

OVERCOMING CHINA'S CHALLENGES IN THE GLOBAL ICT INDUSTRY VALUE CHAIN

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The article provides an overview of the global value chain in the context of ICT industry development. Special attention is paid to improving China's competitiveness by transforming from a «processing factory» to an «innovation center» in the global value chain. Recommendations for enhancing the competitiveness of the ICT industry in China as a whole are outlined.

Keywords: ICT industry; global value chain; competitiveness.

ПРЕОДОЛЕНИЕ ВЫЗОВОВ ДЛЯ КИТАЯ В ГЛОБАЛЬНОЙ ЦЕПОЧКЕ СОЗДАНИЯ СТОИМОСТИ ИКТ-ИНДУСТРИИ

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В статье дается общий обзор глобальной цепочки создания стоимости в контексте развития ИКТ-индустрии. Особое внимание уделяется повышению конкурентоспособности Китая на основе осуществления трансформации из «перерабатывающей фабрики» в «инновационный центр» в глобальной цепочке создания стоимости. Даются рекомендации по повышению конкурентоспособности ИКТ-индустрии в Китае в целом.

Ключевые слова: ИКТ-индустрия; глобальная цепочка создания стоимости; конкурентоспособность.

Introduction

At present, the layout of the global value chain of ICT industry is as follows: the United States and Japan are located at the top of the value chain by virtue of capital, technology and other factors, while South Korea is located at the middle and high end of the value chain, while China is more of a “processing factory” of developed countries and is located at the low end of the value chain [1].

Challenges for China in the global value chain of ICT industry

In today’s global economic system, ICT industry, as a key driving force to promote economic growth and social progress, has formed obvious regional and hierarchical characteristics in the layout of its global value chain. The United States and Japan, with their strong capital accumulation, leading technology research and development capabilities and deep brand influence, are firmly at the top of the global value chain of ICT industry. These countries not only control high value-added links, such as the research and development of core technologies, the production of key components and the marketing and sales of high-end markets, but also lead the development direction of the whole industry by formulating industry standards and rules. In contrast, developing countries, including China, have a relatively awkward position in the global ICT industry value chain. These countries usually undertake low value-added processing and assembly, rely on external technology and financial support, and are in the middle and low end of the industrial chain.

As the largest manufacturing country in the world, China’s position in the ICT industry is particularly eye-catching. In the past decades, China’s manufacturing industry has made remarkable achievements and become an important participant and promoter of the global manufacturing industry. However, although China has made great progress in manufacturing, its position in the global value chain is still relatively low, mainly focusing on processing and assembly. This manufacturing model, which mainly focuses on processing and assembly, has brought rapid economic growth and a large number of employment opportunities, but it has also plunged China into the low end of the value chain. This leads to the low added value of China in the industrial chain, which is heavily dependent on external technology and market orientation. This dependence not only limits China’s technological innovation ability and industrial upgrading space, but also makes China particularly vulnerable in the face of technological blockade and market changes.

In addition, due to the lack of brand influence and core technology, the competitiveness of ICT enterprises in China is relatively weak in the international market. High technical dependence and insufficient innovation ability are two major challenges faced by China’s ICT industry in the global value chain. The high dependence on technology means that enterprises in China often lack the ability to respond independently when facing technological

updates and changes, and can only passively accept the transfer and diffusion of external technologies. However, the lack of innovation ability limits the breakthrough of China enterprises in technology research and product innovation, making it difficult for China to take the lead in the global ICT industry [2].

Strategies to enhance the competitiveness of ICT industry in China

First of all, increasing investment in technology research and innovation is the key to enhance competitiveness. China should make full use of the national science and technology plan and industrial policy, guide and support enterprises to strengthen independent research and development, break through key core technologies, and improve the technical content and added value of products. At the same time, enterprises should be encouraged to cooperate with universities and research institutions to form a good atmosphere for collaborative innovation. By strengthening technological research and innovation, China can gradually get rid of its dependence on external technology and enhance its voice in the global ICT industry.

Secondly, strengthening cooperation and exchanges with developed countries is also an important way to enhance competitiveness. China should actively participate in the cooperation and exchange of international ICT industry and absorb and learn from the advanced technology and management experience of developed countries. By introducing digestion, absorption and innovation, China can narrow the gap with the international advanced level more quickly and enhance its core competitiveness. In addition, we should actively participate in the formulation of international standards and rules to enhance China's influence and position in the international ICT industry.

Furthermore, actively promoting industrial upgrading and transformation is an inevitable requirement to enhance competitiveness. China should accelerate the development of intelligent manufacturing, Internet of Things, artificial intelligence and other emerging fields, and cultivate new growth points. By promoting the deep integration of traditional industries and emerging technologies, we can realize the intelligentization and greening of production methods and improve production efficiency and product quality. On this basis, we should also strengthen brand building and enhance the international popularity and reputation of ICT products in China. Through industrial upgrading and transformation, China can gradually climb to the high end of the value chain and achieve sustained and healthy economic development.

Finally, optimizing the industrial environment and policy support are also key factors to enhance competitiveness. China government should continue to deepen reform and opening-up, optimize the business environment, reduce enterprise costs and stimulate market vitality. And strengthen the protection of intellectual property rights, crack down on infringement and protect the

legitimate rights and interests of enterprises. By building a fair competitive market environment and providing strong policy support, China can attract more domestic and foreign enterprises to invest and develop ICT industry, and promote the rapid development and upgrading of the industry [3].

Conclusion

The challenges faced by China's ICT industry in the global value chain cannot be ignored. However, by increasing investment in technology research and innovation, strengthening cooperation and exchanges with developed countries, actively promoting industrial upgrading and transformation, and optimizing industrial environment and policy support, it is entirely possible for China to gradually upgrade its position in the global value chain and realize the transformation from a "processing factory" to an "innovation center". This will not only inject new impetus into the development of ICT industry in China, but also make greater contributions to the prosperity and stability of the global economy.

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