Creation of a 3D animated film titled "Made and the Lost Spirit"

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Abstract

3D Animation is a form of Animation that uses three-dimensional objects so that the visuals presented look more real and immersive. 3D objects can be rotated and viewed from various perspectives. Bali, with its unique cultural values, should not only be a tourist attraction but can also be the basis for creating multiple creations, especially in animation design, which can be an attraction and introduce Balinese culture to the international arena. In this research, the Animation tells the story of a child named Made who did not have a parental figure from childhood and lived alone with his grandfather in the village. The village where Made lives is not safe; evil demons have destroyed it. This made Made trained by his grandfather to become a strong child worthy of adventure to save the village and find his missing parents. Made's adventure is not alone; Made is accompanied by a good spirit in the form of a barong named Dharma, who will guide Made's journey. Made's efforts are constantly hampered by his older brother, who is an evil spirit with great power, and the only way Made can stop his grandfather is by joining forces with Dharma. The method used in this research is computer graphics with pre-production, production, and post-production stages. This research aims to design an animation entitled Made and The Lost Spirit inspired by the values of the Galungan holiday celebration in Bali. Apart from this, the novelty of this Animation lies in highlighting Balinese culture and ornaments in the visual elements presented in the creation of international standard quality animation with Intellectual Property owned by the author.

Keywords: *3D, Animation, Balinese Culture, Galungan.*

1. Introduction

Information and communication technology development has significantly transformed, especially in Animation. The transformation of information and communication technology drives the growth of the animation industry, including in Indonesia [1]. According to Putra & Gunarsa, 2024, the Indonesian government plays a crucial role in increasing the creative economy in the hope of reducing the problem of lack of jobs in the developing country with the 4th largest population in the world [2]. Through this initiative, it is hoped that the community can explore their creative potential, create new job opportunities, and positively contribute to national economic growth. The government's approach that focuses on the creative economy is not only a solution to overcome the lack of jobs but also a strategic step in building economic sustainability and empowering the community to play an active role in the country's development. By strengthening the creative economy sector, Indonesia can create an environment that supports innovation, motivates local entrepreneurs, and expands international cooperation, positively impacting economic growth and community welfare [2].

This has prompted the Indonesian government to take action by leading globally at the Bali Creative Economy Roadmap 2022 event to provide opportunities for creative economy actors, including Animation. The Indonesian government hopes that animators will be able to explore their potential. In addition, the government also discussed the role of the creative economy in increasing development and supporting the growth of the animation industry, encouraging economic welfare, and improving digital literacy. Animation or animated video media can be said to be like a film that has a combination of video and audio according to the images displayed. According to Furoidah in Fitrianisah et al., 2021, animated video media is a learning media that contains a collection of images that produce images and are equipped with sound, aiming to create a sense of life and store messages from learning [3]. Furthermore, according to Husni's explanation, animated video is the movement of an image with different images within a predetermined time to give the impression of movement, and there is also sound that supports the movement of the image. So, it can be concluded that Animation is a medium for moving an image with pictures equipped with sound to create a sense of life and provide learning messages [3].

The Animation itself is generally divided into 2D Animation and 3D Animation; according to Fika Rahayu Spd (2024), several basic things differentiate 2D Animation and 3D Animation, namely in terms of Dimension, Visual Effects, Production Process, Use of

Technology, Audience Experience. So, it can be concluded that Animation is a fantastic art that continues to develop. Be it 2D or 3D Animation, both have their beauty and uniqueness. 2D Animation is famous for its classic sequential drawing style, while 3D Animation creates a realistic three-dimensional effect. Each type of Animation has its uses in various industries, such as film, television, and games [6].

To create realistic and dynamic animated character movements, an animator must understand the guidelines and references called the 12 principles of Animation. The 12 basic principles of making animated films were formulated in 1930 by Frank Thomas and Ollie Johnston. The two Walt Disney Studio animators formulated the guidelines through the book The Illusion of Life. During that time, these basic principles were also known as the 12 principles of animation [8].

Nina Tri Daniati, Rida Mulyadi, and Agus Nugroho, in the book Basics of Animation (2023), explain that the 12 principles of animation act as fundamental theories in knowing and understanding how to bring Animation to life so that it is more interesting, dynamic, and dramatic, complete with realistic movements. The 12 principles of Animation also emphasize animated characters' expressions, gestures, and personalities [8].

3D Animation is an innovation that has changed how humans interact with the digital world. More than just entertainment, 3D Animation has proven itself to be a versatile technology used in various fields such as architecture, education, medicine, and marketing. With its ability to create realistic and detailed visuals, Animation has become an essential tool for presenting creative solutions in the modern era [10]. Along with the development of technologies such as artificial intelligence (AI), virtual reality (VR), and augmented reality (AR), 3D animation is expanding its potential. Not only does it improve visual quality, but it also provides a more interactive and immersive experience for users [10].

Blender is an application that functions to create 3D animations, visual effects, 3D objects, and games. Blender is quite well-known among computer users, especially those who often work in graphic design [7]. The reason is that Blender's features are pretty complete, the requirements are low, it only requires OpenGL support, and the application is free because it is open source. Blender is also a multi-platform application. This means it can be run on various operating systems—for example, Windows, Linux, and Mac OS. Professionals widely use Blender—both those who work individually and in companies.

As a medium capable of delivering educational messages, Animation can certainly introduce the cultures of Indonesia. Indonesia is famous for its various tribes and cultures spread throughout the country. Unfortunately, along with the development of the era and technology, the interest of millennial children in local culture has decreased. This is a problem because children in Indonesia tend to be interested in foreign cultures such as Japanese, Chinese, South Korean, and so on. (Susanti et al., 2023) [4] Indonesia has beautiful cultures that attract the world's attention, and they are even threatened with being taken over as part of the cultural heritage of other countries.

One of the islands famous for its strong culture is Bali. The island of Bali is nicknamed the Island of a Thousand Temples. The island of Bali has a variety of cultures, such as the Megibung tradition, the Pillow Fight tradition, the Mekare-kare tradition, the Nyepi holiday, the Galungan and Kuningan holidays, and many more. An animation was created with the title "Made and The Lost Spirit," inspired by celebrating the Galungan holiday in Bali to introduce Indonesian culture, especially Balinese culture.

According to Ardiyasa, 2018, the philosophical meaning of the Galungan celebration is the unification of the spiritual to gain a clear view to eliminate all mental turmoil. [5] So, Galungan can be interpreted as the unification of spiritual strength to achieve a calm mind and stance. The unification of the spiritual and a clear mind is the form of Dharma within oneself, while the mental turmoil is the form of Adharma within oneself.

Thus, the animation "Made and The Lost Spirit" was created to introduce Indonesian cultures, especially Balinese culture, which was inspired by the celebration of Galungan in animated video media. Therefore, this Animation is expected to encourage the animation industry in Bali to develop more rapidly and to promote an increase in the creative economy sector in Indonesia.

Until now, there are still very few IP or original stories of Indonesian Animation, which should be more than in other countries because we have so many Indonesian stories. One of the reasons for making the Made Film is to add to the list of original animated stories that take the background of Indonesian culture. However, several problems have arisen related to the production of this Animation. One of the problems is related to the difficulty in developing Intellectual Property (IP) for animators in Indonesia. [9]

Intellectual Property (IP), or in Indonesian, is Intellectual Property Rights (HKI), a form of creative discovery, masterpiece, or design that must be patented and protected by law. IP is also explained by the World Intellectual Property Organization (WIPO) as a creation of thoughts, discoveries, literature, art, design, and symbols used in trade, and laws and regulations protect these creations. IP or HKI is a form of protection and recognition of works, concrete, or abstract objects created based on human intellectual abilities. Intellectual Property aims to make the results of thoughts poured into innovation, literary and artistic works, identity symbols, and images used in trade [9].

The rapid development of digital-based technology has given birth to a creative economy that demands young people to be more innovative in creating work. One of them is in the animation sector, mainly because the idea of story sources can be obtained from folklore or Indonesian culture. The Made and The Lost Spirit film is the only one made with animation principles using Blender software. This film will add to the ranks of local IP and be able to compete with animated movies that have succeeded in Indonesia.

Thus, the animation "Made and The Lost Spirit" was created to introduce Indonesian cultures, especially Balinese culture, inspired by the celebration of Galungan in animated video media. Based on this, Animation is expected to encourage the animation industry in Bali to develop more rapidly and to promote an increase in the creative economy sector in Indonesia.

2. Research Methods

Making Animation involves various stages, from pre-production to post-production.
a. Pre-Production:
    Pre-production is the preparation phase involving an animated production's audio and visual aspects. Some of the stages carried out during pre-production include:

1. Script Writing: This stage involves writing the story used in the Animation.
2. Concept Art: The animation concept is described at this stage, including the character design and the setting used.
3. Storyboard: This is the stage to describe the sequence of events that will be animated.

b. Production:

Production is the main stage in making Animation, which is done after the pre-production stage is complete. Here are some steps involved in the production process:

1. Modeling: The process of creating characters and animation sets from scratch.
2. Rigging: After the modeling, the characters will be given bone structures to move.
3. Animation: The stage where the characters are given movement or animated.
4. VFX: Visual effects are given to the Animation to enhance its appearance.
5. Rendering: After the animation process is complete, this stage provides a visual appearance so that the Animation looks alive.

c. Post-production:

Post-production is the final stage in making an animated film. Here are some stages in the post-production process: Editing is the final stage, where all the shots that have been animated are combined into one whole film.

3. Results & Discussion

3.1. Pre-Production

1. Script Writing: Carrying out the process of writing the script for Made & The Lost Spirits
2. Concept Art: Start the character design stage, including the setting design used.

Fig 1. Concept Art Teaser Made

Concept art, or initial sketches of the film's main characters. The Lost Spirit is Made and Dharma, designed to maintain Balinese culture by wearing a tridatu bracelet and barong clothes. Dharma is designed to resemble a Balinese barong, which symbolizes goodness. Storyboard: Carrying out the stage of describing the sequence of events that will be animated in Made & The Lost Spirits.
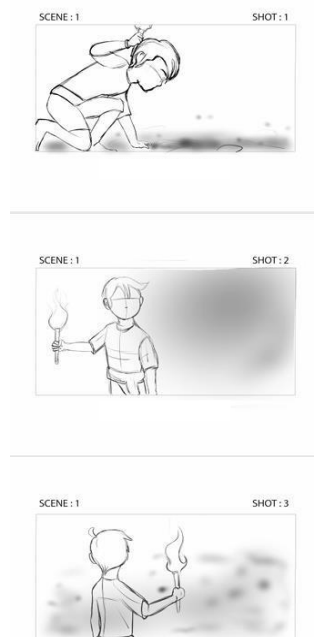

Fig 2. Teaser Storyboard Made.

A storyboard is drawn to determine the scenes in the film to make the Animation easier, such as setting the camera angle and poses in the scene that will be included per shot.

3.2. Production

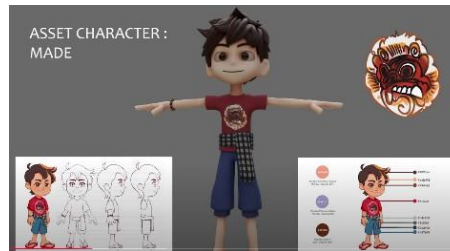1. Modeling: Start creating characters and animated sets from scratch.

Fig 3. Character Modeling Made

Modeling the main character is the process of making characters from designs conceptualized in the concept art process and made through 3d animation modeling techniques from the original or the original only in the form of blank boxes.

2. Rigging: After the modeling is complete, the next step is to add bone structures to the Made character so that they can move.

Fig 4. Rigging Characters Made

Character rigging: The process of giving bones to the main character so that the character can move freely and be perfectly animated in each part of the Made body. This is paired with rigging so that all parts of Made's body can move freely.

3. Animation: The next stage is to provide movement and animate the Made character.
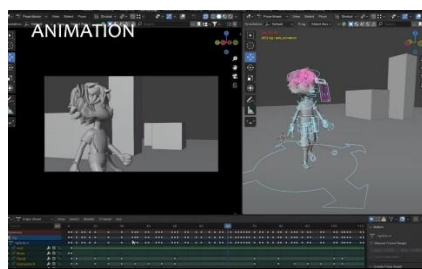

Fig 5. Animated Character Made.

Character animation where after the character is given bones, the character can be moved freely, and the character will be moved according to the scene that has been made on the storyboard; the Animation must be made as smooth and natural as possible so that it is not rigid to be seen by the audience.

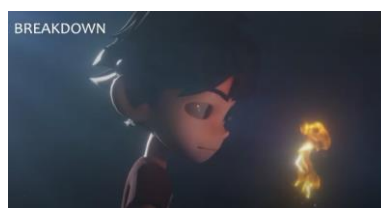4. VFX: Next, the Animation is visually affected to enhance the appearance of Made's character.

Fig 6. Character VFX Made.

VFX is the stage of giving effects to Animation; in the image above, it is made to hold a torch containing blazing flames. This is processed by making effects using 3d effects that are given a touch of light so that the fire effect looks real.

5. Rendering: Once the animation process is complete, this stage provides a visual look to make the Animation look alive.

Fig 7. Render Character Made.

Rendering provides colors and visuals so that the Animation is alive and not monotonous to see because, before the rendering process, all animations were still gray and dark and did not have visuals and colors for the audience to see

3.3. Post-Production

1. Editing: The following process combines all the ready-made shots into one film, "Made & The Lost Spirit."

Fig 8. Editing Made & The Lost Spirit.

Editing is a stage after all methods to work on Animation are completed; this stage combines the results of shots that have been animated and rendered to become a single animated film.

2. Poster: Made a poster of Made & The Lost Spirit for promotion.

Fig 9. Animated Poster Made & The Lost Spirit

The poster of the Made And The Lost Spirit animated movie is taken from one of the scenes in the film where Made just entered a dark, mysterious cave and required him to carry a torch to illuminate it with a few extra bright blue particles to complete the visuals on the poster

3. Teaser: Upload Teaser Made & The Lost Spirit.

Fig 10. Made & The Lost Spirit Teaser Visual Results

The visual results produced in this animated film are very detailed. Where paying attention to all aspects of the animated movie, such as the realistic lighting and dust effects added by adding Balinese culture it, makes the visuals of this film feel thicker with a mystical and fantasy impression

Fig 11. Animated Teaser Made & The Lost Spirit

The Made And The Lost Spirit Animation Teaser has been aired on various social media, including YouTube, and has received many views and positive comments from animation lovers in Indonesia.

Fig 12. Statistical results of the number of viewers.

The results of the statistics are quite stunning for an animated teaser released in a week. It got over 20,000 viewers, and thousands of comments and likes showed the public's enthusiasm for watching this animated film teaser.

4. Stickers: Making Made Stickers & The Lost Spirit

Fig 13. Made & The Lost Spirit Sticker.

The sticker shows a hilarious interaction between the main character of Made and Barong named Dharma; it shows how their very close friendship results in a beautiful sticker visual and also makes the viewer very happy with the cohesiveness done by Made and Dharma.

5. Shirts: Making Made Shirts & The Lost Spirit

Fig 14. Made & The Lost Spirit Shirt

Clothes with Made design with Dharma that unite and pose like a superhero, with Balinese ornaments that make this shirt still maintain its Balinese culture even with an animation aspect and choose dark black for the base of the sweater further to highlight the design of the Made and Dharma characters.

3.4. Discussion

Animated Teaser Made succeeded in producing international standard animation results with stunning visuals. The audience got 27,607 views in approximately 1 month of the teaser release, which proves the audience's great enthusiasm for watching this film teaser. The results and discussion of this research can be seen as follows: the method used above in making this Animation produces a 3d animation with slick visuals. It creates original characters with aspects of Balinese culture, such as a barong motif on the shirt and a tridatu bracelet. After the animation video was released to the public, it received many positive comments and was raised in various national and television media.

"Made and The Lost Spirit" is an animated film that has stolen the attention of many audiences with its captivating storyline and stunning visuals. The film follows the adventures of Made, a young man who tries to restore the state of his destroyed village with wisdom and wisdom. With a rich cultural background, the film is entertaining and conveys a profound message about the importance of maintaining a connection with nature and cultural heritage. The strong characters and the development of the plot, which is full of emotions, also influenced the success of the Teaser in the film. As the main character, Made shows the courage of visual pulling, making every scene feel alive. The nuances of the Bali archipelago in this Animation show how beautiful and diverse the mythology of Bali is.

3.5. Purpose of Manufacture

In Indonesia, especially in Bali, the animation industry is still very unheard of by the public. Several factors influence this. The first factor is the lack of human resources who want to make animated films with a cultural background, which is the main factor causing the lack of animation-based creative economy sectors. Even though the island of Bali has a lot of local culture, art, and wisdom that can be inspired and contained in animated films. Not only does Bali have a diverse culture, but Bali also has artists who are very good at making works of art.

Second, the lack of animation studios in Indonesia, especially in Bali, and the high price of animation learning courses make it very difficult for people who want to enter the animation world. It is not uncommon for some animators to give up animation-making due to economic limitations, such as the high price of tools to make an animated film. There is a price, of course, but there is a good, likewise, with the animation-making process. To create quality animation, of course, animators need quality supporting tools. The relatively expensive price of supporting equipment is also the cause of the lack of Animation in Bali.

This research aims to make an animated 3D film that introduces Balinese culture and ornament through animation films of international standard quality. In addition to this, the author also wants to advance the animation industry in Bali in terms of IP. Students of the Communication and Visual Design study program carried out this project. This animated film project is a forum for students in Bali to work and increase their skills in animated films. This encourages many young people who are moved to work and enter the animation industry after watching this animated film.

This research succeeded in creating characters that already have IP and stories that raise Balinese culture, which is shown by the animation film where in this Animation, there are many aspects of Balinese culture such as temples and trikatu bracelets and the design of the main character that has been created. Namely, Made is very accepted by people from all walks of life because of its simple design, which still preserves aspects of Balinese culture, such as the barong motif on the main character's clothes.

The animation work "Made and the Lost Spirit" has a huge opportunity and an enormous audience enthusiasm, and it must be supported to advance our animation creative industry because Indonesian human resources are not inferior to foreign human resources. As young people, we can also improve the quality of Animation of international standards by continuing to develop and support local Indonesian Animation. So, with the animation film "Made and The Lost Spirit," it is hoped that it will progress the animation industry in Indonesia.

Fig 15. Animation Made is supported by the Minister of Creative Economy, Mr. Sandiaga Uno.

4. Conclusion

Animation received good praise from the Minister of Creative Economy of Indonesia, Mr. Sandiaga Uno; he supported local Animation and always worked to produce new IP for Indonesia that could compete with the world of the animation industry abroad. For the development of Indonesian Animation in the future, here are some suggestions that can be considered:

1. Develop Stories That Are Grounded in Local Culture: Deepening the story by taking inspiration from local myths, legends, and traditions can effectively attract the audience's attention. Displaying rich cultural values will give a strong identity to animated films and help introduce Indonesia's rich culture to the world.
2. Collaborate with experienced artists and animators: working with animators and artists from different backgrounds to collaborate can result in unique and fresh visual styles. This collaboration can also create opportunities for the development of the skills of young animators in Indonesia.

3. Wider Marketing and Distribution: Utilizing digital platforms to distribute animated films can help reach a wider audience at home and abroad—effective marketing through social media.

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