

TECHNOLOGY APPLICATION THROUGH VIRTUAL REALITY TOURISM AND IMAGE PROMOTION SOLUTIONS FOR BUSINESSES

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Abstract

An innovative use of the internet and social media that incorporates several cutting-edge technologies is called the Metaverse. It can not only construct a parallel universe that is strongly autonomous yet related to the actual world, but it can also instantly deliver the immersive experience of virtual worlds. Since the 4th industrial revolution took place, this process has supplemented humanity with many new and advanced technologies, positively affecting aspects of the economy and society. Particularly for the tourism industry, new trends such as virtual reality tourism and smart tourism are also known for the key contribution of technology. The essence of the tourism business is to sell experiences, not products. Therefore, tourism is one of the pioneers in the application of virtual reality (VR) technology. Many travel businesses have implemented VR technology on their websites or apps, giving users the opportunity to try before buying a tour and thereby having a positive effect.

Keywords: Technology, Tourism, Business, Virtual Reality

1. INTRODUCTION

Virtual reality tourism is based on virtual reality technology. Virtual reality technology uses the 3D world, including visual, kinesthetic, and auditory elements, to give users the most realistic experience. Each person participating in virtual reality tourism will experience these things from the perspective of a tourist. Through virtual reality tourism, visitors can travel anywhere using applications, software, and virtual technology devices such as headsets. In addition, visitors may also be asked to wear extra gloves. Existing travelers still see virtual tourism and virtual reality tourism as a temporary alternative to traditional travel. Tourists will usually choose these two forms of tourism to check out the tourist destination. If they are interested, they will choose traditional tourism as a real trip. Besides, suppliers can also recreate famous tourist attractions of the past that are now lost or create a completely new tourist destination. Tourists can use virtual and physical tourism to visit these places. Virtual reality tourism often requires more from the provider in terms of applications and devices to operate than virtual tourism. Usually, a virtual tour only provides visitors with some views of famous places so they can get the most out of them. So these are usually just images from multiple angles and intro videos a few minutes long. In contrast, virtual reality tourism requires visitors to use headsets, gloves, and install specialized applications for a completely "immersive" experience. You will really immerse yourself in a 3D world like in blockbuster movies, in a 360-degree environment like in real life. Therefore, you will utilize all five of your senses: sight, hearing, taste, smell, and touch, just like in traditional travel, when traveling in virtual reality. With virtual travel, you only use sight and hearing, so the effectiveness of the trip is also much lower. To maintain and develop virtual tourism, developers do not have to spend too much money, and tourists also do not need to buy virtual technology devices. On the contrary,

virtual reality tourism requires more technology, human resources, and equipment, so travel companies will have to spend a large amount of money to set up, find human resources, and invest in technology that effectively collects revenue. The cost is high, so companies will certainly charge higher fees for their services. Visitors will have to carefully consider their budget before signing up for a virtual reality tour. In Vietnam, virtual reality in the tourism industry is still in the development stage, but it is gradually becoming more popular. There are several tourist destinations in Vietnam that have applied VR technology to bring new experiences to customers. For example, the Ha Long Wonder Park tourist area in Quang Ninh has opened a VR game room, allowing visitors to explore the beauty of Ha Long Bay and the famous landmarks of Vietnam. At Sun World Ba Na Hills resort in Da Nang, visitors can experience a wide range of games and virtual reality activities such as skiing, Himalayan adventure, a magic train ride, car racing on mountain peaks, and participating in virtual world exploration activities. At Phu Quoc Amusement Park, visitors can participate in virtual reality games with many interesting experiences, such as racing on the island, adventure on another planet, and visiting famous landmarks in the world. At Vinpearl Land Nam Hoi An, visitors can participate in a virtual reality experience with a range of activities such as skiing, conquering Mount Everest, joining Iron Man adventures, and exploring the rainforest. Some hotels and resorts also offer virtual reality services to their customers. For example, the JW Marriott Phu Quoc Emerald Bay resort has a virtual reality room equipped with advanced technology so that customers can explore the virtual world and experience things they cannot find in the real world. The superiority of VR technology has also been strongly applied to create a competitive advantage to attract tourists. Tourism Wales has created virtual reality tour videos that let tourists dive with dolphins or fly with kingfishers to lure tourists to the country's famous wildlife attractions. National Geographic Explore VR takes users to destinations as far away as Machu Picchu, walks with elephants in Africa, or experiences the wildlife of Antarctica. First Airlines in Tokyo (Japan) has established the world's first virtual reality airline to provide passengers with a realistic experience when flying to a destination. Passengers were brought into a simulation of the plane's cabin, taught aviation safety regulations, and served delicious food. When "landing", they experience a virtual tour using VR-specialized glasses: the plane lands on the runway, and the image through the plane window appears. Airport signage greets passengers and directs them to a reserved taxi. Visitors walk through the streets, hear random people talking, pose for pictures, go shopping, learn how to prepare a local dish, etc. Just like it's happening in the real world.

2. LITERATURE REVIEW

Lanier, who founded the American VPL corporation, first forth the idea of virtual reality (VR) in the 1980s. The American professor Steuer analyzed several "virtual media" in the 1990s, including books, television, and virtual reality goggles, contending that they are all different levels of virtual reality and defining virtual reality from the viewpoint of telepresence. Ryan continued by defining virtual reality strictly, stating that any technology that creates a "immersive sensation may be considered a sort of virtual reality. Virtual reality technology was first created prior to the 1980s, and its growth at this time was mostly focused in industry.

Sutherland envisioned a display technology in 1965 that would let users to interact with virtual items and fully immerse themselves in the virtual world. In 1975, Borstin made the claim that the early, authentic tourist experience had been exhausted in mass society and that people were more eager to pursue a trip experience that could be experienced whenever and wherever, demonstrating that virtual tourism had long been a component of the tourism behavior at this time. Virtual tourism is still in its infancy; computer simulation has been proposed, and researchers are still working to further it.

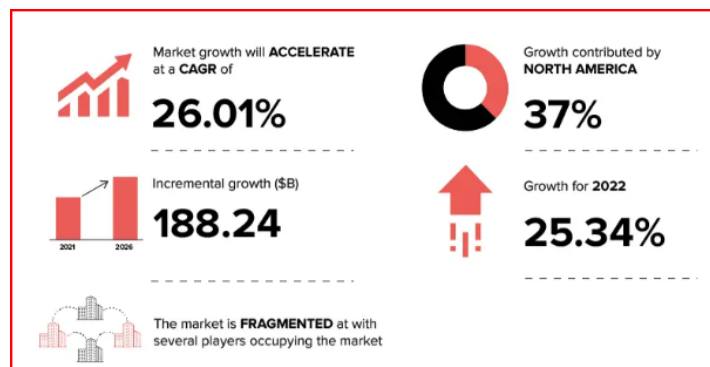
Virtual reality technology has been around since the 1950s and has had a significant influence on the travel and tourism sector. Numerous scholarly perspectives have emerged, and these perspectives clash and significantly advance the growth of virtual tourism. However, with the advent of virtual tourism and the quick advancement of technology, people's comprehension of virtual tourism has grown and its acceptance has steadily increased. Many research may have different findings now since some investigations have trailed behind.

3. RESEARCH METHODOLOGY

For experts to determine the factors affecting the use of technology in general and the use of virtual reality in tourism in particular, the study was conducted using the interview method. This makes it easier to define variables and create a draft questionnaire. After answering the introductory questionnaire, the study was conducted. complete surveys and formal questionnaires, detect inefficiencies, and put in place management measures in accordance with the criteria. In addition, the study inherits from domestic and foreign documents.

4. RESEARCH RESULT AND DISCUSSION

Figure 1: Global Metaverse Market in travel and tourism industry 2022-2026

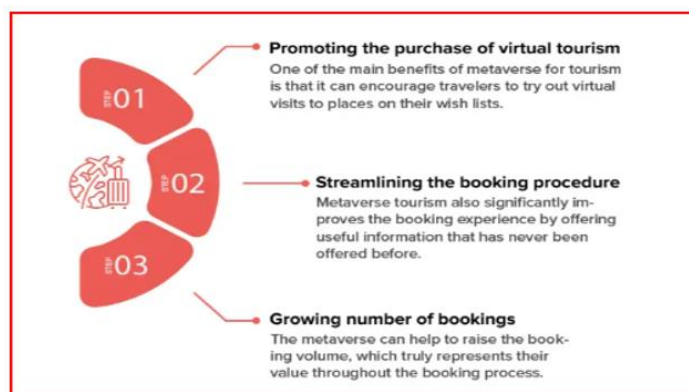


Source: Appinventiv metaverse in travel and tourism – a market overview 2023

For promotion activities in the tourism industry, the virtual tourism model brings great value to the city and service-oriented tourism businesses. First, the virtual tourism model will be an effective tool for promoting and communicating from afar about cities in general and famous tourist destinations with international friends. Virtual reality technology is a trend around the world, especially among young people, so the virtual tourism model easily attracts the attention

and interest of the community. According to the World Economic Forum (WEF), virtual reality tourism is an indispensable direction to keep up with the general trend in the digital era. The term Tourism 4.0 has begun to be used to aim at a breakthrough for the revolution in the global tourism industry. In which virtual reality (VR) tourism and augmented reality (AR) have made a remarkable difference. It allows visitors to experience, directly interact with the destination space, create excitement, and create an impression and desire to go to a certain place.

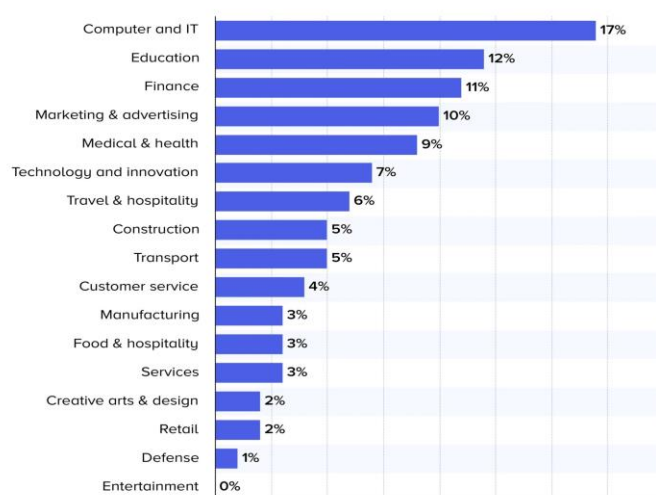
Figure 2: Key benefits of Metaverse for tourism



Source: Appinventiv metaverse in travel and tourism – a market overview 2023

Travelers may use the Metaverse to take virtual trips to the sites on their bucket lists, which is one of its main advantages in the travel and tourism industries. For instance, by adopting an interactive virtual experience that can accurately replicate a real-world scene, travelers may obtain a detailed understanding of a particular site before they visit it.

Figure 3: Leading business sectors worldwide that have already invested in the Metaverse



Source: Appinventiv metaverse in Business 2022

The numbers highlight how widely used and favored the metaverse is in the corporate world. Let's explore some of the Metaverse's potential use cases and the wealth of advantages they provide now that we know where it is.

5. RECOMMENDATION

Forecasting the situation of virtual reality tourism in Vietnam in the coming years is difficult because many different factors must be assessed, including technology development, visitor psychology and trends, government support, and competition with other countries in the region. However, investing in virtual reality tourism will be a way to enhance the travel experience of customers, especially in the context of the complicated evolution of disease and its impact on the industry. Tourism. Customer demand for virtual reality experiences is also increasing, especially in the fields of sightseeing and entertainment. In terms of technology, currently, virtual reality travel-related technologies are developing rapidly and are being widely used. This will help businesses and tourism organizations develop new and diverse products to attract tourists. Technologies such as 5G, IoT, AI, AR/VR, etc. will make virtual reality tourism development more efficient and provide a better experience for customers. The first disadvantage of virtual tours is that they have the potential to become spoilers for the visitor's real trip. Visiting a new place is a unique experience because it is the only time you get to experience your "firsts". But you've seen the scene from virtual travel, so when it comes to traditional travel, it won't be the first time. No matter how advanced virtual reality technology is, it still can't deliver a fully immersive experience like traditional travel. Virtual tourism can only let you see the scenery, completely ignoring the other important elements of a trip: interacting with the locals, immersing yourself in the culture, and experiencing the food. Many tourists choose to travel with family and friends on traditional tours. With virtual travel, although they can still travel with friends and family, the social interaction is not as comprehensive anymore. Sometimes, the tourist destination is only a small part; time with loved ones is the important factor that makes a trip interesting. Therefore, grasping customer psychology, businesses and companies should have the right plan and direction for using technology in tourism.

6. CONCLUSION

Up to the present time, virtual reality tourism in Vietnam is being evaluated as one of the potential development trends and brings many benefits to the tourism industry as well as tourists. However, for sustainable development and customer satisfaction, business units need to invest more in the quality of content and services, creating unique and impressive virtual reality travel experiences, more statues. In addition, there should be cooperation between business units, authorities, and experts in the tourism industry to create a complete and effective virtual reality tourism development ecosystem. Virtual reality tourism brings many benefits, including enhancing the experience, inspiring tourists, changing the way destinations are marketed, and bringing services in the tourism industry in line with current development trends. However, it is not intended to compete with or replace any actual experience, but rather as a way of adding new experiences for travelers. And so it can be considered that the application

of VR in tourism is the work of dynamic managers with knowledge and strategic vision.

CONFLICT OF INTERESTS

None

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