

Research on the Development of Manufacturing Service in Guangxi

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Abstract: In recent years, China's economy has entered a stage of high-quality development from the past stage of rapid growth. To promote the service development of manufacturing industry has become the trend of manufacturing transformation, and is also the core to promote the high-quality development of China's economy. However, the servitization of manufacturing industry in Guangxi is still at a low level. The overall level of servitization is low, the economic benefit is not high, the innovation ability is insufficient, the service form is single, the lack of compound talents, the enterprise capital strength is not strong, and so on, which affects the development of manufacturing industry in Guangxi to some extent. In order to promote the servitization of manufacturing industry, we should change the business model, strengthen the sense of service, focus on training and improving the core competitiveness, extend the industrial chain, increase the added value of products, and expand the scale of enterprises by borrowing the financial market, so as to jointly drive the rapid and sound development of Guangxi economy.

1. Introduction

In recent years, China's manufacturing industry has developed rapidly and has become the world's largest manufacturing country. However, manufacturing power does not mean manufacturing power. China's manufacturing industry is still in a low-end state compared with foreign manufacturing industries. In 2015, the executive meeting of the state council deliberated and adopted "made in China 2025", accelerating the transformation of China from a "manufacturing power" to a "manufacturing power". How to reduce the enterprise's own cost, get the maximum profit and get out of the development dilemma has become the key to the development of manufacturing enterprises [1]. If we want to change the current situation of Guangxi's manufacturing industry, the fundamental way is to change the mode of production, increase the added value of products, and promote the servitization of the manufacturing industry.

2. The present situation of Guangxi manufacturing servitization development

2.1 General situation of Guangxi manufacturing industry development

2.1.1 Guangxi's manufacturing industry is at a lower level

From the total industrial output value of Guangxi's manufacturing industry from 2012 to 2016, the total industrial output value of the three sub-industries -- agricultural and sideline food processing industry, non-metallic mineral products industry, ferrous metal smelting and rolling processing industry -- exceeded 100 billion yuan for five consecutive years, and these three sub-industries belong to the traditional manufacturing industry. The total industrial output value of the high-tech manufacturing industry, which is dominated by the manufacturing of medicine and computer, communication and other electronic equipment, was much lower than that of the traditional manufacturing industry during this period.

Table 1 Total industrial output value of Guangxi manufacturing industry

Unit: 100 million yuan

Industry \ Year	2012	2013	2014	2015	2016
Agricultural and sideline food processing industry	1810.3	2049.6	2232.5	2349.4	2535.5
Pharmaceutical manufacturing	265.3	337.9	384.7	438.9	475.3
Non-metallic mineral products industry	1033.8	1274	1490.8	1701.6	1876.8
Ferrous metal smelting and rolling industry	1810.4	2234	2449.1	2447.1	2666.6
Manufacturing of computers, communications and other electronic equipment	522.4	733.8	966.2	1294.2	1579.7

Data source: Guangxi statistical yearbook 2013-2017.

2.1.2 Guangxi's manufacturing profitability needs to be improved

Guangxi manufacturing industry main business income and total profits have shown an obvious upward trend. In 2016, the annual growth of Guangxi's main business income was 11.68%, and the annual growth of China's main business income was 6.7%, reflecting that Guangxi's manufacturing products are in the growth stage and have development potential. But on the whole, there is a huge gap between the profit of manufacturing industry in Guangxi and the total profit of manufacturing industry in China. In 2012, the total profit of Guangxi's manufacturing industry only accounted for 1.67% of the country's total. After five years of development, it only increased by 0.25 percentage points. Therefore, the profitability of manufacturing enterprises in Guangxi needs to be improved.

Table 2 Comparison table of main business income of manufacturing industry from 2012 to 2016

Unit: 100 million yuan

Year	2012	2013	2014	2015	2016	Annual growth rate
Guangxi	13006.32	15173.90	16849.02	18339.30	20240.88	11.68%
The National	805662.28	909452.71	978229.96	992673.81	1047710.97	6.7%

Data source: China industrial statistics yearbook 2013-2017.

Table 3 Comparison table of total profit of manufacturing industry from 2012 to 2016

Unit: 100 million yuan

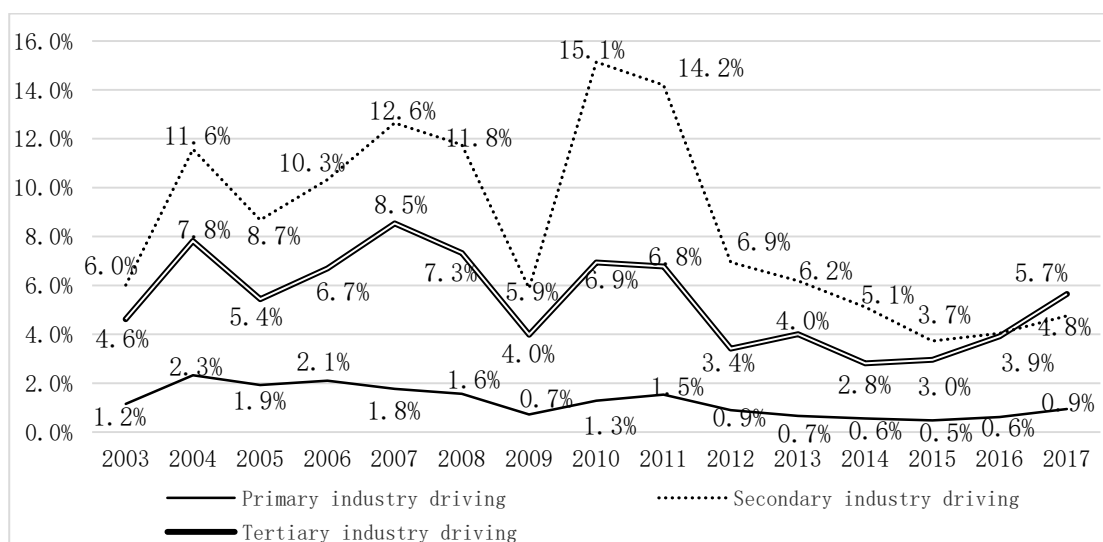
Year	2012	2013	2014	2015	2016
Guangxi	812.16	882.80	916.75	1105.19	1253.88
The National	48570.46	55400.63	56898.46	57974.69	65280.86
The proportion	1.67%	1.59%	1.61%	1.91%	1.92%

Data source: China industrial statistics yearbook 2013-2017.

2.2 Overview of Guangxi service industry development

2.2.1 The service industry has driven the steady rise of Guangxi economy

From the perspective of the driving effect of the three major industries on GDP growth in Guangxi from 2003 to 2017, the second industry has always been the first among the three industries, although its driving effect on GDP growth fluctuates greatly. Since 2011, the driving role of the secondary industry has decreased significantly, while the driving role of the tertiary industry has increased in fluctuations. Until 2016, the driving role of the tertiary industry exceeded that of the secondary industry, and the curve remained above the secondary industry.



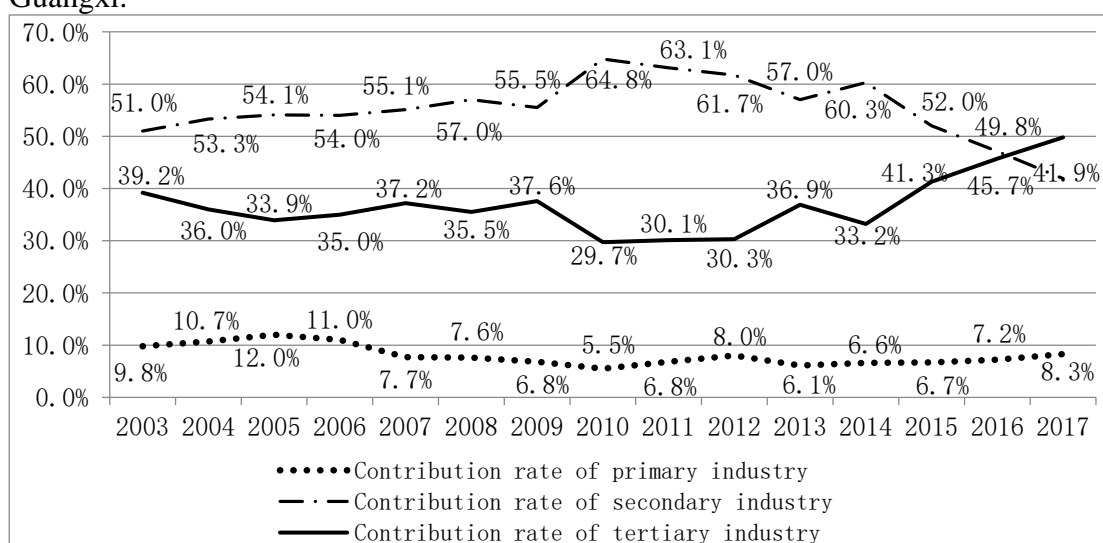
Data source: Guangxi Statistical yearbook 2004-2018.

Figure 1 The three major industries in Guangxi contributed to the GDP growth from 2003 to 2017

Data show that in 1958, 2003 and 2017, the GDP of Guangxi was 2.452 billion yuan, 282.111 billion yuan and 2,039.625 billion yuan, respectively. During this period, it can be clearly seen from figure 1 that the driving effect of the primary industry on GDP growth remains almost unchanged, while the driving effect of the secondary industry tends to weaken, while that of the tertiary industry tends to strengthen. It can be seen that the service industry plays an increasingly important role in promoting the economic development of Guangxi.

2.2.2 The service industry has become an important engine of economic growth in Guangxi

Against the background of slowing down of industrial development, Guangxi's service industry bucked the trend and presented a situation of increasing total volume and increasing vitality. In 2016, the contribution rate of the secondary industry in Guangxi was 41.9% and 49.8%, respectively. For the first time, the contribution rate of the tertiary industry to GDP growth exceeded that of the secondary industry by 7.9 percentage points, and the gap is still widening. In 2017, the added value of Guangxi's service industry exceeded 800 billion yuan, contributing about 50% to GDP. As can be seen from figure 2, since 2016, the service industry has assumed the responsibility of driving economic growth and become an important engine of economic growth in Guangxi.



Data source: Guangxi Statistical yearbook 2004-2018.

Figure 2 Contribution rate of Guangxi's three major industries to GDP from 2003 to 2017

2.3 Overview of Guangxi service industry development

In 2014, premier li keqiang first put forward the concept of "made in China 2025", and then the state council officially issued "made in China 2025". In 2016, Guangxi formulated the implementation opinions on the made in China 2025, proposing to "promote the cross-border integration and derivative upgrading of the manufacturing industry by relying on the Internet and the Internet of things, and realize the transformation from product-centered to service-oriented mode" [2]. That same year, the government issued "the Guangxi zhuang autonomous region," much starker choices-and graver consequences-in "of industry and information technology development planning", and clearly put forward: to adhere to the advanced manufacturing industry and producer services industry integration development, to find out of development manufacturing value-chain of Guangxi, to speed up the Guangxi manufacturing enterprises from production to production service, speed up the manufacturing to stretch on both ends of the "smiling curve", actively promoting the development of manufacturing service.

3. Problems existing in the servitization development of manufacturing industry in Guangxi

3.1 The foundation for service-oriented manufacturing is not stable

The foundation of the servitization development of Guangxi's manufacturing industry is not stable. On the one hand, there are congenital defects in the development of Guangxi's manufacturing industry, which leads to the low level of servitization of Guangxi's manufacturing industry. On the other hand, data show that "two 70%" phenomena are common in the industrial structure of countries with high level of economic development, that is, the proportion of service industry in GDP is 70%, and that of producer service industry is 70% [3]. In 2017, China's service sector accounted for about 51 percent of GDP, while Guangxi's service sector accounted for about 40 percent of GDP. No matter compared with domestic or foreign developed countries, the gap is very obvious. The backward development of service industry restricts the development of Guangxi's manufacturing industry.

3.2 Enterprise service development consciousness is not strong enough

Most manufacturing enterprises in Guangxi do not have the consciousness of service-oriented transformation, and do not fully realize the significance of service-oriented development of manufacturing for the future development of enterprises. The service consciousness of most manufacturing enterprises is only in the initial sales stage. However, most enterprises generally believe that these extra services greatly increase their costs and reduce their profits. Enterprises do not clearly understand the importance of service-oriented development to manufacturing enterprises and lack a profound grasp of the strategic significance of enterprises to service-oriented transformation.

3.3 Enterprise service form is single

The service-oriented development of the manufacturing industry emphasizes the provision of diversified services. World-renowned brands Mercedes Benz and haima are committed to building service brands. By contrast, Guangxi manufacturing industry development of service consciousness, such as Guangxi auto enterprise, even the wuling, dongfeng liuzhou automobile company and other areas of the famous large enterprises, the service provided is mostly stay in the most basic aspects, such as repair and maintenance to the customer services is relatively single, difficult to meet the demand of customer diversified services.

3.4 Enterprises are short of inter-disciplinary talents

Strong industrial base is the key of talents, and at present the manufacturing service transformation of Guangxi, are faced with the problem of lack of interdisciplinary talents, characterized by two aspects: first, the type of talent fostering in Guangxi is relatively single, or pure technology talents, or pure service management talents, simple talents knowledge structure and

manufacturing services development requirements do not match, can't meet the demand of manufacturing to service-oriented transformation; Secondly, the economic benefits and added value of products of Guangxi manufacturing enterprises are not high enough at the present stage, so it is difficult to offer satisfactory wages. As a result, it is difficult for enterprises to recruit workers and lack of talents.

3.5 The enterprise technology innovation ability is insufficient

The service development of manufacturing industry should take innovation-driven development as the fundamental pat [4]. At present, the innovation ability of Guangxi manufacturing enterprises is not strong, and the innovation system is not perfect. In 2016, among the subsectors of the manufacturing industry, the only industry in which the total R&D investment exceeded 1 billion yuan was automobile manufacturing, which invested 3.58 billion yuan. There are only four subsectors with R&D expenditure intensity of 1.0% or more, namely special equipment manufacturing industry, automobile manufacturing industry, instrument and meter manufacturing industry and other manufacturing industry. Their R&D expenditure intensity is 1.21%, 1.42%, 2.11% and 1.15% respectively [5]. Although the research and development level of Guangxi manufacturing industry has been improved, there are still problems such as relatively insufficient investment in research and development funds and low investment intensity, and the independent innovation ability still needs to be improved.

3.6 Enterprise capital strength is not strong

Most of the manufacturing enterprises in Guangxi are small and medium-sized enterprises, which generally have the problem of insufficient funds. In addition, the financing cost of small and medium-sized enterprises is higher than that of large state-owned enterprises, which undoubtedly adds insult to injury. The transformation from manufacturing enterprises to service enterprises requires sufficient funds to introduce talents, new technologies and build service brands of enterprises. The capital flow of enterprises is the lifeblood of enterprise development. Once the investment fails, the capital chain will be broken, which will bring huge losses to enterprises or even lead to bankruptcy. Therefore, most manufacturing enterprises always dare not take the first step to service transformation.

4. Countermeasures and suggestions for the servitization development of manufacturing industry in Guangxi

4.1 Change business model and strengthen service consciousness

As the main body of providing services, manufacturing enterprises should change their business models and concepts. In terms of mode, Guangxi manufacturing enterprises should shift from the profit mode of simply providing products to the profit mode of providing products and services, so as to realize the extension of manufacturing enterprises from the bottom to both ends of the "smile curve". In terms of concept, manufacturing enterprises should learn to strengthen their awareness of providing services, transform from the product thinking of manufacturing industry to the user thinking of service industry, consider the different needs of different customers in the same position, and finally meet the needs of different types of customers through actions.

4.2 Focus on training and improving core competitiveness

Compared with manufacturing enterprises in economically developed provinces, the competitiveness of Guangxi's manufacturing enterprises is obviously insufficient. However, only by having core competitiveness can enterprises remain standing. Therefore, on the one hand, Guangxi manufacturing enterprises should attach importance to the improvement of product manufacturing capacity, especially to strengthen the standardization of product manufacturing process. On the other hand, we should pay attention to the improvement of technology research and development, brand building and other aspects, create diversified brand services, and increase the number of service forms available to consumers, so as to form the core competitiveness of enterprises.

4.3 Extend the industrial chain to increase the added value of products

The impetus to promote the transformation from manufacturing enterprises to service enterprises requires enterprises to continuously deepen the industrial chain, gradually reduce the high cost input in the upstream links of production and manufacturing, and invest funds in the downstream links of the industrial chain with lower costs and higher benefits. That is to say, by increasing the added value of products and downstream services, to establish and improve the after-sales service system, to win a new round of competitiveness, so as to obtain the ability to continue to operate.

4.4 Leverage the financial market to expand the size of enterprises

Manufacturing enterprises should give full play to their subjective initiative, take the initiative to seek and broaden financing channels, take the initiative to embrace the capital market, borrow from the financial market to strengthen their capital strength, and provide strong financial support for the transformation of manufacturing enterprises to service. At the same time, small and medium-sized manufacturing enterprises should also learn to choose the financing mode most suitable for their own development and reduce the financing risk brought by information asymmetry. In addition, learn to grasp the best financing opportunities and make full use of policies to obtain sufficient funds to promote the servitization of manufacturing.

5. Conclusion

To promote the service development of manufacturing industry has become the trend of manufacturing transformation, and is also the core to promote the high-quality development of China's economy. Facing the manufacturing industry of Guangxi economic efficiency is not high, and the overall level of service, lack of innovation and service in the form of a single, lack of talents, enterprise financial strength is not strong, should change its business model from strengthen the service consciousness, pay attention to cultivate and improve the core competitiveness, extending industrial chain, improve product added value from financial markets to expand enterprise scale, etc., to promote manufacturing industry as a service, and driving the development of Guangxi economy fast and good together.

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