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# *The Impact of the Digital Economy on China's Economic Development*

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***Abstract:*** This paper explores the impact of the digital economy on China's economic development. The digital economy, as a new form of the economy following the agricultural and industrial economies, centres on data resources and modern information networks, driving the digital transformation of all factors of production. The Chinese government places great importance on the development of the digital economy, clarifying its direction and key tasks through policy documents such as the "14th Five-Year Plan for Digital Economic Development". This paper analyses the current state of development of the digital economy in e-commerce, digital payments, and big data applications, and discusses its impact on industrial structure, employment, and consumption patterns. The study shows that the digital economy has promoted the upgrading of traditional industries and the growth of emerging industries, while also bringing about changes in employment structure and innovation in consumption methods. However, it also poses challenges to the job market, which need to be addressed through skills training and educational reform.

***Keywords:*** Digital Economy, China, Economic development.

## 1. Introduction

The digital economy is a concept within the field of economics. "Father of the Digital Economy" Tapscoot first proposed the definition and scope of the digital economy in 1996, and since then, more scholars have added their unique insights, expanding the definition of the digital economy into a broader field. On January 12, 2022, the State Council issued the "14th Five-Year Plan for Digital Economic Development" policy document to guide the development of the digital economy by all regions and departments during the "14th Five-Year Plan" period. This is the first time that the concept of the digital economy has been defined in a national-level document in China. The digital economy is a new economic form following the agricultural and industrial economies, with data resources as the key elements and modern information networks as the main carriers. It promotes fair and efficient unity through the integrated application of information and communication technology and the digital transformation of all factors of production. The digital economy is a new economic form that uses big data for optimal resource allocation, improving production efficiency, and promoting economic development [1]. The rise of the digital economy is mainly attributed to the vigorous development of digital technology. In recent years, technologies such as blockchain, the Internet of Things, and big data have entered our lives, promoting industrial transformation and

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gradually becoming the dominant concept in industrial development.This paper will analyse the current state of development of the digital economy in e-commerce, digital payments, and big data applications, and discuss its impact on industrial structure, employment, and consumption patterns. This paper can provide some reference for researchers studying the digital economy in the post-epidemic era.

## 2. The Current State of Digital Economy Development in China

It can be seen from Figure 1 that before the 2008 economic crisis, the scale of China's digital economy development was small, accounting for a low proportion of Gross Development of Product (GDP), and was in the primary stage of digital economy development. However, with technological innovation, the scale of the digital economy has gradually expanded. In 2011, the output value increased to 95 trillion yuan, and the proportion of GDP increased from 15.2% to 20.3%. In 2016, the scale of the digital economy broke through 200 trillion yuan, and the proportion exceeded 30%. To date, the scale of the digital economy continues to grow, and the proportion also gradually increases.

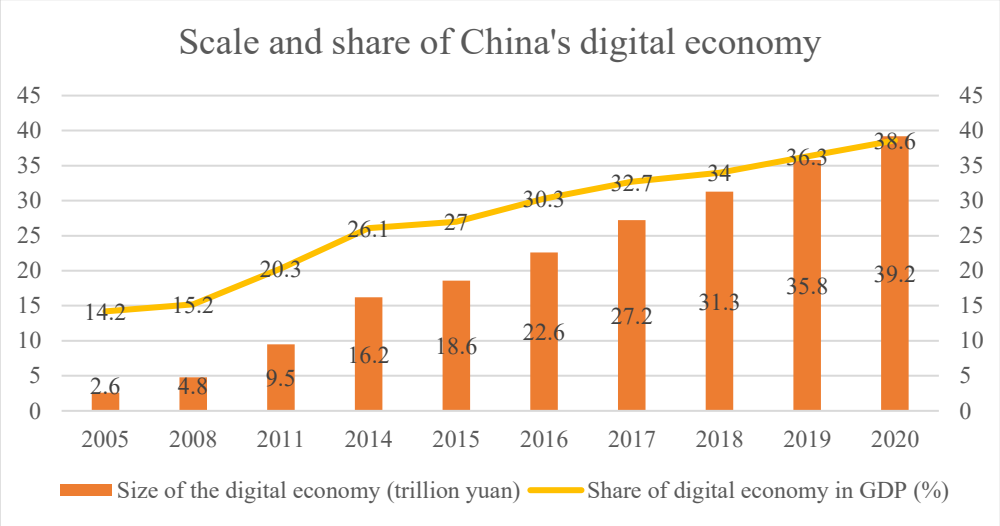


Figure 1: Scale and share of China's digital economy

### 2.1. E-commerce

In the post-epidemic era, the development of e-commerce has ushered in many major changes. Due to the non-circulation of personnel in different regions during the pandemic, emerging industries such as community group buying and online shopping have developed. These emerging industries will continue their influence in the post-pandemic era, injecting more fresh blood into e-commerce.

#### 2.1.1. Rising Consumer Confidence

In the post-pandemic era, the pandemic prevention and control measures of various countries have matured, and the economy, after a significant blow, has gradually entered the recovery stage. Consumer confidence in the market has also gradually increased. Chinese consumers are the most optimistic about economic recovery globally, stabilizing at around 50%, while the United States is at 22%, Australia at -4%, and Italy, the United Kingdom, and Japan are even more pessimistic [2]. Therefore, in China, consumers are more confident that the economy can recover quickly, and they are more willing to spend more money on e-commerce, helping e-commerce to recover.

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#### 2.1.2. Mature E-commerce Infrastructure

Compared to other countries in the world, China started the development of e-commerce earlier, and years of experience have made China a leader in the trend of e-commerce, with a more mature e-commerce infrastructure [3]. The supporting e-commerce facilities and consumer willingness to shop online have helped the development of e-commerce in the post-pandemic era. Compared with the previous small commodity economy, now more luxury brands have also started online sales. LV Group took the lead in opening online virtual sales, by opening live broadcast rooms, one-on-one connection with consumers for exclusive remote sales, without the need for consumers to go to offline stores in person. Relying on high-speed networks and precise equipment, it can restore the most real shopping experience for consumers. At the same time, consumers can also obtain a richer consumption experience through e-commerce, and more and more people choose e-commerce.

#### 2.1.3. Booming O2O Services

During the pandemic, the emerging community group buying and Online To Offline (O2O) grocery retailers seized the surging consumer demand and vigorously expanded their business territory. Hema Xiansheng, Meituan Group Purchase and other grocery retailers have become leaders in community group buying during the pandemic. They have used the digital economy to master the omni-channel business model, efficiently connecting businesses with consumers, breaking the barriers between online and offline, using a complete supply chain and digital application infrastructure, providing consumers with lower prices and more convenient services [4]. Now more group buying leaders and platforms are emerging, allowing both businesses and consumers to benefit more, and also accelerating the development of e-commerce.

### 2.2. Digital Payments

#### 2.2.1. Introduction of Regulatory Policies

The People's Bank of China and other regulatory authorities adhere to the concept of "payments for the people", maintaining a consistent normalisation of strict supervision, vigorously carrying out work to prevent and resolve major financial risks, adhering to both "standardised development and encouraging innovation", and introducing a series of regulatory policies to promote the high-quality development of digital payment services [5]. In March 2024, the General Office of the State Council issued the "General Office of the State Council on Further Optimizing Payment Services", proposing tasks such as improving the card acceptance environment, optimizing the cash usage environment, and enhancing the convenience of mobile payments. On May 1, 2024, the "Supervision and Administration Regulations of Non-Bank Payment Institutions" came into effect, clarifying the access conditions, business rules, risk management, user rights protection, and penalties for non-compliant behaviour of payment institutions. On July 16, 2021, the central bank issued the "White Paper on the Research Progress of China's Digital Currency", clearly defining the digital yuan, design principles, operation system, technical route selection, regulatory framework, and possible impacts and response strategies to the whole country and the world.

#### 2.2.2. Rapid Development of Cross-Border Payments

Cross-border e-commerce is an emerging trade situation in the digital economy era. Trading entities can conduct online transactions and deliver goods in a contactless manner. Cross-border e-commerce has become a new business form and model for foreign trade. Third-party payment institutions focus on the payment and collection of cross-border e-commerce and B2B foreign trade

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merchants, as well as digital pain points, to deeply empower them [6]. With the development of cross-border e-commerce, China has introduced relevant favourable policies, including reducing import tariffs and granting tax incentives. The development of digital trade has entered a golden stage. In order to improve import and export international trade, China has vigorously regulated cross-border payment risks and actively built a national service trade innovation development demonstration zone, creating a digital trade demonstration zone to promote the development and improvement of cross-border payments.

## 3. The Impact of the Digital Economy on China's Economic Development

China's digital economy has developed rapidly. With the continuous advancement of a new round of technological revolution and industrial upgrading, the digital economy has become one of the fastest-growing, most widely radiating, and most deeply influential economic forms, and is one of the core growth poles of the national economy.

China's industrial digital transformation has accelerated, and the development speed of the digital economy has been further improved. Overall, the penetration rate of the digital economy in China's three industries has increased year by year. The primary industry increased from 6.2% in 2016 to 8.9% in 2020, the secondary industry increased from 16.8% in 2016 to 21.0% in 2020, and the tertiary industry increased from 29.6% in 2016 to 40.7% in 2020 [7]. The development of the tertiary industry has been rapid, while there is still a lot of room for improvement in the digitalisation of the primary and secondary industries.

### 3.1. Impact on Industrial Structure Development

#### 3.1.1. Traditional Industries

Traditional industries mainly refer to labour-intensive industries, mainly manufacturing and processing industries. Traditional industries are more susceptible to the impact of the digital economy. With a little integration, the original traditional industries can greatly improve efficiency and reduce costs. There are a large number of simple and repetitive positions in the traditional primary and secondary industries. The digital economy penetrates and integrates into the primary and secondary industries through point-to-face and point-to-face integration, increasing dataisation and networking to varying degrees in production, distribution, exchange, and consumption, thereby reducing the communication and exchange costs in production and sales, and ultimately promoting the overall technological progress of the primary and secondary industry systems and achieving deep integration with the digital economy [8]. For example, the introduction of industrial robots can achieve semi-automation of production lines, reduce labour consumption, make the production process more efficient and environmentally friendly, reduce resource consumption, and achieve green production.

At the same time, the digital economy can also promote the integration of traditional industries. Digitalisation makes information transparent and more accessible. Different industries can obtain information from other industries and use it for their own purposes, which also promotes the integration and innovation between different industries. For example, financial technology combines the financial industry with information technology, allowing Internet technology and cloud computing technology to enter the financial services industry, helping traditional financial industries to use tools more conveniently and accurately to analyse customer returns and markets.

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#### 3.1.2. Emerging Industries

Emerging industries are industries that have emerged with factors such as technological progress, changes in market demand, and policy orientation. These industries are often more dependent on emerging technologies, have high growth potential and innovation, and common emerging industries include big data, artificial intelligence, new energy, and digital creative industries, etc.

Traditional industries mainly rely on physical resources and labour, while emerging industries rely more on technological innovation and data assets. The digital economy just provides a lot of room for innovation and business opportunities for emerging industries. AI technology can help doctors quickly analyse medical images in the medical field, improving the efficiency and accuracy of diagnosis. At the same time, the digital economy helps gather talent and promotes knowledge innovation. For example, Silicon Valley, as a global technology innovation centre, gathers talent to make the primary contribution in industries such as the Internet, software, and semiconductors.

### 3.2. Impact on Employment

The digital economy is a double-edged sword. It can not only provide more employment opportunities for people, but also use digital technology to replace most repetitive and simple positions, leading to a certain degree of unemployment.

The rise of the digital economy has brought about the transformation of traditional industries. Many new positions have been added to traditional industries with emerging technologies, such as the development of Internet finance bringing an increase in positions in financial technology, and big data technology has also promoted the increase of positions such as data analysts and data mining engineers. People have more employment opportunities.

However, the rise of emerging industries also means the decline of old industries. Many repetitive and single-piece work on the assembly line has now been replaced by automation and digitisation, leading to a large number of factory workers losing their jobs. Intelligent customer service has led to the unemployment of traditional customer service personnel.

So the development of the digital economy has brought about both unemployment and employment at the same time. Unemployed people need to accept new skills training, move towards emerging industries, achieve redeployment, adapt to the development of the digital economy, and meet the challenges of the digital economy era.

### 3.3. Impact on Consumption

The digital economy has brought a brand new form of consumption, providing consumers with a more convenient and personalised consumption experience.

The development of e-commerce has promoted consumers' desire to consume. Unlike offline shopping, online shopping does not require consumers to go out of the house, saving transportation costs, parking fees, etc. It can let consumers enjoy a shopping experience almost the same as offline shopping. Because of the control of the epidemic, people will try to keep a safe distance from others in the post-epidemic era to reduce the risk of contact infection; at the same time, they continue the habit of online shopping during the epidemic, and more mature group purchases, online shopping and other technologies have promoted consumption growth.

As people reduced the opportunity for offline transactions during the epidemic, digital payments were promoted and popularised, and digital currency has also become a novel payment method. Consumers can use digital currency for online shopping transactions, making transactions more convenient and secure. Compared with traditional currency, digital currency has the characteristics of cross-border payment, real-time settlement, low cost, etc., which has a positive effect on promoting consumption [9].

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## 4. Conclusion

This paper comprehensively analyzes the multi-dimensional impact of the digital economy on China's economic development in the post-pandemic era. Firstly, the rapid development of the digital economy is due to national policy promotion and technological innovation, especially in the fields of e-commerce, digital payments, and big data applications. Secondly, the impact of the digital economy on the industrial structure is manifested in the digital transformation of traditional industries and the cultivation of emerging industries, promoting industrial upgrading and economic growth. In terms of employment, the digital economy has created new job opportunities while also having a substitution effect on the low-skill labour market, requiring the workforce to upgrade and transform skills. In terms of consumption patterns, the digital economy has brought a more convenient and personalised consumption experience, promoting consumption growth. This paper has not yet delved into the future of the digital economy. Due to the ever-changing nature of digital technology, it is difficult to predict the future prospects of China's digital economy, and more professional forecasting methods are needed to explore the future of China's digital economy.

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