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Multimedia Development Life Cycle Method In Village Infographic Video

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ABSTRACT

Sambas Regency is part of the province of West Kalimantan, whose administrative area includes 19 sub-districts with a total of 183 villages. If viewed from the number of towns, the exciting thing that becomes information for the needs of the community is informed about the development of each city, both in terms of facilities and infrastructure, community life to the number of residents in the village. Currently, information on village data such as population, average occupation, existing facilities and infrastructure, village vision, and mission can be obtained by asking directly to the village office for the form of the information displayed in the form of a village profile report document. This information search is categorized as less effective because it must come directly and takes a long time in the data search process. For this reason, it is necessary to visualize village information through infographic videos developed in motion graphics by applying the Multimedia Development Life Cycle method. Before publishing, the infographic and video were first tested by five material experts and 18 village communities before publishing it. The results of this study will get infographic videos of 10 villages in the Sambas district in MP4 format with a duration of 10 minutes.

1. Introduction

Sambas Regency is a district in the province of West Kalimantan whose administrative area includes 19 sub-districts with a total of 183 villages. When viewed from the number of towns, the intexcitinging that becomes information for the needs of the community is information on the development of each city, such as facilities and infrastructure supporting development, community life to the number of residents in the viltownnformation about the village is no more comprehensive data that the village government only knows but more about data transparency to the community and as an addition to knowledge for the community [1].

Currently, data on village information such as population, average occupation, existing facilities and infrastructure, village vision, and mission can be obtained by asking directly to the village office. Based on the author's direct search of the village office in the Sambas sub-district to find out village data such as population, employment, existing facilities, and infrastructure, it is only shown in the form of village profile documents [2]. Of course, this information search is categorized as less effective because it must come directly and requires a long time in the data search process. Given that information technology in digital form is increasing today, where the community must quickly and easily obtain the necessary data, it is essential to visualize village information in video-based infographics [3]. Infographic videos are made with motion graphic techniques where moving images become media aids in conveying information to the public.

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Presentation of information generated from graphics in the form of illustrations and data [4][5]. Infographics are a form of visualization of information through graphic images, which are not only in the form of text but have a more attractive visual [6]. The design of the infographic adds to the attractiveness of the information displayed. [4][7][8]. The purpose of making village information in the form of infographics is to deliver communication more straightforward, brief, and easy to understand [6][9].

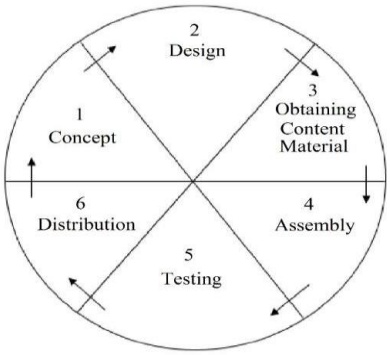
Making this infographic video will apply the Multimedia Development Life Cycle method [10]. The MDLC method has six steps: concept, design, data collection, manufacture, testing, and distribution [11]. Using this method, it is hoped that the visualization of village information in the form of infographic videos can be produced. This research will collect data from 10 villages representing ten sub-districts in the Sambas district. Before being published, this infographic video will be tested by five material experts and 18 villagers, using a questionnaire technique by applying measurements with a Likert scale to get a conclusion on whether or not this infographic video will be published [12]. This village information infographic video will be posted through village social media because social media has an essential role in disseminating information and facilitating interaction with the community [13][14][15].

2. Metode

The development method used in making this village infographic video is the Multimedia Development Life Cycle (MDLC) method. Making Infographic Videos in this study will pass through six stages, namely: Determination of the concept, At this stage, an overview of the contents of the infographic video will be explained. Design, At this stage, a temporary display design of the infographic video will be carried out as a storyboard design.

Data collection, This stage collects data that will be used in making infographic graphics. The data obtained is in the form of village profile data such as history, area, territorial boundaries, population Assembly, At this stage, the steps for making infographic videos using the Adobe Premiere Pro application will be explained to the merging of all the motion graphic effects. Testing, Tests were carried out on material experts and the general public to what extent the feasibility of the infographic video was accepted. Distribution, Distribution is carried out after improvements have been made to input from material experts and the community

The stages in the MDLC method are as shown in the following figure:



Gambar 1. Metode MDLC

3. Result and Discussion

Making a village infographic video follows the stages in the Multimedia Development Life Cycle method, starting with the following steps:

3.1 Concept

In the research of making this village infographic video, the concept created is first to explain the village's history. The vision and mission are continued with village boundaries, population, facilities, and infrastructures such as education, health, worship, community religion, community work, ethnicity, and, finally, the village.

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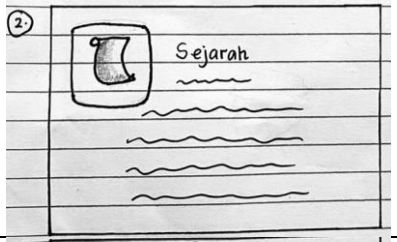
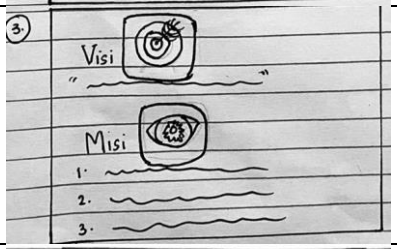
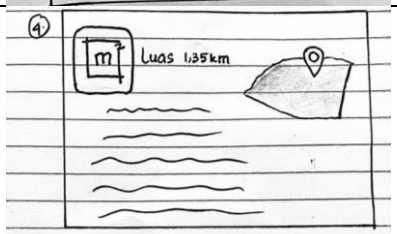
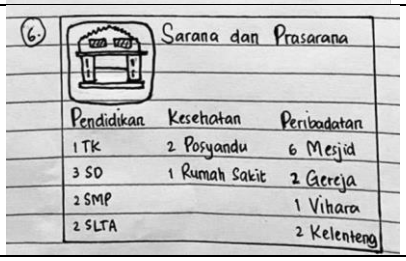
3.2 Design

At this stage, before the infographic video is produced, the initial design of the video is first made. In this design, Storyboarding is the stage of designing the video display. The storyboard of one of the villages in the making of this infographic video is shown in the following table:

Table 1.
Design of Village Infographic Video Storyboards

No	Scene	Information
1		The page that describes the appearance of the front page of the Village
2		Pages explaining Village History
3		Pages that explain the Village Vision and Mission
4		Pages that explain the Village Area
5		A page that describes the number of residents in the village
6		Pages that describe the Facilities and Infrastructure in the Village

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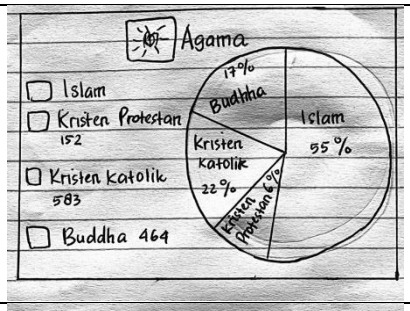
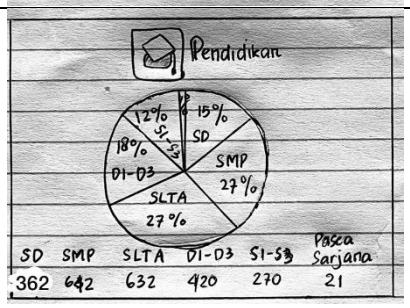
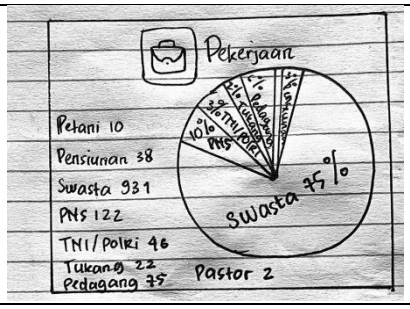
7		Pages that explain the Diagram of Religion in the Village
8		Pages that explain the Education Diagram in the Village
9		Pages that explain the Employment Diagram in the Village

3.3 Data Collection

At this stage, the authors collect data related to village information such as village history, vision, and mission, territorial boundaries, maps (if any), population, facilities and infrastructure, religion, occupation, and education of the community. The village office uses a direct interview method with village profile staff or operators. The village profile reports and the Village Medium-Term Development Plan provide the data.

Figure 2. Data Collection with Village Parties

Then before making the Adobe Premiere Pro application, prepare several icons to support video creation. The icons are made in table 2 below:

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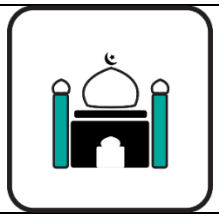
Table 2. Image Icon

Icon/image	Information
	Icon of a group of people, to show the number of residents in the village
	Bachelor's hat icon to mark Education
	Mosque icon for a place of worship

Then use happy upbeat.mp3 backpack sound audio.

3.4 Assembly

At this stage, all objects are combined into one, starting from inserting infographic supporting icons, making motion graphics, and inserting infographic video support back backgrounds manufacturing process starts with:

a. Making village infographic video start page display

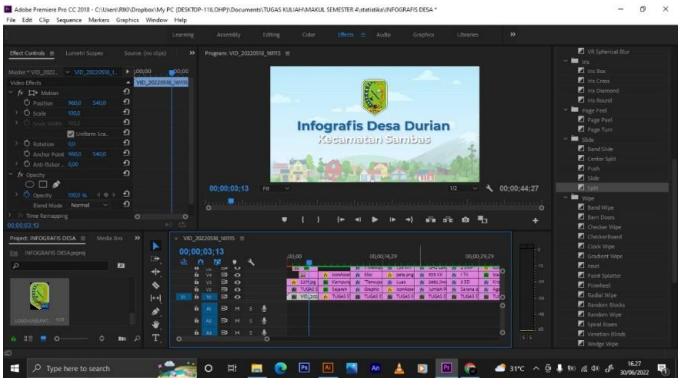


Figure 3. Display of Village Infographic Video Homepage

b. Inserting village information supporting icons and providing motion graphics

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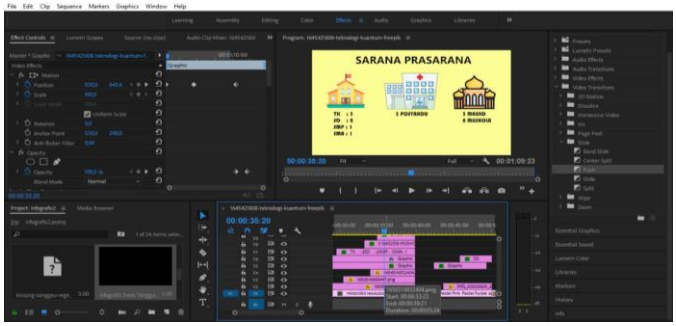

Figure 4. Icon insertion page display and motion graphic creation

c. Backsound audio insertion

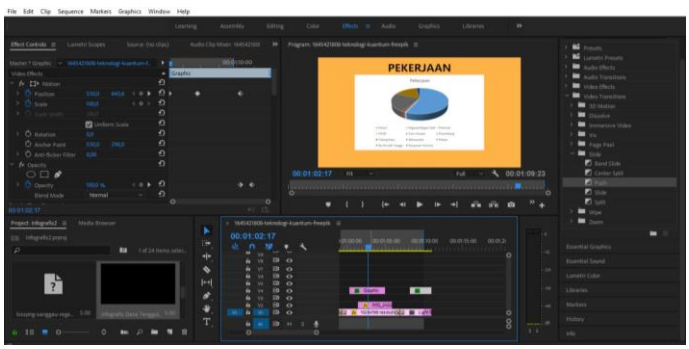

Figure 5. Backsound insertion page view

The processes a, b and c above were repeated for ten villages representing ten sub-districts in the Sambas district.

d. Performing the rendering process or merging all objects and animations in the application to get the whole video

3.5 Testing

At this stage, the results of the infographic videos that have been made are checked and validated by five material experts and eighteen general public using a Likert scale. The following is a questionnaire in the form of questions in the form of statements, which are given to material experts and the general public.

	DATA RESPONDEN (AHLI MEDIA)					
	Nama :					
	Jenis Kelamin :					
	Pekerjaan :					
No	**Pernyataan**	**Sangat Tidak Setuju**	**Tidak Setuju**	**Ragu-ragu**	**Setuju**	**Sangat Setuju**
1	Ukuran dan materi dalam Video infografis sesuai					
2	Penempatan objek infografis sudah sesuai dengan rancangan awal					
3	Struktur teks dan ilustrasi sudah sesuai					
4	Pemberian motion graphic pada objek sudah tepat					
5	Judul jelas, konsisten dan proporsional					
6	Objek sudah sesuai dengan informasi yang ditampilkan					
7	Tampilan ukuran video sudah sesuai dengan ukuran publikasi					
8	Desain Memiliki unsur kreatif dan dinamis					

Figure 6. Questions for Media Experts

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DATA RESPONDEN
Nama :
Jenis Kelamin :
Pekerjaan :
Asal Desa :

No	Pertanyaan	STS	TS	RR	S	SS
1	Motion Graphic sudah informatif dan mudah dipahami					
2	Motion Graphic Infografis Desa dapat membantu anda lebih mengenal Desa					
3	Anda percaya dengan informasi yang ditampilkan dalam infografis tersebut					
4	Informasi yang disajikan sudah lengkap					
5	Animasi pada video sudah menarik					
6	Jenis font yang digunakan mudah terbaca					
7	Penggunaan ikon dan penandaan dalam video dapat dipahami					
8	Tampilan keseluruhan isi video sudah menarik					

Figure 7. Questions for the General Public

The results of the assessments from media experts and the general public are shown in the image below:

Nama	Butir Pertanyaan							
	1	2	3	4	5	6	7	8
Wijaya	5	5	4	4	4	4	4	4
Hidayat	5	4	5	5	4	4	4	4
Erwin	4	5	5	5	4	4	4	4
Arie	4	4	4	4	4	4	4	4
Purmadi	5	4	4	4	4	4	4	4

Figure 8. Results of Material Expert Assessment

No	Nama	Butir Pertanyaan							
		1	2	3	4	5	6	7	8
1	Ewis Atia	4	4	4	4	5	4	4	5
2	Desi Ayu Lestari	4	4	4	4	4	4	4	4
3	Rikyansyah	5	4	4	4	3	3	4	4
4	Sapna	4	4	4	4	4	4	4	4
5	Nandini	4	5	5	5	4	5	4	5
6	Dea Lestari	4	4	4	4	5	5	4	4
7	Yusuf Lana	4	4	5	4	4	5	5	5
8	Abdul Murad	4	5	5	4	4	4	4	4
9	Helin	4	4	5	4	5	4	4	4
10	Urai Oci Melisa	4	4	4	4	4	4	4	4
11	Urai Handewi R	4	4	4	3	3	4	4	4
12	Nurmulyani	4	4	4	4	4	4	4	4
13	Yurda Dianto	5	5	4	5	5	5	4	4
14	Bunyani	4	4	5	4	4	4	5	5
15	Winny	4	4	4	4	4	4	5	4
16	Andi	4	4	4	4	4	3	5	4
17	A. Giant	4	4	4	4	4	4	4	4
18	M Asyraf Azizi	4	4	5	5	5	5	5	5

Figure 9. General Public Assessment Results

Then look for the score interpretation criteria with intervals according to the number of answers above, namely:

0% - 19.99% = Strongly Disagree (STS)
20% - 39.99% = Disagree (TS)
40% - 59.99% = Disagree (KS)
60% - 79.99% = Agree (S)
80% - 100% = Strongly Agree (SS)

So it can be concluded that the test value from material experts is 84.50%, and the general public is 84.03% agree to be published.

3.6 Distribution

This stage is the last stage of the MDLC method. Where this stage, improvements have been made to the infographic video and are ready to be published on each social media from the village. The final result is packaged as a DVD cassette in MP4 format. Here's a picture of the DVD cover and the disc.

Figure 10. Village Infogration Video DVD Cover

4. Conclusion

Based on the results obtained from the making of this village infographic video in the Sambas district, the following conclusions are obtained: Making a village infographic video by applying the MDLC method has resulted in a village infographic video totaling ten villages with an MP4 format of 10 minutes duration From the results of media expert testing of 84.50% and the general public 84.03%, it can be concluded that this village infographic video strongly agrees to be published.

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