

The Coordinated Development of Advanced Manufacturing and Modern Service Industry

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Abstract: The coordinated development of advanced manufacturing and modern service industry is not only a major development direction of the current global economic construction, but also a core driving force for the transformation and upgrading of industrial structure and innovation. The organic integration of advanced manufacturing and modern service industry is of great significance for the transformation of a comprehensive industry and the promotion of high-level development of manufacturing. On the basis of discussing the background of the coordinated development of the two industries, the author analyzes the obstacles that the two industries may encounter in the process of coordinated development in terms of systems and mechanisms, and gives some reasonable policy recommendations, such as improving the talent introduction system, constructing evaluation standards for the integration of the two industries, expanding overseas business, and further expanding the scope of cooperation, etc., hoping to provide reference for peers.

Introduction

Proposed at the National Economic Work Conference, the first of the seven main tasks of national economic work in 2019 is to accelerate the further integration of advanced manufacturing and modern service industry, and promote the high-quality development of the manufacturing industry. In the government work report of the two sessions held in China in 2019, Premier Li Keqiang also made a further emphasis that according to promoting the high-level development of the manufacturing industry to strengthen the fundamental and technological innovation skills of the industry, and promote the coordinated development of advanced manufacturing and modern service industry, and accelerate the development of a strong manufacturing industry [1]. A series of strategic policies of the Party and the country have shown a strong signal that it will promote the further integration of advanced manufacturing and modern service industry. This is the focus of strengthening supply-side structural reforms and promoting high-quality development of the manufacturing industry. It is the need to improve the global competitiveness of the manufacturing industry, and the general trend of the future development of the manufacturing industry. It is an inevitable way to accelerate the construction of a strong country in the manufacturing industry, and is also the current development direction of China.

I. An Analysis of the Obstacles of the System and Mechanism of the Coordinated Development of the Two Industries

Through the continuous deepening of reform and opening up in recent years, the institutional barriers to the deep integration and development of China's advanced manufacturing and modern service industry have been greatly reduced. However, at present, there are still some institutional barriers in the sectors such as industry access, resource sharing, product indicators and supervision and management, which limit the further integration of the two major industries to a certain extent.

1.1 Explicit and Implicit Market Barriers Still Exist

China's service industry is still not open enough. Among the 68 countries published by the

OECD for foreign manufacturers' investment restrictions, China ranked fourth in 2017, which is far higher than some economically developed countries in Europe and America. The industries with stricter restrictions on foreign capital access include service industries such as banking, insurance, securities, telecommunications, medical, education and culture. In some areas, government monopolies also occur. Restrictive measures are adopted for foreign investment and private enterprises, such as access system, shareholding ratio and service scope. The market-oriented organization's survival and development scope is limited, resulting in high service prices in related industries but the service level cannot meet the needs of customers. In terms of national policies, state-owned enterprises also far surpass the advantages of private enterprises and foreign-funded enterprises, which has greatly affected the fair competition of the industry. According to the information released by the World Bank, China's business operating environment has increased to 48 in 2018, which is a tremendous improvement compared to before. However, there are still large gaps in many areas such as handling construction permits, credit, tax payment, contract execution, bankruptcy handling, talent market supervision and management and economically developed areas [2].

1.2 Serious Data Monopoly and Fragmentation

Following the new round of technological reform and industrial transformation, the cutting-edge technologies such as the Internet, big data, cloud computing, artificial intelligence, etc. have driven the formation of new industries, new formats, and new development modes of the two industries. Information is increasingly showing its value, and it has become an important resource and productivity for the coordinated development of the two industries. However, due to the influence of some factors such as administrative system, regional division, profit dividends, laws, etc., there are now many problems that information resources are not shared, data resources are limited, and information resources are not fully utilized. The data information market in advanced manufacturing industry and modern service industry is not perfect. Units and enterprises regard the information resources they hold as the company's industry capital. There is no incentive for information disclosure and sharing, and the historical information of many data systems has not been applied for a long time. Because information is not shared and exchanged, it also causes the repeated construction of the same set of information resources, resulting in a large amount of financial and material consumption, as well as confusion of rules and standards. This also largely restricts the integration and utilization of data resources between industries and restricts the coordinated development of these two industries.

1.3 New Industries and Modes Coexist with Multiple Management and Supervision

The coordinated development of advanced manufacturing and modern service industry has driven many new industries, new formats and new development modes. In the early stage of the construction of this structure, the safety and reliability of its process is difficult to guarantee. The foundation of industrialization and commercialization is not yet strong, and the supporting social development environment, legal environment, and ideological and moral environment have not been perfected. Its connotation and content are also gradually changing, and new economic forms and demands will continue to emerge. As a result, it is often difficult for regulatory agencies to respond in a timely manner or to overreact, posing serious challenges for industry control and market supervision and management [3]. First, the new situation and problems facing us can easily lead to weak supervision. In the recent period, there have been many negative events in the emerging industries, new formats and new development modes in the service industry. Conflicts and disputes between industries have intensified, which is closely related to poor management or inadequate management. Another is that the existing regional division control system may sometimes cause multiple strategies, multi-level approval and cross-enforcement, and many other problems. Excessive supervision and management makes the emerging formats lack a development and observation process, which affects their development and growth.

II. Thoughts and Suggestions on Promoting the Coordinated Development of Advanced Manufacturing and Modern Service Industry

2.1 Accelerate the Development of Manufacturing Service Industry and Realize the Deep Integration of the Two Industries

The further integration of the manufacturing and the service industry is not a single addition, nor can it be understood as the splicing of the service role to large enterprises and major enterprises in the manufacturing industry. Service manufacturing focuses on integrated core contracting, inspection and testing, technology research and development, e-commerce, professional financial services, supply chain control, energy conservation and environmental protection. The focus of the development of the modern service industry is the two goals of supporting the improvement of advanced technology in the manufacturing industry and meeting the needs of the people of our country for a high standard of living. The improvement of service quality will improve the company's position in the value chain and reduce the company's production costs. It has a tremendous impetus for the improvement of technology in the cutting-edge manufacturing industry, industry replacement and improvement of production efficiency. Improving service levels and quality has become the company's main core competitiveness and the focus of sustainable development in the manufacturing industry. Promoting the further integration of the two industries will help build the value chain of the manufacturing industry. It has a great role in transforming and upgrading the entire manufacturing industry, promoting the high-level development of the manufacturing industry, and driving the needs of products in the cutting-edge manufacturing industry [4].

For example, General Electric Company of the United States has shown the trend of service mode manufacturing. The service business is two-thirds of the total profit of the enterprise. According to the survey, in the manufacturing industry, the service mode manufacturing companies in the United States, Finland, Malaysia, the Netherlands, Belgium and other countries are 58%, 51%, 45%, 40% and 37% of the total number of companies in each country, respectively. China Haier's service mode platform, Huawei's integrated solution design and Shanghai Electric's general integrated general contracting mode are already forerunners of the industry. And these companies' entire supply chain integration service reform methods are driving China's manufacturing industry to gradually transform towards service mode manufacturing.

2.2 Drive the Pace of Development of the Two Industries with Innovation

When promoting the further integration of the two industries, innovation drive is an important force to promote the coordinated development of the two industries. All-round innovation and reform should be adopted to promote the further integration of the two industries. Take process and management innovation as the key to promoting high-level development of the manufacturing industry, and actively embrace new scientific and technological reforms and industrial reforms.

First, enhance awareness and update ideas. In view of the lack of understanding of the development of service mode manufacturing by many companies, it is necessary to change the awareness of paying attention to production and not paying attention to service, and transform the work measures and ideology that put the two industries in opposition. We must effectively use innovative design as the leading function of service reform in the manufacturing industry, and regard development reform design and customized services as the key starting point for service mode manufacturing reform. Treat customized services as demand-oriented to promote China's manufacturing industry to move towards the high end of the industry value chain.

Second, with innovation as the driving force, build a system for the introduction and cultivation of high-tech talents. Talent is the foundation of the two industries. Only by building a good talent training system can we attract more excellent talents to invest in advanced manufacturing and service industries. High-end talents are very important to the industry. To this end, we need to use innovation as a breakthrough and build an evaluation system suitable for high-quality talents. In addition to providing a series of preferential policies and talent introduction policies for talents, it

will open up promotion channels so that talents can be attracted and retained, and provide sufficient talent attraction for the coordinated development of the two industries. In addition, leading enterprises in the industry can also cooperate with universities and colleges to achieve fixed-point internship and training. Let relevant industry experts in the enterprise go to universities and colleges to set up professional courses and give regular lectures so that the talents cultivated by colleges and universities are more targeted and technical. Cultivate a group of comprehensive talents who understand advanced manufacturing and familiar with modern service industry for both industries, and inject new vitality into the coordinated development of the two industries.

Finally, coordinated development requires the two industries to jointly promote the improvement of laws and regulations. On the one hand, construct an evaluation system for evaluating the level of integration of the two industries during the integration of the two industries. For example, the proportion of the service industry's revenue in the total revenue of the manufacturing enterprise, the growth rate of the producer service industry and other parameters. Actively explore service-related manufacturing and other related fields, use Internet and big data and other technologies to count relevant information, and conduct monitoring and analysis to provide data references for relevant government departments in various industries.

2.3 Further Expand the Scope of Cooperation to Achieve Coordinated Development

It is necessary to enhance the in-depth cooperation between the two industries, and encourage the leading enterprises of the two industries to communicate with each other and expand outward. The development of the two industries should not only be based on the domestic market, but also the world. Expand some competitive products or businesses overseas, build a manufacturing service network facing the world, and improve the pace of coordinated development of the two industries worldwide. The expansion of the market means that the two industries will further expand the scope of cooperation. For example, they can actively contract international engineering projects. On the basis of certifying domestic relevant standards, certifying internationally recognized manufacturing and service related standards, so as to achieve the effect of transnational business and product export, allowing Chinese equipment and services to go abroad. Combined with the current Belt and Road Initiative policy background in China, the coordinated development of the two industries can be arranged accordingly. Integrate the two industries in the countries along the Belt and Road Initiative, and carry out international cooperation through the policy background. On the basis of achieving business expansion, it will contribute to the development of China's Belt and Road Initiative and achieve a win-win situation.

Conclusion

In short, with the development of intelligence and advanced technology, the industrial structure of the manufacturing industry is also undergoing new adjustments and reforms. China can rely on the characteristics of industrial clusters to deeply integrate manufacturing and service industries, and build a coordinated development mode of symbiosis and resource sharing between the two industries. Through the industrial cluster mode, guide the deep integration of the two industries. Measures such as reforming the concept, perfecting the talent introduction system, constructing evaluation standards for the integration of the two industries, developing overseas business, further expanding the scope of cooperation, and other strategies to achieve coordinated development of the two industries.

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