

# Research on Collaborative Innovation of Dongguan Under the Background of Guangdong-Hong Kong-Macao Greater Bay Area

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*Abstract:* Since the construction of the Guangdong-Hong Kong-Macao Greater Bay Area was put into use in 2009, Dongguan City is committed to the transformation plan of manufacturing industry. With the trend of The Times, the collaborative innovation and development of manufacturing industry, allowing China's products to face the world. This is the requirement of China's current economic development and the inevitable trend of improving China's economy.

*Keywords:* the Guangdong-Hong Kong-Macao Greater Bay Area; Construction Background; Dongguan Manufacturing Industry; Coordinated and Innovative Development

# Introduction

With the continuous development of China's science and technology industry and the gradual improvement of people's living standards, China's manufacturing industry is constantly rising and becoming a pillar of China's pillar industry. Although there is great progress in the field of manufacturing in China, it still needs to be continuously improved in some details. With the progress of society, it needs to usher in certain innovation in engineering manufacturing, and technology needs to make corresponding adjustments according to the requirements of The Times, constantly promote the development of China's manufacturing industry and improve the national economic level. We will achieve integrated economic development in Guangdong, Hong Kong and Macao

Relevant departments of enterprises should establish a sound system to ensure that the Dongguan manufacturing industry can join the economic integration process of the Guangdong-Hong Kong-Macao Greater Bay Area. Economic integration refers to economic development beyond the region, form good exchanges and cooperation, jointly exchange needed goods, and promote the development of market economy. The development of the current manufacturing industry cannot be separated from the communication between the world, need in direct reasonable exchange of human and material resources, achieve good division of labor, this needs to make relevant economic policies, in financial support to promote the market economy and the current economic development of relevant financial policies, etc., realize regional mutual benefit, joint efforts to coordinated development, reach a good consensus on the optimal allocation of resources, and finally form a highly coordinated and unified trade market. Under the context of the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, economic integration reflects more economic exchanges and cooperation between regions. Until 2020, China's foreign economic development amount has become the second largest world economic and trade body except the United States, more and more countries cannot be made in China, in the domestic economic development, cannot only rely on the development of state-owned enterprises and large enterprises as support, more need for small and medium-sized enterprises, achieve more efficient production efficiency, and increase more employment opportunities for the country, find more opportunities in the world economy, to build into developed countries.

# 1. The current development situation of the manufacturing industry

The production mode and production mode of most of China's manufacturing industries are still imitating the foreign

manufacturing industry, and do not form China's characteristic production path. In some high-end technologies, China is still in a relatively backward stage. It needs to buy a large number of machinery and equipment from other countries for product processing all the year round, and its independent research and development ability is low. In many domestic manufacturing industry, just a single purchase of other countries machinery dismantling, after imitation manufacturing, such production mode greatly hindered the development of Chinese manufacturing, long-term enterprise independent innovation ability is low, no leading product in the international market, core technology by others, need to spend a lot of money to buy product patent fee, enterprise's main profit means from product assembly and secondary processing and human resources costs, low voice in international trade.

Manufacturing is a high-risk industry, leading to the increased financing difficulty coefficient of the whole manufacturing industry. Even if there is certain technical support, in the process of investment, the cost of factory construction is less than tens of millions or billions of billions. State-owned enterprises rely on securities and private enterprises can only rely on loans. In the process of building a factory, quality review, such as production area demarcation and comprehensive environmental assessment, need to submit multiple materials to relevant departments for approval layer by layer, and huge guarantee fees are paid. With the development of science and technology, technology update and equipment iteration, the manufacturing industry needs to adapt to the new administrative management requirements and continuous technological transformation. The road of China's manufacturing industry belongs to the road of construction and transformation. Due to the lack of funds, the technological transformation is slow, and the inability of technical transformation will lead to backward product performance and be eliminated in the market. Chinese manufacturing industry is now in a difficult to transfer, once the transformation of early equipment, technology and talent are difficult to apply to the new industry, transformation is not easy, so must study in the machinery manufacturing industry new management policies and technical means, improve the work efficiency of manufacturing enterprises, adopt a new production mode, realize the sustainable development of machinery manufacturing industry.

# 2. Strategy of promoting collaborative innovation in Dongguan's

## manufacturing industry

## 2.1 Reform and innovation of Dongguan's manufacturing industry under

#### the background of the Guangdong-Hong Kong-Macao Greater Bay Area

Relevant local enterprises should learn from the economic model of the Greater Bay Area, increase capital investment in the industry, attract foreign investors to join and form a good international cooperation, and lay a solid foundation for the development of enterprises. Under the premise of improving people's living standards, they should strive to carry out multi-party cooperation and improve the people's participation. Consumption is an important means to promote economic development. Enterprises should promote market consumption in many aspects, establish a consumer market in appropriate areas, and help enterprises to achieve product digestion at preferential prices. Use to join the exhibition fair let more products can board exhibition hall, let more foreign can realize China's products, help enterprises to achieve some cooperation problems, small and medium-sized manufacturing enterprises in low international economy, enterprises to establish good enterprise confidence, constantly realize innovation in science and technology, improve product market share, enterprises can achieve long-term development. Establish a communication platform between various departments of enterprises to ensure the orderly investment and development of enterprises. Enterprises should constantly update the corresponding information equipment, ensure the actual work to the development of The Times, for the relevant personnel to the corresponding training work, organization to carry out staff professional skills training work, ensure that every employee can reason information

means for data processing, feedback to the management personnel to improve efficiency.

#### 2.2 Use large enterprises to promote small businesses

We will actively promote cooperation and exchanges between large enterprises and small and medium-sized enterprises, so that they can get certain guidance in the beginning, and cooperate in various aspects to achieve innovative development of enterprises. For example, Xiaomi's development is very synergistic, with its mobile screens from Samsung, South Korea, its motherboard from Germany and its chips from the United States. Collect products from many countries, independently developed and assembled in China, developed the development of many innovative industries. Let large enterprises penetrate into small and medium-sized enterprises and bring them into their development to help them establish a distinctive industrial system. Enterprises should achieve reasonable talent allocation. There are many excellent scientific and technological talents in some universities. When the enterprise departments should not only consider the development of the technical department and the sales department, but also transfer appropriate talents to the management department to better coordinate the economic development of the company. Nowadays, trade is more and more inseparable from the development of Internet economy. It is necessary to implement the management network system, severely commit network economy crimes, and cultivate the safety awareness of enterprises.

#### 2.3 We will improve the manufacturing process

In today's continuous development of social science and technology, the standards of all walks of life, especially the improvement of technology is high requirements, machinery manufacturing industry is no longer the previous small-scale construction. And the knowledge level covered in the manufacturing process is increased, and the comprehensive cultivation of practitioners is stricter. The work content implemented by different departments in the industry needs to be put under reasonable control, and the integrated planning of the overall layout is also needed after the integration of various small departments. In terms of manufacturing details are not in place, technological innovation is reflected in small details, so as to achieve great progress, product designers need to have a high craftsman spirit. Now all kinds of personalized gradual requirements to constantly improve, for the product technology is a big challenge, how to ensure the safety of industrial products, practicality has become a problem.

## 2.4 Automate operation production

The manufacturing process can be completely realized automatically managed by computer programs. Using certain mold and regulated through the central integrated board, a lot of human and material resources are saved in the process of operation, which are all regulated by automatic equipment, which can avoid some safety risks existing in traditional manufacturing. The use of fully automatic production technology, to achieve 24 hours of fully automatic unmanned monitoring and management, the use of certain infrared remote sensing technology, to achieve remote operation, greatly improves the rate of construction machinery manufacturing. The state should actively help relevant enterprises to achieve innovation, introduce relevant technical personnel to help the development of local industries, and enterprises should actively carry out seminars to help enterprise leaders to better manage the development of enterprises.

## **3.** Conclusion

Under the background of Guangdong big bay area construction in Dongguan manufacturing needs to innovate their own enterprise system, attach importance to the improvement of manufacturing process production level, relying on the regional natural environment advantages, carry out diversified international cooperation and regional cooperation business, promote the transformation of manufacturing in Dongguan, faster into the development of market economy.

Subject: "Dongguan Vocational and Technical College Scientific Research Fund Grant" Subject No.: 2020C17

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