



# Research on the Development of Special Town Based on the Background of Big Data Take China Zhuji Sock Art Town as an Example

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**Abstract.** In recent years, Zhejiang Province has responded positively to national policies and vigorously developed characteristic towns, making outstanding contributions to economic and industrial development. This paper takes Zhuji sock town as an example, through a comprehensive analysis of Zhuji town, the development path of Zhuji town from the perspective of technology, market, innovation, national policies, etc., to understand the history of the town, the development of enterprises and the problems in the process of the development of the town, to put forward the crack through specific analysis, and to realize the comprehensive development of the town enterprises by combining the background of big data.

**Keywords:** Zhejiang · special town · Zhuji sock town · big data

## 1 Introduction

On April 27, 2015, in order to promote active project planning around Zhejiang, promote Zhejiang's economic growth and carry forward traditional culture, Zhejiang Province issued the "Guidance on Accelerating the Planning and Construction of Special Towns", proposing to plan and build a number of special towns throughout the province. On July 1, 2016, the Ministry of Housing and Construction, the Development and Reform Commission, and the Ministry of Finance jointly issued a notice deciding to carry out nationwide cultivation of characteristic towns [1]. Zhejiang is undoubtedly the front-runner in the construction of characteristic towns in the country, which can be confirmed to a certain extent. As one of the characteristic towns in zhejiang province, zhuji socks town, the contribution in the development of zhejiang's economy is even more noteworthy. But just when the country set off a boom in the construction of special towns [2], the lack of innovation, product structure, as well as technology backwardness and other problems have emerged.

The town focuses on the planning and construction of three major areas, namely, "Silicon Valley of Intellectual Manufacturing, Fashion Market, and Creative Space", production, life, ecology "three life integration", industrialization, informationization, urbanization "three drive", project, capital, talent "three implementation" The construction planning of the town. Through the platform construction, the town will improve

the construction level and strengthen the technology research and development, so that the industry can develop innovatively. This paper is intended to show the innovative development of the special town under the background of the full development of big data. By showing the current situation of the development of hosiery town, it draws out the problems in the development process and puts forward relevant suggestions to the problems, in order to promote the high level and high quality development of hosiery town.

## **2 Current Situation of the Development of Zhuji Socks Town**

### **2.1 Status of Zhuji Sock Art**

The title of “China’s hosiery industry,” Zhejiang Zhuji, with more than 70% of the country, one-third of the world’s total, replacing the title of “International Hosiery Capital” in the United States, sitting in the first chair of the international. According to statistics, the town has 4,273 industrial enterprises, including 3,289 hosiery enterprises, the pillar industry of Datang Town, with a total industrial output value of 4.69 billion yuan, sales of 4.56 billion yuan, profit and tax of 536 million yuan, and export product delivery value of 418 million yuan [3]. For the development of Datang industry in Zhejiang has made a great contribution. Every year, Zhejiang Zhuji exports a huge amount of goods outward, for example, Zhuji Hongtuo Needlework Co., Ltd. has nearly one million pairs of socks shipped to Europe and America every day. Datang hosiery industry is characterized by socialized cooperation and specialized division of labor [4], with individual economy as the main body, Datang town as the center, based on five major markets, such as light textile raw materials, hosiery, hosiery machine, joint inspection, labor, etc., with light textile raw materials production, sales, printing and dyeing, hosiery stereotype packaging as a one-stop service economic entity basically formed. This has established its position as the leading production base of the national hosiery industry.

### **2.2 Status of Development of Zhuji Hosiery Town**

The town has always focused on the main industry of “socks” and actively promoted industrial development, focusing on the planning and construction of three large areas: “manufacturing Silicon Valley, fashion bazaar, and crowdsourcing space”.

#### **High population flow, the raw material origin of the hosiery industry chain**

Zhuji is located in the triangle of Hangzhou, Shaoxing and Yiwu, in the south wing of the Yangtze River Delta, north of central Zhejiang, interrupted by the Qiantang River basin, with a wide market and convenient transportation. Covering an area of 400 acres, with a construction area of 120,000 square meters, it has more than 1,600 store rooms, including a complete range of pure brands and excellent quality of light textile raw materials market. The characteristic industrial zone, Zhuji Hosiery, is established as the first major production area of hosiery in China. There are 65,000 socks machines in total, with a large annual production volume, more vendors around, closer distance, low

transportation cost and large amount of incoming goods, thus becoming an important source of raw materials for the socks industry chain.

### **Superior industrial cluster effect and perfect industrial structure**

The total production of hosiery in the town of Zhuji accounts for 65% of the national total, ranking first in the country, and the total production of hosiery every year is among the top in the town of Zhuji.

First, the town has an advantageous geographical location, perfect supporting facilities, a complete industrial chain and significant agglomeration effect, including raw and auxiliary materials, hosiery machinery manufacturing, hosiery stereotypes, printing and packaging, transportation services, e-commerce, etc. Second, the place is between Hangzhou, Shaoxing and the obligatory triangle area, with a developed transportation network, strong cargo transportation capacity, high efficiency and speed of the whole process from production to transportation of goods, which is conducive to industrial development. Third, the development of the national characteristic town policy, brand influence and so on effective dissemination, so that more traders understand Zhuji socks, give full play to the industrial agglomeration effect and improve brand influence.

### **Combine with big data to realize digital transformation**

In recent years, big data has been fully developed, online trade has become an important way of industrial development, Zhuji town development of online trade in line with the trend of the times, to develop the national market, as of 2022, Zhuji hosiery industry to cultivate a provincial industrial Internet platform, the creation of two provincial demonstration enterprises of the integration of two, built 87 municipal digital workshop ... ..Zhuji town, to build has more than 600 industrial robots in service, more than 5200 industrial equipment network operation, to achieve digital transformation [5]. The implementation of digital transformation fully promote the development of online trade, improve production efficiency, strengthen trade exchanges, and promote the digital development of industry.

## **3 Problems in the Development of Zhuji Sock Art Town**

### **3.1 Has a Limited Market Audience and Small Business Scope**

The middle and low-end market is positioned for the middle and low-end consumer groups, generally refers to the market to meet the normal needs of the masses, the middle and low-end market products of ordinary innovation input costs are low, the price is pro-people, and the market demand is large. The high-end market refers to the products are mainly aimed at high consumer groups, the price of the product is generally higher, product innovation investment is higher, product diversification, generally speaking, the high-end market brand effect is stronger, the ability to promote stronger. And Zhuji town in the market for the target is mainly in the low-end market, low market demand, even if the thin profit, but also because of the "large volume" and get a lot of revenue, with a relatively strong ability to resist market competition. But this is the business model, there are also relatively large "hidden problems".

Zhuji town focus on the development of low-end market and ignore the high-end market is easy to cause low brand effect, high-end market competitiveness Weak, resulting in low profitability, weak sustainability and lack of core competitiveness. The development potential of the low-end market is lower than that of the high-end market. The middle and low-end market has positive significance to the employment of the population in a certain sense, but has little impact on the profitability of enterprises, while the high-end market attaches importance to high-quality talents, emphasizes the “precision” of the labor force, and focuses on the injection of technological innovation, so as to achieve the maximum benefit, which is more conducive to the future development of the enterprise economy. The high-end market emphasizes high quality human resources, emphasizes the “essence” of the labor force, and focuses on the infusion of technological innovation, thus maximizing the benefits and the future development of the enterprise economy.

### **3.2 Few Famous Enterprises and Insufficient Brand Influence [6]**

There are tens of thousands of hosiery enterprises in Zhuji town, but there are only a few well-known enterprises. Over the years, the industrial pattern of Zhuji socks town has been “low small scattered”, focusing on the volume, but ignoring the establishment of the brand, low brand awareness has become one of the important factors limiting the development of the socks industry. Zhuji town has always had the title of “world sock industry see Datang” “Datang sock machine ring, the world a pair of socks”. Datang, the “king of socks”, produces 4 pairs of socks for each person in the world on average every year, and most consumers understand that the socks in Zhuji town are “good” but have low understanding of the specific enterprise brand, which is not conducive to the development of enterprises.

And the town of Zhuji usually acts as a foundry for other brands, Zhuji enterprises receive orders, production, packaging, sending and buyers receive goods, so as to gain revenue and drive industrial development. Although “foundry” can bring a certain amount of revenue for enterprises, but not as the center of long-term development. ‘OEM’ low profits, and in the long-term development will also cause technical consumption, technical capacity continues to remain unchanged or even decline, more detrimental to the enterprise ‘innovation brand’, also not conducive to ‘brand efficiency’ establishment, thus forming a vicious cycle of bad.

### **3.3 Forms of Industrial Clusters Create Certain Obstacles for Enterprises**

Three years under the epidemic situation, the international economic environment is severe, the industrial cluster of Zhuji town’s industrial model has been impacted, under the epidemic, in order to avoid the spread of the virus, the export product inspection and verification process has increased, and the export efficiency of products has been reduced to the detriment of the development of enterprises. After the decline of foreign trade rate due to the inefficiency of export products, the negative effect of industry cluster hindrance is prominent and obvious. Before the epidemic, due to the high demand of westerners for socks, Zhuji town enterprises mainly exported hosiery, and the industry cluster model is obvious, now the foreign trade rate is declining, Zhuji enterprises turn the development

object to domestic market, but due to the limited domestic market, the competition among enterprises is fierce and even appears. However, due to the limited domestic market, the competition among enterprises is fierce and even vicious competition such as “price pressure”, which is not conducive to the healthy and stable development of enterprises.

Today the global demand for socks, Europe and the United States account for half of the demand, for example, Americans use socks as a disposable consumable, the demand for socks is close to saturation, need to rely heavily on imports to meet the needs of life, the emergence of the form of industrial clusters make the ability to produce products greater than the demand for products, resulting in excess capacity is not conducive to the economic development of the industry.

## **4 Solutions to the Problems of Zhuji Town Development**

### **4.1 Suggestions for Zhuji Town from a Business Perspective**

#### **Actively explore the market and expand the market coverage**

Zhuji Hosiery Town mainly targets the middle and low-end market while ignoring the high-end market, resulting in a stable and unchanged market share or even a decline due to the epidemic. In response to the problem, enterprises should actively take measures to solve the problem. First, actively carry out foreign markets, promote the construction of high-end markets, learn from the advanced experience of high-end markets at home and abroad, actively strengthen technological innovation, attract high-quality personnel employment, in order to improve the innovation ability and technological innovation of enterprises, on the basis of maintaining the stability of the low-end market, the precise development of high-end markets, so as to increase market share. Second, improve product quality, while actively innovating products, we should also pay attention to the quality of products. “Quality and quantity” production products. So as to achieve the product to attract both new customers and ‘repeat customers’. To achieve a comprehensive and high quality market coverage of the company.

#### **Establish corporate culture and improve brand influence [7]**

Zhuji hosiery town is famous for processing hosiery, often become other companies ‘OEM’, their own corporate brand effect low impact, resulting in buyers only know Zhuji town hosiery developed, but do not know its well-known brands. In the face of this situation, first, drive the transformation and upgrading of enterprises, and actively change the business mechanism to develop their own brands while acting as a ‘foundry’ for other companies. Promote the internationalization of independent brands and enhance brand influence. Second, combined with big data, Zhuji town follows the trend of the times, online trade activities through the Internet and other forms, combined with the promotion of corporate culture, through online live broadcast, special advertising and other forms to improve the visibility of enterprises and improve their influence. Third, strengthen business-to-business cooperation, and actively develop cooperation and exchange with enterprises in various fields under the premise of improving their own influence, so as to open up the upstream, midstream and downstream industrial chains and promote the positive development of the industry. Fourth, deepen consumers’ impression of the

enterprise through the design of cultural and creative products, and attract consumers to understand the enterprise culture through innovative design of ‘mascot’ ‘cultural and creative products’, which will benefit the development of the enterprise.

### **Catering to consumer needs and meeting popular preferences**

Now the relevant enterprises in the context of big data, the consumer demand can have an accurate understanding. First, by fully understanding consumer needs further develop products to meet the public’s requirements. Data analysis can also be used to understand the differences in demand between regions, in the country’s stocking plants according to local demand supply, which in turn not only improves the efficiency of delivery but also to meet the needs of consumers to kill two birds with one stone. Second, innovative forms of product promotion, the public shopping usually have a “value for money” “good value for money” mentality shopping, can attract consumers through promotions and other ways to make consumers understand the product, and through big data to understand the consumer experience process, to understand the needs In order to further upgrade the product, cater to consumer demand, meet the public preferences, and further promote the development of the industry.

## **4.2 Suggestions for Zhuji Town from a Policy Perspective**

### **Diversified economic development strategy [8]**

From the point of view of economic security, the development of the enterprise economy cannot rely on one aspect alone, but should cover the market and develop the industry comprehensively. Zhuji hosiery town in the development of the main dependence on the export of hosiery development enterprises, during the epidemic, suffered a huge impact. Therefore, the development of enterprises can not rely on a particular market alone, the need for enterprises ‘full bloom’, the relevant state agencies should also actively advocate the diversification of enterprises, the domestic market consumption potential is huge, and actively develop the domestic market is also conducive to the gradual and stable development of the enterprise economy.

State agencies can adopt a “subsidy policy” to actively encourage enterprises to develop the domestic market, and strengthen the management of enterprises while encouraging them, so that they can steadily develop the domestic market, reduce the risk of enterprise development, so that they have more incentive to develop, and thus achieve ‘full bloom’.

### **“Tax power” drives enterprise development**

In the context of the epidemic, there are certain problems in each link of the industry chain, such as: logistics stagnation, reduced efficiency in the transportation of raw materials and commodities, which is not conducive to the production and trading of commodities; the reduction in the number of laborers, which halts production as well as stricter export management, which makes it difficult to export, among other reasons.

The annual output of socks in Zhuji town exceeds 27 billion pairs, accounting for one-third of the global socks in production, but due to the epidemic and other reasons, the

production chain of the industry is unstable, the turnover of related enterprises is significantly lower than before, and enterprises are experiencing capital turnover difficulties, financing difficulties and serious economic burdens, etc. In order to solve the problems that arise, the relevant authorities take the policy of tax reduction and fee reduction to inject 'Tax power'. The proposed policy of tax reduction and fee reduction not only reduces the economic burden of enterprises, but also drives the production enthusiasm of enterprises to a certain extent, promotes the innovative products of enterprises and the economic development of enterprises.

### **Further improve the relevant policies and regulations**

While promoting the economic development of Zhuji town, it is necessary to further strengthen the improvement of policies on intellectual property rights, workers' rights and environmental protection [1]. Intellectual property rights, strengthen the protection of intellectual property rights of enterprises, and crack down on the infringement of intellectual property rights of enterprises by unscrupulous elements, so as to stimulate the R&D 'passion' of enterprises and promote the development of industrial innovation. Workers' rights and interests, the hosiery industry upstream and downstream industrial chain is inseparable from the hard work of workers, so more attention should be paid to protecting the legitimate rights and interests of workers, in the face of violations of the legitimate rights and interests of workers, the relevant departments should be "issued in a timely manner", "shall not be omitted", "shall not be withheld". "shall not withhold" workers' wages, solve problems in a timely manner, and safeguard the legitimate rights and interests of workers. Environmental protection, in accordance with the "green water and green mountains is the silver mountain" policy, in the development of the enterprise economy at the same time, increase the protection of the environment, the industrial development of the hosiery industry chain involving a certain impact on the environment to increase efforts to not leave out environmental protection.

## **5 Conclusion**

The main expression of this paper is to study the industrial development trend under the background of rapid development of big data, taking Zhuji special town as an example. Through the study of the current situation of the development of the characteristic town, it can be concluded that there are problems such as single market development, low brand influence, overcapacity and production technology to be improved in the characteristic town at present. And in the relevant policies, there are also problems such as protection of intellectual property rights, protection of labor rights and interests, and insufficient protection of the environment, etc. The existence of various factors hinders the development of enterprises to a certain extent.

Therefore, in view of the above problems in the development of characteristic towns, this paper puts forward relevant suggestions in terms of economic aspects, national policies, and technological development.

- (1) Diversified economic development and promotion of diversified industries While actively exploring domestic and international markets, we balance the relationship between the two, and improve industrial coverage to promote comprehensive industrial development and diversified development.

- (2) Support technological innovation and strengthen industrial R&D. First, through technological innovation to create unique brand characteristics, thus attracting consumers and expanding the market to promote industrial development. Second, the innovation of enterprise technology platform, communication between enterprises will also be strengthened. One of the characteristics of the special town is the obvious effect of industrial clusters. By establishing an enterprise technology platform, communication between enterprises will be promoted to make up for the shortage between enterprises, thus strengthening the technological content of the industrial clusters.
- (3) National policy support drives the development of enterprises. First, the implementation of tax and fee reduction policies to relieve the lack of funds in recent years, financing difficulties and other problems, to a certain extent, also promote the flow of funds, more conducive to enterprise R & D technology. Secondly, the funding guarantee has been increased. Increase the support for the construction of special towns, the central budget investment to pull the regional economic development, and promote the development of the construction of special towns. Third, the infrastructure construction is increased. For the construction of industrial supporting facilities, public service facilities, municipal utilities and other special town projects with certain revenue, support the issuance of local government special bonds [9]. Fourth, strengthen land security. Reasonably meet the demand for land for the development of characteristic towns, optimize the way to allocate new construction land plan indicators, and strengthen the organization of direct market transactions of rural collective business construction land.
- (4) Follow the national policy and grasp the macro form. First, adhere to the policy of ‘green water and green mountain is the silver mountain of gold’, adhere to the road of sustainable development, in the development of industry at the same time adhere to the protection of the environment, and actively promote the “low energy consumption, high development” industrial model. Second, grasp the market development trend. Through big data to understand consumer preferences, follow the trend of the times to meet consumer demand. Third, strengthen brand promotion and enhance brand awareness. Through creative advertising, special activities and other ways to strengthen the publicity, improve brand awareness, increase the added value of the brand, so as to promote the development of enterprises.

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