### New Trend and Countermeasure of High Integration Development of Manufacturing Industry and Service Industry in China

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**Abstract:** There is interaction between manufacturing and service industries. At present, the development of China's manufacturing industry is still lagging behind. Many service projects are mainly self-sufficient and self-selling, which leads to the low level of their competitiveness. It is of positive significance to integrate manufacturing industry and service industry, and then play the role of promoting the two. Therefore, this paper first analyses the mainstream trend of the integration of manufacturing and service industries in China, then discusses the problems in the process of integration of manufacturing and service industries, and finally puts forward specific countermeasures.

### 1. Research Background

#### 1.1 Literature review

With the deepening of economic informationization, the adjustment of new industrial structure is gradually accelerating. At present, with the frequent crisis of global market economy, European and American countries are beginning to realize that economic development cannot rely solely on the capital market. Judging from the development of modern times, although the industrial revolution has brought huge economic wealth, now the recession economy has made these people realize that the Li W.X and Xia J.C (2012) exists in the capital market. Therefore, in this context, entrepreneurs began to shift their focus to manufacturing. Therefore, many scholars have carried out a detailed study on the development of manufacturing industry. Some scholars have pointed out that the current enterprise development from manufacturing to service industry transformation, and then through mergers and acquisitions reorganization, thus opening a new situation of service transformation from traditional manufacturing to service industry (Tang D.Z, 2013). The solution to this situation is mainly from selling products to providing services. Some scholars put forward a new mode of transformation and development of manufacturing industry to service industry (Zhang J, et al, 2016) by drawing lessons from the experience of integration and development of international manufacturing industry and service industry. Moreover, with the continuous integration of information technology, different industries will also appear the phenomenon of integration and development. Especially under the promotion of Internet technology, the trend of integration between manufacturing and service industries is more obvious. Some scholars have pointed out that producer services have become an indispensable part of the current manufacturing industry (Qi L.Q and Zhang Q.N, 2018). In the face of the tide of "Internet +", how to integrate producer services and manufacturing industry has become an urgent problem to solve in the current industry convergence. In view of this, some scholars try to start from the background of "Internet +", through studying the objects involved in manufacturing and service industries, and putting forward specific ideas of integration, a new plan to increase manufacturing transformation is presented (Fang F, 2018). Some scholars have pointed out that with the acceleration of the integration of producer services and manufacturing industries, the decomposition and penetration of the value chain of economic services make this integration more obvious (Li J and Zhang S.K, 2019). At present, China's manufacturing industry integration phenomenon has emerged, but the level of integration is still low. The insufficient supporting effect of producer services on

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manufacturing industry results in weak driving capacity of manufacturing industry as a whole. Therefore, if we want to promote the development of industrial integration, we need to take the development of producer services as the core, speed up the development of industrial spatial agglomeration, so as to optimize the external integration environment.

### 1.2 Purposes of research

Under the existing research theory, the integration and development of manufacturing industry and service industry has a positive effect. However, the current integration phenomenon in China is less, and the level of integration is low, which seriously limits the rapid development of industry. Therefore, how to improve the level of service industry development and promote the integration of manufacturing industry is an urgent problem to be solved, which is also the main purpose of this study. With the continuous development of information technology, the relationship between manufacturing industry and service industry is more closely, the boundary clarity is gradually blurred, the integration between the two is gradually improving, and the development trend of interdependence and interdependence is more obvious. At the same time, the integration of service industry and manufacturing industry will give birth to new formats and promote the continuous optimization and upgrading of industrial structure. From the perspective of industrial structure, the mutual penetration of manufacturing industry and service industry is more significant; from the perspective of business activities, the enterprise center has changed to the industrial chain and the mode of integrated growth. Therefore, in this case, it is of positive practical significance to analyze the trend of integration of manufacturing and service industries in China, and to explore the future development trend and countermeasures.

## 2. The Mainstream Trend of the Integration Development of Manufacturing Industry and Service Industry

## 2.1 Service-oriented manufacturing industry has become the main trend of integration of the two

Existing research shows that the intermediate input cost of services can reach 70%. According to the survey of large manufacturing enterprises such as Huabei Pharmaceutical, Lenovo, Huawei and ZTE, some scholars have learned that 80% of the time for these enterprises'products to be put into the specific sales cycle is in the sales process. In these processes, service input accounts for more than 45% of the intermediate input. Some scholars have pointed out that 69% of the effective demand for productive services in industrial production has important applications (Tong J, et al, 2010). Generally speaking, the key manufacturing industries with high intermediate demand include leasing, R&D, transportation, warehousing, finance and so on. In addition to production, manufacturing industry also includes customer support, sales, research and development, which is the key content of manufacturing enterprises. According to the development of the United States, the proportion of service-oriented jobs in manufacturing industry has increased to 55%, and the return of service industry input and output has reached 26%. In addition, from the existing research situation, the manufacturing industry in developed countries especially depends on the service industry, so the service-oriented manufacturing industry has become an important trend of the current economic development.

### 2.2 The service-oriented trend of manufacturing enterprises is accelerating

In the process of improving the modern manufacturing system, there are fewer and fewer manufacturing links in the added value components of industrial manufacturing products. Among them, R&D, design, brand management, knowledge products and other services are gradually increasing. Take transnational corporations for example. The main business and management mode of most MNC manufacturers are service-oriented, and they have become the most important service enterprises. In addition, the manufacturing service industry has undergone tremendous changes in the industrial form and development model, and there is more room for development (Yuan X.N,

2009). At present, the large-scale manufacturing based on assembly line is a production mode with low inventory as the core, and new models such as agile manufacturing emerge one after another. Subsequently, a new mode of production devoted to changing the way products are produced. In order to seek value-added activities more efficiently and maintain their competitive advantages, many enterprises restructure their value chains, and their main business begins to transform to service. On the one hand, MNCs outsource low-value activities such as assembly to manufacturing enterprises, while the functions of parent companies are transformed into services. From this point of view, the resources of multinational corporations are concentrated in R&D, logistics, after-sales, supply chain management, etc., and their profits will be higher and higher. Therefore, the trend of service-oriented operation of manufacturing enterprises will be accelerated step by step.

### 2.3 Service outsourcing becomes the main way to integrate the two

Under the background of rapid development of Internet information technology, service content has broken through the restrictions of time, space and region, changed the attributes of non-storage and simultaneous consumption of service products, made services more tangible and tradeable, and promoted the rapid development of related services. At present, with the gradual aggravation of industrial division of labor, service outsourcing has become a deepening division of labor in the service industry, which has improved the level of professional services. Moreover, the service division of labor promotes the closer relationship between manufacturing and service industries, and makes the situation of scale and marketization of service industry clear gradually. In addition, service outsourcing improves the productivity of service industry and becomes the key to enhance the core competitiveness of manufacturing enterprises. Therefore, more and more manufacturing enterprises outsource traditional self-service to relevant service providers for the sake of focusing on the main business and saving costs. In addition, in the process of integration of manufacturing industry and service, service outsourcing has become the main way, and they have obvious symbiosis. In this case, the trend of integration between service industry and manufacturing industry has been strengthened, and enterprises 'investment in services has increased, which has promoted the rapid development of producer services in various places. These services are usually realized through offshore outsourcing.

#### 3. The Dilemma of the Integration of Manufacturing Industry and Service Industry in China

## 3.1 Manufacturing industry is dominated by production and processing, which hinders the development demand of service industry market

For a long time, China's manufacturing industry mainly undertakes the processing and manufacturing links in the production system, and always focuses on the low-end and substitute processing mode. The key core technology, marketing network and brand management of products are mostly in the hands of multinational companies. In this case, China's manufacturing industry chain is relatively short, concentrated in assembly activities, or labor-intensive industries. Even if the manufacturer undertakes some technology-intensive and capital-intensive products, most of them are low-value-added and low-technology processes, while high-end value-added services are still in the hands of multinational manufacturers. Therefore, this long-term division of labor and dependence of manufacturing industry not only hinders the demand of service industry development, but also reduces the competitiveness of manufacturing enterprises, which leads to the great limitation of domestic service industry development space.

# 3.2 The low investment of manufacturing enterprises in services leads to the low degree of service specialization

At this stage, the work of Chinese manufacturing enterprises is still mainly self-service, and seldom outsource some processes to service providers. At the same time, the product development, human resources, logistics and distribution services in manufacturing enterprises are usually built-in, which hinders the demand of manufacturing industry for services to a certain extent. As a result, the

penetration process of service industry into manufacturing industry is very slow, which hinders the integration process of manufacturing industry and service industry, and is not conducive to enhancing the core competitiveness of enterprises. At the same time, some enterprises still adopt the traditional production mode such as cost advantage and price competition, which makes their industrial chain focus on product production, while ignoring the key content of product research and development, human resources management, financial services, information technology investment and so on. Especially in the aspect of technological innovation, the investment and R&D power of manufacturing enterprises are insufficient, and they are in the stage of imitation for a long time. At present, the capital input of industrial works of Chinese manufacturing enterprises is 52.5%, while in developed countries, this proportion is only 25%. Therefore, China's manufacturing enterprises have a low level of investment in services, which is not conducive to the development of service specialization.

## 3.3 Benign interaction mechanism between manufacturing industry and service industry needs to be formed

From the point of view of research theory, service industry and manufacturing industry are interdependent and co-developing. The service industry relies on the development of manufacturing industry to provide high value-added support, and manufacturing industry provides basic market conditions for the development of service industry. At present, the development of manufacturing and service industries in China is at a critical stage, and the positive interaction mechanism between them needs to be strengthened. From the micro level, weak interaction is a major obstacle to the integration of manufacturing and service industries. Manufacturing enterprises usually adopt the traditional mode of self-sufficiency and self-selling, seldom use professional services such as suppliers. In large manufacturing enterprises, they have their own professional R&D, logistics, design, finance and other service departments. These services are constantly internalized, providing sufficient basic conditions for enterprises. In this case, manufacturing enterprises gradually change to design, marketing, R&D and other high value chain links. Relatively speaking, small and medium-sized manufacturing enterprises are constrained by their own conditions, unable to provide sufficient funds to speed up the construction of the service sector. Therefore, in the coming period of time, the positive interaction mechanism between China's small and medium-sized manufacturing industry and service industry needs to be formed.

## **4.** Innovative Strategies for the Integration and Development of Manufacturing Industry and Service Industry in China

### 4.1 Expanding the demand and supply of service industry

Firstly, improve the independent innovation ability of manufacturing enterprises. Government departments should improve the core competitiveness of manufacturing enterprises by supporting enterprises in scientific and technological research and development, information technology services and other work. On the one hand, the government should increase the investment of R&D funds, improve the development of manufacturing information technology, and constantly expand the level of service, so as to improve its competitive advantage. At the same time, we should accelerate the establishment of alliance relationship among manufacturing enterprises, scientific research institutions and service institutions in Colleges and universities, and realize the joint planning of industrial chain and revenue sharing. Secondly, promote the transformation and upgrading of processing trade. Manufacturing enterprises should gradually expand to the upstream and downstream of the industrial value chain to enhance the supporting capacity of domestic service industry. We will accelerate the transformation of processing trade from OEM to self-owned brands and expand the demand for service industry development. Finally, improve the service quality of enterprises. Focus on the cultivation of high-growth, high value-added services, through investment in technology, education, and other content, to accelerate the rapid integration of manufacturing and services.

### 4.2 Accelerating the innovation of development model and organizational model

Through innovating the development mode of service industry, we can promote the development process of service outsourcing projects. Manufacturing enterprises should provide special information technology, accounting services, logistical support and after-sales services for traditional production projects. Introduce service organizations with strong service, and make use of the advantages of system, management and network to promote the rapid development of logistics, finance, design and other services. In addition, manufacturing enterprises also need to learn from international management experience, international network channels and related service modes in time, so as to continuously improve the level of internationalization and informatization of service industry, so as to promote the rapid integration of manufacturing and service industries.

### 4.3 Developing high-end service industries to enhance the competitiveness of enterprises themselves

At present, China is facing severe pressure of resources, environment and recognition, especially in large and medium-sized cities. Therefore, only by adjusting the industrial structure and changing the existing development mode, can manufacturing enterprises move towards endogenous growth. In this process, we need to continuously improve the contribution rate of technological innovation to growth and vigorously develop the service economy. In the urban central area, we should fully attract talent gathering, mobilize the needs of service industry development, give priority to the development of high-end service industry, so as to provide more perfect services for the development of manufacturing industry, give full play to the radiation-driven role, and promote the continuous upgrading of regional manufacturing level. Therefore, through the development of high-end service industry, it can not only promote the competitiveness of enterprises, but also effectively promote the rapid development of manufacturing and service industries.

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