Application and Research of Virtual Reality Technology in Brand Design

Jin Xiaolei
Shanghai Jianqiao University, Shanghai
China, 201306

Abstract: The reform and innovation of virtual reality technology in brand design has greatly promoted the development of brand design in the media field. This paper introduces the content of virtual reality technology, describes the brand effect of virtual reality technology on brand design, introduces its specific performance and application, and gives specific solutions according to the defects of virtual reality technology in application, and explores the corresponding solutions Virtual display makes use of its special platform and form, and brings great impact to the brand market. This paper mainly discusses the development of virtual reality technology and its impact on brand communication, as well as how to change brand design ideas and methods to adapt to the communication form of virtual reality.

Keywords: Virtual reality technology; brand design

1. INTRODUCTION

With the continuous development of China's economy, the living standard of residents is also increasing. In the advertising design industry, the virtual reality technology, which was born out of the development of science and technology, is gradually expanding its influence. Because of the variety, large number and single mode of advertisements, the audience has already had a resistance to them. Virtual reality technology, through its interactive viewing mode, enables users to obtain an immersive experience, which improves this problem. In the 1990s, American scientists Burdea and Coiffet proposed three basic characteristics of virtual reality, namely, interaction, immersion and imagination, referred to as 3I.

According to different application fields of virtual reality technology, the proportions of these three characteristics are also different.. These common jewelry display forms have their own advantages and limitations. At the same time, with the development of e-commerce and the maturity of online consumption, people also put forward higher requirements for jewelry display.

With the rise and application of virtual reality technology, new opportunities are brought for the development of jewelry display. As a new type of advertising communication platform, virtual reality is still strange to most people. The design form and promotion of traditional advertising are simply forced output, and the audience influence is not high. The experiential style of virtual reality is to combine the content of advertisements with the experience of virtual scenes, so that users can implant advertisements and integrate them with scenes when they achieve a good situational experience.

(1) If we can be more excellent in the production effect and creativity of the advertisement, the display power and influence of the advertisement will be stronger.

（2）In the advertising design industry, only the combination of high-quality content and high-end technology can bring users a good viewing experience. However, the current advertising design industry in China has encountered the problem of low advertising quality. Even with advanced virtual reality technology, it still cannot bring users a good experience, which seriously reduces users' desire to buy. The biggest market application of virtual reality technology is the entertainment industry. Technology and entertainment have become a mutually reinforcing relationship. Portable VR System at Idaho National Labs is shown below.

Figure. 1 Portable VR System at Idaho National Labs.

2. THE PROPOSED METHODOLOGY

2.1 Advantages of Virtual Reality Technology in Brand Design

People can use technology to create a virtual world, researchers can use virtual scenes for better scientific research, and ordinary people can use these scenes to experience and relax the heavy work and life. As the concept of mass entertainment consumption is getting higher and higher, more market space has been created in scientific and technological entertainment.

In the most common form of jewelry physical display at present, the customer's visual perception obtained from it will be greatly affected by the external conditions at that time. For example, in dynamic physical display, jewelry works are generally small in size, and are often interfered by the stage, lighting, model performance, clothing matching, music and

other external factors in the display. In addition, the display time is short, and the details and materials cannot be displayed normally; The multimedia display with text, pictures or Flash content can only provide the jewelry floor plan. The information provided to customers is limited, there is a certain gap with the physical objects, and there is a lack of interactivity. The regulatory department should further strengthen the supervision, improve the supervision efficiency, and improve the quality of advertising content. For the advertising design department, the advertising designer should keep in mind the product functional characteristics and product advantages, and convey them to users through reasonable and real advertising content.

Therefore, advertising content should not only have depth, but also have a sense of detail, reflecting the advantages of the product in small aspects. Advertising under virtual reality technology fully demonstrates its personalized characteristics. The transformation of various virtual scenes brings users different experiences. Advertising in virtual reality scenes must follow up appropriately with the design content, otherwise it will appear too abrupt and uncoordinated.

2.2 Prospect of Brand Design Under Virtual Reality Technology

This requires advertising designers to conduct a lot of research and analysis, accurately grasp the transformation of virtual reality scenes and the combination of products and customers, so as to produce excellent advertising content. Similarly, virtual reality technology is used in jewelry display, and virtual 3D model is used as the jewelry expression form, which can not only display jewelry products 360 degrees in an all-round way, but also enlarge, shrink, and rotate them at will to obtain multi-directional, multi angle, and continuous observation. Moreover, virtual reality technology supports real-time rendering, so it has incomparable advantages over two-dimensional and three-dimensional single frame images. The interactive browsing mode makes it more advanced than multimedia display mode.

In the use of virtual reality technology, the law is the most powerful weapon. Relevant personnel should improve the laws and regulations on the use of virtual reality technology as soon as possible, and standardize the development of virtual reality technology. First, the national legislature should formulate relevant laws and regulations to ensure the rationality of its operation; Secondly, the national judicial authorities should strictly supervise and review the application of virtual reality technology; In addition, virtual reality technology enterprises should speed up the pace of technological innovation in the application process to bring users an excellent sense of experience.

At the same time, consumers themselves should resolutely resist false advertisements to promote the healthy development of virtual reality technology. According to the statistics in 2016, the click through rate of virtual reality ads reached more than 30%, while that of mobile phones was 1% and that of PCs was only 0.4%. The advertising conversion rate of online virtual reality is 5.3%, while that of mobile virtual reality is only 0.05%. And statistics show that 80.6% of users will read the virtual reality advertisements. The super high conversion rate of virtual reality advertising has brought a new revolution in advertising production and communication, which is different from traditional advertising and focuses on copywriting and graphic design.

3. CONCLUSION

As the "intrusive" brand has affected our life, people's antipathy to the brand is growing day by day. With the development of modern science and technology, relevant brand industry personnel responded to the requirements of the masses to innovate the brand form, and used virtual reality technology to reform and innovate its content and experience, greatly improving the product experience and functional performance Therefore, it will not replace the physical display form in the short term, but it brings us a humanized and novel interactive experience, which indicates a new development direction of jewelry display in the future. At the same time, it is also expected that the above analysis will play a role in the future related research.

4. REFERENCES

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