

Path Selection of Transformation and Upgrade of China's Equipment Manufacturing Industry under Internet +

Environment

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ABSTRACT. *With the continuous improvement of various information technologies in China, big data, cloud computing, Internet of Things, and intelligent terminal information technology are gradually integrating equipment manufacturing to promote industrial technology changes. This paper will analyze the problem of equipment manufacturing in the context of Internet + background, and propose the transformation and upgrading strategies of China's equipment manufacturing industry under the background of Internet +, aiming to promote the effective improvement of the comprehensive competitiveness of China's equipment manufacturing industry.*

KEYWORDS: *Internet+; Equipment manufacturing; Transformation and upgrading*

1. Introduction

Under the background of the Internet +, the traditional equipment manufacturing industry can also transform from the traditional equipment manufacturing industry to the advanced equipment manufacturing industry through the transformation of the new generation of information technology with the Internet as the core[1], "achieving advanced level in manufacturing and R&D technology." Equipment manufacturing is the cornerstone of national economic growth and the main battlefield for Internet information technology innovation and application. From the international experience, the true competitiveness of a country lies in the equipment manufacturing industry, the rise of developed countries such as Britain, the United States, Japan, Germany and Germany. Although the paths are different, the time is different, and the models have their own characteristics. But the commonality lies in its rapid rise. The process is based on the growth of the equipment manufacturing industry.

2. Internet + Background China's Equipment Manufacturing Industry Current Problems

2.1 Structural Adjustment is Inefficient

Structural and institutional issues are the primary issues that constrain the development of China's equipment manufacturing industry. At present, the development of China's equipment manufacturing industry has entered the stage of accelerated development in the middle and late stages of industrialization[2]. The share of heavy industry in economic development is too large, the degree of specialization of industrial development is low, and the phenomenon of homogenization is serious. The regional economic development is mainly driven by industry. The proportion of industry in the tertiary industry is much higher than the world average. In the industrial structure, the proportion of heavy industry is too large, and the ratio of added value is low, showing a deformed industrial structure pattern. At present, China's equipment manufacturing industry faces the problem of excessive proportion of traditional resource-based industries and serious resource consumption. The professionalization level of equipment manufacturing industry is poor and there is no sound industrial division system. In addition, there are deep-seated contradictions in the internal structure of the industry. As the domestic demand market is saturated, overcapacity is increasingly prominent.

2.2 Weak Technical Innovation Capability

At present, the "Internet +" technology innovation system for China's equipment manufacturing industry has not yet formed, so it is difficult to build modern industrial clusters and innovation clusters[3]. "Internet +" China's equipment manufacturing technology level only reaches one-third of the developed countries, most companies only stay in the simple processing and manufacturing stage, and at the two ends of the equipment manufacturing value chain design, research and development, brand marketing, channel management, Financial services and other links are the links that create more value and surplus. The "smile curve" of economic principles shows that in the early stage of industrialization, the added value gap between the design, research and development, brand service and other aspects of the industry in the equipment manufacturing industry in developed countries is small, so the product value chain presents a gradual curve. However, with the deepening of globalization, the standardization of equipment manufacturing technology has led to a significant increase in the added value of design, research and development, marketing, etc., and the added value of processing and manufacturing links has decreased, forming a "smile curve" with high sides and low middle.

2.3 Affected by Economic Mechanism

China's equipment manufacturing enterprises are deeply affected by the planned

economic system, lacking the enthusiasm of independent innovation, resulting in most equipment manufacturing enterprises in the processing and manufacturing links in the middle of the value chain, which differs from the high economic returns obtained from the design, research and development, and financial services. Far away[4]. Although some Chinese manufacturing companies have mastered some key technologies for industrial development, most of the technologies have not yet been industrialized, and they only stay in the laboratory stage.

3. Internet + Background Equipment Manufacturing Transformation and Upgrading Countermeasures

3.1 Actively Cultivate Innovative Intelligent Equipment Manufacturing Industry

The world has entered an era of innovation-intensive new globalization. China can rely on innovation to drive industrial development, build an innovation-driven equipment manufacturing development model, focus on developing smart equipment manufacturing and promote economic transformation and upgrading. Accelerate the transformation of Chinese manufacturing to China through independent innovation and self-owned brands to build core competitiveness. The key to China's equipment manufacturing industry lies in institutional innovation and technological innovation. From the perspective of existing constraints[5], China's independent innovation should mainly adopt leapfrog innovation, cluster innovation and collaborative integration innovation. On the basis of accurately grasping the comparative advantages of China's equipment manufacturing industry, vigorously develop the midfield industry, correctly handle the relationship between traditional advantages and innovation and development, build an innovation system in line with China's reality, accelerate the cultivation of innovative equipment manufacturing industry, and analyze its own characteristics. Breaking through the difficulties of transformation, finding new points of profit growth, and striving for initiative in competition, reflecting the value orientation of the era of knowledge economy. One end is engaged in research and development of new products and new technologies, and the other end is marketing activities engaged in market development and brand promotion. The slender part is the production of products and the transformation of the development orientation of China's equipment manufacturing enterprises.

3.2 Internet + Manufacturing Model to Promote Network Intelligent Production

On the one hand, the participation of the Internet has a great effect on the optimization of the value chain structure of the equipment manufacturing industry. At the same time, it has effectively innovated the manufacturing model and promoted the networked and automated production of equipment manufacturing industry by promoting high-tech methods such as intelligent manufacturing and cloud manufacturing[6]. Introduce informationization into the industrialization process, develop manufacturing outsourcing, change from a single factory to multi-factory manufacturing, actively carry out e-commerce, realize the enterprise group operation structure, and realize the operation mode of equipment

manufacturing enterprises by gradually advancing the integration process of China's equipment manufacturing industry. Transformation. Under the influence of Internet technology, Chinese manufacturing companies can not only analyze market demand more conveniently, but also need to set production and optimize inventory. At the same time, they can connect communities across regions and realize information resource sharing and further optimization of production and sales chains. The equipment manufacturing industry needs the support of advanced logistics and information industry. Informatization has become the transformation fulcrum of China's equipment manufacturing industry, especially the equipment manufacturing industry. The use of information technology to effectively control and manage the business flow, logistics, capital flow and information flow of enterprises to achieve enterprise management information. Scientific management from demand forecasting to organizational procurement, from manufacturing to transportation delivery and sales outlets enables companies to visually manage production costs, inventory and orders, and make rational analysis and decisions based on data that is close to real-time. The technological innovation model of China's equipment manufacturing industry should be a new model for the integration of China's equipment manufacturing industry with multiple entities involved. Link global consumer markets and local industry clusters through strategic alliances, dynamic networks and international subcontracting.

3.3 Actively Build a Soft Environment for the Development of the Internet + Equipment Manufacturing Industry

Promote science and technology and talents to serve the equipment manufacturing industry. The fundamental driving force for intelligent manufacturing development comes from technological innovation. We should improve policy measures, actively strive for financial support, mobilize the enthusiasm of social capital investment, integrate social science and technology resources, and promote the close relationship between scientific and technological factors and economic factors. Combine. Combine the cultivation of talents with the development of advanced equipment manufacturing and intelligent manufacturing industries, provide high-quality public services, innovative environment and working and living environment for high-level talents, and achieve the role of bringing together talents, creating talents and giving full play to talents. In view of the key links and fields of China's equipment manufacturing industry, it is necessary to increase the introduction of talents, especially the introduction of scientific and technological innovation talents in various industries. Establish and improve incentive mechanisms for personnel training and option equity, fully utilize and mobilize the enthusiasm of all types of talents, improve the information network of supply and demand talents, and establish a high-end talent database with a wide coverage to meet the needs of China's equipment manufacturing industry. . We must also improve the construction of the capital market and support the development of the equipment manufacturing industry. First of all, it is necessary to improve the financing system of the equipment manufacturing industry, the use of innovative capital and the mode of investment, and governments at all levels must guarantee the

capital investment in industrial development. We will develop and strengthen investment funds in key areas of China's smart manufacturing industry, encourage the establishment of China's smart manufacturing industry development investment funds, and encourage enterprises to issue corporate bonds and joint instruments. Many factors have made it difficult to form scale in the early stage of intelligent manufacturing development, and it is necessary for the government and enterprises to jointly increase efforts to cultivate the market.

4. Conclusion

All in all, China is currently in a critical period of industrialization development. The development of equipment manufacturing industry is facing unprecedented opportunities and challenges. The equipment manufacturing industry needs to be transformed and upgraded. "Internet +" China manufacturing is an inevitable choice for realizing a manufacturing power.

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