Infrastructure in tourism promotion: Feasibility study of Camera 360 application in Pantai Sembilan, Giligenting, Indonesia

A Cholil[1][*], M I Rosyid[1] and A H B Nur[2]

[1] Faculty of Social and Cultural Science, Universitas Trunojoyo Madura, Bangkalan, Indonesia
[2] School of Education, College of Arts and Sciences, Universiti Utara Malaysia, Kedah, Malaysia
[*]Corresponding author email: cholil@trunojoyo.ac.id

Abstract

Virtual tour is one of the developments in virtual reality technology that is able to explore a place to get information and images about the place using computer devices and smartphones. There needs to be a development of promotional media for Gili Sembilan Beach tourism in Sumenep in the form of application content that is fully packaged and attractive to tourists, both domestic and foreign. This research method is using the Multimedia Development Life Cycle (MLDC) method. Followed by the second stage is to create virtual tour media content and the last is to apply promotion. The creative concept of the application content is equipped with a virtual reality feature that displays tourist destinations in 360°, so that users can feel a space experience that gives its own impression. related to the concept, data material collected, design and application of application content results that can later be distributed as an effort to promote tourism objects in online media and social media.

Keywords

Tourism promotion, Camera 360, Pantai Sembilan

Introduction

An alternative activity in choosing to travel, one of which is an alternative means that can be done without physical mobility known as a "virtual tour" where someone can enjoy tourist activities through certain digital platforms. Conceptually, virtual tourism is a simulation of an existing location, usually consisting of a sequence of videos or still images that use other multimedia elements such as sound effects, music, narration, and text or using three-dimensional models (Handjojo, 2013).

So far, the promotion of Gili Sembilan Beach tourist attractions is only based on writing and photos that are not interactive. New tourist attractions will attract the attention of potential visitors, if they have a shadow of the atmosphere or scenery around the tourist site, interactively.

Virtual tour is one of the developments in virtual reality technology that is able to explore a place to get information and images about the place using computer devices and smartphones (Triani, 2018). The existing virtual tour technology is with 360+180-degree panoramic images. Looking at the representation of a location in a panoramic image can give the impression of being in the middle of that location.

It is necessary to promote Gili Sembilan Beach tourism in Sumenep in the form of application content that is fully packaged and attractive to tourists, both domestic and foreign. The creative concept of the application content is equipped with a virtual reality feature that displays tourist destinations in 360°, so that users can feel the experience of space that gives their own impression and are interested in visiting directly to tourist destinations in Bandung.

Methods

The method of conducting this research includes creating virtual tour media content at Pantai Sembilan, Giligenting, Sumenep. The Virtual tour Application content development method that will be used in this study is to use the Multimedia Development Life Cycle (MLDC) method. MLDC is a methodology created by Luther (1994) which consists of six stages, namely Concept, Design, Material collection, manufacturing, testing and distribution.

Figure 1. Activity method chart in the form of the main stages of research activities (Author's composition, 2023)

At this stage there are several activities that determine the quality of the Virtual Tour, namely taking 360 photos, editing 360 photos, taking content materials (photos and videos), creating graphic content, visualization and uploading on the Virtual Tour application. Next, implement promote Virtual Tour content. Especially with the implementation of the right promotion model, namely the internet-based promotion model, with the hope that it will have the opportunity to increase the number of tourist visits to these destinations. Activity method chart in the form of the main stages of research activities are presented in Figure 1.

Results and Discussion

Results

As for the preparation and development of Virtual Tour Application content, the author has carried out several stages, which are as follows:

1. Concept, is the stage of determining the basics of the application to be created such as who the program user is (audience identification), the type of application, the purpose of the application, and the general specifications of the application. Here researchers will create some content for Applications and content for social media. Social media content that can be filled for 360° content is YouTube and Facebook social media. As for Instagram and Tiktok, it can still be used for 360°-based files. Stages of the concept of preparing Virtual tour 360° Content are presented in Figure 2.
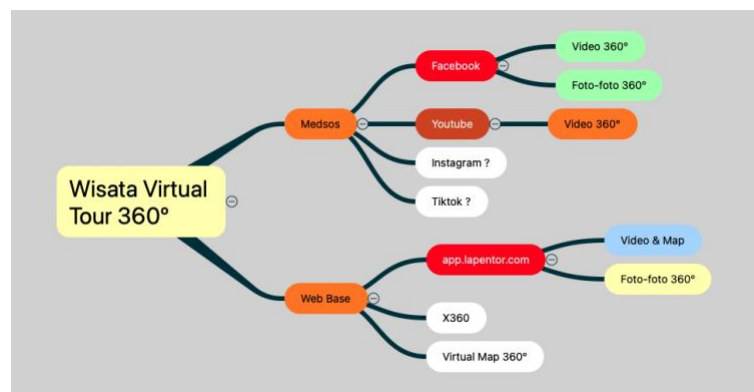

Figure 2. Stages of the concept of preparing Virtual tour 360° Content

2. Design is the stage of making detailed specifications about program architecture, style, appearance and material needs / materials for the program (Astuti, 2013). The use of lapentor.com web site for the use of 360° photo placement as a means of Virtual tour are presented in Figure 2.
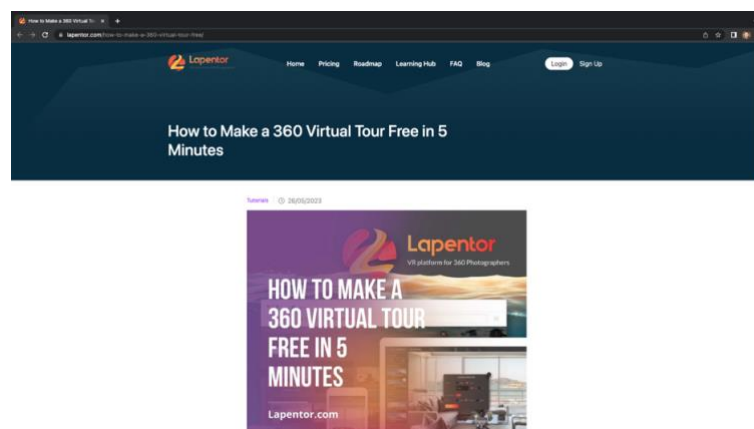

Figure 3. The use of lapentor.com web site for the use of 360° photo placement as a means of Virtual tour

3. Material collecting, is the stage of collecting materials in accordance with the needs worked. The 360° shooting as material Virtual tour is presented in Figure 4.

Figure 4. 360° shooting as material Virtual tour

4. Assembly, is the stage of making programs by arranging all objects or multimedia materials collected in accordance with the design that has been made. The utilization of lapentor.com website for the application of 360° virtual photos Tour Pantai Sembilan, Sumenep are presented in Figure 5.
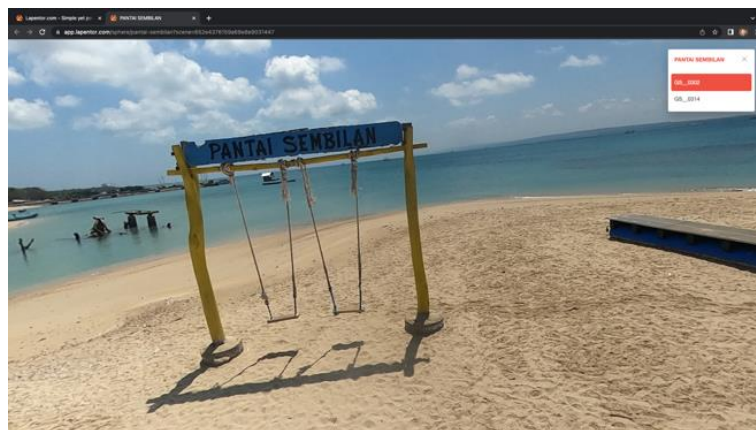

Figure 5. Utilization of lapentor.com website for the application of 360° virtual photos Tour Pantai Sembilan, Sumenep

5. Testing, is the stage of testing the ability and performance of the program that has been made, whether it is as expected. In the testing stage, researchers have tested and made https://app.lapentor.com/sphere/pantai-sembilan links. At this stage several tests have been carried out by linking several 360° photos that have been set in the link address above, to ensure that each pointer in the associated display, has the impact and graphical reaction as expected.

6. Distribution, is the stage of storing programs that have been tested in a storage medium. At this stage, researchers have conducted a feasibility test of a web-based application by copying the link, where this link can be shared in several online media to be used as an address for presenting virtual tour photos that are displayed on online applications as addressed in the link above. From this link address, users or those who want to feel the virtual tour display with a 360° model can feel more exciting.

At the stage of uploading 360° photo files produced by cameras such as the GoPro Max 360° as researchers use can be supported by Facebook. GoPro Max is a 360° camera designed to take photos and videos in 360° format, so as to provide viewers with a more interactive experience. Researchers have uploaded 360° photo and video files directly to Facebook. Once uploaded, Facebook users can explore the 360° photo by dragging or moving the screen to see various angles. The Utilization of Facebook media for the application of 360° Videos and photos, virtual Tour of Pantai Sembilan, Sumenep are presented in Figure 6.
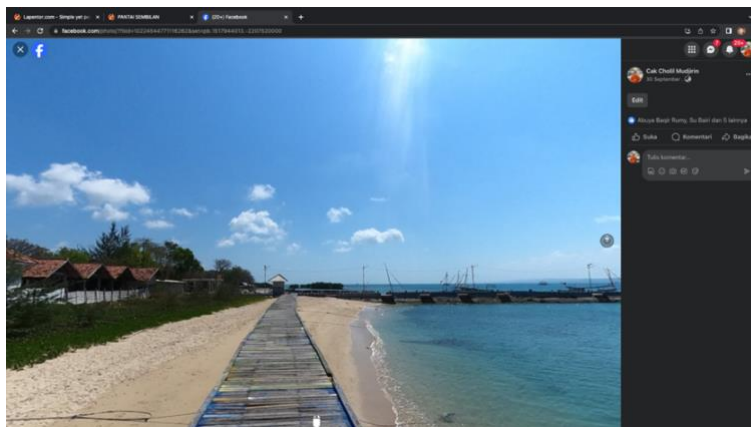
Figure 6. Utilization of Facebook media for the application of 360° Videos and photos, virtual Tour of Pantai Sembilan, Sumenep

The distribution linked to social media Facebook and YouTube in the form of presenting virtual tours online can provide an immersive and interactive experience to users. It is important to choose a platform that suits your needs and ensure that the virtual tour can be easily accessed by the target audience. In addition, monitor analytics to understand the extent to which the virtual tour contributes to marketing objectives and user interaction.

It's also important to make sure that files uploaded to Facebook are in a format that suits the platform. Facebook supports 360° photo and video formats such as equirectangular projection. GoPro Max usually produces files of the appropriate format, but it is still worth making sure to check the settings and file format before uploading it to Facebook.

Also, keep in mind that support and technical features on social media platforms may change from time to time, so always check Facebook's latest guidelines and updates related to 360° photos and videos for feature changes or improvements.

Discussion

Preparation in doing a virtual tour is not more complicated than the actual tour because it is considered much cheaper and more convenient. Traveling virtually can save time, where tourists do not have to arrange travel visas, arrange and book travel packages, or in doing the trip itself. One can access equipment that supports virtual reality systems, put on equipment, choose a trip and can immediately arrive at the tourist destination to enjoy the attractions offered. The travel and tourism industry has

benefited greatly from the implementation of information technology. Information technology systems govern many aspects of travel and tourism products, from airline and hotel reservations to multimedia packages designed to market tourist destinations. It is not impossible that in the future, virtual reality technology can penetrate the tourism industry. A person who uses virtual tourism to access information regarding a tourist destination reportedly has a higher level of satisfaction with their travel experience than those who do not use the virtual tourism service. The relationship between Virtual Tour, 360° content with promotional media is usually done to make a profit and introduce a business or business, but in the virtual tour application that is being researched into an attractive promotional media for users to introduce a tourism place, where this application will provide information in the form of appropriate content about tourist sites visited virtually to the public and potential tourists, Building a good image so that tourist attractions, especially Gili Sembilan beach, become an attraction that can attract prospective tourists to visit Gili Sembilan island as a tourist visit destination and will be increasingly known to many people, it can be achieved by socializing this virtual tour application.

The implementation of a 360° virtual tour in Pantai Sembilan, Gili Genting, Sumenep can include various steps to improve and expand the project. Here are some ideas that might be applicable, namely: 1. Virtual Tour Area Expansion, by identifying and adding other areas or locations of interest around Pantai Sembilan to the virtual tour. As well as explore options to expand the scope of the virtual tour, including nearby attractions, marine life, or other natural landscapes. 2. Integration with Virtual Guides, namely implementing a virtual guide or audio guide feature that provides in-depth explanations about each location or important element in the virtual tour, and uses narration to share unique stories or interesting facts about Pantai Sembilan. 3. Community Participation, by involving the local community in the development and maintenance of the virtual tour. And support the involvement of local residents to ensure accurate information and support the sustainability of the project. 3. Partnership with Tourism Agencies, namely partnerships with authorities, such as local tourism agencies, to obtain further support and promotion and discuss the potential integration of virtual tours in regional tourism marketing campaigns. The hope is that this sustainability plan can provide a foundation for the development of a 360° virtual tour project at Pantai Sembilan, Gili Genting, Sumenep. It is important to continue collaborating with relevant parties and involving local communities in every stage of implementation.

Conclusion

From the results of research on the Development of 360° Virtual Tour as a Tourism Promotion Media in Sumenep-Indonesia, Malaysia and Thailand, it is still needed special device needs, to produce good 360° photos, often need a special camera that supports the technology. This can be an obstacle for users who do not have the device. As well as the limitations of Photographic Equipment and Skills where the use of 360° photos

requires sophisticated photographic equipment and good photography skills. This may be an obstacle for some users who do not have sufficient access or knowledge. But the use of 360° photos on Facebook social media has certain advantages, especially in creating a unique visual experience and increasing user engagement. In the development process, consultation with the Local Community is still needed, which involves the local community in project planning and development. Ask for their input and knowledge about cultural values, natural beauty, and other aspects that should be highlighted in the virtual tour. Taking these suggestions into account, it is hoped that the 360° virtual tour project in Pantai Sembilan can provide an immersive and value-added experience for users and support the preservation and promotion of local tourism.

References

[1] Astutik, Tri Kusuma, Pengembangan Media Pembelajaran Menggambar Proporsi Tubuh Menggunakan Macromedia Flash Untuk Siswa X Busana Smk Muhammadiyah 1 Imogiri, Universitas Negeri Yogyakarta, 2013.

[2] Triani AR, Adriyanto AR, Faedhurrahman D. Media Promosi Bisnis Potensi Wisata Daerah Bandung Dengan Aplikasi Virtual Reality. J Bhs Rupa. 2018;1(2):136–46.

[3] Handjojo F. Perancangan Dan Implementasi Aplikasi Content Management System Dengan Format Virtual Online Tour. J Tek Inform Univ Tanjungpura. 2013;1(2):1–6.

[4] Luther AC. Authoring interactive multimedia. Academic Press Professional, Inc.; 1994.