

Analysis of Virtual Tourism Application

Yue Liu and Jie Shu*

Wuhan Donghu University

1325832378@qq.com; *250158619@qq.com

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Abstract: The accelerating development of science and technology makes the virtual reality step into people's vision gradually. As a new type of travel mode based on network technology, virtual tourism is breaking the traditional people's travel concept and creating a brand-new travel era. Based on the understanding of virtual tourism and combined with the current virtual reality technology, this paper summarizes the development status of virtual tourism in China, and analyzes the characteristics of virtual tourism and the problems encountered in real tourism.

1. Concept and Characteristics of Virtual Tourism

In today's society, the pace of life and work is getting faster and faster. On the one hand, more and more people are relying on the Internet, which has become an important way of life entertainment and work. On the other hand, with the high pressure in life and work, people have a strong need for tourism and leisure. The network and the traveling have become the two key words of people's daily life. Is there a way to combine the two? Imagine that you can experience the ancient ways of living in the Forbidden City, climb the most dangerous mountain in the world, the Mountain Hua, and visit the romantic lavender fields in the Provence in one minute. This is virtual tourism, a new way for travelling to destinations all over the world without ever having to leave your home.. Virtual tourism has been popular abroad for many years. In China, it became popular after the Shanghai World Expo, but few people know about it. Virtual tourism can provide people with appropriate relaxation in this fast-developing and stressful era, provide more ways of entertainment for people, and bring opportunities for many people who want to travel but limited by various factors.

1.1 Concept of Virtual Tourism

Virtual tourism was originally translated from a foreign word, using virtual reality technology to simulate of an existing location and build a virtual three-dimensional tourism environment with other multimedia elements. Virtual tourism is one of the applications of vrp-travel virtual tourism platform technology. The computer technology is used to realize the three-dimensional (3D) simulation of the scene, and make the operator feel the destination scene with the help of certain technical equipment. And it can let the tourist hobbyist choosing the tour route, the speed and the sightseeing spots according to own hobby and their will. Let people visit the scenery and understand the culture across thousands of miles away in a 3D virtual environment.

1.2 Characteristics of Virtual Tourism

1.1.1 Novelty.

"Virtual tour" is a kind of novel and interesting tour way to attract tourists. By this way, the tourists can experience the dreamscapes and preview the information and scenery features of the scenic spot in advance, understand its geographical environment, local culture and other characteristics. Thus, it attracts more tourists to go to the destination.

1.1.2 Experience a Sense of Participation

"Virtual Tourism" is to experience tourism through participation, to feel tourism through

interaction, to have a strong sense of science and technology, to have vivid images, and tourists are willing to participate. Virtual tourism can use the advantages of virtual communities to promote emotional communication between customers and between companies and customers. Therefore, the project has a strong sense of participation and experience.

1.1.3 Low Carbon Environmental Protection

"virtual tourism" or a trend of low-carbon environmental protection of green tourism, not to the actual scenic spot will not damage the ecology, also do not produce pollution, but also to avoid the reality of "to this tour" phenomenon. It is a good scientific and technological means for the protection of the ecological environment of scenic spots, the protective development and display of historic sites, and the digitalization of tourism.

1.1.4 Teaching Tools

According to research, children tend to see new things in the field much faster than they can just listen to the teacher, this technology is suitable for a variety of subjects, it can let the children to understand some books faster, improve students' practical ability and can improve students' interest in learning.

1.1.5 Quick and Cheap

Virtual tourism allows people to visit places of interest without having to travel anywhere at any time, saving time for people to prepare for and travel to scenic spots, it's convenient to not have to worry about living and how to get there. Although virtual travel also takes time, money and energy, but because you don't have to travel long distances to be there, it saves time and effort and costs much less than real-world travel.

2. Current Situation of Virtual Tourism Development in China

At present, 24 cities in China have set up the "city Bar" website of the Tourism Panorama network. Visitors can visit the scenic spots of Beijing, Xi'an, Chengdu and many other famous tourist cities.

In 2008, for example, The Palace Museum partnered with IBM to launch the "Forbidden City beyond time and space," using 3D technology to create an online virtual environment for visitors who can't visit the Forbidden City in person. It is the first virtual world in China to showcase important historical and cultural sites on the internet. In this virtual environment, visitors can not only arbitrarily choose a certain identity tour, such as the princess, attendants, there will be "network tour guide" for users to guide the tour. In addition, if you are interested in one of the attractions, you can click the mouse to let the "I" in the network to take a photo in front of the attractions. On May 13, 2009 the website saw that nearly 270,000 visitors have registered with the site. A few fictitious travel website still can provide each kind of performance to the netizen. The project initially replicated the Museum of Chinese cultural treasures in a 3d virtual world, allowing anyone to log on to the Internet. The Forbidden City, experience the magnificence of ancient Chinese palaces, enjoy the museums. During the tour, visitors appear as avatars in the Virtual Forbidden City. The visitor's Avatar can be one of many characters dressed in Qing Dynasty costumes. In the Virtual Forbidden City, many very important cultural relics or buildings, the system will be important cultural relics or buildings to the text notes and pictures shows such as The Temple there are text notes and even pictures, it enables visitors to gain a deeper understanding of the buildings and their uses. Visitors can access this information with a mouse click, as well as view details of the selected objects and see the detailed features of the selected objects. Visitors can also take an active part in contemporary cultural activities such as archery, cricket fighting and ancient entertainment, go, as well as scenes such as "the emperor's royal food" and "palace paintings". .

Many people in the virtual city of Bauhinia have different opinions about him. Some people have favorable comments on the APP, which can reflect the life of the Qing Dynasty Royal Family. For example, in Hall of Mental Cultivation, we can see the emperor's memorial, in the garden, the royal

family fights crickets and so on, and during the exploration, may through many ways in-depth understanding meets the matter. Most impressive cultural objects and buildings have additional information, even photographs, which contribute to a deeper understanding of their use and construction, he can show the whole view of the city of Redbud very well is accurate even the blue brick at the foot is real wear and tear appearance, in the imperial kitchen even the emperor to eat what kind of night snack have done very carefully. But there are also many bad repercussions, because the virtual baughinia city is a form of games to show everyone the various scenes of the Forbidden City, although there is a strong sense of interaction and substitution, but it's all in the form of animation to show everyone that every scene has been beautified. It's difficult to give people an immersive feeling, and after beautifying the scene, it's easy to give people a psychological gap, the characters are not vivid enough as the general puppet, although the design of the game but the plot is set there is no interaction. And a lot of people say that the APP has a lot of memory and that many environments don't support the experience. In 2016, Shanghai Disney Resort officially launched the Disney Movies VR virtual reality APP on the Steam platform. Like the virtual city of Bauhinia, 360 Panorama videos are in some places looking oddly synthetic due to the lack of technology, because in VR, visitors can decide for themselves which way to look first, traditional photography and design methods can't play a big role in the face of VR technology. On the other hand, interactivity is also a problem. When people become part of a scene, their actions have an impact on the scene. This is a contradiction. On the one hand, the audience's influence on the scene can't break the narrative, on the other hand, ignoring the audience's sense of participation will reduce the interactive experience and make people feel that they have no connection with the virtual world. Then this lack of interactive VR will lose its meaning, because it still has not broken the traditional "fourth wall ". And to solve this problem, we need to increase a lot of interaction from the audio-visual language design, so that the production difficulty and cost will go up. So it takes a lot of work to improve virtual reality, and real immersive, interactive virtual travel should be something between a game and a movie.

As of 2018, China's population of 139538 was 5.54 billion, with an average of four trips per person per year, reflecting the popularity of the travel market. The combination of virtual reality technology and real tourism can make people have an immersive experience of a more comprehensive understanding of tourism destinations, travel choices more rational. An online survey was conducted to find out people's attitudes towards virtual reality tourism.

The survey found that most people who travel are 18-35 years old and most of them are women, with 50.45% of them willing to spend some time and money to travel, 32.43% are very willing, leaving only a small number of people who are not willing to spend time and money on travel. 40.54% of people travel is not fixed in the holidays, winter and summer vacation, a family with children companies have a certain amount of time to go on business trips. 27.03% of people can be sure to visit at least half a year, and 5.41% of people will visit at least once a month, so the number of trips is huge. 67.57% of people will search the Internet to learn about travel information, and from this, most people will learn about travel information through the Internet, more 60.36% have not heard of virtual tourism people are always full of curiosity about novel things, through these two points can see the feasibility of virtual tourism. With the development of technology, 39.64% people feel satisfied with the expectation of virtual tourism, 18.02% people feel very satisfied, 13.51% people feel very satisfied.

3. Problems in the Development of Virtual Tourism

3.1 Tourists Have Insufficient Awareness of Virtual Tourism

According to the above statistics, 60.36% of people have never heard of virtual tourism, and many older people can't accept this kind of tourism. Our relatively well-known virtual tourism only Beijing's virtual Bauhinia City, and not like second life abroad and virtual Sweden is widely recognized and accepted. But according to the survey 39.64% of people have great expectations on virtual tourism, want to experience virtual tourism, so it seems that there is a certain market for the

development of virtual tourism. So in the development of virtual tourism to improve people's cognition also need to spend huge manpower, money and so on.

3.2 Lack of Training of Talents Related to Virtual Tourism

At present, although there are tourism majors, they only stay in the textbooks and teacher-produced PowerPoint presentations. Students rarely really learn. Although many schools now have training rooms for tourism management, many of the facilities are incomplete and used. Not many times, it is difficult for students to really understand the teaching content without a sense of presence. In addition to the fragmented and unorganized content on the Internet, very few can be translated into useful information, and the development of virtual tourism teaching software is also insufficient. This is not conducive to talent training in the long run. Without this talent, the development of virtual tourism is difficult to make great progress. Although there is a tourism major, the students can't really learn anything, even though many schools now have training rooms for tourism management, but many of the training room facilities are not complete and not used many times, students do not have a sense of the scene is difficult to really grasp the teaching content. In addition to the Internet content scattered and unclear, few can be converted into useful information, virtual tourism teaching software development is insufficient. This is not conducive to long-term talent training. It is difficult to make great progress in the development of virtual tourism without talents in this field.

3.3 The Construction Level of Virtual Tourism Websites Lags Behind

China's virtual tourism is mainly in the development of the website, but due to technological backwardness is limited to 360-degree panoramic images such as the ancient city of Lijiang. There are also many websites that crash frequently due to technical problems. There are also websites that have been left unattended for a long time, are not updated in time, have no features, have poor expressiveness, and lack fun, far from being able to achieve the fidelity required by virtual tourism. here are also some websites that have been neglected for a long time and are not up to date, unique, expressive and interesting, far from achieving the virtual tourism requirements of the lifelike. User experience is very poor so does not reflect the basic characteristics of virtual tourism (autonomy, interaction, time and space).

3.4 Lack of Cooperation Between Virtual Tourism and Real Tourism

At present, although some scenic spots have been developed in different degrees and have contributed to the virtual tourism, they have taken the virtual tourism as a means to realize the marketing of scenic spots, and have attracted tourists by using various kinds of information to simulate the landscape but lack of interactivity. Virtual tourism is based on real tourism without the support of real tourism virtual tourism can't play a complete function; without the support of real tourism there will not be a comprehensive scenic spot. Virtual tourism and real tourism lack of effective cooperation mechanism.

3.5 The Development Cost of Virtual Reality Tourism Remains High

From Conception, research and development to design and production, virtual reality tourism products need to go through the stages of structure design, information collection, letter writing, model construction, database construction, program debugging, advertising and so on, the development time and manpower cost is very high, because many people to the virtual tourism unheard of so need to spend a lot of time and money to promote and cause the cost of publicity is also very high.

3.6 Virtual Reality Facilities and Maintenance Costs Are High

The supporting facilities of scenic spots should complete the six essential elements of tourism (food, accommodation, travel, tourism, shopping and entertainment) in order to achieve good publicity results, only when the supporting facilities of the scenic spot are complete, the virtual tourism system can be perfected, and the virtual facilities have high technology content and high

maintenance cost.

3.7 Wild Exaggeration of Scenic Spots Makes Tourists Expect Too Much

The satisfaction of tourists is the result of comparing the expectation of tourists with the experience of tourists. In the actual experience of a certain situation, if the expectations of tourists higher, then the satisfaction will be lower. With the help of modern technology, virtual tourism can perfectly present the reality of tourist attractions, or even better. But if you over-beautify the scenic spot, when tourists travel on the spot, there will be a big psychological gap, feel cheated, which will lead to dissatisfaction and disappointment of tourists. This is very disadvantageous to the development of our scenic spots. Therefore, we should present the realistic scenic spot objectively as far as possible in the process of different production.

4. New Thinking of Virtual Tourism Development

4.1 Improve Immersion

Virtual tourism can create a real-time 3d virtual world to reflect the change and interaction of the real object, and use HMD, data glove and other auxiliary sensing devices, it provides a 3D interface for users to observe and interact with the virtual world, so that users can directly participate in and explore the role and changes of the simulation object in the environment, resulting in immersion.

4.2 To Satisfy a Need for Entertainment

Some different scenic spots in the virtual tour can be added some games can improve the interactive nature of the tour so that visitors can play while traveling, such as free climbing, air skateboarding, extreme cycling and so on. These entertainment items can improve the interactive nature of the virtual tour it can enrich the experience of the tourists. At the same time to meet the six elements of tourism, the need for entertainment.

4.3 The Combination of Virtual Tourism and Real Tourism

In the virtual tourism, some tourists may like some virtual tourism in the corresponding real-world landscape and goods, then you can set up some real-world links, you can buy and book directly on the Internet, this allows tourists to buy local food and entertainment without leaving their homes, and allows the virtual travel site to make money. And in the design of virtual tourism as close as possible to the reality, not too beautify the virtual tourism and the real scenic spot real combination, in order to prevent tourists from arriving at the destination after a larger psychological gap.

4.4 Virtual Tourism is a Powerful Tool for Publicity and Exhibition

It can be used in public places such as tourist reception centers, Tourist Service Centers, exhibition halls, exhibition halls, exhibitions and hotels, etc. It is a good way of tourism publicity and display, with good effect and strong influence, can greatly enhance the popularity and influence of tourist destinations or scenic spots there are many 3A, 4a scenic spots are relatively rare but have great potential to bring people to these scenic spots through virtual tourism. The three-dimensional virtual display stimulates the interest of tourists. The biggest feature of tourist attractions and general products is their immobility. The combination of three-dimensional virtual display and interactive creativity makes the solidified scenic spots come alive let one scenic spot after another become a flowing landscape. Let the visitor place the scenic spot the same experience, is the scenic spot propagandizes the display best technique.

4.5 Restoration of Historic Sites

Due to natural and man-made reasons, many historical sites and cultural relics have been greatly damaged, and some have even disappeared. We, as posterity, will never get a chance to see those magnificent sights. So virtual tourism in the history of the reconstruction of this aspect can be more mining. It can bring out the destroyed or disappeared relics and buildings in the reality, and make

the history reappear, and can let the tourists go through the historical scenes to experience the ancient people's life and appreciate the fine architecture. To some extent, it makes up for the shortcomings of later generations.

4.6 To Develop New Tourist Attractions

Because virtual tourism is realized with the help of computer and virtual reality technology, his tourism scene can't exist in his life, or there are scenes in life that are inaccessible to most people, even to humans, and accessible only to machines, it is mainly based on the imagination of the designer as well as the technology copy the real scene to carry on the simulation. In this way to meet people's needs for novelty can stimulate people's imagination and creativity.

With the rapid development of science and technology, virtual tourism, as a big product of the new era, will only be a supplement to real tourism, not to replace real tourism, but to promote real tourism progress. There will be differences in the competition will also be in which to understand their own shortcomings, to understand their shortcomings will also be improved and improved. With the advent of virtual travel, there will be pressure on travel agencies and attractions to train their staff to provide professional services. Other scenic spots that lack roads and other things will try to repair the roads and improve the experience of other facilities and facilities or other attractions. Will lower the prices of some tourist souvenirs, the emergence of virtual tourism some tourism products can find suppliers to negotiate prices less tour guides and travel agencies profit commission also less gap prices lower tourist attractions prices will also be lower. At the same time, it will improve the quality of nearby residents, only the quality of the word-of-mouth rise will have more visitors want to experience. When people see how beautiful the environment is in virtual tourism, they will also arouse the idea of protecting the environment. When people see the difference between good and bad, they will also pay attention to the idea of protecting the environment and try to restore the beauty of nature. With the theory discussion and the gradual improvement of information technology, virtual tourism will be better and better development, China's tourism will develop more and more comprehensive.

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