

## Conference Paper

# 2D Animation Design of Freshwater Lobster Cultivation

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## Abstract

Indonesian Animation can attract and hold the attention of young viewers, but only if undertaken in a specific manner. For example the short duration of the movie ensures viewers remain engaged and absorb the messaging. This movie animation was designed to attract young viewers with aspirations to cultivate freshwater lobster. The development of this short movie required three stages: pre-production; production; and post-production. The movie followed the characteristics of lobster and their cultivation via the experiences of the central character, Lobi, who successfully cultivates the lobster.

**Keywords:** plan, animation, cultivation, freshwater lobster

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## 1. Introduction

Freshwater lobster (*Cherax quadricarinatus*) can not only be used as decoration, but freshwater lobster is also very delicious for consumption. Plus this lobster has a protein content that is high enough and low in cholesterol making this one food has many fans. When compared to the price of sea water lobster, freshwater lobster is much cheaper.

Freshwater lobster began to be known by the people of Indonesia since 2000. This lobster came from Australia, specifically Queensland. Freshwater lobsters breathe with gills that resemble feathers and make zooplankton, aquatic plants, and carcasses of aquatic animals as food (Needon et al, 1971). With its beautiful appearance, initially this lobster was just used as decoration in the aquarium. Because the benefits and savory taste are not much different from sea water lobster, lobster is gradually consumed a lot. Especially if only used as decoration in the aquarium, the sales turnover will be very slow, while the supply of excess hatchery. Therefore, many people turn to cultivating these shrimp families for consumption so that demand is very fast.

Animation is a collection of images that are processed in such a way as to produce movement. Animation is also often interpreted as moving images such as cartoons, writing, and so on (Sutopo through Pramono and Puspasari, 2017). Meanwhile, according to the KBBI from the Ministry of Education and Culture (2017) the animation is classified as a film in the form of a collection of images that is slightly different from each other which

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when played on the screen will seem to move. 2-dimensional images as if moving due to the brain's ability to always save or remember the previous image (Cinemagz, 2004). With the development of technology, especially computers, 3D animation appears. 3D animations are animated objects that are in 3D space. This animated object can be rotated and moved like a real object (Suheri, 2006: 2).

The selection of animated films is based on the intended target of teenagers who want to try entrepreneurship at an early age. In this media selection because the target for this film is among teenagers who want to try a business at a young age.

But in cultivation, many obstacles that are not yet known by teenagers, such as cultivation steps, how to care, seed selection, and so forth.

## 2. Method

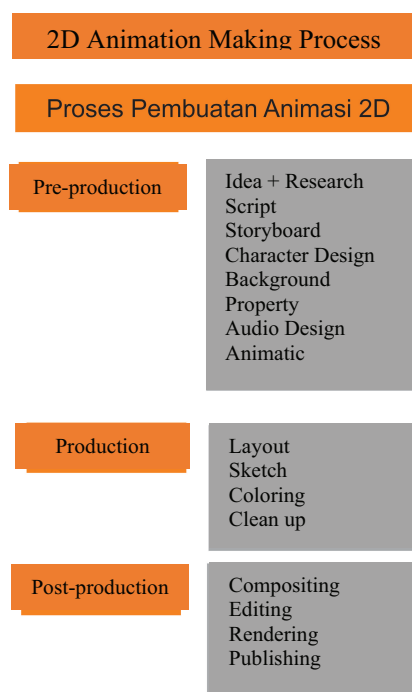


Figure 1: Design flow chart.

In designing the 2d animation short film the method used there are 3 parts as explained by Priyatmono (2013), namely pre-production, production, and post-production.

At the pre-production stage, planning is carried out in preparing the concepts that will become a reference in the production process. Some things that need to be planned at this stage are data collection, data collection is obtained from two sources, books

and the internet. After the data for the design process is collected, the authors make the design concept in accordance with the references obtained starting from the story title, synopsis, storyboard, character design and property design.

Production is the core stage in the design of this 3d animated short film, the production stage is the process of processing all materials that have been obtained in the pre-production process including modeling properties and characters, material and texturing, rigging, animating, and rendering.

In the post-production stages, the steps taken are to prepare and arrange scenes that have been rendered and then cast, and given backgrounds and sound effects.

### 3. Results and Discussion

This design produces a 2d animated short film "Freshwater Lobster Cultivation", as a medium of information to young entrepreneurs who want to try businesses at an early age. This 2d animated short film has a duration of 3 minutes with the video format used is MP4 1280 x 720. The media used for the distribution of this animated film is social media Instagram and YouTube.

This animation tells the story of a young entrepreneur named Lobby who wants to invite others to become entrepreneurs in the cultivation of freshwater crayfish. The lobby explains various things that need to be considered in the cultivation of this freshwater lobster. Such as seed selection, good feed, the temperature needed, to the area or media needed.


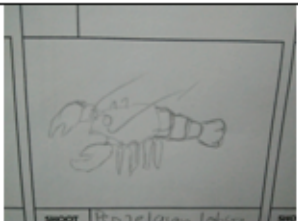

The following is a picture of a piece of storyboard design:

**Figure 2:** Pieces of storyboard design.

Property design is made as supporting material for an animation other than character design, so that the animation looks better. At the stage of character design, the writer makes a character as a supporter of making animation, this design has a chibi theme. In Japanese, Chibi means short stature or small child. Character designs are adjusted to the characteristics of each character so that it is relevant to the animated story created. The characters produced are 1 protagonist named Miko, 2 antagonist characters named Ryan and David, and 3 supporting characters.

Animating is an initial process of producing an animated film, so after we get a story then we will create various properties that will be needed, in the process of moving various properties, this is called Animating, using After effects software to create animation.

TABLE 1: DESIGN STORYBOARD DESIGN RESULTS

Action	Screen	Action-Dialect-Notes	Panel
1		<p>Narasi: Perkenalkan namaku lo bi, aku adalah pengusaha muda di bidang budidaya lobster, mau tau cara untuk budidaya? Mari saya tunjukkan</p> <p>Act: Anak muncul memperkenalkan</p>	
2		<p>Narasi: (penjelasan tentang lobster)</p> <p>Act: Seekor lobster yang berjalan jalan di dalam kolam</p>	
3		<p>Narasi: (penjelasan tentang media yang diperlukan dalam budidaya lobster air tawar)</p> <p>Act: Sebuah bak yang di ukur volume nya</p>	

Editing process is a process that serves to improve, combine various scenes from the animated films that we have made, here we can also add a variety of audio that is needed, such as Narration, Backsound and Sound Effects. Then proceed to the rendering stage, which is the final process in the production process, the process of unifying various films and audio into a whole video file format MPEG4 or AVI.

The post-production stage is the final stage of designing 2D animation, which includes video editing which unites and arranges scenes that have been rendered, then adds backsound and sound effects.

The following are the results of the draft characters and properties that have been made:

### 4. Conclusions

Based on this research, it can be concluded that with the animated film of lobster culture which has a duration of 3 minutes, with a standard screen of 1328 x 720. this then the cultivation of freshwater lobster can be popularized by using 2D animation so that people who want to be entrepreneurs about freshwater lobster can learn and



**Figure 3:** The results of character and property design.

get information easily and can attract the interest of the community to be able to entrepreneurship in freshwater crayfish.

In this design, the writer only makes 2D animation information media. In the future, the writer hopes to design the promotion media for freshwater crayfish not only through animated films but can be via videography or freshwater lobster-themed games, which can make people interested in raising lobster freshwater.

In designing this 2D animated film the writer still has many shortcomings in researching about freshwater lobster, it is hoped that later for those who want to make a media promotion of freshwater lobster culture in order to conduct more complete research on freshwater lobster, so that people who see the information media become clearer.

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