

# DEVELOPMENT OF INFORMATION SYSTEM VR 360° TOUR TOURISM OF LAMPUNG

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## Abstrak

Virtual Reality (VR) is a technology that allows users to interact with a computer-simulated environment. Currently VR is used for online or offline games but actually VR can be applied in various fields, such as tourism in Lampung Province. As a province which has many nature and interesting place, various food and culture, Lampung Province is one of great place for tourism. With VR 360°, users in Indonesia or around the world can choose the tourism place that they want after view (touring) the whole place. User get more information about the tourist destination and get help with the comparison of tourist types, tourist facilities and tourist environment that provided on the website. So, with this website make it easier for people who want to traveling in Lampung Province and also it become an opportunity in improving the economy of local residents and cities

Key Worlds : Virtual Reality, Camera 360°, Computer Vision, Tourism, Website.

## 1. INTRODUCTION

Tourism is an important thing to do in life, it is just like a secondary need. It can be done in various way, like : shopping, staying in hotels, climbing mountain, go to the beach and etc. Lampung Province is one of good place for holiday in Indonesia, because it has everything of natural places to go such as mountain, beach, lake, etc and because of geographical location Lampung Province also has many cultural diversity which can be the attraction of the people to come. The best ways to promote the Lampung Torism is using technology information by social media.

The newest trend is using Virtual Realty (VR).

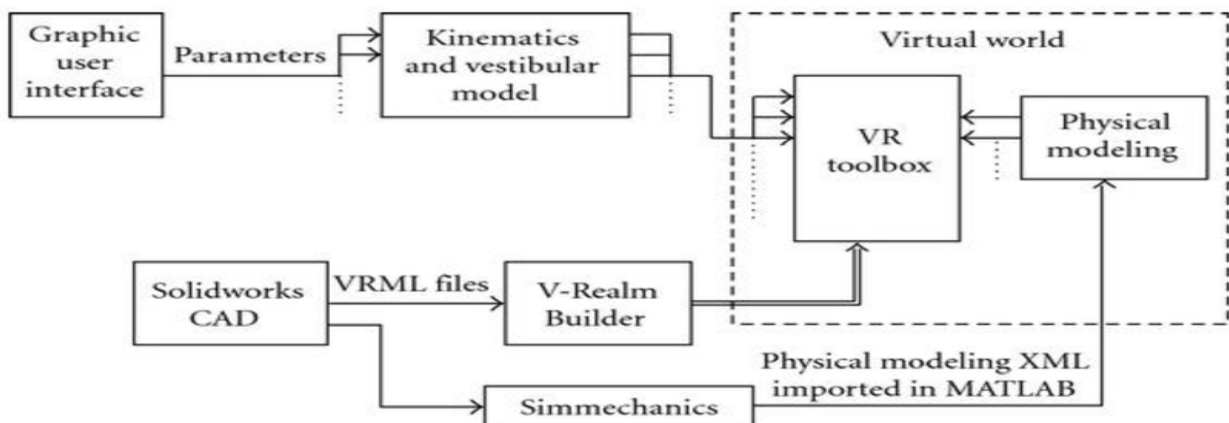
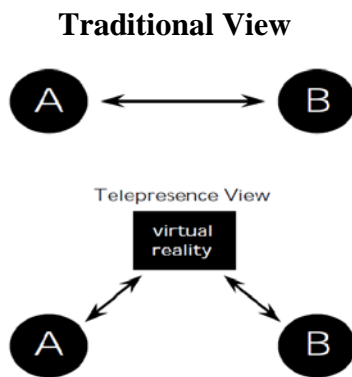
Virtual Reality is a technology that enables users to interact with a computer-simulated environment, a real environment imitated or truly an environment that exists only in imagination (Psotka, 1994). The improvement of the VR world is supported by technological advances that exist specially in the advancement of computer technology. The advancement of computer technology was also supported by software that developed quickly too. With the advancement makes it easier for us in making animation and three-dimensional game (Adinata, 2009).

With VR, user can see all part of the tourism places as if user has already there. So user can choose the best tourism place that they want to visit before come to Lampung and help user to order or book facilities that they like so it can avoid users disappointment when they travelling.

The purpose of this study is to help people in Indonesia or around the world to know tourism place in Lampung and make easier to them to bookig the facilities tourism place so can avoid dissapointment by touring the place using VR.

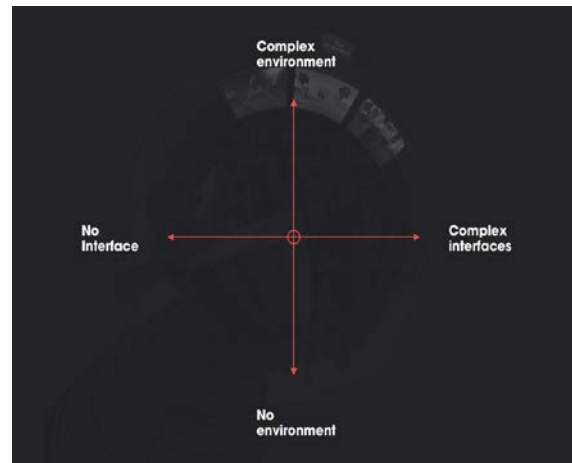
## 2. RESULT METHOD

**Figure 1:**  
**Two Models of Mediated Communication**  
(after Krueger, 1991, p. 37)



**Figure 2 :**

Antarmuka adalah kumpulan elemen yang berinteraksi dengan pengguna untuk menavigasi lingkungan dan mengendalikan pengalaman mereka



**Figure 3 :**

Schematic block diagram of how the virtual reality world is created and controlled

**Figure 4 :**

Kebutuhan Device dalam penelitian

NO	DEVICES	SPEFICATION
1	Camera 360	Ricoh Theta S : <ul style="list-style-type: none"><li>- Bisa mengambil Foto/Video 360° Spherical.</li><li>- Sensornya 2 x 12MP 1/2.3", dengan Output 14.4MP.</li><li>- Twin Lens System, f/2 Maximum Aperture.</li><li>- Full HD 1080p Video Recording at 30 fps.</li><li>- Live Streaming via USB atau HDMI.</li><li>- Auto, Shutter Speed &amp; ISO Priority Modes.</li><li>- ISO 1600 &amp; Manual Exposure up to 1 Min.</li></ul>
2	Smartphone	Android Platform : <ul style="list-style-type: none"><li>▪ OS : Android OS, v6.0 (Marshmallow) / MIUI 7</li><li>▪ Chipset : Qualcomm MSM8996 Snapdragon 820</li><li>▪ CPU : Dual-core 2.15 GHz Kryo &amp; dual-core 1.6 GHz Kryo</li><li>▪ GPU : Adreno 530</li></ul>
3	NoteBook	Laptop Dell 7460 14" Developer Edition (Core i7 gen 7, ram 8 gb, storage 1 TB, window 10 pro 64 bit)
4	Prototyping OS	<ul style="list-style-type: none"><li>- Unreal Engine 4 uses C++ and comes with <a href="#">Blueprint</a>, a visual script editor</li><li>- Less cross-platform compatibility : <i>Windows PC, Mac OS X, iOS, Android, VR, Linux, SteamOS, HTML5</i></li></ul>

### 3. CONCLUSION

The conclusion of this paper are :

1. With Virtual Reality (VR), user can get many information about the tourism place. Even they can feel as if the truly has already travelling there.
2. In the website also user can know and book / order the facilities that provided in that tourism places
3. Avoid dissatisfaction user to come travelling in Lampung

### 5. FUTURE ENHANCEMENT

We hope in the future this application can be applied and the features collaborate not only with tourism places but also with hotels, restaurants and etc