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# Adjustment and Upgrade of County and District Industrial Structure in the Digital Economy Era

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**Abstract:** In the era of digital economy, the effective adjustment and upgrading of industrial structure in county and district industries is directly related to whether counties can achieve high-quality development goals. This article first analyzes the significant characteristics of the county economy, and on this basis, analyzes the advantages of county industrial structure adjustment in the digital economy era. Finally, it proposes effective paths for county industrial structure adjustment, providing reference and reference for county related work.

#### 1. Introduction

With the rapid development of the digital economy, county and district economies are also facing enormous opportunities and challenges. The emergence of the digital economy has provided new growth points and driving forces for county and district economies, while also bringing impacts and challenges to traditional industries. Therefore, how to adjust and upgrade the industrial structure of counties and districts, achieve industrial transformation and upgrading, has become an important issue in the current economic development of counties and districts.

#### 2. Characteristics of County Economy

#### 2.1 County economy is a subsystem of the national economy

The county economy is a subsystem of the national economy, which is mainly reflected in the following aspects:

One is regional. The county economy is based on regions and is an economic system in the national economic structure, with counties as units. It operates independently and is interconnected with other regional economies. The development of the county economy is constrained by regional factors such as natural resources, transportation, population, etc. Therefore, the county economy has a certain degree of regionality in the national economic system.

The second is to provide production and living services for local residents. The county economy serves the production and daily life of local residents, mainly by providing materials and services necessary for daily life, such as agricultural products, daily necessities, energy, etc. At the same time, the county economy is also the foundation of socio-economic development and the main channel for

providing employment opportunities and creating value for local residents<sup>[1]</sup>.

Thirdly, having a relatively independent economic operating mechanism. County economy is a relatively independent subsystem in the national economic system, with relatively independent economic operation mechanisms such as financial autonomy, project approval power, and business registration power. Can independently formulate and implement local economic policies, responsible for the economic development of the entire region.

The fourth is closely related to the development of the national economy. County economy is an important component of the national economy, closely related to the development of the national economy<sup>[1]</sup>. The development level, industrial structure, and market development of the county economy all play an important role in promoting the development of the national economy. At the same time, under the guidance of national development strategies and policies, county and district economies will also form their own characteristics and advantages, making their own contributions to the development of the national economy.

#### 2.2 Unbalanced development of industrial structure in counties and districts

A common feature of economic development in counties and districts is the imbalanced development of industrial structure. This imbalance is reflected in the significant differences in industrial structure between different counties and districts. Some counties and districts have formed obvious advantages based on the development of a certain industry, while others have weak development and a single industrial structure. For example, some counties and districts have developed the service industry, which accounts for more than 50% of GDP, while some counties and districts are still driven by the Secondary sector of the economy, and the Tertiary sector of the economy accounts for less than 40% of GDP.

The uneven development of industrial structure is partly due to differences in history, geography, resources, and other factors. Some counties and districts are located in areas with inconvenient transportation, scarce resources, and limited industrial development, while others are rich in resources and have obvious geographical advantages, forming prominent industrial characteristics. Secondly, the level of economic development varies among different counties and districts. Some counties and districts have advanced economies, sufficient social capital, and abundant technological reserves, which can quickly transform and upgrade in the adjustment of industrial structure. However, underdeveloped counties and districts face significant development pressure <sup>[2]</sup>. On the other hand, different levels of policy support can also lead to differences in the industrial structure of counties and districts. Counties and districts with strong policy support can attract more investment and talent, accelerate the pace of economic development, and conversely, it is difficult to leverage their advantages.

#### 2.3 Insufficient industrial technology innovation capability

At present, the insufficient innovation capacity of industrial technology is an important factor restricting the development of counties and districts. Specifically, firstly, there is insufficient investment in basic research. Basic research is an important foundation for technological innovation. Compared with developed cities, the proportion of basic research investment in most small and medium-sized cities is still relatively low, leading to insufficient technological innovation capabilities. Secondly, the internal innovation capabilities of the enterprise is limited. Enterprises lack strong independent research and development capabilities, lack national level high-tech enterprises, and rely more on external introduction and absorption for technological innovation, making it difficult for enterprises to independently carry out technological innovation. Thirdly, the institutional mechanisms that constrain innovation are not sound. Inadequate protection of intellectual property rights and

difficulties in transforming scientific research achievements have all constrained technological innovation capabilities<sup>[3]</sup>. Fourthly, there is a shortage of talent. Innovation requires high-quality talents, and some cities still have certain problems in talent cultivation and talent mobility, which will directly affect the ability of industrial technology innovation. Fifth, there is insufficient market demand. Market demand is an important driving force for technological innovation. Currently, there is insufficient market demand in some regions and fields, resulting in insufficient space and motivation for technological innovation.

# 3. Advantages of Industrial Structure Adjustment in the Digital Economy Era

# 3.1 The development of emerging industries is guaranteed

Firstly, emerging industries have the ability to innovate in technology. In the era of digital economy, technological innovation is an important driving force for the development of enterprises and industries. Emerging industries, due to their extensive use of digital and internet technologies, have a deeper understanding of digital technology and are able to quickly apply new technologies and concepts, continuously innovate and improve products and services.

Secondly, emerging industries have broad market prospects. In the era of digital economy, consumers' demand for digital products and services continues to grow, which brings huge market prospects. Emerging industries typically involve fields with high-tech content and high added value, and their innovation capabilities and technological level are often high, which can better meet market demand.

Once again, emerging industries have the ability to upgrade their industries <sup>[4]</sup>. Traditional industries are often affected by market competition and technological updates, making it difficult to achieve industrial upgrading. Emerging industries can promote the upgrading of the whole industry and improve the overall economic level because of their progressiveness technologies and concepts.

Finally, emerging industries have the advantage of international competitiveness. In the era of digital economy, the pressure of international competition is increasing. Emerging industries, with their technological and innovative capabilities, have stronger international competitiveness and can better participate in global market competition, driving the internationalization development of the entire industry.

# 3.2 The development prospects of the service industry are promising

In the era of digital economy, the service industry is an important component of industrial structure adjustment. It has unique advantages in digitization, intelligence, sustainable development, and other aspects, and its development prospects are worth looking forward to.

Firstly, the rapid development and widespread application of digital technology have provided more development opportunities for the service industry. With the popularization and application of network technology, cloud computing, big data, artificial intelligence and other technologies, the service industry has broken through the traditional time and space constraints, and can provide customers with more convenient, fast, accurate and personalized services based on the Internet and cloud computing and other technologies, while also improving the efficiency and quality of the service industry.

Secondly, the service industry has the characteristics of diversification and strong innovation, which also promotes the rapid development of the service industry. In the era of digital economy, the development focus of the service industry is gradually shifting from traditional human resources services to digital services, and its service forms are also becoming more diversified and innovative<sup>[5]</sup>. The diversification and innovation of the service industry can not only bring better

service experiences, but also create more job opportunities and increase economic contributions.

Finally, the service industry is an important driving force in the digital economy era. In the era of digital economy, the service industry can use big data and other technologies to improve service quality, optimize service processes, realize service standardization, modularization and scale, and thus drive the development of the entire industry. At the same time, the development of the service industry can also promote consumption upgrading and promote economic transformation and upgrading.

# 3.3 Rich human capital and technological resources

The abundance of human capital and technological resources is an important factor in the emergence and rapid development of the digital economy, with the following advantages.

Firstly, the abundance of human capital and technological resources is conducive to the innovation and practice of the digital economy. Human capital and technological resources are important components of the digital economy, and their richness and diversity can fully play a role in basic and applied technologies, further promoting the development of innovation and practice in the digital economy. The richness and utilization efficiency of these human and technological capital are fundamental to the competitive advantage of the digital economy.

Secondly, the abundance of human capital and technological resources contributes to the development and upgrading of the digital economy industry. The digital economy industry covers various fields, including e-commerce, financial technology, the Internet of Things, artificial intelligence, and other fields. For each field, the enrichment and optimization of human capital and technological resources can quickly promote the development and upgrading of industries, providing strong support for the growth and growth of the digital economy.

Finally, the abundance of human capital and technological resources helps to build a digital economy ecosystem. With the continuous development of the digital economy, the richness and sustainability of human capital and technological resources will become important conditions for building a digital economy ecosystem. How to strengthen talent cultivation and technology transfer, establish innovative, creative, and leadership organizations and teams, is an indispensable factor in building a digital economy ecosystem.

# **4.** Strategies for Adjusting the Industrial Structure of Counties and Districts in the Digital Economy Era

# 4.1 Optimize industrial infrastructure

Firstly, counties and districts can optimize industrial infrastructure by introducing new technologies and industries. With the rise of the digital economy, some emerging industries and technologies, such as e-commerce, artificial intelligence, big data, have become important factors to promote economic development. County and district governments can gradually enrich industrial infrastructure, continuously improve production efficiency and industrial competitiveness by introducing these new technologies and industries.

Secondly, county and district can increase product added value by adjusting industrial structure. In the industrial economy, industrial structure is a crucial factor. If the industrial structure is unreasonable, it will affect the development of the entire economy. In order to increase the added value of industries, counties and districts can adjust their industrial structure, gradually eliminate inefficient and high energy consuming industries, and promote industries with high added value and green environmental protection. For example, in counties and districts dominated by traditional industries such as metal smelting, this approach should be used to increase the added value of products, increase profit margins, and improve environmental quality and residents' quality of life.

Finally, counties and districts can enhance the competitiveness of the entire industry by strengthening industrial alliances and chain cooperation. In the era of digital economy, the cooperation of industrial chains and the construction of industrial alliances are becoming increasingly important. County and district governments can promote the formation of industrial clusters by strengthening industrial alliances and chain cooperation, fully leveraging the economies of scale and agglomeration effects of local economies, and improving the competitiveness of the entire industry.

## 4.2 Promote the rapid development of modern service industry

With the rapid development of the digital economy, counties and districts should promote the adjustment of industrial structure by promoting the development of modern service industries. Firstly, counties and districts can increase investment in the service industry, support and cultivate a group of digital and intelligent service enterprises through the establishment of internet industrial parks and preferential policies for enterprises in the parks, guide traditional service enterprises to transform into digital services, and enhance the competitiveness of the service industry. Secondly, counties and districts should actively promote the integration of digital industry and service industry, build digital service platforms, connect the supply chain and value chain of services, promote the transformation of the service industry from simple offline services to online services, and improve service efficiency. In addition, counties and districts can also establish a talent cultivation system for digital economy, focus on cultivating talents with digital and intelligent service capabilities, and provide a solid talent foundation for the development of modern service industry. Finally, strengthen policy guidance and provide strong policy support for the rapid development of modern service industries by encouraging innovation, creating a favorable development environment, and increasing financial support. In short, counties and districts should give full play to the advantages of digital economy, strengthen the Digital transformation of the service industry, promote industrial upgrading, and achieve high-quality economic development.

#### 4.3 Give full play to the driving role of leading industrial clusters

In the era of digital economy, counties and districts can adjust their industrial structure and achieve economic transformation and upgrading by leveraging the leading industrial clusters. On the one hand, counties and districts can guide relevant industries to concentrate towards the leading industry cluster through the agglomeration effect of the leading industry cluster. For example, in a certain county or district, the information transmission, software and information technology services industry, as well as the automotive parts manufacturing industry, are the leading industrial clusters. Counties (districts) can guide relevant industries to concentrate on information transmission, software and information technology services, and automotive parts manufacturing through various policies, attract relevant enterprises to settle in, form economies of scale, and improve the competitiveness of the industrial cluster. On the other hand, counties and districts can enhance their visibility and influence through international expansion and brand promotion of leading industrial clusters. County and district governments can establish service processes that are in line with international standards, introduce advanced international technology and management experience, improve service quality and industry standards, create international brands, attract customers and investors from around the world, and promote economic prosperity in the county and district.

#### 5. Conclusion

With the advent of the digital economy era, the adjustment and upgrading of county and district industrial structure has become an urgent issue. In this process, counties and districts should optimize

their industrial infrastructure, promote the rapid development of modern service industries, and play a leading role in leading industrial clusters. Only in this way can they promote the rapid development of the county economy, achieve industrial structure adjustment and upgrading, and enhance economic competitiveness and sustainable development capabilities.

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