Introduction Of Local Culture Between Indonesia - Thailand Through Media-Based Infiniti Architecture and Virtual Web Applications 3D Modeling Virtual Reality (VR), Augmented Reality (AR), and Screen Mirroring

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ABSTRACT : Indonesia is one of the countries in the world that has a lot of cultural heritage, local culture is an asset of the Indonesian Nation that must receive attention, especially in the current era of Globalization. National culture is an important part of the Indonesian state that can be developed and managed as well as possible, introducing culture to the international arena is the obligation of all of us. Based on these problems, the solution offered is in the form of technological media including virtual web 3D Modeling Virtual Reality (VR), Augmented Reality (AR), and screen mirroring, the introduction of Indonesian and Tahiland local culture with media based on 3D Modeling web applications is a process of utilizing and improving the function of one of the technology developers from Basic Technology consisting of Kubity products that provide services in the form of 3D Modeling viewers, Virtual Reality (VR), Augmented Reality (AR) and Screen Mirroring functions, this series of technologies is an access to introduce culture to the international scene as a form of service on an international scale. The method used in the method used in the implementation of the program is through a participatory approach in the sense that the proposing team and partners are proactively involved in each activity. The proposing team and partners are actively involved in identifying the needs or solutions to the problems to be solved. Furthermore, the proposing team designed and made technological media in the form of technological media including virtual web 3D Modeling Virtual Reality (VR), Augmented Reality (AR), and screen mirroring which were implemented to Eakkapa Sasanawich Islamic School located in Thailand as partners in this program.

Keywords - Augmented Reality_2; Culture_3; Media_4; Virtual Reality

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1. INTRODUCTION

The cultural diversity of a region is something that cannot be denied. It is an asset that can be useful for the implementation of cultural education and can also contribute greatly to the formation of local identity. In the context of understanding a pluralistic society, ethnic culture is part of the acculturation of various cultures that come from outside and affect local cultures that have developed, cultural diversity (multiculturalism) is the result

of a long historical journey marked by waves of migration and cultural diffusion in the archipelago. Information about Indonesia's local cultures on the international scene is still limited, in the form of books and websites. The information is still in the form of text accompanied by images of traditional houses in the form of two-dimensional (2D) images. Objects in the form of three-dimensional (3D) models are needed to present and visually present traditional houses that are more interesting and more detailed. In addition, technology is also needed that can interact with these objects in Realtime.

Making 3D virtual objects of Indonesian traditional houses equipped with information related to traditional houses from each province and applying markerbased Augmented Reality to visualize Indonesian traditional houses using the Tangible User Interface (TUI) method (Favorisen R. et al., 2019). According to Bamodu (Suryani, 2016) Virtual Reality (VR) is a medium of interaction between humans and computers in a virtual form that can present the effect of real feelings through various feedback such as virtual channel sensors, aura, touch, smell and so on Niedenthal et al (2023); Voordijk & Vahdatikhaki, F. (2022); Agbo et al (2023). Supporting applications that allow users to access information about local culture through projects developed by Google are Google Arts & Culture, Valerio, et al (2022); Thamwipat, (2019). In this technology users can use AR features to access information about local culture and know more about the surrounding environment.

Virtual Reality as a learning media has been applied to national monuments in Indonesia (Wardijono et al., 2015). The technology that can be used is Virtual Reality (VR) technology, and Augmented Reality (AR), Seeing the importance of the introduction of local culture owned by Indonesia, we are therefore interested in carrying out international service with the focus of service activities with the title Introduction of local culture between Indonesia - Thailand through media-based infinity architecture and virtual web applications 3D Modeling Virtual Reality (VR), Augmented Reality (AR), and screen mirroring. It is hoped that with this service, the local culture of Indonesia, especially in South Sulawesi, will be better known internationally.

2. HEADINGS

Cultural preservation and recognition is an effort to maintain and introduce the values of art and culture, traditional values by developing manifestations that are dynamic, flexible and selective, as well as adjusting to situations and conditions that are always changing and developing. In identity, there is local wisdom, or local wisdom, which comes from the local genius of various ethnic groups. This local wisdom should be knitted into a unity of culture, or culture, to realize a nation, namely the Indonesian Nation, Lina, & Sadipun (2018). Culture has existed since thousands of years ago when humans first appeared. The same habits have persisted and shaped human behavior from generation to generation. At least from an etymological perspective, culture is the result of human intellect. Culture, which in this case is referred to as culture, has a very close relationship with society. In the process of cultural turnover between generations, it is necessary to have an intermediate generation who can understand the older generation and can communicate in a language that is easily understood by the next generation, Hidayat et al (2021).

The introduction of local culture between countries has an important role in many aspects of human life, both at the individual and group level. The importance of the introduction of local culture between countries is currently very vital in terms of several aspects such as awareness and respect for other cultures. The introduction of local cultures between countries can help increase awareness and respect for other cultures, Orhan (2022); Pujayanti (2017). Through this introduction, people can understand and appreciate cultural differences, thus increasing tolerance and respect for other cultures.

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There are several ways that people, especially as the younger generation, can support cultural preservation, participate in maintaining and introducing local culture to the international stage, namely Culture Experience through 3D virtual web media, VR, AR and screen mirroring. Culture Experience Is a cultural preservation carried out by plunging directly into a cultural experience, Cáceres et al, (2022); Shadiev et al (2021). for example, if the culture is in the form of dance, then the community is encouraged to learn and practice in mastering the dance, and can be performed every year in certain events or festivals. Thus, local culture can always be preserved. The goal is education or for the development of the culture itself and the potential of regional tourism.

Thus the younger generation can enrich their knowledge about their own culture. In addition to being preserved in the two forms above, local culture can also be preserved by getting to know the culture itself. Furthermore, through the process of Virtual Reality or virtual reality, Virtual Reality, abbreviated as VR) is a technology that allows users to interact with the environment using a computer-simulated environment, a real environment in the real world that is copied or a fictitious environment that only exists in the imagination, Akhsani (2020); Setyawan et al (2023). Current virtual reality environments generally present a visual experience displayed on a computer screen or stereocopically, but some simulations include additional sensory information, such as sound through loudspeakers.

The understanding of local culture in various countries is currently facing the threat of decline due to various factors such as the impact of globalization, modernization, and technological advances which result in the younger generation being less interested in preserving the increasingly marginalized culture. Many cultures and traditions have been forgotten by the people due to the lack of knowledge and understanding of these cultural aspects. The result of the decline in awareness in preserving local culture is that the identity and identity of a nation is becoming increasingly faded. In addition, the cultural diversity that should be the wealth of each country is also at risk of extinction. Therefore, it is very important to raise public awareness, especially the younger generation, about the urgency of preserving local culture.

3. INDENTATIONS AND EQUATIONS

The method used in the implementation of the Program is a participatory method which means that the proposing team and partners are directly and pro-actively involved in every stage of the activity. this participatory method was chosen to ensure that the program is relevant to the needs, culture, and aspirations of the targeted community. The implementation of this program, the proposing team and partners will collaborate directly where partners and the implementation team identify needs in the form of Initial Consultation, form an implementation team in making a joint plan which will later be implemented collaboratively in each team's home country, then evaluate and improve the program to ensure that the program implemented can continue.

Step Identification of Problems and Partner needs, this stage is carried out at the beginning to collect information about partner needs by conducting in-depth analysis to understand the priorities and urgency of partner needs. in identifying the needs carried out also considers aspects of the resources and expertise of the team that will be involved in the program related to how local cultural preservation between countries can continue to be preserved. From the results of this identification, several problems were found related to local culture between countries, namely the lack of awareness and understanding of the importance of preserving local culture, lack of appreciation for cultural heritage, lack of technological innovation in introducing local culture to young generations and the lack of cultural education in schools and the available curriculum does not prioritize teaching local culture.

The next strategic step is to form an implementation team in making a joint plan, at this stage the team makes a joint plan that will be implemented collaboratively in each of the team's home countries. the team formed consists of members who have diverse backgrounds, expertise and experience. A diverse team can bring different perspectives and enrich the process of planning and implementing the activities undertaken. At this stage, it was jointly agreed that the solution would be to design and create media technology including 3D virtual web modeling Virtual Reality (VR), Augmented Reality (AR), and screen mirroring, a media introduction to local culture between countries based on 3D web applications that would be implemented to partners. After the

technology development is complete, the team visits partners to disseminate, train and implement the technology to partners. Training, mentoring, and implementation of technology media technology including 3D virtual web modeling Virtual Reality (VR), Augmented Reality (AR), and screen mirroring to partners.

The next strategic step is to evaluate and improve the program to ensure that the implemented program can continue. Evaluation of program implementation will be carried out after each activity is completed from a series of activities as a whole. The evaluation is carried out to assess the extent to which the activities that have been carried out have succeeded in achieving the expected goals and positive impacts, Serrano-Perez et al, (2023); Ghisellini et al, (2016). In addition, evaluation is also carried out to find out whether the solutions provided are effective and efficient and can be applied sustainably. This stage is carried out by determining the field and solution that is the target of community service implementation. In this case, the target to be achieved in this program is to increase partners' understanding of the importance of preserving culture between countries through cultural recognition training using developing media technology in the form of technology media including virtual web 3D Modeling Virtual Reality (VR), Augmented Reality (AR), and screen mirroring which will be implemented to partners. The use of Virtual Reality technology as a medium for cultural recognition in Indonesia through museums, parks, zoos, tourist attractions, and cultural heritage, Dewi & Sahrinan (2021); Al Hakim (2022) in this study utilizes virtual technology in introducing Indonesian culture in three dimensions.

4. FIGURES AND TABLES

The progress of a nation will certainly not be separated from the Human Resources (HR) factor in it. And the quality of human resources in achieving goals is built by knowledge through the education process and the role of culture in a nation. Education is to apply and instill human manners, where the goal of achievement is related to the mind, and produces good people. Good judgment here is not only the result of the value of a cultural consideration, but whether or not a person is good before God. A good nation is a nation that is able to maintain its culture so that it can be distinguished from other nations. Maintaining the nation's culture amidst the onslaught of foreign cultures is not easy. The character and culture of a nation must be maintained so that it can be distinguished between one nation and another.

Technology has a very important role in human life, humans can do anything through technology, facilitate human work. Encouraging changes in the socio-cultural perspective of society. The development of technology has become a momentum for the birth of various national cultures globally. The unification of technology with human life encourages useful innovations to develop cultural culture, especially Indonesian cultural culture. The influence of this technology can introduce cultural cultures that the community itself does not know more deeply. The influence of technology can introduce cultures that the community itself does not know deeply. from technology, it makes a breakthrough from social media, for example. Creating an innovative interesting content about the culture that exists in Indonesia, such as regional dances or traditional houses. The sophistication of technology makes all events that occur in this world or any information directly spread through the internet without limits. There is no doubt that technology is needed, but the most important thing is to consider the good and bad effects it causes and understand that the use of technology must be based on ethics.

Initially technology developed slowly but surely along with the pace of culture itself and the level of human civilization, but in the end the development of technology accelerated very quickly. The more advanced the culture, the more developed the technology because technology is the development of a rapidly advancing culture. Technology is an innovative result of the development of human intelligence that must be responded to properly, otherwise it will cause social problems that will penetrate the identity and identity of the cultured Indonesian nation. The existence of Information Technology and its development must be responded quickly and well, by creating new breakthroughs in cultural promotion. The use of the Internet is one solution that can be used, in addition to conventional media and cultural exchange activities.

After conducting an introduction to the introduction of local culture between Indonesia and Thailand through media-based infinity architecture and virtual web applications 3D Modeling Virtual Reality (VR), Augmented

Reality (AR), and screen mirroring on students of Eakkapa Sasanawich Islamic School Thailand which is under the auspices of the Association of Education Cultural International (AECI) Thailand which was held on the 4th to the 9th of May 2023, the results we obtained stated many benefits from the process of learning culture between countries, including:

- Broaden your horizons and understanding

Learning about other countries' cultures will open your mind to a wider world. You will gain knowledge about the customs, traditions, history, and values upheld by other societies. This broadens your horizons about human diversity and allows you to understand different perspectives.

- Improves Communication Skills

Understanding the culture of other countries also helps improve communication skills. You can learn a foreign language, master new vocabulary and understand unique cultural expressions. These skills are valuable assets in an increasingly connected and multicultural world.

- Developing Openness and Tolerance

Gaining an in-depth understanding of another country's culture can help open your mind and heart to differences. You will learn to appreciate diversity and build a sense of tolerance towards cultures, beliefs and traditions different from your own. This strengthens your mental openness and fosters harmonious cooperation in a global society.

- Provides Valuable Learning Opportunities

Learning about another country's culture is a priceless learning opportunity. You can unearth new knowledge about art, music, literature, and innovations that come from other cultures. This enriches your life experiences and helps form a more holistic understanding of the world.

- Expanding Career Opportunities

Knowledge of other countries' cultures is a plus in an increasingly globalized and multicultural world of work. The ability to adapt to different cultures and understand international business customs will give you a competitive edge in your career. You can also establish a valuable international network for the future.

- Building Intercultural Connections

Through understanding the cultures of other countries, you can act as an agent of change who builds bridges between cultures. By respecting and appreciating the cultures of others, you can promote dialogue, cooperation and brotherhood in an increasingly connected society.

Here are some pictures of activities during the process of implementing activities for the introduction of local culture between Indonesia and Thailand through media-based infinity architecture and virtual web applications 3D Modeling Virtual Reality (VR), Augmented Reality (AR), and screen mirroring, including:

(student practice on media-based infinity architecture and virtual web applications 3D Modeling Virtual Reality (VR), Augmented Reality (AR), and screen mirroring for culture introduction)

(MOU and MOA signing process by service partners from Eakkapa Sasanawich Islamic School and Association of Education Cultural International (AECI) Thailand)

5. CONCLUSION

The summary of this program is that the lack of local language, namely Thai, is the main problem in the implementation of the service, during the presentation of the content to the participants, there were also some difficulties because the presentation of the content was in English and the stakeholders still have difficulty in using English. However, the help of partners in this regard the tutor as a translator of the content made it much easier during the implementation of the program.

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