

Virtual Reality Design as Digital Learning Media in Preserving Local Culture of Tarawangsa Art

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Abstract: Civilization and culture become significant entities in the historical development of human life. The rapid development of information and communication technology (ICT) has changed the structure of social life in society, including the preservation of Ormatan arts. One of the practical efforts in the preservation of the art of Ormatan is through the media of documentation that utilizes the sophistication of today's technology. Tarawangsa art, as Sumedang's original art, began to be rarely performed by the young generation in the village of Rancakalong in particular and Sumedang Regency in general. Therefore, an interactive documentation media is needed to be able to be used as a reference and perpetuation of the Ormatan Tarawangsa art to remain sustainable. One such media is virtual reality (VR). The purpose of designing VR media is to help cultural and cultural actors to have an effective media in socializing the native culture of a particular area so that the moral values contained therein can be sustained. The research method conducted by using a qualitative approach involving Ormatan Tarawangsa art figures and virtual reality media practitioners in a direct participatory manner. The results show that virtual reality media can provide convenience in practising Ormatan Tarawangsa art, which is on the brink of extinction for the younger generation.

Keywords: Digital Media, Information and Communication Technology, Ormatan art, Tarawangsa, Virtual Reality.

INTRODUCTION

The activities and creativity of the people of West Java, which reflect an agrarian society in general, have resulted in a variety of displays of Ormatan art as an expression of gratitude for having obtained abundant agricultural products. One of the Ormatan arts in West Java related to agricultural community's ratification is a ceremony closely with respect to Dewi Sri which is still held in West Java, such as the Mapag Sri ceremony in Cirebon, the Ngidepkeun / Neuteupkeun Pare Ceremony in Baduy, and the Ngalaksa ceremony in Rancakalong with Tarawangsa (Yulaeliah 2006).

Along with the development from agrarian society towards an industrial society based on science and technology, the development of art and culture in agrarian societies experienced a setback due to the penetration of information technology, which increasingly spoiled human beings in many ways. This technological progress is a challenge that ought to be faced wisely by Indonesian people. Based on observations, the increasingly widespread technological developments nowadays, have a significant impact on various cultural changes and

character of the Indonesian as a nation. The shift in culture and character of Indonesian has become a problem, culturally, and affected Indonesian civilization as a whole. All elements of society are equally responsible for these problems, including government, communities, families, and the young generation. On the other hand, technological progress has a positive impact on strengthening the culture and character of Indonesia if it is done correctly.

Concerning the utilization of technological advances in the practice of preserving regional art and culture, the selection of documentation media based on the strength of information technology is essential. One of the efforts to support the performance of Ormatan Tarawangsa arts, which started to "extinct," digital documentation in the form of Virtual Reality (VR) media becomes very important as a medium of information and education for young people in the future. Combining the visual appearance of a cultural art as an object packaged into digital technology can produce specific depth experiences for VR users. Visual experience using digital media has a better appearance than ordinary simulation modes; this is an effort to achieve optimal visual thinking of media users (Aldalalah, Ababneh, Bawaneh and Alzubi 2019). The visual experience will generate interest for those users

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who want to experience Ormatan Tarawangsa art performances so that the art itself is not forgotten and still become part of the history of the cultural journey of agrarian communities in West Java. The use of digital technology for regional art and culture packaged in the form of stories with visuals that are interesting, simple, and virtually published through digital media making it closer to the younger generation (Noviyanti, Waluyanto and Zacky 2018; Ahmad and Ahmad 2018)

On the other hand, since the emergence of smartphones as part of the development of information technology, VR has become quite common and is trending among the information technology community. One of the reasons to use VR is because it enables people to visualize and provide experiences that traditional media cannot do before. Another supporting reason is the fact that VR can support the interaction of users previously provided by a photo or film that has resolutions of 1800 to 3600 and in 3 dimensions, which is the main strength of digital media. VR is a reality that is packaged in the form of images or films according to real conditions. In other words, VR is an imitation of real space and human activity in it, by using computer equipment. This VR consists of a computer model of a 3D environment in which participants of existing virtual reality, which appears to be genuinely mobile (Tuma, Tuma, Knoflíček, Blecha and Bradác 2014).

LITERATURE REVIEW

Performing arts, Ormatan Tarawangsa currently does not receive enough attention from the younger generation. One of the reasons is the display of Ormatan Tarawangsa art that looks monotonous with non-dynamic movements and simple instruments. In line with what conveyed by (Ahmad and Ahmad 2019; Supriatin 2012) on changing views from an agrarian culture to an industrial culture as well as postindustrial has become a significant factor in the socio-cultural change in the younger generation. In fact, traditionally, the Ormatan Tarawangsa art is performed as an act of gratitude from an agrarian society (farmers) that have obtained abundant agricultural products (rice) and is done by elders and parents who continue to be carried out as part of a cultural ritual for generations hereditary, which need to be preserved.

The development of digital technology has brought a very significant change in the world of communication, information, and documentation today, especially regarding aspects of information obtained by the public. The spread of information on digital media

cannot be limited, any information can be obtained easily; anyone can access the information without any restrictions (Salman and Syaifuddin 2018). The sophisticated development of technology today has an impact that will occur in a culture that exists in society if it is not anticipated earlier. A traditional culture that is found in various regions in Indonesia will automatically become extinct if no one wants to preserve it. Like the two sides of the coin, the existence of technology today can also be used positively or negatively for the community.

Combining elements of traditional culture with technology can produce new experiences that are more profound so that it can generate interest and continuing a culture so as not to be forgotten by the community (Lianto, Gde, Swendra and Yudani 2018). Therefore, we need media to be a means of documentation and introductory guidance in promoting the Ormatan Tarawangsa art performances that can be easily accessed by the general public, especially the millennials generation.

Based on the phenomena that occur in the community regarding the art of Tarawangsa, this research designs a VR-based application that enables creating images and information on an object in a virtual form representing to that of the real world. Based on survey and research observations, today's young generation and teenagers are very fond and close to technology, namely smartphones. A smartphone can be used to apply VR. VR applications that are integrated with smartphones can add experience, interaction, and foster a sense of interest for users, especially when accessing VR Tarawangsa Ormatan arts applications without having to get involved in Ormatan Tarawangsa art performance activities in Rancakalong Sumedang which are usually held all night long. This VR application can be used as a medium for promotion, socialization, and education that is simple enough to be known, followed and understood by the public. After watching VR, the Ormatan Tarawangsa art is expected to make the public "curious" to know more and be directly involved in the Ormatan Tarawangsa art performance.

This study aims to produce a prototype of digital information media in the form of VR about local wisdom that is suitable for use in shaping the nation's character. This VR prototype is a media for the socialization and education of local culture for young people who need to get support from the government that focuses on cultural arts as part of efforts to

preserve the value of local culture that has begun to erode by the modern time's development. This research was conducted based on the idea that the use of digital information media in the learning process is one of the efforts to preserve more meaningful and quality cultural arts with digital media. Based on the description above, this study considers, it is necessary that the Ormatan Tarawangsa art show performed by the Rancakalong community of Sumedang Regency to be examined from various perspectives, including those combined with advances in information technology. Through qualitative studies using digital information media, aspects of the Ormatan Tarawangsa art performance can be well explained and documented.

RESEARCH METHODS

The research method used is an experimental method with research procedures that adapt the development model ADDIE (Analysis, Design, Development, Implementation, Evaluating) with a qualitative approach through interviews and participatory observation of key informants. Considerations that must be taken in determining key informants including (a) the person concerned has personal experience regarding the problem under investigation; (b) mature in age; (c) physically and mentally healthy; (d) being neutral, having no personal interests; and (e) knowledgeable. This research then interviewed the figures (elders) of the Ormatan Tarawangsa art, namely Abah Oting, Mr. Ade, and Mr. Pupung. Data collection techniques in this research use the participatory observation that researchers involved in a series of implementation of the Ormatan Tarawangsa art from beginning to end.

Based on participatory observation and considering aspects of ease of reach by the target of the research object, the design of digital VR media was chosen on the grounds that it is one of the digital documentation media that has an appropriate visual concept and in accordance with the ability of the community so that the primary purpose of this media design can be achieved optimally. The data collection tools used in making VR information media are smartphones, VR gear, and a Bluetooth controller joystick in recording Ormatan Tarawangsa art performance. The data obtained in order to complete the theoretical aspects that explain the visuals in VR are done by interviewing and studying literature about the development of Ormatan Tarawangsa art performances. The design target of VR media in this study is aimed at young people with ages

between 12 to 20 years and have high curiosity to preserve Tarawangsa art values.

RESEARCH RESULTS & DISCUSSION

A Glimpse of Ormatan Tarawangsa Art

Rancakalong Village is a Sundanese cultural place located in Sumedang Regency and is one of the Sumedang cultural centers that have a role in shaping the nation's character in an agrarian society. The people in Rancakalong Subdistrict hold faithfully cultural and artistic heritage that has existed historically since ancient times around the 18th century. The Rancakalong area of Sumedang Regency is a village with the main livelihood is as rice farmers and other plantation fields. The Village has a cultural ritual ceremony of the agrarian community. One of the agrarian cultural rituals performed by the Rancakalong community is the display of the Ormatan Tarawangsa art.

Tarawangsa cultural art is a culture in the form of thanksgiving ceremonies and expressions of thanks to ancestral spirits for the blessings of harvest in the Rancakalong region where this culture was born from the social interaction process of an agricultural and farming community. The art of Tarawangsa or Jentreng from Rancakalong grows and develops in the cultural environment that lives in the Tatar Pasundan (Pasundan Land) society as an agricultural society. In line with the statement from (Ahmad and Ahmad 2019; Supriatin 2012) which states that Tarawangsa is an oral art tradition of Sundanese culture as an accompaniment in the Ngalaksa traditional process as a medium to express gratitude to Allah SWT and respect to Dewi Sri who provide fertility for rice plants as a staple food source for the Sundanese people. Art of Tarawangsa or Jentreng is a ritual ceremony related to religious magic in honor of Dewi Sri. The people of Rancakalong call it by the name of Kersa Nyai with the aim that Kersa Nyai will stay and feel at home in Rancakalong. It is a custom of the community that put Jentreng Art as the primary media in the implementation of Nyalin ceremonies or rice harvest. The musical instrument of Waditra Seni Tarawangsa is the Kecapi, which functions to accompany (mirig) Rebab (Tarawangsa), which has two wires that function one wire as a song guide and the second wire for Goong. Tarawangsa or Jentreng is usually performed at traditional thanksgiving events, such as Ngaruat, Ngalaksa, Ngarosulkeun, Buku Taun, Harvesting, or on thanksgiving events such as Marriage and Circumcision.

Virtual Reality (VR) Design Concepts of Ormatan Tarawangsa Art

The development of the Internet influences social life, politics, economics, and culture. The dynamics and rapid development of technology is one of the reasons why individuals and organizations make behavioural changes in communicating both verbally and in writing through new media (Nugraha, Subekti, Romli and Novianti 2019). This new media has a significant influence on providing information to the public. It can be seen in the interests of various individuals, groups, or governments in conveying the aims and objectives. Providing quality information to the public is a shared responsibility, including in terms of information regarding the preservation of the nation's character values based on the development of communication and information technology. According to McQuail (1989), the media is a location (or forum) that is increasingly playing a role to present the events of community life, both at the local, national, and international levels, the media often plays a role as a vehicle for the development of arts and cultural forms and symbols in the sense of developing procedures, fashion, lifestyle and norms (Permadi 2009).

Along with the times, the virtual world has given birth to various phenomena that can benefit human life with all its dependence on the Internet. One of them is the phenomenon of communication media, information, and documentation in the form of visual displays that are connected to the Internet as a virtual communication media. VR allows for documentation to be very simple in appearance because it is a 4-dimensional setting, which is mainly preferred by today's generation. According to Yudha and Prayudi (2013), computer users generally need additional storage media to meet their needs, such as facilitating work, archives, entertainment (Putri 2016).

The phenomenon of local art and culture that is increasingly rare in terms of appearance in the community requires a concern that must be done to save the original assets of the nation's culture by utilizing elements of contemporary technology of new media. In the opinion of (Jinan 2013), the existence of new media undoubtedly has brought fundamental changes to all aspects of people's lives today. There is no living space spared from the intervention of the sophistication of new media technology. New media, as part of artifacts produced by industrial era 4.0, has the advantages of systematic and structure in changing the world and culture or habits in society. The forming of

new media and communication patterns can influence social life, as the existence of this new media has provided opportunities for users to interact and convey ideas and inspiration, it can even influence people's behavior (Mahanani 2014)

The current concept in the use of new media of VR through Tarawangsa is chosen so the younger generation could have an interest in getting to know and learn the arts of Tarawangsa's devotion and the meaning of human life in the world. The use of VR media is part of an educational program in the 21st century, which is an education in the information technology era, viewing knowledge as a central character in community development in cities and villages (Hartati 2016). This VR media is expected to be able to change the perspective of Ormatan Tarawangsa art, which known as an art that is less dynamic in both movement and music that accompanies it into an "exciting" art for young people to do. The existence of VR can replace the whole real world with the virtual world (Yuen 2011). Therefore, digital documentation information media is needed as an effort to introduce the Ormatan Tarawangsa art more widely so that it is known and studied by the public, especially the younger generation, through VR. Because as the current millennial generation, the young generation needs to use the Internet in their daily activities (Hafiar, Subekti and Nugraha 2019).

To make an understandable content of Ormatan art activities, which already a rare event, and to make it a demanded event by the public, the VR media for Tarawangsa art is an excellent choice to preserve the national cultural values. VR is an exciting, informative, and easily accessible to all people who want to learn it. Also, the VR media can be used as a learning medium in stimulating the formation of national character, which makes the Ormatan Tarawangsa arts get a "strategic" position as part of the arts that need to be preserved, especially for the Rancakalong Sumedang village community and Sumedang Regency government. According to Berkowitz and Bier (2005), character education is the creation of a school environment that helps students in the development of ethics, responsibility through models, and teaching good character through universal values (Maunah 2015). These character values should be instilled in the community so that they would be able to apply them in their lives both in the family, school, community, and country enable them to make a positive contribution to their environment.

Table 1: Series of Ormatan Art Activities in Virtual Reality Media

Visual Appearance	Visual Description
<p data-bbox="329 275 675 302">Leading Scene: Natural Atmosphere</p> 	<p data-bbox="873 275 1495 348">Views of rice fields and gardens in the village of Rancakalong, Sumedang are beautiful and engaging which shown as part of the nation's character environmental awareness</p>
<p data-bbox="415 646 589 674">Scene 1: Opening</p>  <p data-bbox="370 758 626 831">Narasi pembuka video tarian Tarawangsa</p> <p data-bbox="297 940 672 1041">Video dibuka dengan narasi mengenai ritual Tarawangsa. Scene disini akan berisi foto-foto 360° bergantian dengan efek fade-in/out.</p>	<p data-bbox="878 646 1484 699">Cultural Ceremony of Ngalaksa Seni Tarawangsa Rancakalong, Sumedang Regency, West Java</p>
<p data-bbox="358 1066 643 1094">Scene 2: Permission (<i>Amitan</i>)</p> 	<p data-bbox="865 1066 1500 1119">Public Figure/<i>Adat</i> /owner of paddy field delivering the statement to begin their activity in the paddy field.</p>
<p data-bbox="410 1514 594 1541">Scene 2.3 : Hoeing</p> 	<p data-bbox="878 1514 1487 1566">Farmers are working in the paddy field with a spirited expression embracing the meaning of hard work as nation's character.</p>

(Table 1). Continued.

Visual Appearance	Visual Description
<p data-bbox="326 254 678 279">Scene 2.4 : Eating Together (<i>Botram</i>)</p> 	<p data-bbox="850 254 1516 327">The activity of eating together as part of the harmonious life (<i>guyub</i>) of agricultural society by sharing food among farmers has the meaning of friendship, which is one of the nation's characteristic.</p>
<p data-bbox="407 655 597 680">Scene 2.5: Planting</p> 	<p data-bbox="850 655 1516 728">The activity of planting the paddy's seeds as means of producing foods for survival by agricultural society, this represents a responsible characteristic of the nation.</p>
<p data-bbox="407 1110 597 1136">Scene 2.6 : Praying</p> 	<p data-bbox="850 1110 1516 1163">To say a prayer before and after planting the seeds is a characteristic of religious society which represents religious nation characteristic</p>
<p data-bbox="448 1524 557 1549">Scene 2.7:</p>  <p data-bbox="204 1871 293 1892">Gratitude</p>	<p data-bbox="867 1524 1500 1577">Suasana awal penghormatan kepada Dewi Sri yang menunjukkan upaya pembentukan karakter religius</p>

(Table 1). Continued.

Visual Appearance	Visual Description
<p data-bbox="293 254 711 279">Scene 2.8: The opening of Ngalaksa activity</p> 	<p data-bbox="850 254 1516 327">The opening of <i>Ngalaksa</i> led by cultural figure (<i>panema</i>) accompanied by <i>kecapi</i> and <i>rebab</i> (both are traditional music instruments) is called <i>Lulungsur</i>.</p>
<p data-bbox="375 621 630 646">Scene 2.9 : Elderly Female</p>  <p data-bbox="224 890 282 915">Dance</p>	<p data-bbox="850 621 1516 695"><i>Lalayaran</i> is an activity of putting the offering or objects as complementary for <i>Tarawangsa</i> ritual, which then put in paddy barn in the house (<i>Goah/Leuit</i>).</p> <p data-bbox="850 701 1516 726"><i>Ngibing Paibuan</i> is dance ritual done by elderly female until midnight.</p>
<p data-bbox="380 930 625 955">Scene 2.10 : Elderly Male</p>  <p data-bbox="310 1272 737 1335">Tahap ketiga Tarawangsa: Memperlihatkan sesi para bapak-bapak menari (ngibing)).</p> <p data-bbox="224 1331 282 1356">Dance</p>	<p data-bbox="867 930 1500 982"><i>Ngibing Pamegeut</i> is dance ritual done by older male from midnight until dawn.</p>
<p data-bbox="367 1371 638 1396">Scene 2.11 : Dewi Sri Dance</p> 	<p data-bbox="867 1371 1500 1444"><i>Nyumpingkeun</i>: Closing part of Ormatan Tarawangsa Art Ritual presenting "spirit" of Dewi Sri that <i>nyurup</i> (possessed) to a Female character</p>

(Table 1). Continued.

Visual Appearance	Visual Description
 <p>Tahap keempat: Suasana ketika Dewi Sri hadir. Tarian penutup yang dilakukan oleh nara ibu-ibu.</p>	
<p>Scene: Ritual Media</p> 	<p>Various commodity as offerings in <i>Tarawangsa</i> Art activity.</p>
<p>End Scene : Closing</p>  <p>Ditutup dengan foto-foto 360° bergantian dengan efek fade-in/out. Di layer depan berisi closing credit.</p>	<p>Acknowledgements to every elements involved in the making of VR for Ormatan Tarawangsa Art</p>

The VR media, as documentation media in the preservation of the Ormatan Tarawangsa art, ought to pay attention to the quality of the information content consisting of the pre-performance of the Ormatan Tarawangsa art to the Tarawangsa dance. In general, the Ormatan Tarawangsa art tells about the process of

planting rice to post-harvest rice as a form of gratitude to God Almighty for the harvests obtained by farmers in the village area of Rancakalong Sumedang.

The information content in VR media about the Ormatan Tarawangsa art consists of visualization

aspects and sound effects that are easily understood by the public. To get the results of the story in making a VR of Ormatan Tarawangsa art, there are several factors that need to be considered in order to produce a good and interesting story idea for the object of research, including a) the message content factor (a series of Ormatan Tarawangsa art display activities); b) technical factors (a series of technical creation of a virtual storyline); c) psychological factors (readiness of Ormatan Tarawangsa art performers).

In terms of the content of the message contained in the VR media about the arts of Tarawangsa, there are 2 (two) things, namely the Performance in the Rice Fields and Ibing Tarawangsa or (Ngalaksa). In the performance process in the paddy field the series of activities consists of bubuka (amitan), hoeing, eating together (resting), planting rice, entrusting, and harvesting (sawen). Whereas in Ibing Tarawangsa the series of activities includes lulungsur, lalayaran, ngibing paibuan, seren ti paibuan, panema, ngibing pameugeut, seren paibuan, and nyumpingkeun. The following is a series of stories in the virtual reality media art of Ormatan Tarawangsa:

The technical factors in making VR of Ormatan Tarawangsa art were directly delivered on August 16, 2019, by visiting Padepokan Seni Orwatan Tarawangsa Sasaka Bangun Jaya (Art House of Tarawangsa Orwatan Art of Sasaka Bangun Jaya) led by Mr. Ade Rohmat in Rancakalong village, Rancakalong district, Sumedang Regency.



Picture 1: Discussion Process of Ormatan Tarawangsa Art.
Source: Research Documentation, 2019.

There are several stages to produce excellent image quality in VR media, including 1) Recording Preparation Stage; 2) Recording Implementation Stage; 3) Video Stitching Stage; 4) Application Development Stage; 5) Application Use Stage; and 6) Evaluation Phase. The theoretical explanation of some of the stages in making VR of Ormatan Tarawangsa art can be seen in the Table 2 below:

For psychological factors in making VR of Ormatan Tarawangsa art, ideally, it should be done just before the harvest of paddy in Rancakalong Sumedang and the time of implementation is carried out in the month of Maulud (a month in Islamic Calendar) each year. Timing becomes crucial in the effort to produce success, smooth recording, and coverage of Ormatan Tarawangsa art activities carried out by the agrarian society. That is, the media needs to pay attention to the psychological aspects of the audience before publishing text and images (Widyatmoko 2016).

The VR media, which contains Ormatan Tarawangsa art shows, must be able to become a beneficial learning media role model in preserving national cultural character values. The use of VR as an innovative learning media model, not only develops cognitive aspects but also enable reaching affective and psychomotor aspects. It is also able to support the formation of the nation's character and strengthening it by preserving national cultural values in the era of communication and information technology development. According to (Supala 2013), the character of the nation is built from core ethical values based on religious values, state philosophy, and national culture. The transfer of knowledge should not only be visible at the current moment, but now it is needed on an ongoing basis by using learning media that is readily accepted and affordable in society, targeting technology literate young people.

The VR display of Ormatan Tarawangsa art can be a useful learning medium for the young generation and the continuity of the socialization of local art and culture. The design of effective learning media is in line with the ADDIE model approach. According to Branch (2009), ADDIE is a product development paradigm that is applied to design the learning process by preparing a learning environment that can facilitate complex learning by involving the learning environment optimally by responding to many situations, interactions in context and interactions between contexts (Goddess 2018). Related to digital information media as learning media and a means of socializing the Ormatan Tarawangsa art using the ADDIE approach can be explained in several stages. The first stage, from ADDIE, begins with the Analysis activity, which is identifying the possible causes of a social gap (attention) felt by the performers of the Tarawangsa Ormatan art. For the Design phase, which is testing and checking social conditions that are expected to be solved by using appropriate testing methods, such as through interviews with performers of Ormatan

Table 2: Technical Factor in Producing *Virtual Reality*

No	Stages	Description
1	Recording Preparation	Prepare the equipment used for recording which consists of a Gear 360 Camera, Samsung S7 Edge Smartphone, and Tripod Download and Install the Samsung Gear 360 Application on a Smartphone Connect the Smartphone and Camera using the Gear 360 application to start video recording
2	Recording Implementation	Place the camera on a tripod Adjust the height of the tripod as desired Place the tripod in a flat place and try to put it in the middle Record videos using the Samsung Gear 360 application on a smartphone as a remote
3	Stitching Video	Download and Install the Gear 360 Action Director application on a Laptop Run the Gear 360 Action Director application Select and Import the video recorded earlier to be stitched Wait until the video download and stitching process is 100% complete Produce stitched videos
4	Application Development	1. Preparation Download and Install the Unity Application Prepare Android SDK, JDK, NDK, and GoogleVR 2. Making the Main Page Scene Designing and making classrooms as the background of the main page Make menu buttons including, start, information, instructions, and exit Make a display of the contents in each button Creating a script to move it to the Video 360 scene 3. Making 360 Video Scenes Creating object spheres Insert a stitched 360 video Make a countdown Create running text Make an exit menu Build the application into .apk to run on a smartphone
5	Application Use	Prepare the tools to run applications that consist of Samsung S7 Edge Smartphone, Samsung Gear VR (Oculus), and Joystick Bluetooth Controller Install .apk from the application Connect the Joystick with the Smartphone using Bluetooth Run the application then Pair the Smartphone on Oculus
6	Evaluation	The Gear 360 camera and the Samsung Gear 360 application can only be used on certain smartphones, namely, Samsung Galaxy S8, S8 +, S7, S7 Edge, Note 5, S6, S6 Edge, S6 Edge +, A7 (2017), A5 (2017)

Tarawangsa. At this stage, the performers of Tarawangsa Ormatan complained about the various conditions of the younger generation who were not paying attention to the art and culture of their ancestors. In the next stage, development is the activity of producing and validating selected learning resources. From this stage, the researcher consulted with multimedia practitioners who suggested choosing interactive and practical information media, namely VR, as a medium for learning and socializing to the younger generation. At the Implementation stage, the activities

prepare the learning environment and involve the user (community) in a participatory manner. This implementation phase shows that the user is quite enthusiastic about the presence of digital information media that can facilitate the process of transferring knowledge quickly and efficiently, including in the case of virtual messages of Ormatan Tarawangsa art. The final stage is evaluation, assessing the quality of the learning process and products, both before and after. In this evaluation phase, researchers get different responses from the public, especially those who have

used VR media. However, in general, the community conveys a positive review for the presence of alternative media socialization for younger people in regional art and culture preservation. ADDIE model approach will produce a learning program design to improve the ability of the young generation to think critically and to become an ethical enabler and follower of cultural arts in a particular area, including Ormatan Tarawangsa art.

To explain the relationship between Ormatan Tarawangsa art and character education, which is one of the government programs. Then some behavioral elements exist in the community that can be categorized. According to the Indonesian Ministry of

National Education (2016), which has formulated 18 values embedded in Indonesian citizens to build and strengthen the nation's character as explained in the Table 3 below:

At present, the condition of moral decadence in the younger generation can be seen in the world of education, which can represent a gloomy portrait of the socio-cultural life of the Indonesian people. The rampant circulation of pornographic videos played by students, student fights, cheating in national exams, drug cases, corruption, criminal acts is some of the examples. Likewise, the local Indonesian arts and culture, which one by one began to "fall" due to the lack of character education of the next generation in this

Table 3: Character Values of Indonesian People

No	Character	Description
1	Religious	To have respectful attitudes and behaviors in implementing religious teachings, being tolerant of other religious practices, and living in harmony with followers of other religions.
2	Honest	To have behavior based on efforts to make him/herself as a person who can always be trusted in any words, actions, and work.
3	Tolerance	Attitudes and actions that respect differences in religion, ethnicity, opinions, attitudes, and actions of others that are different from him.
4	Discipline	Actions that exhibit orderly behavior and comply with various rules and regulations.
5	Hard work	Behavior that shows earnest effort in overcoming various obstacles and completing tasks properly.
6	Creative	Think and do something to produce a new way or result from something that already existed.
7	Independent	Attitudes and behaviors that consider not to depend on others in completing tasks.
8	Democratic	How to think, behave and act that assesses the same rights and obligations of himself and others
9	Curiosity	Attitudes and actions that always try to find out more deeply and extensively from something that is learned, seen, and heard.
10	Nation Spirit	A way of thinking, acting, and having insight, which places the interests of the nation and the state above self and group interests.
11	Loving the homeland	It is the way of thinking, attitude, and behavior, which shows a sense of loyalty, care, and high respect for the nation's language, physical environment, social, cultural, economic, and political.
12	Appreciate the achievement	Attitudes and actions that encourage him/her to produce something useful for society, and acknowledge, and respect the success of others.
13	Friendly /Communicative	Open attitudes and actions towards others through polite communication to create good collaborative collaboration
14	Peace loving	Attitudes and behaviors that reflect an atmosphere of peace, security, calm, and comfort over their presence in a particular community or community
15	Love Reading	It is the habit of providing time to read various readings to bring virtue upon him/her.
16	Environmentally aware	Attitudes and actions that always try to prevent damage to the surrounding natural environment and develop efforts to repair natural damage that has already occurred
17	Social care	Attitudes and actions that always want to assist other people and communities in need.
18	Responsible	The attitude and behavior of a person to carry out their duties and obligations, which he/she should do, towards oneself, society, the environment (natural, social and cultural), state and God Almighty.

nation, especially the ones in the world of education. In line with what expressed by (La Hadisi 2015) that the character of the Indonesian nation has significantly diverged from norms, both legal norms or social norms, even religious norms. The presence of industrial society 4.0 era, is now experiencing a crisis that influencing civilization greatly, the crisis of character. As reality touches the nation, character education needs to be integrated with technology. Character education in art and culture that is integrated with technology can be an alternative to embody the formation of character in the younger generation to reach a nation's noble personality.

Strengthening character is one of the government's programs to revolutionize the nation's character. The Ministry of Education and Culture implements the strengthening of the nation's successor character through the Strengthening Character Education (PPK) movement that was rolled out since 2016. According to President Joko Widodo's direction, character education at the basic education level gets a more substantial portion than higher-level schools, which comprise 70 percent for primary schools, while for junior secondary schools, 60 percent (Salman and Syaifuddin 2018). Not only literacy, but PPK also encourages national education to pay attention to the teaching process of soul (ethical and spiritual), the teaching process of feels (aesthetic), and physical teaching (kinaesthetic). These four dimensions of education should be carried out in their entirety and all at once. The integration of learning inner-curricular, co-curricular, and extracurricular activities in schools can be implemented based on the development of school culture or through collaboration with communities outside the educational environment. There are five central character values derived from Pancasila, which are the priority for the development of the PPK movement, namely religious, nationalism, integrity, independence, and cooperation. Each value does not stand and develop individually, but interact with one another, develops dynamically and forms personal integrity (Kemdikbud 2017).

CONCLUSION

Digital information media about Ormatan Tarawangsa art is appropriate to be used by stakeholders, especially the government, in order to preserve local cultural arts and as a learning media for the formation of national character reinforced by the validation of Ormatan Tarawangsa art cultural figures, multimedia practitioners, and the community. Based on

the prototype aspects obtained, digital media information about the Ormatan Tarawangsa art has a visual display of messages containing the values of national characters contained in a wealth of cultural arts. With the use of information technology as an alternative for interactive information and documentation media, overcoming problems of the socialization and education program on local cultural arts can be achieved.

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