

Virtual Sport Event Activities During Pandemic

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ABSTRACT

The main objective of this study is to analyse the experiences of visitors and participants in accessing the virtual exhibition at the VR Duathlon Series TOBA 2020, which was taken place on September 26, 2020, at a location around Lake Toba, North Sumatra. This sports event is routinely held every year in different locations. However, it was carried out online during this pandemic to implement several activities such as exhibition information, competition activities, and tourism through virtual media. This research on virtual exhibitions completed using quantitative methods of analysing virtual reality from virtual reality application at sports events—the quantitative methods used by surveying 102 participants who accessed the virtual exhibition at the sporting event. This study stated that the completeness of the information regarding competition and tourism activities and the visual appearance of the environment from the virtual exhibition had a considerable influence on participants who accessed the virtual exhibition. The participants who access the virtual exhibition shown a desire to visit the event location after accessing the online virtual exhibition. This result answers the question that the application of virtual reality in sports events can provide a different experience for participants accustomed to attending events offline but need a more realistic virtual appearance to simulate the environment where the event took place as a visual and tourism attraction.

Keywords: user experience, user perception, virtual exhibition, virtual reality

INTRODUCTION

Since the start of the pandemic in early 2020, many exhibitions and sports events have been at a standstill. Including sports event such as the Triathlon Series Indonesia, which is in 2019, took place in the Sungailiat, Bangka area (Primus, J., 2019). In 2020, the event Series needed some adjustment into Duathlon Series, which is in the Toba Lake area. Due to the pandemic, it was decided to hold the event virtually. This event was formulated to elevate the local culture as part of tourist destinations to show the richness of the cultural environment from the local area in digital form and virtual experience. The VR DUATHLON Series TOBA 2020 Is a sports event that is supposed to take place at Toba Lake; however, during the pandemic situation, the attendee can still visit the Toba Lake through the website and complete the sports competition online from their home. The attendee can join a submission to run and cycle the whole area of the event supposed to be in an open space or park in Lake Toba's middle of Samosir island.

The challenges faced by the developer are that they must realize that when they initiated the event virtually, the pandemic still occurs, so there will be some limitation in the type of activities the participants could do. On the other part, they must give the same experience for the attendee and participant in the virtual world without compromising Lake Toba's beauty and culture. As we all know that in a digital world, we need certain boundaries or scope of the virtual world that we offer. Therefore, we need to limit that to only the places or area accessible for any attendee to come to this event and feel like they are in the actual Danau Toba. To create the experience, the developer must generate or build the digital version of Lake Toba and the whole park, tent event track race that give the viewer the sense and sensation of being in the actual event. Even though this is a sporting event, the main goal is tourism and showing the area's cultural heritage.

METHODS

In this study, the research method type used is quantitative research. This study seeks to find and analyse the problem of "whether the virtual image on virtual reality can influence user perception to come to the destination". This study requires participants to visit the virtual reality from the sports event website, entering the virtual reality then filling out all the questioned regarding the virtual image from the virtual reality on the website. The target questioner in this study were man and women with age range between 17 to 45 years old. The questionnaire is distributed to the public (limited group). The number of participants who filled out the questionnaire was 102 participants with a total of 11 questions. A total of 11 questions are divided into two types of questions: the first four questions about gender, age, activities and destination, and the rest of the questioned about the virtual image from the virtual reality on the website.

The questionnaire results found that 29% of men and 71% of women had filled out the questionnaire. The data shows that 67% of participants have never visited the Danau Toba area, and 33% have visited Danau Toba. The questionnaire found that only 32% of participants were active in outdoor activities or sports events, and 68% were not active in outdoor activities or sporting events.

Converting experience from destination to virtual UI

The tourist attraction is the focus of driving tourism in a destination. In this term, virtual reality technology will be used as an implemented form of tourist attraction. Tourist attractions can be applied to motivate tourists to come to a destination. Motivation can come from tourists' internal or emotional characteristics and external and situational factors such as tourist knowledge or the image of a particular destination.

In this paper, the main discussion is about the destination and the tourist attraction in this sport event. To visit this sporting event virtually, the visitors can enter via the website by displaying an entrance gate in the form of a roof from the Toba traditional house, which is one of the customs in the North Sumatra area, which are the location for this sports events. However, the gate's appearance has not shown the complete identity of the Toba traditional house; the image of the gate still lacks detail; however, the environment shown already have a natural look. The appearance of a traditional house and its environment needs to be adjusted to show the cultural ornament and motif from the location where the event provides cultural tourism.

The World Tourism Organization defines cultural tourism as the movements of persons who satisfy the human need for diversity, tending to raise the cultural level of the individual and giving rise to new knowledge, experiences, and encounters. From the main gate, visitors walk through the Information board explaining the Main stage, Race Expo, Toba Gallery, and Race submission. The image of the information board looks modest and need a more virtual image. The ornament from North Sumatra and Toba need to be added to show the local cultural identity. Then The visitor can go to the main stage and Toba Gallery to see the cultural event from this destination, such as dance performances, tourist attraction and culinary places. In the area of Map Exhibition, the visitor can find all the area from this sport event. The website's content needs to be adjusted to meet the user need and exposed to sport and tourist experience who cannot come to the location.

The experience of visiting a place and tourist destination will provide a different experience. We can achieve this experience from direct interaction with the people, the environment, buildings, and objects seen around the location. How can visitors get the same experience by visiting tourist attractions through virtual reality is what we need to keep in mind. The experience between being in a location by being able to touch the object being seen and enjoying local culinary will undoubtedly be different from visiting the location virtually. The experience of visiting a location or tourist destination virtually provides a different experience for visitors. There are many limitations in seeing building objects, tourist environments and culinary delights. This impression can be described as a person's mental representation of their experience, values, feelings, and overall perception of a specific location (Ching Fu Chen, D. C. T., 2007). The term "venue picture" is a commonly debated concept. However, it can be divided into three primary components: a cognitive component that refers to a person's beliefs or awareness about a location's characteristics. This affective component refers to the tourist's feelings about a location. Furthermore, a conative component refers to what a person does with this knowledge (Chun Yang Wang, M. K. H., 2010).

Since tourists have become familiar with technology, it has become common to promote a destination in today's world with Virtual reality. However, enjoying tourist attractions in a virtual world is still limited by the existing user interface. Creating virtual reality from a tourist location requires environmental data, complete objects so that users can still enjoy the same experience or get close to the actual environment. Virtual reality holds a certain appeal for the tourism industry to communicate intangible tourism experiences to a larger audience. The tourism industry has long relied on visual images to engage with and influence customers when marketing destinations. Due to the indefinite nature of tourism, marketers depend heavily on visual imagery to advertise destinations (Aziz, A., 2011).

Virtual reality has great potential for promoting a destination due to the immersive sensations it can offer and its ability to communicate how a distant place or experience feels. As a promotional tool, Virtual reality has the potential to reduce the perceived risk of intangible services helping travelers make more informed decisions with more realistic expectations (Lisa R. Klein, 2003).

User Perception on Virtual Image

Perception of virtual images in visual reality begins with the questions given, including whether the visual display in the gate area (enter) attracts participants to see more of the existing VR display. The initial appearance of the website is one of the attractive data for website visitors to find out more about the material on the website. As many as 84% answered they were interested in seeing the display in the gate area (enter) from the questioner results. The view on the gate area can display in Figures 1. After entering the main gate, visitors can go through the Information Board named the Plaza as the next direction to see the whole event (Figure 2).



Figure 1. Gate area.



Figure 2. The plaza.

In the following question, the display on the Toba gallery, which contains the destinations, culture, and cuisine on the VR, attracts participants to visit these tourist attractions. From the questioner results obtained data that 75% of participants are interested in visiting these tourist attractions. The display in the Toba Gallery seen in figures 3 & 4.



Figure 3. Toba gallery.



Figure 4. Main stage.

On questions concerning the appearance of tourism, such as culinary tours, cultural tourism, and destination tourism, almost 85% of participants answered that they were interested in VR display regarding cultural tourism and culinary tourism. The appearance of cultural and culinary tourism display in figures 5 & 6.



Figure 5. Culinary tourism page.



Figure 6. Cultural tourism page.

In questions about the decorative appearance of gates and buildings in VR, about 78% of participants stated that the image in VR displays regional culture characteristics. As for the display on the main stage, which provides information, 71% of participants stated that the information given on the main stage was quite clear. The main stage is a location that contains information and explanations about sports events, competitions, and tours from the local area. In the closing question of this questionnaire, about 54% of participants expressed interest in participating in the competition held at this sporting event, and 78% expressed interest in participating in this VR event in the future.

RESULTS

After the researcher finds the literature and makes questioners that already take from 102 responses, there is 66,7% who never know Danau Toba. From the age 17-45 years old, the most active for outdoor sport and interesting in sport event is age 17-25 and 36-45. This research analyses the interface on the website of the <https://www.triathlonseries.id/vr>. It bears results to an exciting outcome that many correspondents do like the opening area.



Figure 7. Gate area.



Figure 8. Image caption.

The researcher also analyses the website gallery, including a page advertisement of destination, culture, and culinary that will provide exciting information for the audience, not just for the sports event enthusiast but also for the public. The website gallery can make a good opportunity for the committee to make a new innovative event for the long term. The environment design in this virtual tour from the exterior and interior (description) perspective already represents the culture of Danau Toba. VR's applications and suggestions for the travel industry area are both vast and critical, so the experiences acquired from future VR the travel industry exploration can give immediate, viable worth to the travel industry area. This area is continually developing, and, very much like some other arising innovation, VR will give the area the two difficulties and openings. Just with a more inescapable and complete comprehension of the connections between VR and the travel industry, will these difficulties best be met and the chances best abused. Luckily, notwithstanding its related difficulties, VR offers an assortment of promising applications in territories going from arranging and the board to amusement. Besides, VR offers the possibility to make substitute encounters that might be amazingly valuable for legacy protection in specific circumstances. As VR technologies advance over the years, the potential uses for VR inside the travel industry area will keep on expanding in both number and significance, so it will be the work of the travel industry scientists and experts to misuse VR for the novel chances it presents.

Since the coordination of VR into the travel industry area stays in its preliminary stages, just a restricted measure of existing exploration has straightforwardly inspected VR's applications and suggestions for the area. Likewise, because VR innovation is developing quickly, and more youthful generations may demonstrate more open than their archetypes to these advances, VR the travel industry research should be continually re-vali-dated through nonstop examination (Sussmann, Silvia and Vanhegan, Hugo, 2000). For example, research like investigation of perspectives toward VR the travel industry substitutes would potentially get various outcomes if it were led today or one more decade from now. Hence, more examination is required regarding the subjects talked about all through this paper, and a considerable lot of these points effectively loan themselves to possible future investigations. For instance, past arranging research led in places like Sweden could be extended to explore the viability of VR as a participatory travel industry arranging apparatus in non-industrial nations, where networks less acquainted with VR-type innovations might be even more effectively influenced by VR's peculiarity impact (Heldal, 2007).

CONCLUSION

A further examination into VR and the travel industry advertising could explore the adequacy of utilizing VR to showcase the travel industry objections to various segment fragments (for example, by sexual orientation, age, or ethnicity). Also, the examination could expand on crafted (Wan, C.-S., Tsaur, S.-H., Chiu, Y.-L., & Chiou, W.-B., 2007). who contrasted virtual encounters and pamphlets for showcasing amusement parks and characteristic parks, to contrast VR and other promoting gadgets (for example, video) or for different sorts of attractions (for example historical centers). In addition, promoting exploration could examine the similar viability of various VR yield gadgets (for example, HMDs, AR goggles, or CAVEs) for showcasing various kinds

of attractions (for example, recorded destroys or seashore resorts). Examination on VR as the travel industry diversion could research the feasibility of building up engaging VR attractions at various sorts of existing destinations (for example, typical attractions like the Grand Canyon or synthetic attractions like the Eiffel Tower). Exploring VR and the travel industry training could examine the instructive advantages of VR historical center shows as contrasted and more customary displays. Exploring openness for impaired travelers could examinewhich qualities of a VR application (giving comprehensive data or offering good designs) are most firmly wanted by disabled guests unfit to get to a specific site. Numerous chances exist to explore the chance of utilizing VR encounters as a substitute fortravel industry encounters. For instance, the examination could research sightseers' assessments about the genuineness of unmistakable simulacra like Lascaux II. This examination could determine whether certain qualities of travelers (for example, age, identity, or travel insight) could impact the view of realness in different conditions likewise impact the impression of validness for VR the travel industry encounters (Budruk et al., 2008). Additionally, exploration could research what situational factors (for example, area or endorsement by a usable power) or VR qualities (for example, olfactory reproduction, wide flood, or offering the experience to other people) increment the discernment that a VR substitute encounter is genuine. Expansion partner, the examination could research how various inspirations (for example, seeing a procession, shopping, or meeting local people) and limitations (for example, absence of assets, chronic frailty, or security fears) sway travelers' acceptance of a VR substitute.

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REFERENCES

- Aziz, A. (2011). Destination image: an overview and summary of selected research (1974 –2008). 2(1). <https://doi.org/10.1504/IJLTM.2011.037185>
- Ching Fu Chen, D. C. T. (2007). How destination image and evaluative factor affect behavioural intentions? Tourism Management, 28, 1115–1122. <https://doi.org/10.1016/j.tourman.2006.07.007>.
- Chun Yang Wang, M. K. H. (2010). The relationship of destination image, satisfaction and behavioural intentions: An integrated model. Journal of Travel and Tourism Marketing, 27(8). <https://doi.org/https://doi.org/10.1080/10548408.2010.527249>.
- Heldal, I. Supporting participation in planning new roads by using virtual reality systems. Virtual Reality11, 145–159 (2007). <https://doi.org/10.1007/s10055-006-0061-3>
- Klein, L. R. (2003). Creating virtual product experiences: The role of telepresence, Journal of Interactive Marketing, Volume 17, Issue 1,Pages 41-55, ISSN 1094-9968, <https://doi.org/10.1002/dir.10046>
- Budruk, M., Dave, D. White, Jill A. Wodrich & Carena, J. Van Riper. (2008). Connecting Visitors to People and Place: Visitors' Perceptions of Authenticity at Canyon de Chelly National Monument, Arizona, Journal of Heritage Tourism, 3:3, 185-202, DOI: 10.1080/17438730802139004
- Primus, J. (2019). Komplet, ini enam lokasi Indonesia Triathlon Series 2019. Kompas.Com. [Rahayu, A. (2020). Siaran pers: Kemenparekraf dukung Indonesia Duathlon Series Danau Toba 2020 secara Virtual. Kompas.Com. <https://old.kemenparekraf.go.id/post/siaran-pers-kemenparekraf-dukung-indonesia-duathlon-series-danau-toba-2020-secara-virtual>.

Sussmann, Silvia and Vanhegan, Hugo, "Virtual Reality and the Tourism Product Substitution

- or Complement?" (2000). ECIS 2000 Proceedings. 117. <https://aisel.aisnet.org/ecis2000/117>
- Wan, C.-S., Tsaur, S.-H., Chiu, Y.-L., & Chiou, W.-B. (2007). Is the advertising effect of virtual experience always better or contingent on different travel destinations? *Information Technology & Tourism*, 9(1), 45–54.