

Digitalization of Cultural Heritage Data in East Nusa Tenggara Initial Stage Towards the Virtual Museum of Austronesian Culture in East Nusa Tenggara



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Background

The potential threats to the traditional villages in East Nusa Tenggara (NTT) are relentless. Fires could devastate the villages, which are largely made from organic materials, making them highly vulnerable to complete destruction. Indonesia's geographical location at the meeting point of major tectonic plates makes it prone to various natural disasters. Several incidents have directly affected the cultural heritage, such as fires and Cyclone Seroja, and the lack of high-resolution archival data makes preservation difficult.





MAP OF INDONESIA



Objective

1. Digital archiving of Sumba's traditional village cultural heritage in East Nusa Tenggara for future reliability.
2. Transformation of information through the transfer of cultural heritage to a broader audience
3. Realization of high-quality digital data for Sumba's traditional villages into a virtual museum of Austronesian culture.

Concept of

the

Metaverse is a world where users can communicate, work, play, and interact like in the real world. This project involves digitalizing cultural heritage and organizing the data into a Metaverse database for future preservation and public accessibility. It combines elements of AR -VR, and a robust database for cultural heritage archiving

Vulnerability of Cultural Heritage

The focus of this activity is on the vulnerability of traditional villages and their valuable cultural elements. Traditional villages display various artifacts, including architecture, ritual objects, and daily-use items. The aim is to document these objects digitally to preserve them and prevent total loss due to natural disasters or negligence.

Strategic Value

Cultural heritage objects have become crucial for tourism development in many countries. The use of the Internet of Things (IoT) is part of this initiative to connect, share, and publish cultural data for wider public access. This project aims to make cultural data accessible for various stakeholders, including tourism development, academics, and corporations.

Implementation and Outcome Implementation

The activity will take place on Sumba Island, focusing on 40 traditional villages across four regencies. Data collection will include photos, videos, audio, 360° video, and 3D images, with specialized data recording tools and expertise required.

Outcome

The project will result in high-resolution digital photos and videos, 360-degree videos, aerial views, 3D digital photogrammetry, linguistic data, ethnographic data on traditional villages, megalithic heritage, and traditional dances. This data will be stored on a high-capacity server for future use.

RESU ITS

The digitized cultural heritage data of Sumba's traditional villages will be processed and made accessible in a virtual museum. Users can access the data via a dedicated portal under construction at

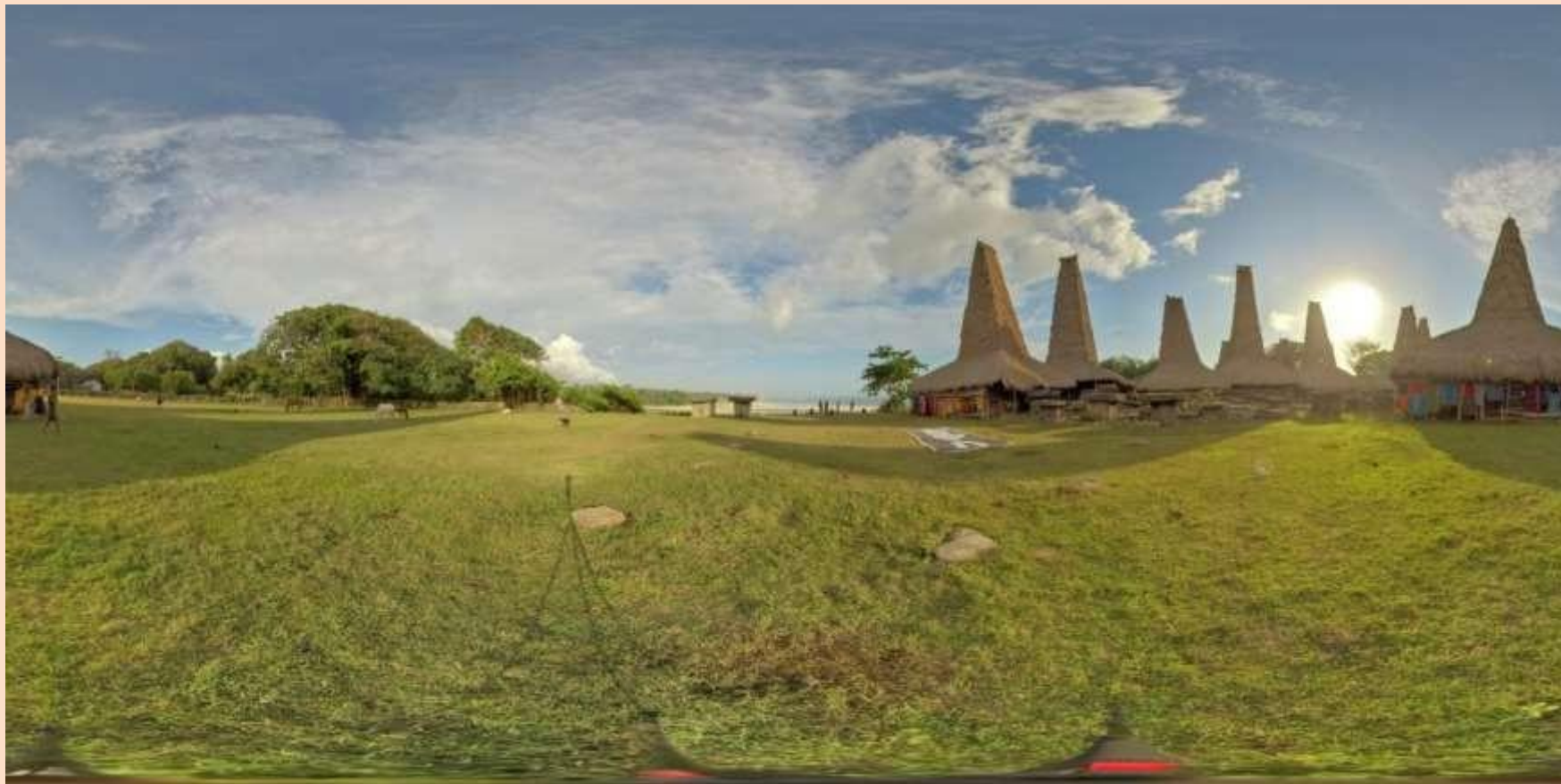
<https://austronesia.museumvirtual.id/>



Conclusion

Conserving cultural values is essential, and the development of technology and the creativity of millennials should be supported. The digital preservation of cultural heritage will help preserve it for future generations. Ai and multimedia are key to thriving in the digital era of metaverse and Big Data

Traditional Village Ratenggaro, Southwest Sumba Regency



Megalithic Stone grave in the Traditional village
Prai yawang, East Sumba Regency



Megalithic tradition in the Traditional
village Wai Galli, west Sumba Regency



authentic audio video recording process for traditional leaders



data collection activities







THANK
YOU

