Research on the Application of Digital Art in Exhibition Space Design

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Abstract: The advantages of digital art are more significant, which can provide more possibilities for display space design. In the new era, people's demand for exhibition space is more diversified, and designers need to strengthen the connection between digital art and exhibition space design, so as to provide better services for visitors. However, there are still some problems in the practical design, and designers need to develop reliable measures to optimize and improve the design effect of display space.

Keywords: Digital art; Display space; Design; Apply

At present, the application of digital art to exhibition space design has become an inevitable development of The Times. However, there are still some shortcomings in the actual work, and staff need to make targeted improvements to ensure that the role of digital art can be maximized and people's recognition of the display space can be improved.

1. Problems in applying digital art to display space design

1.1 There is no balance between technology and art

For the application of digital art, the balance between technology and art should be ensured. Designers should promote artistic innovation and enhance people's aesthetic ability while applying digital technology. However, from the actual analysis, it is found that some exhibitions still blindly use digital technology, and a large number of digital exhibition equipment are used, resulting in digital technology equipment receiving more attention than the exhibition main body, and even ignoring the nature of the exhibition. In addition, the application of digital technology equipment and the dissemination of exhibition content are relatively fixed in scope, which, from a certain point of view, will reduce the attractiveness of artworks to people.

1.2 There are differences in the professional level of designers

First, some display space designers do not have a comprehensive understanding of digital technology, resulting in more random behavior when applying technology. For example, designers have not yet realized the application requirements and operation norms of interactive multimedia design, and certain limitations of functions or orderly operation may occur when interactive design is carried out [1]. Second, in the design of exhibition space, it is necessary to strengthen the connection between creativity and technology. However, due to the gap in technical strength, some designers have difficulty in transforming ideas into technology. For example, although some designers have a lot of inspiration, they lack the support of modern technology, which makes it difficult for their inspiration to be presented in a timely and accurate digital art works. In addition, with the increase of technological strength, there are many different types of modern digital technologies. However, exhibition space designers do not pay enough attention to modern technology, and the updating speed is also different, and some designers cannot skillfully use modern technology.

1.3 The experience needs of different visitors are not met

First, there is a significant gap between visitors' cognition and acceptance of new technologies. Some visitors prefer digital art and are willing to experiment with it. However, some visitors think that digital art is dispensable and attach less importance to it. This results in the application of digital art in the design of exhibition space, which can only meet the needs of some visitors, but cannot meet the needs of all visitors. Second, to make full use of digital art in exhibition space design, it is necessary to ensure that visitors have certain ability to apply modern knowledge and skills [2]. The technical strength of some visitors is not high, it is difficult to form a full understanding of digital interactive equipment, and skilled application, therefore, exhibition space designers should clarify the

appreciation ability of different visitors in the application of digital technology, and provide them with low application difficulty and easy to understand interactive means.

2. The role of digital art applied to exhibition space

2.1 Can update the presentation form

Digital technology makes the presentation of the exhibition space more diverse and, in a way, can make the exhibits more innovative and gain the attention of visitors. With the help of different means such as digital exhibition wall and interactive projection, the exhibits can be presented in a dynamic form to help visitors understand more details of the exhibits.

2.2 Displaying extended functions

The essence of the exhibition is to show the exhibits, the application of digital technology, so that the exhibits in a virtual form, can improve the situation of some products have strong limitations. For example, the portraits in the Dunhuang grottoes will be weathered and damaged over time, and if the visitors are concentrated, the aging of the portraits will be accelerated. The application of digital virtual technology can make the digital collection of exhibits more feasible. With the support of three-dimensional modeling technology, a special digital exhibition hall is created to ensure that visitors can use the Internet to feel the brilliance of ancient culture, and inherit and carry forward the excellent culture while protecting the exhibits.

Virtual displays of exhibits can also give them more depth. First, visitors can use virtual reality technology to observe the product in detail and get a more diversified experience. Second, the application of augmented reality technology can make the exhibition contain more rich content, and introduce the historical background and appearance significance of the exhibits in detail. In addition, the application of digital technology can also accurately show the state of the exhibition site and bring people a more real experience [3].

3. Application scheme of digital art in exhibition space

3.1 Harmonize technology and art

In the application of digital technology, exhibition personnel should take artistic innovation as the key to enhance its aesthetic function. By strengthening the connection between art and art, the exhibition space design can be displayed in a unified form. Technology is the premise of artistic innovation, and art is an important driving force of technology. First, when designing the exhibition space, the staff should integrate digital technology into all stages of art design to ensure that the exhibition space can have strong artistry, attract the attention of designers, and improve the quality of display. Second, display designers should coordinate reasonably, find out the similarities between digital art and traditional art, and ensure that the two are in balance. The characteristics of digital art and traditional art are different, and each has its advantages and disadvantages. In the design of exhibition space, designers should ensure that the two can be deeply connected, improve the display effect, and bring people a more wonderful experience. Only by strengthening the balance between technology and art, and clarifying the connection between traditional art and digital art, can digital art maximize its role in exhibition space design.

3.2 Build a highly professional design team

First, training activities should be held regularly or irregularly to ensure that display designers can learn about new digital technologies and methods in the first time. By organizing designers to participate in learning and holding lectures, we can build a perfect knowledge system, enhance designers' self-learning ability, and guide designers to take the initiative to study the latest digital art. Second, the design of exhibition space should not only apply technology, but also strengthen the integration of art and creativity. Through the creation of creative workshops, exchange meetings and other strategies, to provide designers with more opportunities to communicate, to ensure that designers can have strong creative thinking. Third, we should carry out exchanges with professionals in other fields and strengthen cooperation with each other. For example, computer science, art and design. By enhancing the exchange of various disciplines, the vision of designers is enriched, and they can get more inspiration to show the advantages of digital technology in the application of exhibition space design. Fourth, it is necessary to organize it into practical projects to ensure that designers can enhance all aspects of their literacy through continuous practice. Carrying out realistic project design can help designers to form a clear understanding of the application requirements of digital art, accumulate experience, and enhance their ability to deal with problems.

3.3 Give visitors a more authentic experience

In order to bring visitors a more real experience, it is necessary to make visitors immersive and improve their acceptance of the display space. Therefore, digital art should be used to design exhibition space from the following points: First, research activities

should be carried out at the early stage of design, communication with visitors, clear the actual needs and follow-up expectations of visitors, and according to the feedback of visitors, optimize the exhibition space design scheme to ensure that visitors can better recognize the exhibition space design. Second, it is necessary to ensure that the exhibition space design can be interactive in real time, and provide more opportunities for visitors to interact [4].

At present, the exhibition space design pays more attention to interaction, and visitors play an important role in the design process. The application of virtual reality technology can bring visitors a richer sense of experience. By connecting digital technology with display space design, the static display design can be presented in a dynamic way, and users' enthusiasm for display and interaction can be enhanced. With the help of information transmission, users can browse under real environmental conditions, understand and display relevant information, and strengthen the overall experience.

4. Summary

In the new era, the application of digital art to develop exhibition space design can make the exhibition space present in digital form and improve the display effect. However, in the process of integrating digital art and exhibition space, there are still many challenges to be met. It is necessary for staff to intensify analysis and exploration, find out the causes of problems, and make improvements from multiple perspectives to improve the design level of exhibition space.

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