Experiential analysis of Integration of Two Industries to Promote New Services of New Quality Productivity

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Abstarct: Integration of modern service industry and manufacturing industry is an important way to constitute a modern economic system, which is of great significance to adapting to the new international industrial division of labor environment and order, breaking the development constraints of manufacturing industry, and promoting the transformation and upgrading of the service industry. In Tokyo's IT technology and connected industrial model, Singapore focuses on smart factories, industrial Internet, shared production, supply chain management and full life cycle management. Hangzhou gradually explore form "digital + service + derivative manufacturing, service manufacturing, supply chain management, system overall solution" of the two industries fusion path. Development experience of "integration of two industries" will cultivate new productive forces for "new service".

Keywords: New Quality Productivity; New Services; Integration of Two Industries

1. Introduction

In September 2023, General Secretary Xi Jinping first put forward the concept of new quality productive forces during his inspection visit to Heilongjiang Province.In March 2024, the work report of the Central Government stressed: vigorously promote the construction of a modernized industrial system, accelerate the development of new quality productive forces, and accelerate the development of modern producer services. China financial forty BBS academic adviser, former mayor of Chongqing Huang Qifan the connotation of new quality productivity deconstruction: "represented by strategic emerging industries and the future industry" new manufacturing ", represented by high value-added producer services" new services ", and represented by globalization and digital" new forms, the three "new" aggregation into a new quality productivity kernel"[1].

As early as 2019, China has made clear the significance of the development of high-value-added producer services. In recent years, China has paid more attention to the integration, upgrading and development of advanced manufacturing industry and modern service industry (hereinafter referred to as "the integration of the two industries") to promote the development of high-value-added producer services. From 2019 to March 2024,26 relevant policies at the national ministry level were issued, and 89 relevant policies were issued by all provinces and municipalities across the country. China's current high value-added producer services are still far from the level of developed countries. In 2023, producer services will account for about 56% of GDP in the US, the added value of producer services in other developed countries and G20 countries will account for 40% to 50% of GDP, and the proportion of producer services in China is only about 17% to 18% of GDP. The "new services" represented by high value-added producer services need to be accelerated to realize the comprehensive and systematic development of new quality productive forces in China.

The existing literature has made a beneficial exploration on the connotation of new quality productive forces, mainly discussing the contribution relationship between new quality productive forces and economic development, but how to cultivate and promote the new quality productive forces according to local conditions. Under the current background, it is of great significance to summarize the development experience of "two-industry integration" at home and abroad to cultivate

new quality productivity, especially the accelerated development of "new service".

2. The Role of "The Integration of the Two Industries" on the New Service of the New Quality Productivity

2.1 The Concept Connotation of "The Integration of the Two Industries"

Industry integration refers to the technological progress, market opening and system innovation, through technology penetration, industrial linkage, chain extension, internal restructuring, break the original industry boundary, promote the cross integration, foster new mode of new forms, manufacturing and services to support each other, efficient coordination, the dynamic process of fusion interaction. According to the about promoting the development of advanced manufacturing and modern service industry depth fusion upgrade implementation opinions " (hair change industry [2019] no. 1762), the industries fusion new forms mode mainly includes industrial Internet, intelligent factory, supply chain management, the whole life cycle management, flexible customization, sharing production platform, total integrated general contracting, service derivative manufacturing, industrial culture tourism type.

2.2 The Positive Role of the "Integration of the Two Industries" on the New Services

The integration of modern service industry and manufacturing industry is an important feature in the late stage of industrialization and an important way to constitute a modern economic system. It is of great significance to adapt to the new environment and order of international industrial division of labor, improving the position of global division of labor value chain, breaking the constraints on the development of manufacturing industry, and promoting the transformation and upgrading of the service industry.

The integrated and upgrading development of advanced manufacturing and modern service industries is an important trend in the development of modern industries in the world. Accelerating the in-depth integration and upgrading of the two industries will help build new advantages in international competition and cooperation. At present, the boundary between the service industry and the manufacturing industry in the traditional sense is becoming more and more blurred. The deep integration and upgrading of advanced manufacturing industry and modern service industry has become an important trend of global economic growth and modern industrial development, and is a profound reflection of the world's new technological revolution and the upgrading of international industrial structure. Accelerating the in-depth integration and upgrading of the "two industries" is conducive to the forward-looking layout of the future industry "tuyere", occupy the first-mover advantage in new technologies, new business forms and new models such as intelligent manufacturing, industrial Internet and flexible customization, and effectively enhance the status of the international division of labor.

3. Integration of Two Industries of International Cities to Promote New Services

3.1 Experience of Promoting the Integration of the Two Industries in Tokyo

First, IT technology and "connected industry" are used to accelerate the integration of "manufacturing + services". Japan has clearly put forward the IT founding strategy and promulgated the Draft of the Basic Law of a Highly Information Society. In this context, Tokyo strongly supports the development of intelligent manufacturing, artificial intelligence and information service industries, such as exempting the 7% information technology development asset tax and cutting another 5% tax for investment in advanced manufacturing technology and equipment.Toyota, SONY, Mitsubishi Electric and other manufacturing enterprises lead the world in intelligent manufacturing, industrial Internet, supply chain management, full life cycle management and other fields. Mitsubishi Electric has built the intelligent manufacturing factory solution "e-F @ cstory", develops intensive artificial intelligence "Maisart", and integrates cutting-edge technologies such as FA-IT technology to help factories reduce power consumption by 96%, increase sales by 70% and reduce costs by 30%.

Second, we will promote the deep integration of "manufacturing and services" through industry-university-research cooperation. Tokyo focuses on R & D investment and

industrial development design. Tokyo's R & D expenditure accounts for 40.8% of Japan and 7.2% of local GDP, forming a circular integration mode of "research and development promotes production and production drives research and development".On the one hand, play in the high-end talent and strong research strength advantage, focus on the development of knowledge intensive "advanced new" industry, and "mass production factory" into "new product development factory", will research and development factory small test after the new product new technology copy to more suitable for mass manufacturing region, its essence is through research and development design leading manufacturing, for the relatively lack of technical ability to provide advanced manufacturing system integration solutions, is the important way of the implementation of service-oriented manufacturing transformation.On the other hand, the Tokyo government, large enterprises, universities and scientific research institutions have established several new technology verification zones, such as Baiye Wisdom City and Tsukuba Robot pilot zone, to conduct technology landing tests in different fields; establish university science and technology transfer institutions to improve the conversion rate of scientific and technological achievements, for example, the University of Tokyo provides enterprises with about 200 patent licenses and technology transfers in the fields of information and communication and electrical appliance manufacturing every year.

Third, the digital transformation of small and medium-sized enterprises as a means to expand the effect of the integration of the two industries. The main obstacles to the introduction of IT by small and medium-sized enterprises are the cost burden, the unclear introduction effect, and the lack of staff skills. Since 2018, it has formulated and promoted "IT", encouraged IT suppliers to develop digital tools that are easy to use for small and medium-sized enterprises, and supported machine manufacturers and industry groups to provide high-quality and inexpensive cloud services for small and medium-sized enterprises.Establish an "intelligent manufacturing support team" specifically for small and medium-sized manufacturing consulting, and establish 25 liaison offices in Tokyo, increasing the proportion of companies collecting data in factories from 40 percent to 88%.

3.2 Experience in Promoting the Integration of the two Industries in Singapore

First, By promoting the transformation and reform of the manufacturing industry through "digital + manufacturing + services". In 2015, the Singapore government issued the Future Manufacturing Initiative, which proposed to improve the efficiency and leadership of the manufacturing industry through digital transformation and the development of the information service industry.In deep cooperation with Germany, introduced the concept of "Industry 4.0", promoted Siemens to establish industry 4.0 laboratory in Singapore, and jointly launched the world's first Industry 4.0 tool —— "Singapore Smart Industry Maturity Index (SIRI)" with TUV, the world's leading third-party testing and certification body.Government, industry and research jointly promote the development of intelligent manufacturing. The Singapore government and Nanyang Technological University established Advanced Remanufacturing and Technology Center (ARTC) and experimental factory, and developed more than 400 incubation projects in intelligent robots and advanced production solutions; We invested in Singapore to build the first IVD Industry 4.0 intelligent factory in Southeast Asia, and formulated industry standards with Singapore Diagnostic Research and Development Center, Health Science Bureau of Singapore, National University of Singapore and other institutions.

Second, to explore the road of international supply chain management with Singapore characteristics.According to the industrial development stage and changing logistics needs, Singapore has formulated and implemented logistics industry improvement and application plans and the development roadmap of logistics productivity. The strategy of combining "bringing in" and "going out" has developed the logistics supply chain industry. At present, 17 of the world's top 25 third-party logistics enterprises have set up regional headquarters or carried out business in Singapore, and cultivated a number of international supply chain management enterprises such as Ye Yongfu Logistics Group and Singapore Post.Continuous innovation logistics supply chain management concept and

practice, put forward the free port, free trade zone, supply chain neural control center, the seventh party logistics (7 PL) innovation ideas, and promote the logistics industry with The Times use leading information technology, in the global first launched and adopt the trade management electronic platform (TradeNet), provide convenient one-stop customs clearance service.

4. Integration of Two Industries of Key Domestic Cities to Promote New Services

4.1 Experience of Promoting the Integration of the Two Industries in Shanghai

First, we will continue to improve the policy system for integrating the two industries. Intensive issued "Shanghai producer services and service-oriented manufacturing development special support detailed rules for the implementation (2018)" the Shanghai advanced manufacturing industry and modern service industry depth fusion upgrade of the development of the implementation opinions (2021) "," Shanghai producer services development "difference" planning (2021) " series of planning policy, according to their own industry integration characteristics determine the total integrated general contracting, supply chain management services, such as key development areas, and take the lead in establishing statistical system, release producer services statistical classification and code, service-oriented manufacturing statistics and evaluation index system.

Second, we will increase special fund support. Since 2007, Shanghai has set up a guiding fund for the development of service industry, focusing on supporting the transformation and development of manufacturing industry and supporting the integration and upgrading of manufacturing industry; On the basis of the guiding fund, the first special fund for producer services, and in 2018 "the Special fund for the development of Producer Services and Service-oriented manufacturing", including service-oriented manufacturing into the scope of special funds for the first time.

Third, to cultivate a number of "manufacturing + service" suppliers with strong independent innovation ability. In intelligent system solutions, total integrated general contracting, and other fields, support Shanghai electric, baosteel, huayi, zhenhua heavy industry, a batch of manufacturing enterprises to speed up the service transformation, through the whole life cycle management, financing lease, benefit sharing mechanism, provide more accurate "product + service", in the "Belt and Road" countries along the capacity cooperation.

Fourth, we will establish a number of national pilot enterprises and typical models. Shanghai selected local enterprises to participate in the pilot demonstration selection by the National Development and Reform Commission and the Ministry of Industry and Information Technology. A number of national pilot / demonstration enterprises and demonstration projects such as Jiangnan Shipbuilding and Lianying Medical emerged in key areas such as general integrated general contracting, intelligent manufacturing, full life cycle management, shared production, industrial tourism.

4.2 Experience of Promoting the Integration of the Two Industries in Hangzhou

First, "digital + service + manufacturing". Give full play to the digital economy first advantage, through artificial intelligence, cloud computing, big data, industrial Internet of digital technology connection can assign manufacturing and services, especially in Hangzhou high-tech zone (binjiang) in the Internet of things, intelligent manufacturing, health, information software, actively promote the two fusion, with "digital +" "digital + service" to promote advanced manufacturing and modern service industry depth fusion, build two fusion "riverside model".

The second is the service derivative manufacturing. Give full play to the advantages of many well-known e-commerce enterprises, and promote the integration of retail services and their own brand manufacturing. Netease yan selected, for example, "strict selected service derivative mode" dominated by the Internet, on the basis of manufacturing, use strict selected consumption big data to help manufacturing end accurate perception of market demand, further product design, material procurement, manufacturing, quality detection, logistics, after-sales service the whole industry chain, through the brand authorized manufacturing and processing, gradually form has its own characteristics of innovative original design manufacturers model.

Third, supply chain management. Support the development of intelligent supply chain network, promote logistics supply chain and manufacturing integration, such as novice network, chuanhua at, best logistics, promote the development of digital logistics process, actively build manufacturing enterprises and logistics enterprises docking platform, innovative supply chain coordination mode, promote logistics facilities and manufacturing services whole process intelligent, integration.

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