



DEVELOPMENT OF DIGITAL SQUEEZE FRAME AS CREATIVE MEDIA ADVERTISEMENT FOR METAVERSE

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Abstract. Marketing in selling products through certain channels and disseminating services and ideas is called Advertising. There are several problems within advertising on television one of which is zapping occurs when the audience switches to other channels while the ad is running. According to one study, approx one third of TV ad viewers have the potential to switch channels when an ad is broadcast. Because of that, there are several ways to advertise, one of which is squeeze frames, advertisements that appear during the program and will shrink image on television without changing the aspect ratio, so blank spots will be created elbow-shaped (L), and in the empty area it is used to put information and promotions, but not only in the form of an elbow (L) but also (U) or just a beam under when the event takes place, and shapes other. That way advertisers can use squeeze frame ads to avoid zapping as ads will be served during the program. The existing squeeze frame ads currently only use 2-dimensional assets and typefaces with pop-up and exit animations, with technology developments include 3D animation which used to be difficult become easier. In according with the development of technology, advertising not only on a real world, but also on the virtual world, Metaverse. With the existence of Metaverse and various technological devices supporters, it is very possible for users to feel the sensation of being in a very real virtual environment. Digital squeeze ad graphic development frames become 3D then digital advertisements can be displayed to the virtual world 3D digital advertisements will later contain public service advertisements will be tested on one of the metaverse platforms namely Decentraland. Testing the results of digital advertising will be measured by color using vectorscope.

Keywords: squeeze frame, digital advertising, metaverse.

1. Introduction

The word Metaverse was first mentioned by Neal Stephenson in his novel entitled Snow in 1992. Stephenson defines the metaverse as a virtual environment that big. A metaverse world has also been introduced in the novel and film Ready Player One. Naya, V.B., López, R.M. & Hernández, I. L. (2012), who defines the metaverse as virtual environment or also known as MUVE (Multi User Virtual Environments), in MMORPG (Massive Multiplayer Online Role-Playing Games) format where allows everyone to meet the avatar form in a video game 3D that combines virtual reality, augmented reality (AR), virtual reality (VR) and the internet. With the existence of the Metaverse and various supporting technological devices, it is very allows its users to feel the sensation of being in a very virtual environment real (Díaz et al., 2020). It can not only be used in a video game or other entertainment activities (Lee, 2021) but also in other aspects of life can use Metaverse technology, including one of which is advertising.

Advertising is a means of promotion for individuals, entrepreneurs, organizations or institutions government to deliver messages of a favorable nature plus all any form of nonpersonal presentation intended to promote an idea or give information about the advantages and benefits of a product financed by the main sponsor through paid announcements in print, broadcast, or electronic media [1]. There are many types of digital advertising, one of which is Squeeze Frame. Ad position the shape can be the letter L or it can also be a box surrounding the display media.

In general, squeeze frame ads use 2-dimensional graphic assets with added simple animation, and the products displayed also use 2-dimensional graphic assets. 3D animation is the development of 2D animation. With 3D animation, the characters are shown to be more alive and real, approaching his original human form. 3D animation. Overall done using the help of a computer. Via the deep gesture menu computer program, the whole object can be shown in 3 dimensions [3]. Squeeze frame ads use 3-dimensional graphic assets on the displayed product so that the ad looks bigger, interesting and more lively and suitable for applications in the metaverse world.

2. Theoretical Basic

A. Advertising

According to Kustadi Suhandang (2005:13), "Advertising (advertising) is a process of communication mass media involving certain sponsors, namely the advertiser (advertiser), who pays for the services of a mass media for broadcasting. The purpose of advertising can be grouped based on its main purpose, namely:

1. Inform; informative advertising is used especially when introducing new product category.
2. Persuade; Persuasive advertising becomes more important as competition increases. Here is the company's goal is to create selective demand.
3. Remind; advertising that reminds the importance of mature products, the ad will make consumers constantly think about the product.

The function of advertising in marketing is to reinforce consumer needs and desires towards a product to achieve the fulfillment of satisfaction. In order for the advertisement to succeed in stimulating the Journal Business Administration (JAB) Vol.23 o.2 June 2015. Actions buyers, according to Djayakusumah (in Pujiyanto (2003:25) must at least meet the criteria AIDCDA namely Attention (contains attractiveness), Interest (contains attention and interest), Desire (raising the desire to try or have), Conviction (raising confidence in product), Decision (generates satisfaction with the product), Action (leads to action to buy). Based on the concept of AIDCDA, advertising promotion must require sufficient knowledge about behavior patterns, needs, and market segments. The concept is expected consumers can make ongoing purchases. All advertising efforts with persuasive language style.

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Media Advertisement

The advertising media is the media in which the advertisement will be placed, or take place for convey its aims and objectives to the target market. By type and material, there are several types of advertising delivery media. According to Kustadi Suhandang (2005:28) various kinds of advertising media that now adorn the mass communication system in society among others are:

3. Print Media, from daily newspapers and magazines to weekly and pamphlets contains information about shopping centers.
4. Media Outside the Home, in the form of posters, exhibitions, and transit cards.
5. Custom Postcards, can directly reach a certain audience.
6. Graphic Information, in the form of leaflets containing information in various forms chart.
7. Broadcast, from television stations (national, local, commercial, general), various kinds of stations radio, as well as through technological developments, arrived at new media that in essence it can blur the difference between printing and broadcasting.

B. Squeeze Frame

Squeeze frame is a term used in the world of broadcast which refers to when reduce the size of the television picture without changing the aspect ratio of the picture so it will an empty space in the shape of an elbow (L) is created, and this empty space is used for placing Information and promotions can be in the form of pictures or moving animations. What's with the shape which is angled and large enough to make the information and promotions conveyed can also make lots of detail. However, because of its angular shape and quite large, this is what make such an impression

of sacrificing the the main event / main event of the ongoing program and this is felt to be quite disturbing for the majority of the audience, so the duration is usually from. This squeeze frame is not too long because of its nature, for example the squeeze frame adon the following figure 1.



Fig. 1. Commercial Squeeze Frame Advertising

C. Animation

The definition of animation is from the word to animate which means to move, animate. For example, an inanimate object that moves through gradual and regular changes to give the impression of being life. Djalle Zaharuddin defines animation as follows: The process of creating or changing effects movement a form that lasts for a while. This is also a way to display an image. So the audience feels the illustration of the motion of an image displayed. justice means that inanimate objects can. 'switched on'. This definition is a similar term in the sense that it does not need to be translated explicitly, but is a symbol that expresses familiarity [3]. 3D animation is the development of 2D animation. With 3D animation, characters which is shown to be more alive and real, approaching the original human form. 3D animation in real time is computerized through the computer program, the whole object can be shown in 3 dimensions. In this study squeeze frame advertising using 3-dimensional graphic assets on the displayed products so that the ads look more attractive and more alive [3].

D. Metaverse

METaverse, a combination of the prefix "meta" (implying beyond) with the word "universe", describes a hypothetical synthetic environment related to the physical world. The word Metaverse first mentioned by Neal Stephenson in his novel entitled Snow in 1992. Stephenson interpret the metaverse as a large virtual environment. A metaverse world too introduced in the novel and film Ready Player One. Naya, V.B., López, R.M. & Hernández, I. L. (2012), who defines the metaverse as a virtual environment or also known as MUVE (Multi User Virtual Environments), with the MMORPG format (Massive Multiplayer Online Role-Playing Games) where everyone can meet avatar forms in a 3D video game that combines reality virtual, augmented reality (AR), virtual reality (VR) and the internet. With the existence of the Metaverse as well various supporting technological devices, it is very possible for users to feel the sensation of being in a very real virtual environment (Díaz et al., 2020). This is not only used in a video game or other entertainment activity (Lee, 2021).



Fig. 2. The world of Metaverse Decentraland

3. System Design

A. Multimedia Development Life Cycle

In this section we will explain system design of the digital squeeze frame advertisement . As for the chart of the process research are as follows:

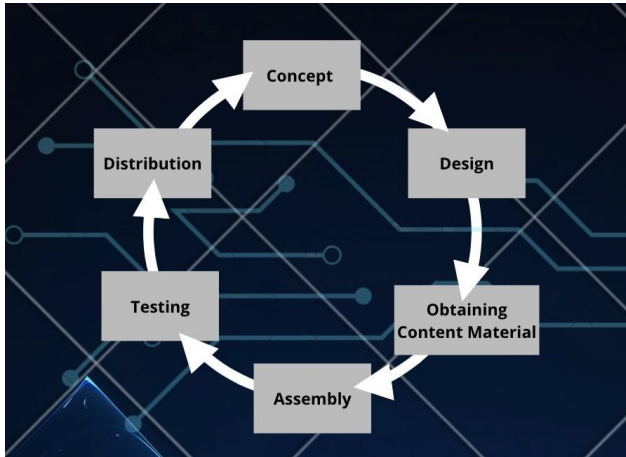


Fig.3. System design of digital squeeze frame advertisement




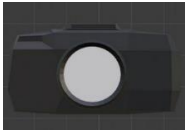

At this stage of making the concept, conceptualization is carried out for each advertisement that will be made, on this stage also determines what products will be advertised. And also public service announcements like what will be used as an ad. The following is the product data that will be advertised.

1. Automatic 3D Anaglyph ActionCamera Holder.
2. Enterprise Thecnology Hybrid OnlineLearning
3. EEPIS news and networking team.

For the next stage is design. At this stage the graphic assets created which been adapted to the storyboard made before. The software used is Adobe Illustrator and Blender, each software has its own function such as Blender for creating 3-

dimensional graphic assets, and Adobe Illustrator for 2D graphic assets. Some of assets we can see in Table 1.




Table 1. Graphic assets of Squeeze Frame

No	Assets	Information
1	 A 3D rendered character with a blue long-sleeved shirt, dark pants, and white shoes, standing with arms slightly out.	Main character 1
2	 A 3D rendered character with a blue long-sleeved shirt, dark pants, and white shoes, standing with one hand on their head.	Main character 2
3	 A 3D rendered character with a red top, black skirt, and white shoes, standing with arms slightly out.	Main character 3
4	 A 3D rendered camera lens and body, shown from a top-down perspective.	Camera animation
5	 A 3D rendered computer setup including a monitor displaying a webpage, a keyboard, and a mouse.	Computer animation

After creating graphic assets, then next step is to animate the graphic assets which already exists in the editing software. Graphic assets are animated accordingly requirements that have been drawn on the storyboard. At this stage the 2-dimensional assets are transferred to the Adobe After Effects software to be animated. While 3 dimensional assets will be animated in the Blender software. Technique the animations

used in squeeze frame ads will be explained in the following tables.

Table 2. Animation technique of Squeeze Frame

No	Scene	Animation Technique
1		Rigging Scale Position Rotation
2		Rotation Masking Scale
3		Position Masking Camera

On the next stage is assembly. At this stage, all the results of each 3-dimensional asset animation that has been made inBlender software are combined into one and adjusted the accuracy of the timing between 3-dimensional animation movement with 2D animation. This video editing using AdobeAfter Effect. After Animated for each asset 3 dimensions and2 dimensions , the next step is to merge all assets. After the editing process is complete, the next step is rendering with Adobe Media Encode. The resolutionn of squeeze frame is 1980x1080 px with 25fps and H.264 video format.



Fig.4. Editing of squeeze frame with Blender.

4. Performance Evaluation

In this section we do a testing on squeeze frame advertisement. Digital squeeze frame advertisement will be measured by color using vectorscope and the parameters motion.



Fig.5. Digital squeeze frame “Automatic 3D Anaglyph Action CameraHolder”color measured

According to the figure, for digital squeeze frame “ Automatic 3D Anaglyph Action Camera Holder “ the number of color measured is 89 IRE, it is mean that the colour of squeeze frame that use is appropriate, not overbright or under light, where the maximum number of colour is 100 IRE.



Fig.6. Digital squeeze frame “Enterprise Thecnology Hybrid OnlineLearning”color measured

Based on vectorscope,the number of color measured for *Digital squeeze frame* “Enterprise Thecnology Hybrid Online Learning” is 69 IRE, it is mean that the colour of squeeze frame that use is appropriate, not overbright or under light, where the minnimum number of colour is 0 IRE.

For digital squeeze frame “EEPIS news and networking team”color measured is 85 IRE. The result is suitable show thecolour animation nicely.

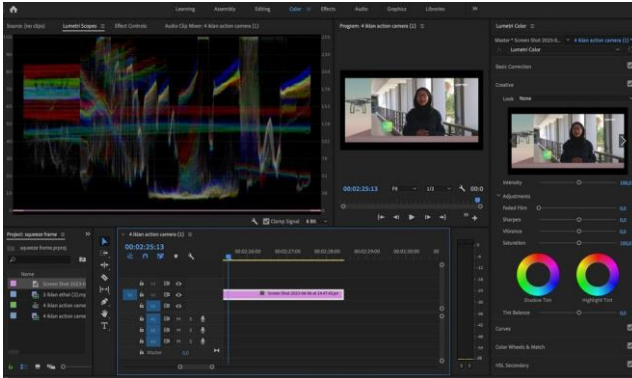


Fig.7. Digital squeeze frame “EEPIS news and networking team” colormeasured

5. Conclusion

There are many ways to attract public interest in an advertisement, one of which is by using creative advertising in the form of squeeze frames. The vectorscope color measured results for three digital squeeze frame advertisement is 89 IRE,69 IRE and 85 IRE.

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