

# The Impact of Digital Economy on China's Employment Structure and Its Countermeasures

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**Abstract:** In the context of the prominent contradiction between digital economy and structural employment, it is of great practical significance to explore the impact of digital economy on employment structure. Through the analysis of the current situation of employment in China, this paper further clarifies the prominent problems faced by employment at the present stage, and draws the conclusion that digital economy is conducive to improving the overall quality of employment and optimizing the employment structure. Therefore, colleges and universities should speed up the pace of educational system reform and further strengthen the market-oriented training mode. The government should formulate digital economy policies in line with the current employment structure, give play to the role of digital economy in driving and optimizing the labor employment industry, improve the construction of digital infrastructure in various regions, and develop a series of social security systems. Enterprises should carry out vocational skills training for employees to meet the needs of enterprise development and market orientation.

**Keywords:** Digital economy, Employment structure, Countermeasures and suggestions, Structural employment contradiction.

## 1. Introduction

With the rapid development of digital technologies such as big data, artificial intelligence, Internet of Things, and blockchain, digital technology has become an important engine driving China's economic growth. As a new driving force for economic development, the high-quality development of the digital economy will help release effective demand and efficiently allocate labor factors, thus contributing to the Chinese-style modernization drive. Employment is the biggest livelihood, and achieving high-quality and full employment is an important content and fundamental goal of achieving high-quality development and Chinese-style modernization. However, economic restructuring combined with the impact of the epidemic has increased employment pressure, and structural problems in employment are a common long-term problem in all countries. In order to meet the demand for jobs in the era of digital economy, the Occupational Classification of the People's Republic of China (2022 edition) has marked 97 digital occupations, accounting for 6% of the total number of occupations. Vocational digital transformation has become the basic requirement of high-quality employment in the era of digital economy. Therefore, it has important theoretical and practical significance to clarify whether the digital economy policy can alleviate the problems of "employment difficulty" and "recruitment difficulty" and optimize the employment structure.

## 2. Current Situation Analysis of Digital Economy and Employment Structure

Employment is fundamental to people's livelihood, and the Chinese government attaches great importance to employment. The 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Outline of Vision Goals for 2035 emphasize that "achieving more adequate and higher quality employment" is an important part of the main goals of economic and social

development during the 14th Five-Year Plan period. It puts forward the requirements of "improving the promotion mechanism conducive to more full and higher quality employment, expanding employment capacity, improving employment quality, and alleviating structural employment contradictions". To achieve high-quality employment in the process of Chinese-style modernization is an inevitable choice to adapt to the high-quality development of China's population, a fundamental measure to improve people's well-being, and a basic way to cultivate and develop new quality productive forces and new drivers of growth [1]. In the post-COVID-19 era, the policy of sustained economic recovery and stable employment has achieved results, but the structural problem of mismatch between employment supply and demand still exists.

The digital economy has brought new vigor and vitality to traditional industries. In terms of scale, the scale of China's digital economy in 2022 has reached 50.2 trillion yuan, accounting for 41.5% of GDP; In terms of growth rate, the nominal value of the digital economy in 2022 increased by 10.3% year-on-year, showing a rapid upward trend overall. In theory, the development of digital economy can reshape the value-added method of manufacturing industry, bring new data element input to the development of manufacturing industry, and break the evolution law of traditional industries to a certain extent [2]. In addition, the digital economy improves the entrepreneurial activity of the city through the job creation effect, provides more jobs for the manufacturing industry, and then helps the stable employment of the manufacturing industry, and brings opportunities for the stable employment of the manufacturing industry, and improves the overall employment quality and optimizes the employment structure by optimizing the employment structure [3, 4]. In the process of job seekers looking for jobs, the use of the Internet, big data and other new generation of information technology, so that the supply and demand of labor information symmetry, not only improve the matching efficiency of the labor market, but also increase the autonomy and flexibility of employment choice. The application of digital Internet technology has greatly improved the

transparency of labor information and promoted the flow of labor across sectors and industries. The Internet attribute of the digital economy promotes the information symmetry of the labor supply and demand sides, thus improving the matching efficiency of the labor market and alleviating the contradiction of structural unemployment [5]. The digital economy is based on the global value chain climbing theory, which helps to reduce operating costs, promote the innovation of industrial organization structure and model, promote the level of technology, and improve the demand for workers [6].

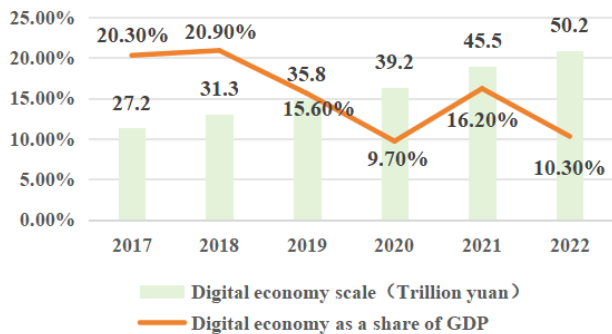


Figure 1. Development of China's digital economy from 2017 to 2022

### 3. Key Issues of Digital Economy and Employment Structure

#### 3.1. The Economic Environment is not Optimistic

Since the 2008 financial crisis, the world economy has been Mired in "long-term stagnation", anti-globalization trends are on the rise, trade protectionism is prevalent, and China's economic development is facing an increasingly complex, volatile and severe external environment. The outbreak of the China-US trade war in 2018 has compounded the epidemic, countercurrent economic globalization, and increasing destabilizing and uncertain factors. In such an unfavorable external environment, China must achieve economic independence by reducing international dependence and expanding the domestic market. The volatility of the volatile international environment also affects the demand for labor, making the employment environment even worse.

In this context, the central government has made a strategic deployment to accelerate the construction of a "new development pattern with the domestic great cycle as the main body and the domestic and international double cycles promoting each other", emphasizing that relying on the domestic great cycle to enhance the internal power and reliability of economic growth. Make the domestic cycle bigger and stronger, and achieve stable growth and sustainable development of the domestic economy. However, with the fading of foreign trade dividend and demographic dividend, factor costs are rising, resource and environmental constraints are tightening, traditional comparative advantages are difficult to sustain, internal circulation is weak, and domestic demand is weak. The development of China's manufacturing industry has been in the middle and low-end links for a long time, which makes the coexistence of "difficult employment" and "labor shortage" common in the employment field [7]. How to change the current employment situation, further increase the number of jobs, and alleviate the employment pressure has put forward higher requirements for China's industrial structure adjustment and economic

transformation and upgrading.

#### 3.2. The Structural Problems in Employment have Become Increasingly Prominent

Since the 18th National Congress of the CPC, China has made great achievements in employment. In terms of urban and rural employment pattern, the proportion of urban employment in 2022 will be 59.76 percent, an increase of 3.88 percentage points over 2018. In terms of employment structure, with the continuous transformation and upgrading of industries, the tertiary industry has increased its ability to absorb employment, and the proportion of employed people has increased from 44.4% in 2018 to 45.0% in 2022. In terms of the unemployment rate, the unemployment level has remained below 6% in recent years, which is at a relatively low level.

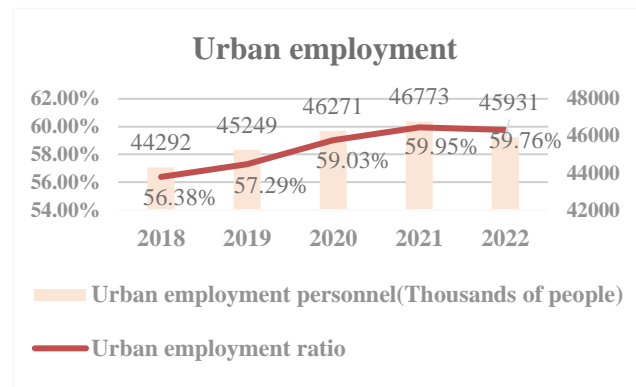


Figure 2. Urban employment

At the same time, we must be soberly aware that the employment situation is still not optimistic. Since the 2008 financial crisis, due to the lack of construction and orders of enterprises, China's labor market began to appear in the eastern coastal areas of the "recruitment difficulties" and "labor shortage" phenomenon, and gradually spread to all parts of the country. In the past two years, the impact of the epidemic combined with insufficient domestic demand and complex international situation has increased the employment pressure on job seekers, especially college students. Although the overall trend of urban employment is still rising, in 2012, the absolute number of working-age people between 15 and 59 years old in China recorded a net decline for the first time. In 2022, the unemployment rate of urban youth reached 19.9%, showing a gradually worsening trend.

At present, the most serious problem in China's employment field is the existence of structural contradictions, which are mainly reflected in the imbalance of regional structure of employment, industrial structure of employment, income structure of employment and labor quality structure of employment, and "difficult employment" and "labor shortage" coexist. The existence of structural employment contradiction represents the serious mismatch between industrial structure and employment structure.

#### 3.3. Digital Economy has a Crowding Out Effect on Employment

With the in-depth development of the new round of scientific and technological revolution and industrial revolution, digital technologies represented by the Internet, cloud computing and artificial intelligence have developed rapidly and gradually penetrated into various industries. Digital economy has produced employment creation and

employment substitution [8]. The rapid development of the digital economy forces the optimization of the traditional industrial structure, which in turn promotes the transformation and upgrading of the employment structure. At the same time, the digital economy policy has also squeezed out some manufacturing employment, especially on the traditional jobs had a greater impact, many low-end jobs are gradually replaced by machines, jobs shrink or even disappear. The result is structural unemployment for older workers who are slow to learn new skills and technologies. For example, with the rise of e-commerce, the retail industry is facing enormous competitive pressure, and the decline in the number of people and sales of physical stores makes some physical stores have to reduce the number of employees or even close stores. The progress of digital technology will reduce the demand for low-skilled workers and increase the demand for high-skilled and highly educated workers, leading to a trend of "polarization" in the employment structure [9]. In addition, with the continuous evolution of artificial intelligence technology, especially generative artificial intelligence technology, machines have begun to replace humans in some stylized and even creative work, so that more workers are replaced in positions [10].

### 3.4. Digital Talent Shortage

Although the development of the digital economy has created many new jobs, there is a certain lag in the process of training talents. Strategic talents are urgently needed in digital economy fields such as big data, artificial intelligence and financial technology. At present, many colleges and universities still train students according to the past teaching mode and professional courses, and fail to set up corresponding courses according to the requirements of national policies, which makes talent training out of touch with the needs of social reality. Many college graduates encounter the dilemma of "professional mismatch" in the process of job hunting, and even face the dilemma of "unemployment upon graduation". It is difficult to meet the needs of China's emerging industry development and economic transformation, and is not conducive to the improvement of labor relations [11].

At the same time, with the development of new productive forces, the quality of the labor force in our country has improved obviously, but compared with the requirements of high-quality economic development and industrial restructuring, there is still a big gap. The new quality productivity is an advanced productivity quality that plays a leading role in innovation, gets rid of the traditional economic growth mode and productivity development path, and has the characteristics of high technology, high efficiency and high quality, and is in line with the new development concept. The development of new quality productivity puts forward higher requirements for the quality of workers, requiring workers to have strong adaptability and innovation ability, and be able to integrate with the digital economy and emerging industries. At present, the average period of education of the working-age population in China is 10.9 years, which has not yet reached the level of high school graduation, and high-quality labor force is still very scarce.

## 4. Conclusion and Suggestion

From the perspective of digital economy, it is of great significance to explore the impact of digital technology deeply embedded economy on China's employment status and

the transformation and upgrading of employment structure. On the whole, the rapid development of the digital economy is conducive to increasing job opportunities, and the job creation effect is greater than the replacement effect. In order to better promote the digital economy to optimize the employment structure and improve the quality of employment, this paper puts forward the following policy recommendations:

First, colleges and universities should speed up the reform of the education system, further strengthen the market-oriented training model, and promote the steady and long-term construction of education power. By optimizing the professional Settings and reducing the phenomenon of "no use for learning" and "no matching of majors", colleges and universities should widely carry out teaching contents that adapt to the current economic and social development, set up disciplines and majors that adapt to new technologies and new industries, take the initiative to strengthen the contact and docking with employers, and closely link internship, practice and employment. Colleges and universities should take the market demand as the guide when setting up majors, effectively improve the compatibility between the supply of higher education and the social demand, so as to cultivate the workers with special skills that the market really needs. In addition, colleges and universities should vigorously develop vocational education, deepen the integration of production and education, constantly improve the "dual tutorial system", strengthen school-enterprise cooperation, while cultivating students' academic ability and practical operation ability, and actively train applied, innovative and scarce talents for the country's economic and social development.

Second, the Chinese government should formulate digital economy policies that are in line with the current employment structure and development prospects, and give play to the role of digital economy in driving and optimizing the labor employment industry [12]. The development of the digital economy has a profound impact on the employment and income of residents, creating new industries and jobs, but also squeezing out some manufacturing jobs. Therefore, the government should formulate reasonable economic policies, actively promote the deep integration of "Internet +" and blockchain with traditional industries, provide certain financial subsidies for enterprises to conduct digital skills training and other necessary measures for employees, alleviate the structural employment contradictions caused by the mismatch between workers' employment skills and the digital economy model, and provide precise employment services for employees. In addition, the government should increase employment through coordinated measures to expand domestic demand, deepen supply-side structural reform, explore overseas markets and other effective measures to meet the growing employment demand of society.

Third, enterprises should comply with the government's digital economy policy and carry out vocational skills training for employees to meet the needs of enterprise development and market orientation. Enterprises should provide workers with accurate learning, training and practice opportunities, so as to improve workers' skills and fundamentally alleviate the structural contradictions in employment.

Fourth, promote the in-depth development of the digital economy and improve the construction of digital infrastructure in all regions. The government helps small and medium-sized cities with low levels of development to build information infrastructure, implements preferential policies,

constantly Bridges the "digital divide" in the region, promotes coordinated regional development, and enables people in all regions to enjoy the dividends of development in the digital era. Through the digital economy, the government can empower backward areas, attract application-oriented talents and high-quality labor force, and attract a large amount of capital, which can effectively alleviate the imbalance of regional structure of employment.

Finally, the government should formulate a series of social security systems for the current severe employment situation, and relevant departments should provide support and help from pension insurance, unemployment insurance, medical insurance services and other aspects. The government should improve the unemployment insurance system, introduce a package of phased and combined unemployment insurance policies and measures to help enterprises stabilize jobs, help cover, cover and cover the bottom line of people's livelihood, so as to protect the interests of the people and alleviate the unemployment problem caused by employment difficulties.

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