

# Boosting Effect of Industrial Design in Regional Economic and Social Development

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**Abstract:** In the process of industrial development, industrial design plays a pioneering effect, which can provide an ideological basis for the production, processing and production of industrial products, based on the effect and value of industrial design. Many countries take industrial design as the basis of industrial development and use it as an important force for national industrial innovation and social and economic development. In this regard, some countries have increased their investment in industrial design and introduced relevant policies to improve the level of design, which requires relevant designers to strengthen their design consciousness, analyze and compare the characteristics of industrial products and internal and external factors, so as to improve the industrial design and ensure that the final product meets people's psychological expectations and satisfies their needs. This paper focuses on the boosting effect of industrial design in regional economic and social development, so as to discuss the role and status of industrial design from the level of social and economic development.

## 1. Introduction

Industrial design refers to the analysis of the characteristics, nature, internal and external factors of mass-produced industrial products through some design principles and concepts, so as to design more practical, beautiful and scientific products. With the development of modernization, people's design concept and design level have been improved, which has changed people's aesthetic consciousness to a certain extent and promoted the development of social economy. In this regard, we should pay attention to industrial design, actively develop the industrial design profession, and strengthen investment in all aspects to ensure that industrial design has sufficient economic and social conditions. In addition, industrial design by nature has a certain relationship with economic development, industrial development and social development, for which people need to focus on the boosting effect of industrial design on regional economic and social development.

## 2. Relationship between industrial design and regional economic development

Industrial design can promote the transformation and upgrading of industrial industries, adjust the regional economic structure, promote the development of industrial industries in the direction of energy saving, environmental protection and green, and promote the coordinated development of industrial industries and social ecology, thus promoting social stability. And the development of regional economy and society can, to a certain extent, cultivate a group of excellent industrial design talents, meet the demand for design talents in the industrial field, broaden the talent introduction mechanism, and promote the upgrading of talent structure. In addition, industrial design can also improve the innovation and creativity of regional enterprises, market competitiveness, and promote the healthy and sustainable development of regional economy and society. At present, the world economic development is developing in the direction of market regulation and market competition. Industrial design is a kind of talent-oriented and market-oriented technology, which is the core force of people's survival and development, social stability, industrial

transformation and upgrading, and to a certain extent can promote social civilization and progress, for which people need to pay attention to the relationship between industrial design and regional economic and social development <sup>[1]</sup>.

### **3. Boosting effect of industrial design in regional economic and social development**

#### **3.1. Industrial design can improve the market competitiveness of regional enterprises**

At present, China is vigorously developing high-tech industries, and pilot projects have been built in some areas, in which industrial design plays an important role. For high-tech industries, science and technology is the primary productive force and the main competitive factor, and industrial design based on products is the second productive force, and currently science and technology and industrial design are gradually converging. Some of the world's largest companies have integrated the simultaneous development of technology and industrial design into their development strategies. In the long-term development goals, it is ensured that the production of products is completed while their appearance and quality are already in line with the characteristics of market products and in line with people's expectations. However, the current market is facing a situation where supply exceeds demand, and some manufacturers are strengthening their sense of competition in order to occupy a larger market share and improve their market competitiveness through various channels. For some countries with more advanced market mechanisms and laws and regulations, it is necessary to compete through intelligent means in the circulation of products in the market, for which it is necessary to rely on industrial design to attract attention. Industrial design is a modern design method that allows designers to improve the competitiveness of products by making them more attractive in terms of their nature, features and appearance. If companies fail in the market competition can continue to improve the product through reflection, redesign, and ultimately improve the level of design to ensure that the level of product design in the entire market converge, so as to provide consumers with quality products. It can be seen that market competition can promote the development of industrial design, and industrial design can also improve the competitiveness of products in the market <sup>[2]</sup>.

#### **3.2. Industrial design can generate added value for regional economic and social development**

In the current market economy, the value of a product depends mainly on the price, which is often affected by the raw materials, components, production processes and labor costs, overhead, packaging costs, transportation costs, corporate income, sales and distribution costs used by the product manufacturer. These are fixed costs, which can be predicted by calculation and statistics, but the various technologies and design concepts used in the process of product design and optimization are intangible and belong to soft costs, which are the fruits of intellectual labor. In the era of commodity economy, consumers' ideology, consumption concepts, consumer behavior have undergone significant changes, in which the new technology content, good appearance image of the goods sold well, circulated more frequently, more likely to gain the favor of consumers, but also gradually opened up the gap between the old products. But the fixed cost between the old and new products is the same, and the value of goods under technology and design is called added value, for which people can improve the added value of goods through industrial design to improve regional economic development. In this regard, regional enterprises can also strengthen the awareness of industrial design and innovation, emphasize industrial design, protect the environment, scientifically utilize product resources, and thus promote the stable development of local economy and society.

In addition, in the specific industrial design, designers generally need to analyze the market situation and consumer behavior, demand, ideas, especially consumers require designers to have a keen observation, so as to develop a new, high-potential market, to effectively play the power of industrial design. For example, a product with a low original price, because of the improvement in the appearance and packaging, its market price has been rising, creating a huge gain in the circulation within a month and bringing extra profit to the company, thus it can be seen that it is

caused by the huge added value created by industrial design. But not all industrial designs can create great added value. Its requires designers to keep learning, enriching the design knowledge system, accumulating experience, and promoting product production in the direction of specialization, intensification and scale, so as to create certain economic benefits and thus drive the increase of added value of the whole regional economy <sup>[3-4]</sup>.

### **3.3. Industrial design level improvement can promote the development of regional enterprises**

Industrial design is an essential part of enterprise production, and the effect of design directly affects enterprise production. For a good product to create a certain economic value and have great market influence, it is necessary for the enterprise to optimize the industrial design and improve the design level according to its own strategic development goals, so as to help the enterprise develop new markets, gain rich commercial profits and eventually produce a series of brand effects. Industrial design itself is a service that creates and develops products on the basis of relevant concepts and ideas to promote better functionality, greater value, and more beautiful appearance to satisfy the needs of consumers and manufacturers. In this case, it is possible to ensure that business profits are maximized, that the company continues to improve its competitiveness, its market image, and that its products are accepted by the public. For enterprises, if they want to produce and develop, they need to make full use of their existing resources and conditions, improve management mechanisms and systems, launch high-end products, and actively promote and sell their products, which will lead to certain profits while creating great social benefits and ultimately improve their image. In this process, the product has an important promoting effect on the development of enterprises, which shows that the ultimate goal of industrial design is to improve the quality of products. Currently, industrial design has been transformed from traditional product design to enterprise design, which eventually leads enterprises to market-oriented development. The boosting effect of industrial design on enterprise development can be shown in the following aspects:

First, industrial design can clarify the direction of enterprise development. Enterprises can improve the scientific nature of industrial design, it is necessary to plan and design according to their own production and operation, to clarify the goals, directions and tasks of product production, so as to establish a clear and unambiguous product development goals and improve the product image. For example, the U.S. enterprise has driven the development of a series of brand enterprises because of the production of Apple cell phones. For this reason, if enterprises would like to make industrial design serve their own development, they need to plan and control industrial design scientifically from the management process. Second, industry can achieve product innovation through design. As social and economic conditions continue to mature, people's appreciation level and needs have also changed. In response, industrial designers need to change their philosophy and focus on the relationship between people and technology, machines and environment, between people and people, beauty and technology, function and beauty. Through analysis and reflection, companies design their products innovatively based on meeting the above requirements as a way to help them achieve high returns and to clarify the points of innovation in product production <sup>[5]</sup>. Led by innovative design, it can ensure that industrial design and corporate development strategies are aligned and ultimately help companies achieve value innovation. Third, industrial design can promote the construction of corporate culture. Industrial design plays a decisive role in the construction of enterprise culture. The construction of enterprise culture is the main means of enterprise transformation at this stage, but the construction of enterprise culture is closely related to market factors and is influenced by consumers, and it is an image created based on consumer demand. Companies also need to be consistent with the image in the minds of consumers in the process of setting cultural goals, mainly around products and services, in order to improve the cultural development strategy. Companies generally rely on planning in shaping their image and implement the actual shaping of the image through strategy, at which point industrial design is required to play a specific function. The industrial design department should choose the design direction, design style and design concept according to the strategic objectives of the enterprise, and constantly adjust the appearance image, details, color and quality of the products in the process, so

as to create a product image that meets the image in the mind of consumers and the market style, and finally promote the development of the enterprise.

### **3.4. Industrial design can promote the stable development of regional economy and society**

From the point of view of industrial design itself, products need to be designed from the perspective of resource conservation and environmental protection. Many of the products that our country comes into contact with in life, work and study are products of industrial design, and the constituent structures and parts of the products are closely related to the natural environment, and they themselves have certain environmental protection indicators. In this regard, designers are required to fully consider the relationship between people, the environment and society when carrying out industrial design, try to choose environmentally friendly and green materials, and conceptualize from the perspective of resource conservation, environmental protection and social benefits to ensure the recycling of products and to improve the service life of products. This shows that industrial design can also achieve environmental protection goals and promote sustainable regional socio-economic development. In addition, industrial design itself is also a method and a service that can meet people's material needs as well as their spiritual needs, and can introduce consumers to the environmental protection and green performance of products, driving the development of environmentally friendly and energy-saving products through consumer domestic demand. In this regard, designers should not only focus on the product itself, but also consider people's lifestyles and behavior, strengthen environmental awareness, adopt new ideas to design products, and ultimately ensure that industrial design has environmental value and role. In short, industrial design can visualize and concretize ideas and concepts, so as to guide people to carry out a series of social construction activities and economic development activities, and to promote the concretization of people's social planning ideas and construction ideas. It is an anticipatory, forward-looking, development tool that can ultimately be effective in promoting stable socio-economic development <sup>[6]</sup>.

### **3.5. Industrial design is the bridge between enterprises and the market**

Industrial design can transform productivity and science and technology into a variety of functional products to meet the market demand, and can feedback market information to enterprises in the process of market circulation, thereby promoting the reform and innovation of enterprises. In addition, design is also an important resource for enterprises. Good industrial design can improve the market influence of enterprises, enhance corporate image and reputation, and prompt enterprises to be more vital and creative. Design can also help enterprises to enrich their visual image and promote a more individual style. Throughout the history of social development, industrial design can prompt new technology and life reality to connect and dock, and prompt enterprises and consumers to connect. In addition, industrial design can also link technology and market, promote the prosperous development of the market, create more high-end goods, promote the outstanding personality characteristics between goods, improve the added value of products, and finely divide the market, reduce product production, and promote the stable operation of the market.

## **4. Conclusion**

In short, industrial design analyzes the production process from a scientific and rational perspective, so as to produce products that meet people's psychological expectations and physical and mental needs, and make them more practical, beautiful and better circulated in the market, creating certain economic benefits for enterprises, driving the continuous development of enterprises, and driving the stable development of regional economy and society through product value enhancement. In this regard, we should take a scientific view of the relationship between industrial design and regional socio-economic development, and grasp the boosting effect of industrial design on regional economic development, so as to improve the level of social civilization.

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