Research on Countermeasures for the Upgrade and Transformation of Garment Industry in China

Take Humen Town as an Example

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Abstract—In recent years, with the adjustment of China's textile industry strategic pattern, coupled with the market environment changes, rising production costs and other unfavorable factors, the textile and garment industry are facing an unprecedented situation. For example, the development of Humen garment are influenced by domestic, foreign environment and its own factors. Therefore, to maintain survival and further development, there must be a strategic adjustment to achieve industrial upgrading and optimize the development. This article will analysis the garment industry form two aspects, including PEST, SWOT, then provide a solution.

Keywords—Humen; garment industry; PEST; SWOT; innovation; development

I. INTRODUCTION

The textile and garment industry fully embodies the inequality of profit distribution on the global value chain. It is a typically labor-intensive industry, with the costs of labor reaching 60% of the cost of the entire production. At present, more than 2,300 garment producing and processing enterprises, with staff of more than 20 million people engaged in garment-related industry in the whole town of Humen [1]. China's textile and garment industry relying on traditional advantages has become the world's largest textile producing and trading country, embedded in the global chain of interests, but still in the low-end. Garment industries in Humen have a certain advantage in the national clothing market. Among China's top ten clothing markets, Humen Fumin clothing wholesale market has made it to No.2.

In recent years, many scholars have conducted in-depth research on the garment industry. Wang [2] studied the development of Humen garment industrial cluster, proposing that Humen garment industry should change from the professional market into a mixed business one. Li [3] believed that the cluster of production has the nature of space extensity and market self-organization. Liu [4] and Pang [5] used the SWOT method to analyze the situation of the garment industry, pointing that there are several problems existing in the process of its development, and putting forward the corresponding countermeasures. Based on the "Smiling
Curve" Zou [7] studied the pillar industry of Humen, garment industry, and analyzed the current situation of the chain of the production, along with the problems existing and relevant coping strategies.

To promote the transformation and upgrade of that domain, “Garment Collaborative Innovation Center” was established in Humen Town, in the city of Dongguan, which was committed to integrating innovative resources, building platform carriers, and providing services for the development of enterprises, to enhance the core competencies [1]. On the twenty-first China (Humen) International Fashion Fair & 2016 Humen Garment Week the importance of innovation and creation were stressed, showing that the development of garment industry being healthy, strong and vigorous [6]. Industry knowledge seeding was essential for the initial establishment and subsequent expansion of the industry [8]. The rapid adoption of e-Commerce, especially Business-to-Business commerce among Ready-made Garments (RMG) industry is a key opportunity for local and international trade development of developing countries [9].

This paper will analyze the garment industry from the following parts: in the first part, we will use the PEST analysis method to analyze the macro environment in China; in the second part, the SWOT analysis of Humen will be given. In the third part, bottlenecks and countermeasures will be shown, and finally the whole article shall be summarized.

II. ANALYSIS ON PEST OF CHINA 'S GARMENT INDUSTRY

PEST is a common method for strategic external environment analyzation. It analyzes the macro environment through four basic aspects: political, economic, social and technological, trying to figure out whether the market is growing or declining, the exact condition of the domain, its potential and the direction it’s going. The macro environment of garment domain in China, has vital influence on Humen garment industry. The following part will give an analysis using the method of PEST on Chins’a garment industry in the macro environment.

A. Political and Legal Environment

Garment industry as a labor-intensive industry, it being thrive or not is relevant to national economy and people's livelihood, but is also vulnerable to political and legal factors. Since 2009, China has constantly introduced the standards for the development of the garment industry and other regulatory documents. Garment industry, as the terminal part of the textile industry chain, can be related to many fields, such as raw materials and dyeing skills, and those fields have varying degrees of impact on the ecological environment. Therefore, its development must take into account along with the national environmental protection policy strategy. On the basis of the enactment of the “Environmental Protecting Law of the People's Republic of China”, other relevant laws and regulations were carried out, giving more strict regulations and orders on textile, printing and dyeing enterprises to lower down their impact on the ecological environment. And that lead those developing garment industries on the path of selecting more environmental friendly technology and products, which pushed the entire industry in a more way.

B. Economic Environment

China's garment industry is under the vital circumstances that the pressure of producing cost continue to rise, while the recovery of production and investment remain weak, the pace of RMB current appreciation accelerating, the growth of domestic economy slowing down, but the demanding space remain huge. Our nation implements positive policies on monetary and fiscal, continuing to expand investment, meanwhile pulling domestic demand. The international economy environment is complicated and changeable, economy over the globe will remain in deep structural adjustment, momentum for economy growth is insufficient, but favorable factors are increasing gradually. In addition to that, with China's development on economy, national consumption level continues to rise, its consumption patterns will change as well, which makes garment industry not only to meet people's basic consumer demand, but also carries the value of fashion symbols to meet people's psychological needs and self-satisfaction. CPI is what the consumer price index refers to, it is a macroeconomic indicator that reflects
the changes of residents’ consuming level. It is a relative measure of the price level of a group of certain representative goods and services that changes over time and is used to reflect changes in the price level of those goods and services purchased by households. As shown in Figure 1, since 2006, the overall CPI index is positive, the level of purchasing power of residents has increased.

![Figure 1. National CPI index changes](image1)

**C. Economic Environment**

China’s urbanization is speeding up, people's purchasing capabilities are growing, as shown in Figure 2. In 2016, China's urbanization rate has reached 57.4%. It is expected to reach over 65% by 2030. The development of urbanization has brought unprecedented opportunities for the garment industry. China's per capita income is also growing at a high speed, providing a guarantee for the rising purchasing ability of people, which also takes people's demand for clothing products to a higher level. Clothing products is not only the fruit of the material culture, but also the extension of the spiritual culture. From the initial function of the warm shelter to the representatives of today's fashion trends, clothing products fully embodies how cultures in different countries and the public aesthetic taste changes.

**D. Technology Environment**

Textile materials technology innovation and the rapid development of information technology are happening. The bond between the development of garment industry and technology innovation is also unbreakable. The changing in technology environment made is possible for the garment industry to develop by leaps and bounds in a short period of time. Standards on international clothing technologies have become more stringent than before, because of development and improvement in that particular domain. On the other hand, developments on information technology have also provided chances for e-commerce to improve quickly. The implement of innovative managing skills along with the popularity of fast fashion concept have prevailed, a large number of new management concepts have also begun to be applied to the garment industry, things like supply chain management, ERP and RFID technology, are changing the traditional clothing Industry gradually. Those techs have made it possible to support garment industry in Humen technologically.

![Figure 2. China's urbanization rate in 2010-2016](image2)

III. ANALYSIS ON SWOT OF HUMEN’S GARMENT INDUSTRY

SWOT is a method to analysis the competitive of enterprise, is one of the basic methods on marketing, by evaluating the strength, weakness, opportunities and threats to carry out strategies about the development of industry, which can position the competitive advantage and analysis the status of industry comprehensively. Next, the SWOT analysis about Humen garment industry will be given.

**A. The Strengths**

It is obviously that Humen has the advantage of have a good location, that is being located in the southwest of Dongguan, in the hinterland of the Pearl River Delta, adjacent to Guangzhou, Shenzhen, Hong Kong, Zhuhai and Macao; Humen has integral chain of garment industry and good industry industrial base, the industrial clusters effect is prominent; Humen is located in the coast, product updates fast, clothing products are mainly Volkswagen brand, basis of the textile and garment industry is solid the scale of Humen...
clothing market rank in forefront of the country, the reaction cycle is fast, maintain a leading edge in the garment industry.

B. The Weaknesses

Industry cluster is strong in Humen indeed, but leading enterprises are not that many; besides, the similarity between brands and low additional value from products will seriously obstruct its further development; enterprises in desperate need of tech-supporters, developers and designers, lacking innovation capacity, being at the low-end of the garment product value chain, which is called the “Smiling Curve”, are all problems to be solved; managing skills in enterprises is relatively backward when compared to other domains, and strategy and plan for brands are still needed; public service platform of government is still incomplete, delivery services also should be improved.

C. The Opportunities

National Development and Reform Commission issued a document--"National new urbanization comprehensive pilot program", in which Dongguan, Guangzhou are included. In the city of Dongguan, Humen will be changed from a town into a city, this will provide a unique opportunity for the garment industry in Humen. With the development of network economy and electronic commerce, China's domestic demand for the garment industry is increasing stably, technological upgrade and management innovation to help the garment industry transformation and upgrading. Modern management innovation provides an effective solution to the development of fast fashion industry, which will benefit the improvement of management efficiency, and complete the management process.

D. The Threats

In recent years, economic situation in China has changed a lot, for example, prices of raw materials such as cotton kept rising, the aggravating trend of aging population brings great impact to the labor market; these factors all posed threat to the development of garment industry in Humen. In addition to those factors, poor quality of products, lack of high-end talent, and poor cultural atmosphere, all these need to be strengthened. Government support and the market supporting resources still need to be optimized.

IV. Bottles and Countermeasures

Garment industry in Humen has a good industrial base, and a complete chain of product, but lack of refined products; the whole industry still lies in the low-end of the value chain. Medium and small-sized enterprises produce low-end productions on a large scale, most of the products are used for bulk sales. Many enterprises lack strategic guidance and technical support for a long time, making it difficult to achieve any innovation or upgrade. Therefore, the government of Humen will establish a Government-Industry-University collaboration innovation center, to integrate high-quality social resources and solve the current difficulties of garment industry.

A. Enhance Research and Design Capability

Collaborative innovation center and some colleges and universities cooperation, such as Donghua University, Shanghai Maritime University, which brings a lot of
professionals for the clothing industry. Professionals in research, development, design and management will bring many advantages; they can enhance the overall research and design capability through professional knowledge, increase the additional value of clothing productions, eventually occupy the high-end position of the industrial value chain.

B. Leading The Industry Upgrade into the Fashion Industry

The center provides technical support for Humen e-commerce, helps enterprises propose strategies and draw up plans, and develops new business models. Humen has a good foundation for the garment industry, which is conducive to the development of the fashion industry. With the help of the Collaborative Innovation Center, Humen clothing will evolve into the fashion industry.

C. Establish Innovation Strategic Alliances

In order to solve the problem for garment industry, with the help of the government, Humen has established the collaborative innovation center. In the long run, it is of great importance. The center connects universities, government and enterprises, it will provide corresponding solutions and favorable suggestions for Humen's economic development, especially in the textile and garment industry.

D. Achieve Restructuring and Remodeling

In solving the actual problems in clothing industry, the center will also provide recommendations for the layout of the entire city's industry. The transformation and upgrade of clothing industry will promote the upgrade of other supporting industries, thus promoting the remodeling of the industry frame, and ultimately achieve the economic restructuring of Humen. Design and creativity are the core of clothing industry, and while helping garment industry, the center will also reshape the culture of Humen.

V. Conclusion

Garment industry is essential in any time, any stage, and the need for clothes and requirements for garments will only be higher than ever, so Humen garment industry still has a long way ahead of it. Humen government and local enterprises should be ready for transformation and improvement, only then, can they be better, and be ready for higher need.

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REFERENCES


