

# **CULTURAL INTRODUCTION APPLICATION IN LEMBATA DISTRICT NTT USING ANDROID- BASED AUGMENTED REALITY**

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## **ABSTRACT**

*There are many ways to preserve cultural heritage in Indonesia, such as continuing to utilize traditional items for clothing, traditional houses, culture, dance, and others. Therefore, it is necessary to create a cultural introduction application in NTT Lembata Regency using augmented reality technology. The NTT Lembata Regency Cultural Introduction Application uses Android-based augmented reality technology to display 3D products. This is due to the limited information provided by the Lembata Regency Government through the website. The application of cultural awareness can provide experience to the community and encourage cultural enrichment through virtual understanding. The purpose of this study is to develop a cultural introduction application for Lembata Regency, NTT, including the design and implementation of applications displaying local culture. In addition, to ensure the stability and performance of the application on different Android devices by implementing testing methods and optimizing the application to avoid interference when the application is running. The method used in this study is RAD (Rapid Application Development) which consists of several stages, namely problem identification, literature study, research design, data collection, application design and development, and testing.*

*The results of the development of an Augmented Reality-based cultural introduction application in Lembata Regency show that the application can run well on Android devices without requiring an internet connection, allowing users to access cultural information anywhere and anytime. The application interface presents main features such as Play, About, Profile, and Quit. The Play feature allows users to display traditional clothing and woven fabrics in 3D using a scan marker. Users can zoom in, zoom out, adjust the model according to the sub-district and play object animations using the available tools. The application is designed using various tools such as Adobe Photoshop, Blender, Mixamo, Vuforia, and Unity 3D. Testing shows that the application is stable and compatible with various Android devices, increasing the accessibility of cultural information and expanding the cultural awareness of the community and tourists.*

*Keywords: Augmented Reality, woven fabrics, traditional clothing, cultural introduction application.*