

The Digital Development Strategy of Anhui Red Historical Resources Based on VR Technology from The Perspective of Red Tourism

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Abstract: Red historical resources are an important carrier of red spiritual culture, but they are also a non-renewable historical wealth. In order to promote the spread of red spiritual culture, the application value of enriching red historical resources is of high significance. In this regard, this paper takes red tourism as the background, explores the application of VR technology in the digital development of red historical resources in Anhui province, and puts forward the basic principles of the digital development of red historical resources, as well as the guarantee of the digital development of red historical resources.

Keywords: Red tourism, VR technology, Red historical resources, Digital.

1. Anhui Red Historical Resources Status Quo

Since the Red Revolution of China, Anhui, as an important inland region of China, has become an important carrier of the red history. As early as 1921, when the Communist Party of China was founded, the Red Revolution in Anhui had been in full swing and became the founding area of the revolutionary base area in western Anhui. Anhui Dabie Mountain has been born many Red Army, known as the cradle of the Red Army, it is also the main battlefield of the war of liberation. With the passage of time, Anhui has formed a rich red historical resources, and its various forms, retain the precious spirit of China's red revolution, and has also become an important historical mark.

(1) Anhui red historical resource form

With the development of the red movement in Anhui, Anhui has also formed various forms of red historical resources, which record the great achievements of countless revolutionary ancestors and give more vigorous vitality to the humanistic culture of Anhui. In the form of red historical resources, it can be divided into three categories: red historical stories, red historical relics and red historical relics. The story of red history is mainly based on the red movement events in Anhui. During the revolutionary period, there were hundreds of battles in Anhui. In Jinzhai alone, 100,000 people joined the army, 59 founding generals were born, and more than 11,000 people were regarded as revolutionary martyrs. Countless touching stories have emerged among this and become a precious red historical resource of Anhui. The red historical sites are mainly war sites during the revolutionary period. At present, there are more than 3,000 revolutionary sites in Anhui, of which 43 are open to the public, 31 have formed red scenic spots, and 63 red memorials and museums have been built. Such as the former site of the New Fourth Army in Huangshan City, the revolutionary site of Zhu fo 'an Town, Huoshan County, Lu' an City, Huangshan Red Army North Anti-japanese Advance Team Memorial Hall, Wuhu Wang Jiayang Memorial Park, etc. The red historical relics are mainly preserved from the red Revolution period, such as guns, clothing, letters, tools, etc. According to statistics, there are 11,018 pieces (sets) of revolutionary cultural relics in

Anhui Province.

(2) The development level of Anhui red historical resources

As an important red province in China, Anhui attaches great importance to the protection and development of red historical resources. Especially in recent years, our Party has continuously strengthened the inheritance and study of the red spirit, and carried out a comprehensive development and protection of a large number of red historical resources, driving the development level of Anhui red historical resources. By 2021, Anhui has identified 255 projects for the development of red historical resources, and completed documents and works such as The Regulations on the Protection and Utilization of Anhui Revolutionary Cultural Relics (submitted for review) and A General Survey of Anhui Revolutionary Cultural Relics. Through the party building activities, red tourist attractions, red community culture, college education and other forms to promote the inheritance of red culture and red spirit. To a great extent, the educational value, humanistic value and social value of red historical resources have been played. With the development of The Times, in order to better meet the public's learning needs for red culture, Anhui province issued the Regulations on the Protection and Inheritance of Anhui Province Red Resources in 2021, which clearly proposed the use of digital, networked and intelligent technologies to provide the public with online red resource information sharing services through the government service platform.

2. The Digital Development Principle of Red Historical Resources

Red historical resources of digital development is the important direction of the construction of Anhui red culture, red historical resources digital development mainly refers to the use of modern digital information technology of the traditional red historical relics, cultural relics, manuscripts, stories, resources such as visual upgrade, can spread, interactive characteristics, and enhance the value of the traditional red historical resources, rich in the form of traditional red historical resources, promote the heritage of traditional red historical resources. However, the digital development of the red historical resources is not simply the application of digital information technology to the red

historical resources. In the process of development, in order to ensure that the red historical resources are not damaged and distorted, the following development principles need to be strictly observed:

(1) Respect the principle of facts

The digital development of red historical resources is based on red historical stories, red historical relics and red historical relics. Although digital information technology has a high degree of innovation ability, it must be based on historical facts in the process of digital development. We should not blindly distort or tamper with historical facts in pursuit of innovation and originality, nor should we make malicious adjustments to the content of red historical resources. Digital information technology can only be used as an auxiliary display means of red historical resources, and is a way to diversify the forms of red historical resources. Any development behavior of putting the cart before the horse should be rejected, the purity of red historical resources should be guaranteed, and the red historical resources can be displayed to the public.

(2) Principles of subject protection

Red historical resources are the precious wealth of Anhui Province and the cultural treasure formed by the continuous precipitation of history. Although digital development is conducive to the inheritance and dissemination of red historical resources, any damage and interference of red historical resources should be avoided in the process of development. In the application process of digital information technology, "protecting the original appearance of red historical resources" should be taken as the bottom line and starting point of all development work. Red historical resources should not be damaged because of the pursuit of novel digital development results.

(3) the pursuit of efficiency principle

The benefits include economic benefits, cultural benefits, social benefits and other aspects. The digital development of red historical resources is aimed at improving the value of red historical resources. In the process of digital development, any development behavior should clarify the value of the development work, and it should be clear that the digital development of red historical resources is only a means to enhance the value of red historical resources, and the development work itself is not the purpose. Therefore, the digital development of red historical resources should follow the principle of pursuing efficiency, put an end to any worthless development activities, and resist the digital development of formalism.

(4) Innovation and development principles

The digital development of red historical resources is to give red historical resources new vitality, make it more adapt to the development trend of today's society, and meet the public's cognition and preference of red history and culture. This requires red historical resources of digital development adhere to the principle of innovation and development, through the introduction of different forms of modern information technology, improve the experience of red historical resources, on the basis of protecting historical resources, make it have more diverse display form, more convenient mode of transmission, more accurate retrieval mechanism, and make the red historical resources out of the history, to the future.

3. Anhui Red Tourism and Red Historical Resources VR Products Combined Way

Red tourism is the best way to present red historical resources, and also the best platform for red historical resources to realize their economic value, social value, educational value and cultural value. In recent years, Anhui has vigorously developed the red tourism industry, and has successively established 31 red tourist attractions. Red tourist attractions have become the most important connection channel between the red historical resources and the public. Therefore, the realization of the digital development of red tourism resources cannot be separated from the red tourism industry. Only by fully combining red tourism and VR technology, can the digital development of red historical resources be better realized.

(1) Add the VR section to the red scenic spot

Adding the VR section to the red scenic spot is the easiest way to combine the VR technology with the red scenic spot. At present, the red tourist attractions are mainly based on the red historical sites. Through the restoration of the sites and the construction of surrounding supporting facilities, they have the value of sightseeing. However, the red scenic spots are limited and the repair level of the sites, many sites are difficult to completely repair, leading to the red scenic spots can not be fully displayed. In this regard, VR section can be added to the red scenic spot, namely VR scene roaming, VR role playing, VR desktop display embedded in the red scenic spot. First, in terms of story deepening, virtual reality technology is used to reproduce the story plot of the Anti-Japanese War on the basis of the real scene of the former residence. Visitors can visit the former residence site and see the stories and characters that happened at that time, and then turn the former residence site into a stage to interpret the historical stories. Second, in terms of scene restoration, virtual reality technology is used to restore the damaged scenes, and with augmented reality technology, visitors can see the original appearance of the scene. Third, in the aspect of multi-dimensional observation, the desktop virtual reality technology is used to carry out the three-dimensional display of the exhibits from multiple angles, so that visitors can observe the exhibits more carefully. Increased the interaction between the exhibition and the tourists. Fourth, in terms of environmental experience, immersive virtual reality technology is used to let tourists place themselves in a highly developed environment, truly experience the real atmosphere during the Anti-Japanese War, and improve the viewing effect.

(2) Establish online VR red scenic spots

Adding the VR section to the red scenic spot is to integrate the VR technology into the scenic spot, and its essence is that the online VR technology returns to the offline scenic spot. On the contrary, the offline red scenic spots can also be transplanted to the online platform as China through VR technology, that is, the online VR red scenic spots can be established. Online VR red scenic spots can effectively break the dilemma of the remote location of the red scenic spots, so that they can realize interactive display through the online platform. Then improve the service ability of red tourist attractions, deepen the cultural connotation of red tourism, change the traditional red tourism service mode. Use advanced virtual reality technology to improve the experience of red tourist attractions. On the one hand, you do not have to visit the red scenic spot, it can make people feel immersive,

on the other hand, it can make people meet their diverse aesthetic needs. It is not only conducive to realizing the restoration of historical events, but also can better protect the red tourism resources. Through the application of virtual reality technology, will break the red tourism in space, the red tourism is not limited to the real viewing, more can rely on virtual reality technology, realize infinite space experience, form online tourists, improve the transmission ability of the red culture spirit, further stimulate visitors interest, never leave home can feel the great charm of red tourism.

(3) Virtual selection of red tourist routes

Red tourist route is the series of red tourism scenic spots, due to the Anhui red tourist scenic area is based on the red historical sites, and the red historical sites in geographical event correlation, namely near the red historical sites often exist between historical events, such as "the huai hai campaign, the great victory" boutique lines, across Xuzhou, xinyi, huai north, Suzhou four city, includes the huai hai campaign memorial, huai hai campaign zhuang wei battle memorial, jia wang uprising memorial, kiln bay memorial nine red tourist attractions, through the linkage of red tourist attractions, realize the red theme tourism. However, due to the large number of red tourist routes, tourists cannot fully understand the characteristics of various red tourist routes when choosing the red tourist routes, which is prone to the problem of improper choice. In this regard, VR technology can be combined with red tourism routes to build a virtual selection platform for red tourism routes, so as to help users to roughly understand the basic situation of red tourism routes in just a few minutes in the virtual platform, and then make accurate selection based on individual red tourism needs. In this way, the value of the red historical resources is maximized by accurately matching the red tourist routes for tourists.

4. The Guarantee of The Digital Development of Red Historical Resources

From the perspective of red tourism, the digital development of red historical resources not only needs the support of VR technology research and development, but also needs the support of the general society. To realize the digital development of red historical resources based on VR technology, it is necessary to determine the following guarantee conditions to promote the reasonable development of red historical resources

(1) The continuous integration of technology

To realize the deep application of VR technology in the digital development of red historical resources, a strong technical team is needed to ensure the continuous development of VR technology-related products. At present, the common VR technology mainly focuses on scene roaming, but in terms of group environment interaction experience, VR technology still needs to be further developed. Therefore, in order to improve the level of red historical resources digital development, should strengthen the introduction of modern information technology team, attract more advanced technical personnel, promote VR technology team and the depth of the red culture research team cooperation, explore form more novel, more efficient, richer content of virtual reality technology, and form more related products.

(2) Overall government leadership

Red historical resources are the precious cultural resources

of Anhui Province and an important carrier of Anhui red spirit. In the process of developing red historical resources, not only to guarantee the integrity and security of red historical resources, but also need a lot of human and material support. In the case that the digital development of red historical resources has not yet realized the industrialization and marketization, the overall leadership and support of the government directly determines the level of the digital development of red historical resources. Therefore, it is necessary for Anhui governments at all levels to take the digital development of red historical resources as an important social and cultural construction project, constantly strengthen the investment, and lead the relevant social organizations to actively participate in it.

(3) Build a wide range of cooperation platforms

From the perspective of red tourism, the digital development of Anhui red historical resources based on VR technology involves many fields, such as historical research, red culture research, tourism industry, modern digital information technology and so on. It is a comprehensive work highly integrated in many fields. Therefore, to realize the digital development of red historical resources, it is also necessary to build a wide cooperation platform, promote the participation of all sectors of society, so as to ensure the deep integration of knowledge and technology in different fields, and provide a solid technology, talent, resources and economic guarantee for the digital development of red historical resources.

sum up

From the perspective of red tourism, the digital development of Anhui red historical resources based on VR technology has deepened the cultural connotation of red tourism and enriched the form of red historical resources. At the same time, advanced virtual reality technology is used to improve the experience of red tourist attractions, on the one hand, people can have a feeling of being there, on the other hand, people can meet their diverse aesthetic needs. To achieve the purpose of improving the prevention of exhibits, the restoration of historical events, the protection of red tourism resources, and the restoration of the old objects of the red tourism site. Through the application of virtual reality technology, it will break the limitation of red tourism in space, make the red historical resources to break through the limitations of real objects, realize unlimited space experience and protection, and provide a more open prospect and solid guarantee for the inheritance and dissemination of red historical resources.

Acknowledgment

Fund Project: Anhui University Humanities and Social Science Research Project "Research on Digital Development and Utilization of Anhui Red Historical Resources Based on VR Technology" (SK2021A0259); Anhui University Humanities and Social Science Research Project "(SK2021A0265); Anhui Provincial Philosophy and Social Science Planning Project" Research on Local Public Reproduction in Mobile Internet Public Space " (AHSKQ2019D074).

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