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The Circular Economy in the Fashion Industry

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Abstract

In the context of “carbon neutrality” becoming a hot topic, more and more countries are promising to complete the time for carbon neutrality. In contemporary times, the fashion industry is one of the most important reasons for climate change. This paper will introduce the application of circular economy, challenges and future development suggestions from the theme of establishing circular economy in fashion industry. For example, the establishment of a secondary market, strengthen culture and education. The author will use the data search and collation method to complete this article.

Keywords: Circular economy; sustainable strategy; carbon neutral; fashion industry.

1. Introduction

The fashion industry, as a huge business empire, has always been driving the development of social trends. However, as “carbon neutrality” has become a hot topic, the negative impact of the fashion industry is also emerged. Take the garment industry for example, during its entire life cycle, textiles produce 5-10 percent of the world’s emissions of greenhouse gases, consume the world’s second largest amount of water, and release polluting microplastics and chemical agents to waterways.(Zhang, L. 2023) Therefore, people’s awareness of environmental protection has gradually improved, and has begun to put forward higher requirements for the sustainability of the fashion industry. As a new economic development mode with the efficient utilization of resources as the core, circular economy is being gradually applied in the fashion industry. This article will take the form of a review which mainly introduces the application, challenges and future countermeasures of circular economy in the fashion industry in the current era.

2. Methods

Find useful content from the available information. Look for keywords about “fashion” and “circular economy” in the Nature and Science journals. Search the amounts of information for articles. Through comparative analysis of the same research content as other cases, we find its limitations and make some suggestions and methods. Combined

with their own understanding and analysis, we will perfect it into a review paper.

3. Results

The application of circular economy in the fashion industry is mainly reflected in the following aspects:

The first point is to reduce waste. In the traditional linear economic model, fashion products are often regarded as fast moving consumer goods and are discarded after a period of time, resulting in a large waste of resources. Fast fashion culture brings huge costs, which speeds up the generation of clothing garbage. Chile's vast Atacama desert has become a "fast fashion garbage dump", with a huge stock of waste clothes piled (ZongJuan Wallpaper, 2022). In the circular economy model, factories can make fashion products after wearing them for a period of time, repair, clean or reengineering, and they can enter the market again, thus reducing waste. The establishment of the second-hand market is a good solution. With the support of the concept of "carbon neutrality", the Internet combined with the second-hand trading mode and circular economy is becoming an industry strongly supported by the policy. At the same time, with the economic downturn cycle, the change of consumers' shopping concept and other factors, second-hand goods represent the consumption concept of environmental protection, and buying vintage and vintage products has become a fashion trend, which is becoming popular around the world. At the same time, the major head e-commerce is also increasing the attention and investment to the second-hand market. (IT Orange) "Under the Background of Global Circular Economy, 2023 Development Report on the Investment and Financing of Second-hand Transactions"

The second is to improve sustainability: Previously, large amounts of textiles ended up in landfills. In the circular economy model, designers need to consider the sustainable aspects of their products, including the life cycle, repairability, and recyclability. This will encourage designers to choose more environmentally friendly and durable materials and manufacturing methods in the design and manufacturing process, thus improving the sustainability of fashion products. For example, the technology to recycle cellulose in fabrics can make clothing more sustainable (Nature 611,2022), or take a life-cycle approach to examine technological advances to improve sustainability at each stage and suggest future directions (Zhang, L. 2023).

Creating business opportunities: As consumers' attention to environmental and sustainability issues continues to increase, their demand for circular fashion products is also increasing. This will prompt more brands and businesses to start producing and selling circular fashion products, creating new business opportunities for the fashion industry. In 2019, the scale of the global secondhand goods e-commerce transaction market reached \$822.8 billion; in 2020, the global secondhand goods e-commerce transaction market scale increased to \$895.6 billion (Wu, M. 2023). This shows that creating sustainable business opportunities with circular economy characteristics will continue to promote the green transformation of the economy and subtly change more people's consumption concepts.

Challenges Faced by Circular Economy in the Development of Fashion Industry:

Although circular economy has broad application prospects in the fashion industry, it still faces some challenges: The first is the quality and safety issues. Recycling fashion products often undergo multiple processes of repair, cleaning or remanufacturing, and their quality and safety issues may be more prominent compared to new products. How to ensure the quality and safety of recycled fashion products is an important problem that needs to be solved. Secondly, the establishment of an effective recycling system is the key to the successful application of circular economy in the fashion industry. At present, the recycling systems in many fashion industries are still insufficient, and further improvement of relevant facilities and policies is needed. Finally, more consumer concept shifts are needed. To promote circular fashion products, it is necessary to change the consumption concept of consumers. Consumers need to gradually accept the concept and advantages of circular fashion products, and understand their impact on the environment and the role of resource conservation.

4. Discussion

According to the above mentioned, it is a general trend to establish a circular economy in the fashion industry,

but there are still limitations. All the conditions are established in an ideal state, with sufficient funds and the people's cooperation. But now some developing countries do not have the above conditions, and the productivity of some developing countries is not even enough to support their national economy. Moreover, some developing countries are suffering from the "fashion garbage" from developing countries, and fashion has become a meaningless term in some areas. Therefore, this article is limited to the circular economy that some countries with "fashion junk needs to create". For these countries, they can strengthen their policy support. For example, tax incentives and financial support measures can be provided to encourage enterprises to produce and sell circular fashion products. Or to establish industry standards. The industry association may formulate industry standards for the circular fashion industry and standardize the production, recycling, reuse and reuse processes of related products. At the same time, strengthen the industry self-discipline and supervision, to ensure product quality and safety. Then the publicity and education should be strengthened. The circular economy will be widely promoted through various channels to improve consumers' awareness of environmental protection and sustainable development issues. At the same time, the publicity and promotion of circular fashion products should be strengthened to improve consumers' awareness and acceptance of these products.

5. Conclusion

Circular economy, as a new economic development model with resource efficient utilization as its core, provides an opportunity to address the environmental challenges facing the fashion industry while meeting consumer demand for sustainable products. By implementing strategies such as reducing waste, improving product sustainability, creating business opportunities through increased demand for circular products, strengthening policy support, establishing industry standards, enhancing publicity and education efforts, and enterprises are encouraged to strengthen technological innovation. The fashion industry can promote the development of circular economy and achieve resource conservation and environmental protection.

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