

Chapter 51

InLAD VR

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Abstract

There are some damaging heritage sites and sensitive environments that are vulnerable for crowds to visit as well as physical impairment that limit people's movement in travelling. Thus, 'In Less Accessible Destination Virtual Reality' (InLAD VR) is designed and developed as a useful mobile application that allows the users to view 360 degrees moving video through a VR Headset, which provides them with the accessibility to virtually travel to destinations across Malaysia. The objective of InLAD VR is to enable users in using this mobile application as an alternative to promote sustainable tourism. It is also to educate and give awareness to the users about tourism destinations that need to be preserved as well as to act as a medium in terms of promoting Malaysia's tourism products. This mobile application targets users interested in tourism, elderly users, users with impairment as well as users travelling to endangered tourism destinations.

Introduction

InLAD VR can benefit the users as it helps to give them good exposure towards less accessible destinations in Malaysia such as Mt. Kinabalu Peak, by providing a mental escape and helping to minimize impact in travelling to fragile destinations. It can also act as an educational tool, especially for today's youth by providing knowledge about protected tourism destinations, thus aiding tourism organizations in marketing the image of our tourism products. The novelty of the InLAD VR is that it will be the first mobile application that highlights virtual tour by using moving videos that focuses on less accessible destinations and protected areas in Malaysia's rather famous tourist attractions with supplemented information.

Content

a) Virtual Reality (VR)

Virtual reality is an artificial environment which provides an experience that can stimulate our sight and hearing provided by any electrical or technological devices that allows anyone to feel what happens in their surrounding as though they are real. According to Tussyadiah, Wang and Jia (2017), VR means to create an environment in which users can retrieve information via multi-sensory (e.g; auditory, visual and kinesthetic) modalities, and realistic representation of the environment as it portrays can be experienced by the users.

b) Accessibility

Referring to Sambhantan and Good (2013), due to complex geographical location and endangered tourism destinations, some destinations might become less accessible to human beings. Besides that, impairments can be one of the contributing boundaries that does not allow them to visit some places the same way other tourists do. Next, according to Aziz and Siang (2014), there are 38 heritage sites and properties listed by UNESCO heritage committee that are in danger. Another example of limited access which prohibits people to visit one particular destination at a certain time is Bali, due to the potential eruption of Mt Agung. The same goes for Mt Kinabalu for having high carrying capacity

at its peak. Thus, InLAD VR aims to provide spatial presence or sense of being in those destinations to the users by providing them the accessibility to virtually travel to those sites.

c) InLAD VR use and application

InLAD VR is created using 'Android Studio', which is a tool developed to build applications on every type of Android device. InLAD VR stands for 'In Less Accessible Destination Virtual Reality' because of the uniqueness that this mobile application only contains and focuses on some less accessible destinations and protected areas that become challenging for users to reach. This mobile application uses a graphical user interface, which will display on the users' phone screen through a selection from the menu and icons provided. When users turn the InLAD VR on, firstly, they are able to choose their preferred languages. Next, they will continue to choose between two options: either the 'protected area' option or the 'less accessible destination' option on the menu. Then, the users continue to choose a destination they would prefer to travel to and read some information regarding the preservations of the destination. The last icon will instruct the users to explore the environment by asking them to insert their phones into the VR headset so VR video will be played. Besides using the application for entertainment purposes, the InLAD VR intends to attract today's youth in terms of academic uses, especially for students to allow them to experience a new way to approach learning. In addition, in terms of commercialization, the InLAD VR is developed to be a part of the tourism organizations in Malaysia; such as Tourism Malaysia and Ministry of Tourism and Culture, to promote famous tourist destinations, while at the same time aiming to educate tourists on sustainable tourism.

d) InLAD VR and sustainability

This mobile application is developed in order to try to be a new approach in sustaining a tourism destination. The InLAD VR will give users precise information on why the destination is being protected. Referring to Guttentag (2010), VR can be a tool to preserve heritage sites as it can portray real situations of degradation of the tourist sites such as erosion. Hence, it will raise awareness of its users and help tourism organizations, which are obligated to protect the places, to prepare strategies in monitoring the restoration process for the long run. According to Aziz and Siang (2014) the virtual reality technology can be considered as a holistic application. VR does not only provide an alternative to endangered heritage sites visitation and cause less impact of overcrowding visitors, but also may act as a form of preservation, marketing and an educational tool for the tourists or visitors of the place. Thus, it shows how VR can be a holistic approach to many divisions and promote sustainable tourism using technology. Jamei, Mortimer, Seyedmahmoudian, Horan and Stojcevski (2017) agree that implementing technology in urban services and infrastructure will help in the management of resources. Improving sustainability and sustainable tourism development are essential and can bridge a missing gap from the current researches by understanding the use of innovativeness (Cranmer, Jung, Dieck & Miller, 2016). This shows that the InLAD VR is aiming to apply technology to sustain tourism attractions.

Conclusion

InLAD VR will highlight the importance of utilizing the power of technology in contributing to the environment and community. Besides aiming to promote sustainability and accessibility by allowing users to travel virtually, it targets to educate and give awareness to users especially the students once they are done using this mobile application. The importance of studying such an innovation is to acknowledge and observe how far VR technology can benefit in sustaining a tourist destination as well as to promote sustainable tourism. Lastly, the InLAD VR has the potential to extend its application and function to portray more less accessible destinations and protected areas, not only in Malaysia, but also in other endangered historical places across the globe.

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