

## Design of Wayang Show With 360° Video (Virtual Reality) as a Media to Introduce Teenage About Wayang Cepak Tegal

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**Abstract.** Nowadays, wayang cepak in Tegal City are increasingly rarely known by young people, especially teenagers wayang performances being rarely attended. From this study, it is known that adolescents tend to be more interested in westernized modern culture so that they are indicated to have less respect and are increasingly unfamiliar with their own existing traditional culture. The purpose of this research is to reintroduce the wayang cepak in the form of digital media which is shown to teenagers in Tegal City aged 15-21 years. The delivery of story content through Virtual Reality has the potential to provide an immersive viewing experience that can be viewed from a 360° video perspective using the Luther-Sutopo version of the Multimedia Software Development Method for the segmentation of teenagers aged 15-21 years. To find out and collect data the researchers used qualitative methods. The results of this study are expected to help re-introduce and invite teenagers to generate a sense of love for wayang cepak. As well as looking for alternative ways to watch wayang shows from a 360° perspective as a whole for Virtual Reality users. Virtual Reality is an effective promotional media that utilizes new technology to add to the audience's new experience of an environment as a whole, so that here it is hoped that the audience will enjoy the Wayang Cepak performances that contain the values of good moral teachings through various stories.

### 1. Introduction

A cultural heritage can grow and develop if there are actors who continue to work, there are community groups who love culture and there is a government that protects and provides facilities for holding cultural performances. Wayang culture is one example of the characteristics of Indonesian culture, especially in Java. The recognition of wayang as a world masterpiece by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2003 did not make wayang more preserved. In fact, 75 types of wayang are becoming extinct and only 25 types of wayang are left. The disappearance of wayang culture was caused by the lack of people who knew wayang and the lack of fans or audiences for wayang performances [1]. Puppet show is one of the many Indonesian arts. Besides its function as entertainment, the art of wayang golek does not only contain aesthetic values, but includes all the values contained in the supporting community [2].

Wayang Golek is part of Javanese culture, its existence has now changed in the third generation. For example, the wayang golek show in Bintang Meriah Village, Batang Kuis District, Deliserdang Regency, the origin of wayang golek was created from a music art community. The musical instruments used are unique because all of the musical instruments are made of bamboo, so when an idea arose from one of the musicians to initiate an addition of culture in a performance, so that music fans do not get

bored with musical performances. Then came the Wayang Golek whose manufacture was not far from the basic material, namely bamboo. Taking bamboo as the basic material in this art has a deep philosophy, where bamboo when blown by the wind will remain strong to the roots and even bamboo trees. This illustrates that we must be able to keep up with the times by bringing our own culture [3]. These values are socialized by artists and puppeteers. Tegal, which is located in Central Java Province, has a variety of traditional arts, one of which is the art of wayang golek in the form of short puppets. Wayang Cepak is a wayang made of wooden dolls with a smack or smack head shape and does not use a crown because it tells about the daily life of the general public which is full of advice and the clothes are usually not excessive. Tegal speaks Javanese and Cirebon speaks Sundanese (Figure 1).



**Figure 1.** Part of Wayang Cepak

Nowadays, short puppets in Tegal City are increasingly rarely known by young people, especially teenagers. This can be seen in wayang shows which are rarely attended by teenagers. Nowadays teenagers tend to be more interested in westernized modern culture so that they are indicated to have less respect and are increasingly unfamiliar with the existing traditional culture. Likewise with the influence of globalization on the current visual media which has an impact on the lack of shows featuring wayang golek as content on television shows and the tendency of teenagers to prefer watching movies or music concerts rather than watching puppet shows. Wahyo, as the maker of the Tegal short puppet, expressed his concern that more and more Tegal residents did not know the indigenous culture of the area. Even at school, it was as if they had never been introduced. Moreover, holding a puppet show in Tegal.

With these problems, the local government or anyone who cares about indigenous culture should also pay attention to and preserve the Tegal cepak puppets (IKM Data, 2017). This change made the art of wayang sprint in the city of Tegal not well known. Meanwhile, Sulistyobudi [2] argues that it is undeniable that issues of globalization and modernization often create a sense of uncertainty among traditional artists. But in other facts, ideas about the values of local cultural wisdom are also being encouraged and strengthened as orientations in facing the challenges of globalization. Modernization and advancement of information technology and the entertainment industry should not destroy our cultural identity. But there are also many parties who take advantage of modernization and technological advances to renew the treasures of traditional arts to make them more contemporary. This effort is also to bridge the flow of transformation of traditional cultural values to the younger generation as heirs. For this reason, alternative digital media were created so that the Tegal Cepak Puppet show, and the noble values contained in it could survive, playing their role today in line with technological advances. The technology that will be applied to the Tegal cepak puppet show is 360° Video and Virtual Reality. Both

360° Video and Virtual Reality are created using a camera that shoots in a full 360-degree angle [4] (Figure 2).



**Figure 2.** 360° Camera Video

360° Video technology is one of the technologies that can be used to spread culture to become more modern and can be developed by following current trends. It is hoped that users, in this case virtual audiences, can enjoy the atmosphere that is presented immersively while at the same time adding to the cultural value of the wayang golek itself [5]. The use of Virtual Reality in viewing recordings made by 360° Video technology is also an interesting new experience in watching Tegal puppets. Through the application of this technology, it is hoped that it will become a means of preserving culture, as well as helping to reintroduce and invite youth to awaken a sense of love for the Tegal puppet art. The purpose of this research is to reintroduce wayang sprint in the form of digital media which is shown to teenagers in Tegal City aged 13-18 years, where psychologically teenagers at this stage are very interested in trying new things, liking competencies and challenges. The low level of knowledge about wayang Cepak needs to be improved through a digital media approach. For this reason, this study designed the introduction of wayang cepak to wayang performances through digital media, namely Virtual Reality which is fun through an interactive and educational story. The delivery of story content through Virtual Reality has the potential to provide an immersive viewing experience that can be viewed in a 360° video perspective with the Luther-Sutopo version of the Multimedia Software Development Method [6]. To find out and collect data, researchers used qualitative methods, namely conducting preliminary studies in the form of field observations and literature studies to describe the data found and make conclusions from these data which were then analyzed.

## 2. Method

This study uses research and development (Research and Development) or R&D is a research method used to produce certain products and test the effectiveness of these products. Even Sugiyono [7] states that development research has 4 kinds of designs that can be seen from the difficulties, namely: level 1 researching without testing (not making and testing products), level 2 testing without researching (testing the validity of existing products), level 3 researching and testing in an effort to develop existing products, level 4 researching and testing in creating new products. The method used in this study uses level 1. Research and development at level 1 is research and development where researchers conduct research to find out the potential and problems that exist in an object, conduct research to design products, and conduct research to test the product design individually. internal (opinions of experts and practitioners). In this level of research, researchers do not produce designs that have been made and test these products externally (tested). This research is development research, referring to the development



of the Wayang Golek Show using a technology and video or cinematographic approach. This Tegal cepak puppet show is presented in the form of interactive multimedia which aims to provide facilities for the community, especially the younger generation, to be able to help reintroduce and invite the public to awaken a love for the art of Tegal cepak puppet show. In preparing for the show, we first make a storyboard to describe how the show will be carried out later. After the storyboard is finished the assembly [8-13] process begins where in this process all multimedia objects will be created [6]. Product creation based on storyboards and display design will be used according to the purpose and functionality. The function of this show is as an alternative medium to watch wayang performances and to introduce and invite the public to arouse a sense of love for the Tegal cepak puppet art. While the purpose of this show is an alternative media for puppet shows to the public as a means of cultural preservation. The application of making wayang performances is based on the multimedia development method created by Arch Luther with the technology used to produce videos in the form of 360° Video using "Ricoh Theta S" and the media used for watching in the form of Virtual Reality using "VR Box Glasses" (See Figures 3 and 4).



**Figure 3.** VR Box Glasses



**Figure 4.** Ricoh Theta S

### 3. Results and Discussion



**Figure 5.** Wayang Cepak Tegal

Actually, young people's interest in the world of art has increased every year, we can see on social media how they express themselves using various media. Social media such as Youtube, we find many song covers, on Instagram posting the beauty of photography, on Twitter with tickling threads and many more artistic expressions posted on various offline and online media. Wayag Cepak Tegal show is included in contemporary wayang culture because it can adapt to the characters of its time and the stories it tells can also keep up with the times. Through this concept, the Tegal cepak puppet art can also be given more modern touches to make it more interesting and innovative. The selection of the right technology to increase interest in something is a solution to the problems that are often faced. The following is a concept table for the Wayang Cepak moored show (Table 1) :

**Table 1.** Concept

Specification	Description
Title	Design of Wayang Show With 360° Video (Virtual Reality) as a Media to Introduce Teenage About Wayang Cepak Tegal.
Application type	Interactive Media
Function	Can be used as an alternative media to watch the puppet show and to introduce as well invite the public to evoke a sense of love for the traditional puppet show art of Tegal.
Objective	Providing alternative media for performances puppets to the community as a means cultural preservation.
User	Society in general and generations young children, teenagers and adults.
Audio & Video	video using .mp4 format format and .mkv. The storyline is made on paper in the form of a storyboard then moved with a scanner and stored in image file format. Next applied to 360° Video production tools. For audio use the .mp3 . format and .wav. applied to background music. For voice narration story, the sound comes from the recording.
Editing	Animation on text and images made using existing tools in Adobe After Effects.

### 4. Conclusion

The use of Camera 360° in overcoming the problem of young people's interest in the art of Wayang Cepak is considered appropriate because by using Camera 360° directly to the virtual world being explored. This exploration experience becomes a distinct impression, especially if this virtual experience is coupled with interactive capabilities. 360° video allows users to thoroughly explore the surrounding

scenery. Virtual Reality is an effective promotional media that utilizes new technology to add to the audience's new experience of an environment as a whole, so that here it is hoped that the audience will enjoy the Wayang Cepak performances that contain the values of good moral teachings through various stories.

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