

A Survey into the Upgrade of China's Athletic Equipment Sector from the Perspective of Global Value Chain Theory

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Abstract. Based on the theory of Global Value Chain(GVC), this paper studies the sustainable development of athletic equipment industrial cluster from the perspective of GVC. This paper first reviews the relevant theories of GVC, and then investigates into the upgrade mode of China's athletic equipment industrial cluster in the theoretical framework of GVC. Through theoretical analysis and empirical research, the paper puts forward the upgrade idea of China's athletic equipment industrial cluster, and provides the basis for its development and policy-making.

Introduction

Since 2010, enterprises in China's coastal areas have been faced with the Labor Shortage problem. And in 2011, the problem becomes further aggravated and spreads all over the country, even to such first-tier cities as Beijing and Shanghai. As a result, the export of enterprises slows down and product orders gradually reduce. Therefore, in view of the continually shrinking and compressed profit margins, the writer believes that China's athletic equipment industry must undergo a series of structural transformation and upgrade to achieve its enduring development.

The Object and Method of the Research

A. Research Object: Based on the theory of GVC, this paper studies the upgrade approaches of athletic equipment industrial cluster.

B. Research Method: document literature, investigation, online query and data analysis.

Research Results and Analysis

A. Theoretical Analysis

a) The Concept of Global Value Chain

The Global Value Chain(GVC) refers to a global cross-enterprise network organization which connects the processes such as production, marketing and recycling to achieve the value of commodity or service, involving the whole process from the acquisition and transportation of materials, production and distribution of semi-finished and finished goods, to the final consumption and recycling. It covers all the participants, the organization of such activities as manufacturing and marketing together with their value and appropriation of profits. In view of this, the GVC of athletic equipment means: a global cross-enterprise network organization which connects the processes such as production and marketing to realize the sports goods value. It mainly studies the global distribution and flow law of technologies and innovation resources, as well as the corresponding additional value distribution, from this industry's organization level(the global organization of industry chains), the space level(global and regional), as well as the product and service level(how to segment the links of the chains). From the perspective of GVC, different sports goods enterprises all over the world are involved in such activities as designing, product development, production-manufacturing, marketing, consumption and after-sales service.

b) The Driving Mechanism of GVC

The dynamic model of GVC constitutes one of its core elements. The GVC dynamical problem basically inherits Gereffi's theory of dual driving force(Gereffi, 1994), which claims that the driving mechanism can be divided into buyer-driven and producer-driven value chains.

c) The Industry Upgrade Under The Global Value Chain

Industrial economics believes that industry upgrade refers to the lower-to-higher conversion of industry, including the total output growth and industrial structure improvement. Industrial structure includes four main aspects: ① the weight evolution of first, second and tertiary industries in national economics; ② the industrial structure evolves following the order of labor-intensive, capital-intensive, technology-intensive and knowledge-intensive; ③ the industrial structure shifts from low added-value to high added-value; ④ the industrial structure shifts from preliminary processing to deep processing. The industrial upgrade has four forms: ① process upgrade; ② product upgrade; ③ industry function upgrade; ④ value chain upgrade. And the upgrade is usually conducted like this: shifting from Original Equipment Manufacturer (OEM) to Original Design Manufacturer(ODM), and then further upgrading from Original Brand Manufacturer(OBM) to the ultimate conversion of value chain. During the upgrade process, it becomes harder and hander, and every upgrade should be achieved through competition.

B. Empirical Analysis

a) The formation of China's athletic equipment industrial cluster gradually reduces the trade cost of enterprises within the cluster.

1) The cluster development and the industry gathering lowers the learning cost of tacit knowledge. Owing to a close geographical location of enterprises within the cluster, people communicate very frequently, knowledge and information spread even faster, thus lowering the cost of knowledge upgrade and learning.

2) The industry gathering reduces the production cost. With enterprises gathering in a certain region, the production of every enterprise is conducted upon the division of labour and collaboration in line with economic principles and efficiency. In this way, each part of the production becomes the main body of market competition, leading to an improvement of product quality and lowering of production cost.

3) The formation of the cluster lowers the purchase cost. Owing to a close geographical location of enterprises, the transportation cost is greatly reduced with a highly developed logistics network; moreover, enterprises can further reduce the purchase cost by cooperating to purchase together. According to Anta's purchasing manager Mr. Lee, the buyers in Jinjiang area can save a minimum of 15% purchase cost compared with other enterprises in independent areas.

b) The factor cost of China's athletic equipment industrial cluster is on the rise.

1) The price of land rockets. While the per capita land area is originally lower than the national average level, some speculators stock lands for interests owing to the overheated real estate in recent years, thus leading to a huge gap of land for industrial use and an upsurge in land prices. Compelled by the high prices, some enterprises starts to move outward to the areas of more favorable policies as well as more abundant labor and land resources.

2) Due to a tense power supply, blackouts and brownouts are frequent in summer days, which compels the enterprises to generate electricity with diesel and thus increases the production cost.

3) As RMB appreciates steadily, the costs of shoe-making enterprises are also on the rise. The enterprises in a shoe-making cluster are mainly dependent on product export, with most of them targeting the U.S. market. Because of a continual and substantial RMB appreciation as well as a tendency of accelerating, the cost of these enterprises inevitably goes up. If their materials are imported, they will suffer less influence. Because the export cost will be reduced with the decline in import cost, thus offsetting the impact of RMB appreciation. In addition, considering the fact that China's export far outweighs the import trade, our government should initiatively cut down the export rebate rate including clothes, shoes and hats enterprises so as to alleviate the trade surplus and decrease trade friction.

The Enlightenment of Foreign Footwear Industrial Cluster Upgrade

The Spanish shoes industrial cluster started in the 1950s and bloomed in the 1960s-1970s. However, in the late 1980s and the early 1990s, the shoes clusters in Italy, Germany and France mushroomed. With their substantial progress in production individualization and flexibility, the Spanish clusters were nearly deprived of the possibility of upgrade. In the meanwhile, with the advantage of low cost, the clusters in Brazil, India, Portugal, and Taiwan again ravaged Spanish cluster's low and middle classes. It was in this predicament of double oppression that Spain had spent about ten years in shoes cluster restructuring and finally made a point of differentiation competition strategy. Strategically, export enterprises in the cluster adopted an independent design-dominant guiding principle supplemented by importing from abroad. Regarding the mode of production, division of labor and collaboration between small, middle and large enterprises were emphasized. At present, 75% of the enterprises in the cluster adopted the low cost competition strategy and were mainly engaged in the basic processes as production and manufacturing; 20% of the enterprises employed the differentiation competition strategy, and were chiefly involved in the market competition through a combined strategy of independent design and importing overseas new products; 5% of the enterprises focused on the brand building and marketing channel expansion. In the end, through arduous industrial labor division and restructuring, a level management with every link of an industry chain both mutually separate and cooperating basically took shape and then continually challenged the higher links of value chain to occupy the high added-value of product.

At this stage, the athletic equipment industrial cluster is also confronted with the double oppression situation and is badly in need of industrial upgrade and shift. Therefore, the restructuring and development experience of Spanish shoes cluster can serve as an excellent guide.

The Upgrade Measures of Athletic Equipment Industrial Cluster

A. Promote Innovation Capability And Foster Differentiation Competition.

Differentiation is an important means for enterprises to gain a competitive edge, which means that enterprises should establish a unique product profile and brand characteristic by distinct products. In other words, they should differentiate their products from others so as to avoid price competition. To polish the product differentiation capability, the enterprises must promote their innovation capability. So how can enterprises within a cluster gain innovation capability? Through analysis we can roughly get two approaches: Firstly, establish an innovation alliance through cooperation[1]. With the leadership of a dominant enterprise, the alliance should conduct product and technology research and development. In virtue of sharing the fruits of research and development, upstream and downstream enterprises in collaboration with the leading enterprise can be notably polished in their technology level and production efficiency. The production efficiency of the whole alliance can be promoted with these improved enterprises coordinating the leading one. Secondly, broadcast innovation knowledge through frequent exchanges. Due to geographical relations, the enterprises are relatively close to each other and as a result they contact frequently. Therefore, innovation knowledge is able to be quickly spread all over through extensive informal contact, thus helping the enterprises to seek for common innovation of brand and technology.

B. Actively introduce talents and promote the human resources and management level of shoes industry.

In deed, the competitions between enterprises and markets come down to the competition of talents. Therefore, our government shall build a sound mechanism to introduce and cultivate talents, so as to absorb and retain elite specialists to carry out enterprise and product innovation. Moreover, our government shall also employ various ways to stimulate employees' innovation enthusiasm in order to maximize their individual potential. Since creativity is regarded as the source of enterprise core competition, the government shall also lay down a perfect incentive mechanism to encourage the employees to innovate, thus carrying out product and enterprise upgrade[2].

C. Develop Towards The High-link Of Value Chain Through Original Brand Manufacturing

(OBM).

Through professional development, cooperation and division of labor, enterprises within a cluster have undergone the original capital stage, after which they adopt the strategy of product branding. With an aim to realize branding, they should foster differentiation innovation capability and upgrade the product function. For this purpose, leading enterprises should first create famous high-quality brand at home, and then try to march on the international market through OBM and challenge the high-link of GVC. For instance, establish their own overseas marketing network. By way of exclusive shop, ANTA has entered the international middle-high footwear market. Up to the first half of 2004, it has launched over 80 franchised shops abroad, all of which profit at the year of their establishment with each pair of ANTA shoes pricing above \$ 60. This model is beneficial not only to overseas market expansion but also the management for the company.

D. Cooperate With International Forefront Brand Enterprises And Upgrade The Value Chain.

Cluster enterprises should consolidate their relationship with outside world, and integrate into GVC with the help of global purchaser's capital, technology, brand and marketing channels, so that both sides will win through cooperation. Here is how: Based on their desire to enter Chinese market, we should form strategic alliances with foreign enterprises of the same trade, sharing domestic marketing channels with them and promoting our own brand by using their foreign channels at the same time. Take 2003 as an example. ANTA gained an opportunity to cooperate with Italy's GEOX by making use of its own domestic marketing network. According to the ANTA-GEOX agreement, all the GEOX agencies throughout the world must run the ANTA brand at the same time. Instead of displaying ANTA products in the GEOX shops, they must open exclusive ANTA shops. Meanwhile, ANTA was responsible for the GEOX brand promotion, network establishment as well as marketing in China[3].

Conclusion

a) China's sports shoes industrial clusters should change their concept of competition, converting from individual competition between enterprises to competition between product value chains. By sharing the risk in product operation, maximize the whole interests of product value chain.

b) China's sports shoes industrial clusters should blend the three upgrade approaches of process, product and function, or sometimes swap each other, as there should be no fixed upgrade model. Cluster upgrade should be aimed at creating differentiation competition by way of cultivating innovation capability, reinforcing competitive edge, adopting its own strengths and circumventing weakness.

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