

The Feedback Effect of Digital Fashion on the Real Economy

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Abstract. In the context of the rapid development of the digital era, the development of digital fashion has been widely discussed. Meta universe brand space, virtual clothing, NFT products, and so on are constantly emerging. The development of the fashion industry in the physical aspect has attracted much attention, but whether it can drive the real development of the real economy has not been fully discussed. The analysis shows that the brand reduces the threshold of entity purchase by identifying with consumers in the virtual space. Expand brand awareness and cultivate new consumer groups through social media communication. Brand can help the data in the digital space move forward in production logic, reduce resource waste and feed back the real economy. At the same time, this paper points out that this path largely depends on the brand's own cultural accumulation, and emerging brands may not be able to copy and use it directly. This paper puts forward the following suggestions: brands should pay attention to different consumer groups and optimize the quality of physical products to achieve sustainable development while promoting digital experience.

Keywords: Digital Fashion Identity, Communication Path, Production Logic, Sustainable Development

1. Introduction

The fashion industry has been closely linked with the word "entity" for a long time. From cloth selection, three-dimensional cutting to logistics and transportation, each link is centered on the real object. However, this kind of material-centered system is changing. With the emergence of digital fashion, clothing can exist completely independent of entities for the first time.

This change is not only in the production and manufacturing, but also in the concerns of consumers. More and more people begin to care about their appearance in the virtual space, rather than just the clothes in real life. The digital environment is becoming an important place for "self extension" [1]. Based on this background, a more realistic question arises: when fashion enters the screen, how can it be transformed into executable, real economic effects through the communication mechanism? Based on this, this study takes Gucci × Roblox and Nike × RTFKT as examples to analyze the path of digital fashion nurturing the real economy, and puts forward the optimization scheme.

2. Concept definition and communication characteristics of digital fashion

2.1. Concept definition

The academic community generally defines digital fashion as the practice of virtual production through 3D technology and only in digital form [2].

From the perspective of consumers, the key to understanding digital fashion is to distinguish it from traditional fashion. The essence of traditional fashion is physical goods, while digital fashion is a simple virtual effect. What consumers buy is not tangible physical fabrics, but a virtual image dressing on the screen.

It is worth mentioning that in recent years, some brands have begun to use digital fashion and give full play to its characteristics to feed the real economy, such as selling virtual clothing in the form of non-fungible tokens, which gives the scarcity and tradability of brand digital products and makes virtual clothing more similar to the collection characteristics of physical luxury goods. At the same time, some brands release the digital product test market through the current virtual space, and then determine the production of physical products according to the data of consumers' purchase intention. This digital-first mode provides a direct path for digital fashion to feed the real economy.

2.2. Communication characteristics

There are obvious differences between the communication characteristics of digital fashion and traditional fashion. Traditional fashion sales mainly rely on offline channels, such as fashion magazines and fashion shows. The direction of information dissemination is relatively single, mainly one-way communication from brands to consumers. The deep integration of digital fashion and online social media is conducive to the two-way interaction between brands and consumers, and widens the communication channels.

This difference is first reflected in the interactivity. Consumers are no longer passive receivers. In the virtual environment, consumers can match their virtual image, choose clothes, and even participate in the design process through one-way viewing. Take Gucci × Roblox as an example. In 2021, Gucci and Roblox launched the virtual experience space "Gucci Town", which is a permanent virtual community. Users can choose and try on virtual clothes in the Gucci shop, which can be directly worn on their personal virtual images. Combined with Gucci's brand history, the series of products in its virtual space continues the brand's consistent visual style, only replacing the material with pixels. When consumers buy these clothes for the virtual image in the game, they are essentially trying different versions of themselves. This process is not simple. The study found that consumers will gradually have a psychological connection similar to the "sense of ownership" of digital goods when personalizing the virtual image [3]. This psychological recognition has greatly reduced the threshold for the acceptance of digital products and subsequent physical products.

Secondly, social media plays an important role in a variety of communication paths. The shapes designed by users in the virtual space usually reflect their aesthetic and self-exploration, so they often take the initiative to share on social media platforms such as Xiaohongshu, Ingram or Shuaiyin. When I search for digital fashion wear on these platforms, I can see many posts sharing virtual wear designs in the metaverse. The content sent by these users is more authentic and credible than the advertising communication of the brand. People tend to have true positive feedback from consumers, which greatly expands the potential consumers of the brand and reduces the investment cost of marketing.

The third is the immersive experience. Users can explore and walk in the space "Gucci town" and interact with other users. They can feel the brand culture imperceptibly, so as to enhance their loyalty to the brand independently, rather than through the unilateral output of the brand. This immersive experience has changed the passive acceptance of consumers in traditional consumption, which is not only about watching and read, but to obtain information through operation, experience, and interaction. Relevant research shows that this kind of immersive experience will affect the depth of users' understanding of information [4]. When consumers feel the convenience and beauty of digital clothing in the virtual world, their cultural understanding and recognition of the brand are more three-dimensional and deepened.

3. Impact and limitations

3.1. Positive impact on the real economy

Virtual digital experience drives entity consumption intention. The biggest difference between virtual fashion and traditional fashion in terms of purchase is that consumers have different ways of purchasing. Traditionally, consumers usually understand products through offline try-on in the commodity window and brand advertising, and digital history provides consumers with a new experience mode. It promotes the positive development of the real economy through identity recognition with consumers, expanding the communication path and promoting the logical advance of brand production

3.1.1. Continuation and strengthening of identity

First of all, in the virtual space, consumers can match their virtual image with clothing at will, which greatly increases the operability. In the process of experiencing the virtual space and matching clothing, this process itself is a deep psychological connection between consumers and brands. The study found that in the social and interactive process of virtual form, in order to establish the emotional medium between users, virtual clothing has become the identity and main aesthetic carrier to attract new consumers of Generation Z [5]. "This psychological recognition has greatly reduced the threshold for the acceptance of digital products and subsequent physical products. This recognition of digital fashion products has shifted to consumers' recognition of the brand itself, which has promoted the development of the real economy.

Secondly, the impact of digital fashion on the real economy is also reflected in the construction of consumers' identity. In the context of the meta universe, a digital wardrobe is regarded as a self-expression tool that transcends physical limitations, allowing individuals to explore multiple identities in the virtual world [6]. From the perspective of communication, digital clothing plays a role in virtual identity, digital personality construction, and lifestyle expression in the meta-universe virtual social interaction [7]. Consumers show their taste, identity, and values by choosing specific digital clothing.

First of all, consumers extend themselves through digital platforms, reflecting the community identity theory: individuals define their self-worth through group membership, form a cognitive framework of "us and them", divide social groups into "inner groups" to which they belong and "outer groups" to which others belong, acquire a sense of belonging by complying with group norms, and enhance self-esteem through group advantages. Gucci x Roblox limited the sale of digital items such as Dionysus handbags in the game. Consumers differentiate themselves from other groups inside and outside the game through the brand's unique, limited virtual fashion items.

In addition, based on the theory of self-consistency, this self-identity further strengthens consumers' sense of brand identity. Consumers tend to choose brands that are consistent with themselves. Digital fashion provides them with a platform that can break through the limitations of reality, such as gender restrictions, body restrictions, environmental restrictions, etc., which greatly improves the freedom of consumers' exploration and expression. Gucci × Roblox's user Avatar "amorphous luminous body" freely explores, breaks the narrative mode of traditional luxury one-way inculcation, and interprets the new philosophy of "inclusive luxury". So that consumers can further enhance their sense of brand identity.

3.1.2. The cultivation of new consumer groups and the spread of social media

Digital fashion is also quietly changing the relationship between brands and consumers. Every virtual change, sharing, or display is a small but continuous interaction. These seemingly scattered behaviors not only consolidate the original consumer groups but also attract consumers from different cultural backgrounds to inject new customers into the brand, thus accumulating a stable brand identity. The establishment of this relationship will not only make physical consumption no longer completely dependent on high costs to obtain customers, but also attract consumers from different backgrounds to continue to participate. For the real economy, this transformation means a more resilient growth mode.

In addition to attracting a large number of new customers, the diffusion effect of this cooperation in social communication can not be ignored. NFT holders will take the initiative to display their collections on social media after obtaining virtual shoes. Cole Villemain, co-founder of Pudgy Penguins, a well-known NFT project, once posted an unpacking video on his x account with more than 125000 fans, sharing his experience of ordering 27 pairs of Nike rtfkt shoes, and mentioned that "countless comments" were made when wearing these shoes to participate in activities.

These phenomena strongly prove that virtual fashion is conducive to injecting new consumer groups into the brand and expanding the brand's social media influence.

3.1.3. Forward movement of brand production logic

In addition to the changes in the relationship between brands and consumers, digital fashion is also quietly changing the production efficiency of brands. Previous studies have pointed out that virtual design can help reduce material waste and inventory pressure caused by mispredictions [8]. The operation mode of the traditional fashion industry is "Mr. postpartum sales" -- the brand is put into production according to the forecast, and then pushed to the market through channels. The problem with this model is that once the prediction is wrong, it will cause a large amount of inventory backlog. This phenomenon is particularly common in fast fashion brands.

Digital fashion provides a new mode for brand production: brands can release products in the virtual space first, and then decide whether to put them into physical production according to consumers' purchase intention. For example, the cooperation between Nike and Rtfkt. Consumers first come into contact with digital sneakers in the form of NFTs. Brands can decide whether to put into production by observing purchase data, the popularity of social media discussions, and consumers' willingness to exchange for entities. This path of "virtual before entity" provides a more reliable reference for traditional manufacturing, and also makes production decisions more scientific and prudent.

3.1.4. From the perspective of sustainable development of the industry

The traditional fashion industry is known as one of the most polluting industries. High inventory, low turnover, and unpredictable demand have always been its pain points. The emergence of digital fashion provides the possibility of sustainable development for the traditional fashion industry.

First of all, digital fashion allows consumers to participate in the production of physical products before the brand through the production of virtual products. The brand produces on-demand through the needs of consumers, so that the production logic moves forward, reducing the waste and loss of resources in the production and transportation of the brand, which is conducive to the sustainable development of the fashion industry and improves the development efficiency of the fashion industry.

Secondly, for highly polluting products, consumers can satisfy their consumption preferences by purchasing goods in digital form to replace the physical production of highly polluting products [9]. As a new media platform, digital fashion combines the concept of environmental protection with cutting-edge technology and aesthetic experience, and gradually forms a narrative framework of "environmental protection is avant-garde" [10]. In order to reduce the demand for highly polluting products, consumers pursue the concept of environmental protection, so as to reduce production and pollution, which is conducive to the sustainable development of the fashion industry.

3.2. Limitations

Although the digital economy shows a variety of potential to promote consumption in the real economy, the development of digital fashion still faces many limitations, which mainly lie in the transformation of consumer values, virtual and physical

3.2.1. Consumer values

For consumers who have been used to the traditional model for a long time, or those who pay attention to pragmatism, it may be difficult for them to understand why they pay for invisible virtual clothing. Digital clothing does not meet the needs of such consumers in real life.

This cognitive gap between culture and values limits the number of consumers of digital fashion. If only a small number of consumers participate in virtual consumption, its driving effect on the real economy will be relatively small.

3.2.2. Product gap from digital presentation to real production

There are a few constraints on purchasing virtual products in the virtual world. People usually ignore the fabric material, size and use scene of virtual products. Once a fashion product changes from virtual to physical, consumers will also consider more factors, such as whether it is suitable for daily use, the practicality of wearing products, and whether the physical products produced are consistent with the virtual products in the minds of consumers. All these factors will affect consumers' final decision on purchasing physical products. Therefore, after the physical products are launched in the virtual world, popular products in the virtual world will not necessarily be equally popular, which may lead to the physical products produced by brands based on online data, and can not meet the expected sales.

3.2.3. Economic level of consumers

Finally, the economic ability of consumers is also an important constraint on their feedback to the real economy. Consumers who buy virtual products in the digital world may not be able to buy their physical products.

A student may spend a few dollars to buy a virtual Gucci bag on Roblox to experience the feeling of luxury, but when Gucci launches the same physical product, it cannot afford the high price of thousands of dollars. Therefore, in such cases, virtual consumption can not drive physical consumption, but the sales in virtual space may lead to a misjudgment of brand demand.

From the perspective of the real economy, if digital fashion mainly attracts low consumption groups, its role in promoting the high-end real market will be very limited.

4. Enlightenment

The transformation argument in this paper is based on Gucci, Nike, and other brands with profound cultural heritage. Such brands can quickly establish trust with consumers in the virtual space, which largely depends on their own long-term accumulation of historical culture. For new brands that lack a background culture, the efforts made in the virtual space may not be able to translate into consumers' trust in the brand, and then into physical consumption. Therefore, emerging brands cannot directly copy this path.

The driving effect of digital fashion on the real economy is not actively completed. If a brand wants to truly transform virtual products into the driving force of real development, it needs to actively plan at the two levels of product design and consumer groups.

In product design, designers should take the people-oriented concept as the design premise. No matter what degree of scientific and technological development, design must always adhere to its essential mission, that is, truly serve people and create beneficial designs [11]. Further serve people with digital technology. At the same time, the key to a brand is to strengthen the emotional connection of consumers for digital products, rather than relying entirely on the consumption data of digital products. Online data can reflect consumers' interest in products, but it cannot be simply equated with purchase intention. Brands can strengthen consumers' desire to buy through the connection between digital and physical products. For example, online member points can be accumulated together with offline points, and customers who buy virtual products online have priority to purchase this product. At the same time, whether the idealized state of digital products can be reflected in physical products is also a major focus in achieving transformation. The brand should improve the product quality in the production of physical products and restore the idealized state of virtual products as much as possible.

In terms of consumer groups, brands should distinguish between virtual consumers and potential physical consumers. Online products may only be purchased by students and other groups who are curious about virtual products, and their purchasing power for physical products may be insufficient. Therefore, brands need to distinguish free users, low-cost virtual product holders, and high-cost virtual product holders. Identify the real entity, potential consumer groups and make targeted design investment.

5. Conclusion

This paper analyzes that digital fashion feeds the real economy mainly through the path of identity, expanding social media communication and moving forward the production logic. This paper

believes that the digital-first mode is conducive to reducing the cost and pollution of brand generation, and is conducive to sustainable development.

However, this path is only applicable to brands with cultural accumulation, and start-up brands do not apply to direct copying. The differences between consumers' values and consumption ability, virtual and physical products, will have adverse effects on transformation. At the same time, it should be noted that the popularity of the digital platform cannot directly and indirectly affect the production end, and brands need to be differentiated.

With the continuous development of the digital age, emerging brands are also constantly diversifying. Based on this, future research can further discuss the transformation path of emerging brands from virtual to physical, so as to help the common development of the digital economy and the real economy.

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