent cultivation and skill development, encouraging the labor market's digitalization, boosting talent service capacities, and strengthening policies that support digital talent.

### 3.2.3. Relatively Slow Development of Traditional Industries

The development of digital industry can improve the efficiency of digital reform and accelerate the structural transformation of the economy [14]. However, some traditional Chinese industries' supply chains are unable to keep up with the digitalization process of emerging industries. First of all, existing supply chains require strengthening since their stability is eroding. Second, there is not enough of a driving force behind the digital transition, and market competition is getting more intense. It is impossible for traditional company supply chains to satisfy the demands of superior development in the manufacturing sector. Supply networks must become more intelligent and efficient in order to support the growth of businesses. Through fostering information transmission and interchange, cutting business expenses, and increasing the effectiveness of resource allocation, the digital economy can improve supply chain resilience and encourage the digital transformation and upgrading of

DOI: 10.54254/2754-1169/85/20240862

traditional manufacturing. The only way to achieve high-quality development under the new development pattern is to strengthen the resilience of traditional manufacturing supply chains through the digital economy and to promote the safe and stable development of supply chains. These actions are crucial for guaranteeing the smooth operation of the economy[15]. There is still more to be done to digitize traditional industries like agriculture, and some businesses are having trouble transforming digitally because they are unwilling, or unable to do so. It is comparatively late for small and medium-sized businesses to embrace digital transformation. These are things that China urgently needs to solve.

## 3.3. China's Opportunities

### 3.3.1. Commercial Landing of 5G Technology

The commercial landing of 5G technology will provide a broader development space for the digital economy.

First off, the quick development of a full home demand system has resulted from the commercial deployment of 5G. As the information artery of the digital economy era, new infrastructure such as 5G is the information base that supports the entire domestic demand system's transformation and upgrade towards networking, digitization, and intelligence. It has opened up the digital cycle for the national economy's endogenous circulation.

Second, the rapid advancement of digital industrialization has been propelled by the commercial use of 5G. There is a significant economic spillover impact from the new information infrastructure, such as 5G infrastructure.

Thirdly, a wide range of sectors have adopted 5G commercial applications. 5G is expected to be extensively used in a variety of areas, including agriculture, industry, education, culture, and technology, because of its exceptional performance in providing ultra-low latency and ultra-high dependability. It will connect people and everything, deeply integrate with technologies like cloud computing, big data, artificial intelligence, virtual reality, and augmented reality, and develop into a crucial infrastructure for the growth of the digital economy. This will support China's network power building and the advancement of the digital economy to new heights.

### 3.3.2. The Prosperity of Digital Trade

The rise of cross-border digital trade will promote the internationalization of China's digital economy. In 2022, the import and export volume of digitalized services in China reached $372.71 billion, a year-on-year increase of 3.4%, and the scale reached a new historical high. The import and export volume of cross-border e-commerce reached RMB 2.11 trillion, a year-on-year increase of 9.8%[16].

Moreover, China and ASEAN have contributed to the "Digital Silk Road," which is progressively evolving into a new route for creating a community for higher education and a strategic relationship based on mutual benefit and trust in the age of the digital economy[17].

China refers to the three ways of driving economic growth as the three carriages: consumption, investment, and foreign trade. Readers can recognize that the scale of China's digital trade is constantly reaching new highs, and its global competitiveness is also increasing. China's digital trade is driving the growth of China's economy.

### 3.3.3. Sharing Economy

Digital economic ecologies such as social media, online marketplaces, crowdsourcing, crowdfunding, and other forms of the so-called "sharing economy" are exhibiting a new type of digital economic circulation[18]. Sharing economy will promote the deep integration of digital economy and traditional

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economy. Sharing economy should be viewed as a significant subset of the digital economy in marketing. The sharing service's data may be examined to see how it benefits various parties, including society, businesses, and customers, and how this affects an industry's whole value chain. By vertically integrating into the downstream sharing platform, established businesses are embracing the sharing economy more and more in an effort to better capture the value created by platform data[19]. It can be proven that China regards the development of the sharing economy as an opportunity to drive the growth of the digital economy. In addition to being a key strategic move for quickening the growth of the digital economy, bolstering, refining, and growing the platform economy is also a major catalyst for deepening the integration of the two sectors of the economy [20].

## 3.4. China's Threats

### 3.4.1. Incomplete Laws and Regulations

The prosperity of the digital economy requires comprehensive legal and regulatory support. In response to the development needs of the digital economy, China actively promotes legislation in the field and has formulated laws such as the Civil Code and the E-commerce Law.

Although the above laws and regulations can provide legal protection for China's digital economy, China's digital economy still exposes some problems. China's current legal framework for data is a little behind other countries, and it is unable to adequately address the myriad issues that the use of enterprise data in the digital economy has brought about. There is no unified enterprise data protection law in China's current legal framework; the Civil Code merely contains introductory clauses on data. When addressing corporate data issues, courts typically use statutes and rules such as the Trade Secrets Law, the Anti Unfair Competition Law, the Copyright Law, etc. However, it is challenging for the current legal framework to fully satisfy the practical needs of numerous stakeholders in the unique environment of digital industrialization and industrial data [21].

### 3.4.2. Data Privacy Protection

Nowadays, as data becomes an increasingly significant part in people's daily lives, data privacy protection has become an increasingly vital issue, requiring enterprises to strengthen data management and protection measures. For example, in the e-commerce industry, concerns about security, privacy, and perceived risk are significant variables that influence customers' purchase decisions in an online marketplace[22].

Taking the financial industry as another example, the problems faced by data security in the financial industry mainly include the incomplete top-level system of data security, uneven data governance capabilities, and the further increase of data security risk coefficient through open integration and new technology applications [23].

Solving this problem cannot be achieved without the efforts of individuals, society, and the governments. On a personal level, individuals should be cautious in protecting their data privacy while strengthening prevention to prevent fraud. rom a social perspective, society should establish a good atmosphere of abiding by laws and regulations and establish a supervisory system. Enterprises should also promote social morality, abide by laws and regulations, protect user privacy, and eliminate illegal activities. At the national level, a sound legal system should be established, effective supervision should be implemented, and scientific legislation, strict law enforcement, and fair justice should be achieved.

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## 3.5. United States' Strengths

### 3.5.1. High Degree of Marketization

The US strategy is centered on giving the private sector control over the data. Resources (such as money, talent, technology, etc.) will flow freely in a highly market-oriented economic environment based on supply and demand. The most creative and promising digital economy projects can swiftly gather resources thanks to this flexibility, which speeds up the sector's growth. An economic system that is strongly focused on the market promotes collaboration and competition among businesses, which stimulates innovation. Businesses will consistently invest in R&D and introduce new goods and services to maintain innovation in the digital economy, giving them a competitive edge in the marketplace. Businesses will constantly enhance user experience and service quality in a highly competitive market to draw in and keep consumers. Businesses are under constant pressure to innovate and improve due to competition, which raises the standard of service across the board for the digital economy. Businesses in a highly market-oriented economy will constantly modify their industrial structure and development plans in response to competition and market demand. The digital economy can swiftly adjust to changes in the market and undergo industrial upgrading and transformation thanks to this flexibility.

### 3.5.2. High Internet Penetration

As of the start of 2023, 311.3 million Americans, or 91.8 percent of the population, were internet users. The United States had 246.0 million social media users as of January 2023, accounting for 72.5 percent of the global population. In the United States, there were 383.4 million active mobile phone connections as of early 2023, or 113.1 percent of the total population[24]. The high Internet penetration rate in the United States also shows that American Internet users are becoming the backbone of the development of the digital economy in the United States.

## 3.6. United States' Weakness and Opportunity

Regrettably, exports of digitally tradeable services from the United States are facing increased worldwide obstacles. The spread of these trade restrictions poses a threat to American workers and businesses by preventing them from realizing the potential advantages of exporting services that are tradeable digitally. Meanwhile, the United States has strong funding to ensure the normal flow of the digital economy and the development of technological products. The broad prospect of the digital economy in the United States makes Wall Street investors optimistic about it.

## 3.7. United States' Threats

### 3.7.1. Intense Global Competition

The United States will engage in direct competition with China, the European Union, and other emerging digital economy countries. Other digital economies will squeeze the market share of the US digital economy. This will pose a huge threat to the digital economy of the United States. Therefore, the United States should actively enhance its core competitiveness and cooperate with other digital economies internationally for mutual benefit.

### 3.7.2. Monopoly

Large market shares and resources are common among companies, which may deter them from being innovative. These businesses might not have enough motivation to invest in R&D or attempt new

DOI: 10.54254/2754-1169/85/20240862

business models since they already hold a dominant position in the industry. This could impede the growth of the digital economy and innovation. Monopoly businesses may preserve their market dominance by limiting competition, which could upset the market's fair competition environment and lower the digital economy's general efficiency. Monopoly businesses have the potential to violate consumer rights by abusing their dominant market position. This would reduce consumer welfare and hinder the long-term growth of the digital economy.

## 4. Conclusion

This article uses policy comparison and SWOT methods to conduct in-depth research on the current status of the field in two countries, providing insights into their potential future trajectories. Comparative analysis shows that although the two countries face different opportunities and challenges, their growth momentum is strong.

In terms of the current situation between China and the United States, the two countries are respectively the first and second in the world's digital economy, and there is still a strong development trend. In terms of policies, both China and the United States have issued relevant policies to ensure the effective development of the digital economy. In terms of policy comparison, it is not difficult for readers to find that China's policies in the field of digital economy are stronger than those of the United States. Chinese high-level officials attach great importance to the digital economy, and China intends to strengthen its influence on the international stage. On the other hand, the policies issued by the United States only need to align with its interests. In the SWOT analysis, China's strengths and opportunities mainly come from its fast development speed and intentional integration with the international market, while its weaknesses and threats mainly stem from regional development disharmony, talent and legal deficiencies caused by the late start of China's digital economy. The advantages and opportunities of the United States mainly stem from its early start and strong funding. The disadvantages and threats of the United States mainly stem from unilateralist trade barriers and technological monopolies. Both China and the United States have their own strengths, weaknesses, opportunities, and threats. How the Chinese and American governments leverage their strengths, seek opportunities, transform weaknesses, and eliminate threats will directly affect the status of the digital economy of China and the United States and the direction of global digital economy development in the coming decades.

The digital economy will grow to be a significant part of the global economy in the future. China and the US seek to use the growth of the digital economy to gain more influence and competitiveness in the global economy. This implies that China and the US will unavoidably compete with one another as they expand the digital economy. China and the United States now have to think about how to effectively manage competition-related challenges. However, the author hopes that China and the US can work together to develop the digital economy, that conflict and confrontation will be replaced with cooperation, that they will be able to find common ground while reserving their differences, and that the digital economy will become a catalyst for both global economic growth and prosperity on a bilateral and trade level.

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