Design and Analysis of the Motion Graphic Publication Program Implementation as a Promotional Media for Batam TV

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ABSTRACT
Motion graphics is a form of video-based advertising that incorporates corporate or other business advertising as a promotional medium for a wider community. The main purpose of this study is to develop motion graphic as promotional media for Batam TV, so that program publication can be distributed and accessed online through social media to reach a wider audience. We used Multimedia Development Life Cycle (MDLC) method to develop this motion graphic which based on six stages, namely concept, design, material collecting, assembly, testing, and distribution. The test analysis used Likert scale which has five rating scales from 108 respondents. Questionnaire distributed and tested for validity and reliability, the percentage of each aspect of making the motion graphics is obtained, namely the spatial aspect is 87.84%, the temporal aspect is 86.54%, the live action aspect is 88.95% and the typography aspect is 88.89%. Overall, these aspects scored 88.07% in the very effective category.

Keywords: Motion Graphic, Promotional Media, Effectiveness.

1. INTRODUCTION

The development of science and technology today helps humans to get information quickly, easily and accurately. Advances in technology at this time make a lot of media used as a means of information. Technology and information can also be used to promote a company in the form of images, videos, websites and others. Promotion is a tool used by a company in offering its products. Some are through television media, print media, and so on [1]. Media promotion in the case study that the author will create is a company engaged in television, namely Batam Multimedia Television or commonly known as Batam TV.

Batam TV as the first local television in the Riau Islands, especially Batam City, focuses on the interests and desires of viewers in Bumi Melayu, Riau Islands Province. Batam TV viewers have the typical character of the metropolis, which is dynamic and appears as it. It likes to be involved in television shows. With these principles, Batam TV makes programs that are really close to the community and involve the community as participants in every Batam TV program [2]. The survey data conducted by AC Nielsen, the author obtained from PT Batam Multimedia Televisi (2020) shows that Batam TV viewers are 56% watched by women and 44% are watched by men whose overall age of the audience is 10% aged 05-05. 14 years old, 15% 15-24 years old, 20% 25-34 years old, 35% 35-44 years old, and 20% 44 years old and over. Based on this data, Batam TV still continues to exist to this day with various superior programs.

Sylvanni Syafruddin explained that behind the variety of Batam TV's flagship programs, there are limitations in terms of publication programs promotion which are only addressed directly to the desired client, either by letter or face to face. This requires special time and makes the scope of the
promotion limited and less developed among the public. Based on these limitations, a promotional media is needed that can assist in distributing offers to clients (personal communication, 06 April 2021). As an alternative solution to this problem, the author is compelled to create an animated video of a motion graphic Publication Program as a promotional media on Batam TV which can be distributed and accessed online through social media, so it can reach a wider audience. Motion graphics in every movement can help simplify messages and information that will be displayed more easily absorbed with a simple [3]. Dissemination online can facilitate interaction with many people, expand relationships, eliminate barriers of distance and time, dissemination of information can also be done more efficiently at a much cheaper cost [4].

Referring to these problems, the title of this research is "Design and Analysis of Motion Graphic Publication Programs Implementation as Promotional Media for Case Studies on Batam TV" which is expected to be a solution and can expand the distribution of information and increase the number of enthusiasts for the Batam TV Publication Program.

2. METHOD

This study used descriptive quantitative approach to get systematically, factually and accurately describe certain facts and characteristics, or to describe phenomena in detail [5].

The design used Multimedia Development Life Cycle (MDLC) method which develop a multimedia system based on six stages that consist a concept, design, material collecting, assembly, testing, and distribution [6].

![Figure 1 Stages of the MDLC Method](image)

The stages of development in the MDLC are:

2.1. Concept

Formulate the basics of the analysis of making visualizations that will be created and deployed. Especially on the purpose and type of visualization to be made.

2.2. Design

The stage where the visualization is described in detail what will be done and how the stages and design of the video ad are made. Manufacture of scripts, navigation and other design processes must be completely carried out. At this stage, you will have to know how the final result of the visualization will be done.

2.3. Material Collecting

Material collecting is a process for gathering everything needed in figuring this visualization. Regarding the material to be delivered, then multimedia files such as audio, video, and images that will be included in the presentation of the visualization.

2.4. Assembly

The materials and multimedia files that have been obtained are then assembled and arranged in such a way according to the design that have been designed.

2.5. Testing

After the result of the visualization are finished, it is necessary to carry out trials. The trial was carried out by applying the results of the video and visualization. It makes sure that what has been made previously is correct before it can be applied in mass publication.

2.6. Distribution

The stage of duplicating and distributing results to users. This visualization needs to be packaged properly according to the media for its distribution, whether through CD/DVD, or other media.

3. RESULT AND DISCUSSION

3.1. Related Works

<table>
<thead>
<tr>
<th>Ref</th>
<th>Year</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>[7]</td>
<td>2014</td>
<td>To know the effective and efficient tool in order to increase the attention of the audience through media by motion graphic.</td>
</tr>
<tr>
<td>[8]</td>
<td>2016</td>
<td>The performance and unique</td>
</tr>
</tbody>
</table>
3.2. Pre-Production Stages

The pre-production stage is divided into two stages, they are:

3.2.1. Flowchart

Drawing a flowchart that will be used as the process of implementing a motion graphic video.

![Flowchart Motion Graphic Batam TV Publication Program](figure2)

**Figure 2** Flowchart Motion Graphic Batam TV Publication Program

3.2.2. Storyboards

Drawing the scene sketches in sequence that will be used as a reference in the implementation process of After Effects and Adobe Illustrator software which will become a motion graphic video.

![Storyboard Motion Graphic Batam TV Publication Program](figure3)

**Figure 3** Storyboard Motion Graphic Batam TV Publication Program
3.3. Production Stages

The production stage is the stage that contains the production process of the motion graphic of the Batam TV Publication Program accompanied by the implementation of four aspects of framing motion graphics, namely spatial, temporal, live action, and typography. (a) Spatial aspects are aspects related to position, scale and rotation that are used in influencing an object with other objects in the displacement of direction, movement and size. (b) The temporal aspect of motion graphic is used to make motion smoother with the presence of Frame Per Second (FPS). (c) The live action aspect is the use of color that is able to support the creation of an emotional atmosphere in the audience, expressing story ideas that are combined in a video that is supported by animated movements. (d) Aspect of typography is a technique of selecting and arranging letters to create a certain impression in conveying a message or information.

The following is a table of the result of digital motion graphic processing of the Publication Program from the storyboard that has been made, shown in table 2 below.

Table 1 Sequence Motion Graphic

<table>
<thead>
<tr>
<th>No</th>
<th>Scene / Shot</th>
<th>Duration</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/1</td>
<td>3 S</td>
<td>Barikdas di BATAM TV?</td>
</tr>
<tr>
<td>2</td>
<td>1/2</td>
<td>3 S</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2/2</td>
<td>6 S</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3/2</td>
<td>4 S</td>
<td></td>
</tr>
</tbody>
</table>

3.4. Post-Production Stages

In this stage, an analysis of the motion graphics that have been framed based on the spatial, temporal, live action, and typography aspects is carried out before the motion graphic are published. Testing motion graphics as a promotional media for the Publication Program was carried out in 2 stages of testing, namely alpha and beta testing.

3.4.1. Alpha Testing

Alpha testing is a questionnaire to experts that aims to find out the shortcomings of the implementation of motion graphics made and provide suggestions regarding the aspects that are applied.
Table 2 Result of expert questionnaire calculations

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>Ahli A1</th>
<th>Ahli A2</th>
<th>Ahli A3</th>
<th>Ahli A4</th>
<th>Score</th>
<th>average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Spatial Aspect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The layout of the motion graphics is well structured</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>16</td>
<td>4.00</td>
</tr>
<tr>
<td>2</td>
<td>The display of the combined visual elements supports the concept of the presented theme</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>18</td>
<td>4.50</td>
</tr>
<tr>
<td>3</td>
<td>Placement of images and text on motion graphics does not interfere with the audience's understanding of the message presented</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>18</td>
<td>4.50</td>
</tr>
<tr>
<td>B. Temporal Aspect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The timing of the movement of the motion graphic elements is correct</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>16</td>
<td>4.00</td>
</tr>
<tr>
<td>2</td>
<td>Transitions between scenes move clearly</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>18</td>
<td>4.50</td>
</tr>
<tr>
<td>3</td>
<td>The movement of animated objects is smooth and detailed</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>17</td>
<td>4.00</td>
</tr>
<tr>
<td>C. Live action aspect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The applied color contrast is correct</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>16</td>
<td>4.00</td>
</tr>
<tr>
<td>2</td>
<td>The color combination used makes the motion graphic look attractive</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>19</td>
<td>4.75</td>
</tr>
<tr>
<td>3</td>
<td>Color combinations that vary between objects and text support each other</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>18</td>
<td>4.75</td>
</tr>
<tr>
<td>D. Typography Aspect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The types of fonts used in motion graphic designs are clear to read</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>17</td>
<td>4.25</td>
</tr>
<tr>
<td>2</td>
<td>Variations in font sizes used in motion graphic designs are clear to read</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>17</td>
<td>4.25</td>
</tr>
<tr>
<td>3</td>
<td>The use of distance and space between writing in motion graphics is correct</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>20</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Amount: 50 48 55 57 210 52.50
Average: 4.17 4.00 4.58 4.75 17.50 4.38

(Source: Data processing using Microsoft excel).

3.4.2. Beta Testing

In beta testing there were 108 respondents, including 43% men and 57% women with age categories ranging from 15-59 years old. Beta testing is done by distributing a questionnaire in the online google form.

Graph 1 Percentage of Respondents Assessment
(Source: Data processing using Microsoft excel)

Table 3 Percentage value of each aspect applied

<table>
<thead>
<tr>
<th>No.</th>
<th>Category</th>
<th>Value Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spatial Aspect</td>
<td>87.84%</td>
<td>Very effective</td>
</tr>
<tr>
<td>2</td>
<td>Temporal Aspect</td>
<td>86.54%</td>
<td>Very effective</td>
</tr>
<tr>
<td>3</td>
<td>Live action aspect</td>
<td>88.95%</td>
<td>Very effective</td>
</tr>
<tr>
<td>4</td>
<td>Typography Aspect</td>
<td>88.95%</td>
<td>Very effective</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>88.07%</td>
<td>Very effective</td>
</tr>
</tbody>
</table>

(Source: Data processing using Microsoft excel)
It is known from the average assessment of each aspect in table 4 which refers to graph 1, getting a value of 88.07%, this shows that the value is included in the “Very Effective” category based on the application of the aspects that have been applied above.

3.5. Publication

This stage is the distributing motion graphic videos stage for the Batam TV Publication Program as a promotional media that has been made through Batam TV social media such as on YouTube, Facebook, Instagram channel and also on Batam TV daily broadcast both on the 51 UHF frequency and on the JPM Stream Application.

4. CONCLUSION

Based on the data processing and analysis as well as the discussion that has been carried out, it can be concluded as follows: (a) In accordance with the design that has been designed, it has been successfully carried out which can be used to promote the publication program on Batam TV. (b) Based on the research finding and data processing carried out from the application of motion graphics which include spatial aspect and temporal aspects, the overall score is 88.07% which is included in the “Very Effective” category. It shows that the design is in accordance with the expected goal, which is to be able to reach potential customers widely through uploads on social media and daily broadcast of Batam TV in a short time.

REFERENCES


