Implementation of Digital Village by Creating Content for a Website as an Information Center in Banyumanik Village, Semanu, Gunung Kidul

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A r t i c l e

A b s t r a c t

Digital villages have become a necessity in the current era of disruption. Along with the development of the world of technology and communication, all regions can have access to and obtain information. Rural communities are often stigmatized as underdeveloped communities living in areas that are far from the reach of information and the progress of modernization. Therefore, there needs to be an effort to overcome these differences by providing services that are equivalent to those in urban areas through instilling a digital culture. The purpose of this community service is to increase the capacity and skills of partners in the field of visual content and empower them to become digital villages. The activity method is divided into several stages, namely the coordination and preparation stage, the science and technology implementation stage, and the evaluation and monitoring stage. The activities carried out include training and management of supporting content, village profiling through shooting, audio recording, and video editing. The result of this service activity is the creation of content for the village website as an information center for village programs, village activities, assistance information from the regional or central government, and other information. In addition, a digital village profile is also created that can provide initial information about Banyumanik village. This activity aims to provide benefits for partners in disseminating village information in the future and can be an inspiration for other communities in developing communication media and village information through visual content.

Keywords: Digital Village; Website; Village Profile.

Introduction

Rural communities are often stigmatized as being left behind, far from the reach of information and progress, and lagging in the modernization process. Therefore, there needs to be an effort to overcome the gap. Villages, as the most dominant area in this republic, must get services equivalent to those in urban areas by instilling a digital culture. Banyumanik Village is one of the villages located in Pacarejo, Kapanewon Semanu, Gunung Kidul Regency, Special Region of Yogyakarta, Indonesia. Banyumanik is one of the 28 villages in Pacarejo Village. This.

village is located close to the intercity route, namely the Wonosari-Yogyakarta road. Broadly speaking, the people of Banyumanik make farming their daily activity, but there are also construction workers. Organizations in this village are members of the Ngudi Makmur Farmers Group, the Pertiwi Farmers Group, and, for youth members, the Tunas Muda youth group

As a village that is located quite far from other villages, Banyumanik has two main problems: the limited availability of clean water and the poor signal reception. The problem of clean water availability is caused by the absence of PDAM (Indonesia Water Utilities) water and well water in Banyumanik. This means all residents have to collect rainwater using Rainwater Harvesting Equipment (PAH) and Rainwater Harvesting Installations (IPAH). However, when the dry season arrives, people in Banyumanik have to buy water for 100–110 thousand per tank, with an estimate that the water will run out within 1-2 weeks. On the other hand, the problem of poor signals makes information and communication in the village difficult, when in fact, the signal networks and the internet support communication between residents and village officials to find solutions to the problems faced. The empowerment of technology, especially ICT, will increase the potential of villages to obtain authority through independent action efforts that encourage development and become subjects in the development itself.

In this case, an understanding of the urgency of village digitalization is first carried out by village stakeholders and the community so that they are open to digitalization, which provides easy access to communication and village governance. The effort was made to raise the awareness of state civil servants and citizens to jointly build a digital village, which began with an understanding of the importance of content and all its supporters. This is related to the theory of media publicity, where it supports public relations activities to disseminate information. A type of website that is widely used by government agencies, education, industry, and public organizations is the profile website (Muhammad *et al*., 2020). Media publicity is designed to develop knowledge and a positive understanding of the various personal activities of a person or organization (Danandjaja, 2011; Miranda, 2023). Thus, website content can be used as a communication medium related to the development of efforts to solve problems experienced by residents of Banyumanik District. Website branding is the foundation for building an image online (Budiarti, 2024). It involves visual elements such as logos, colors, and designs, as well as a consistent brand message. A professional-looking and cohesive website helps reinforce the credibility and trust of users in something displayed (Harsari *et al*., 2024; Luisa *et al*., 2024).

The role of content media is an effective means of communicating messages through various creative elements owned by the village. Relevant and engaging content helps reinforce the image and provide a positive experience for users (Rahma & Hariyana, 2023; Sudirjo *et al*., 2023). However, with the current poor signal reception in the village, village stakeholders must strive for signal availability first. This is because the availability of internet signals or networks is essential as a support for the use of information and communication technology.

Therefore, to overcome this gap by looking at the background of the situation in Banyumanik village, the Communication and Multimedia Science and Technology Team will try to bring the digital world closer to the people of Banyumanik, Semanu, Gunung Kidul by creating visual content for the village website as a village information center. The information center contains information about village programs, village activities, assistance information from the local and central governments, and other information. In addition, the team will create a village profile in digital form so that the initial information about Banyumanik village will be available later. The activities carried out in this service also involve village youth. As the next generation, the youth groups need to train and develop their knowledge and creativity so that the use of creating content for websites as a medium of information and communication can continue to develop and be used consistently. This is because the era of information disclosure must be addressed more wisely so that they are not trapped in digital consumerism but can also take advantage of digital progress productively.

Method

The implementation method is the method or steps used to carry out a project or activity; the implementation of this community service program took place in February 2023 in Banyumanik Village, Semanu, Gunung Kidul, DI Yogyakarta. The participants in this service were people in the village. The method used in these activities was training and providing direct assistance to residents in the community. This activity was also accompanied directly by Padukuh, the Communication and Multimedia Science Team (LPPM UMBY), and Communication Science students of the Faculty of Communication and Multimedia Sciences, Mercu Buana University, Yogyakarta.

Materials and tools used for counseling and training residents are smartphones, including applications such as Canva, Open Camera, Kinemaster, Inshot, and Easy Voice Recorder. Canva is an online visual communication design platform that can create any design and publish it in any media (Resmini *et al.*, 2021). Open Camera is an app that functions as a replacement for the built-in camera software on smartphones. The advantage of this software is the feature of manual settings, just like those on professional cameras, that can be applied to smartphone cameras (Ramadhani & Nur, 2023). Kinemaster is one of the audio-visual editing applications on smartphones; the features offered are almost similar to those of video editing applications on computers (Widiyono, 2021). The Inshot editing application is one of the video editing applications that has features that are almost similar to computer editing but have a simpler appearance when compared to Kinemaster (Widiyono, 2021). The latter application is an Easy Voice Recorder that functions to record audio with good quality compared to the smartphone's built-in voice recorder application.

Stages of Activity Implementation Methods

The implementation of this community service activity is divided into the following three stages:

a. Coordination and Preparation Stage

This is the stage of coordination and preparation of applications that will be used in the service. It includes several steps, such as coordination with the team that has conducted a preliminary survey, communication with the hamlet leader, and the selection of applications that are considered relevant to the partner's problem. Before the training was held, there was socialization on digitization and the importance of content creation.

b. Science and Technology Application Stage

There are two stages in applying science and technology to community service, namely, the content development stage for the website and profile making. The first stage is content creation, which will also be carried out in Jogjakarta by involving students and the service team. After everything is completed and ready to be used, it will be given directly to the village head for use. The second stage is village profile making, which involves taking pictures in Paduhan Hamlet, editing, final control, and submitting the village profile file to the Head of Banyumanik Hamlet.

c. Evaluation and Monitoring of Activities

Evaluations will be carried out at the beginning, middle, and end of the activity. At the beginning of the activity, an evaluation of the partners' level of understanding will be carried out on the material that will be provided in the training, which includes shooting, audio recording, and video editing. The purpose of the initial evaluation is to determine the success rate of training activities. The evaluation method uses structured interviews. Monitoring in the middle of activities is carried out by LPPM UMBY to determine the level of success and the possibility of completion of the activity. Meanwhile, the evaluation at the end of the activity will be carried out together with the external monitoring team to determine the level of success of the activity and the possibility of continuing the program by looking at the indicators of overall activity success from the review of several parameters, such as service output targets, technology transfer with the creation of content for websites and profiles, and its utilization by the government of the village in Banyumanik Village, Semanu, Gunung Kidul, DI Yogyakarta.

Results and Discussion

Preparation and Coordination of Activities

Preparing and coordinating the implementation of a digital village program involves various parties in Banyumanik Village. Previously, researchers conducted a preliminary survey to determine effective actions in the implementation and realization of Banyumanik Digital Village. The survey method is related to the pre-implementation of activities, where surveys play an important role in the presentation of initial data that affects the potential for quality results in meeting the objectives of the implementation of the predetermined agenda. In the preliminary survey, researchers carried out an interview method: intense communication with the head of the hamlet regarding the implementation of the program.

In the initial stage, the survey also plays a role in providing awareness to the people of Banyumanik village, especially stakeholders, about the importance of village digitalization to facilitate access to communication and village governance related to the realization of digitalization. The preliminary survey also becomes a reference in the selection of relevant applications empowered by partners based on the backgrounds of partners who have constraints on the network and providers that can be accessed in Banyumanik Village, such as Telkomsel and Smartfreen. Through coordination with the head of the hamlet and several representatives of residents and local organizations such as the Ngudi Makmur Farmers Group, the Pertiwi Farmers Women's Group, and the Tunas Muda Youth Organization, it is known that Banyumanik Village has a big problem related to water availability. In Banyumanik Village, there is no PDAM and no well water, so the majority of residents are very dependent on rainwater, which is then accommodated using Rainwater Harvesting Equipment (PAH) and Rainwater Harvesting Installation (IPAH).

This study found two community groups have IPAH, and the rest depend on PAH. This significant difference is related to water conditions, where PAH is pure rainwater and IPAH is sterilized rainwater. In the dry season, the residents of Banyumanik Village meet their water needs by buying water with a price range of 100–110 thousand per tank, which can run out within 1-2 weeks. According to Poedjastanto, Indonesia's minimum basic water needs are 70 liters per person per day (PUPR, 2007).

Based on observations and evaluations carried out with Banyumanik Village partners, several problems can be identified, such as the absence of empowerment of information media that can encourage governance, such as supporting websites, limited community resources (HR) in Banyumanik Village to realize a support profile as a means of initial introduction media related to village conditions, and the lack of community participation in initiating digital villages in Banyumanik Village.

Internal information media plays a role in the study of media publicity. Media publicity is achieved through information that can be transferred into public service advertisements known as "Public Service Announcements (PSAs)" (Danandjaja, 2011). The implementation of media publicity can be in the form of developing and empowering supporting website content as an effort to provide information related to the condition of Banyumanik Village. The absence of media publicity in Banyumanik Village, related to the lack of human resources in the realization of PSA, causes the development of the village to be hampered. This can be seen from the lack of infrastructure that can support the implementation of village digitalization in Banyumanik.

Science and Technology Application Stage

a. **Content Development for Websites and Content Empowerment Training**

Figure 1. Socialization and Content Creation Training

Content creation activities begin by involving students and the service team in designing concepts and determining the basis for content creation. Whether the selection is effective or not determines the creation of a website, which will then be processed by the residents of Banyumanik Village. The website itself is one of the information and communication media that is widely used by various groups, both individuals and organizations. Content creation can be done in various ways, one of which is by using an application.

After making observations and seeing the reality in the field, it was found that the effectiveness of content for application-based websites has potential for partners. This is related to the complexity of partner maintenance efforts if chosen to manage content. Purchasing and updating in the maintenance of content creation becomes a challenge when there is no longer a team, so there needs to be an individual who is in charge of editing the application for the content to be created. For this reason, paid applications are considered relevant for the introduction of content empowerment and the implementation of publicity media for Banyumanik Village. Banyumanik Village is famous for its many processed agricultural products, so content creation is the right way to open something new for Banyumanik Village in digitalization.

Figure 2. Processed Agricultural Products

Economically, the creation of content can help farmers in Banyumanik Village brand their products. In addition, the creation of website content is done by paying attention to simple things that will make website visitors focus on the information presented, so there will be knowledge transfer related to Banyumanik Village. The home page is the most important part of content media, especially because it gets more views than any other page (Oktaviani & Ayu, 2021). Therefore, there is a need for the display of content on the homepage since it also has the potential to make the website content more interesting. The creation of the display emphasizes the positioning of the layout and colors so that it can deliver the content information that supports the growth of Banyumanik Village as a digital village in an attractive way.

b. Creation of Village Profile

The next activity related to audiovisual empowerment is making videos and photos. The audio-visual aspect involves the use of sound and images to convey information (Salsabila *et al*., 2020). The audio-visual aspect can increase the effectiveness of knowledge transfer, which is the process of transferring knowledge from one party to another. The audio-visual aspect has several advantages, including (1) it can attract the attention and interest of the recipient of information; (2) it can make it

easier for the recipient of information to understand and remember the information; (3) it can convey complex information more simply and concretely; and (4) it can increase the interaction and participation of information recipients. The audio-visual aspects can also be an option to be applied in various circles, for example, in the academic environment to increase the effectiveness of learning for kindergarten, elementary school, and university students. The audio-visual aspect is one of the most effective and innovative strategies in science transfer in today's digital era.

Well-managed content will help visitors get information easily when accessing the content provided. One of the things needed to make the content look better is the addition of audio-visuals. Making audio-visual works seems quite easy because everyone can do it. Actually, there are several techniques used in the recording process that can make audio-visual work more interesting and deliver the message well. This service will focus on developing skills in making audio-visual works with the equipment available at the service partners.

Figure 3. Organizational Activities

Creating a village profile is carried out by taking snapshots of Banyumanik Village, such as village conditions, its social interaction, and infrastructure aspects. The results are processed into external documentation and videos that will be displayed on the website. For the visual display of photo documentation, the concept of automatic slides on the website content will be applied so that visitors can view the documentation without having to click on the photo. For video display, it considers aspects of video duration and quality, following the capacity of the website later. This is done because videos can burden the content for the website and create potential obstacles to watching (buffering), which takes time. Outputs in the form of good-quality audio-visuals are provided for Banyumanik Village so that they can use them if they need an external form of higher quality.

The final control process is carried out to ensure that the output of the audio-visual work meets the quality standards and specifications set. The final control process includes several steps: (1) re-checking all audio-visual elements, such as sounds, images, text, graphics, animations, transitions, and effects; (2) making corrections if errors or shortcomings occurred; (3) converting file formats as needed and ensuring compatibility; (4) testing and evaluating the final audio-visual work; and (5) storing and archiving audio-visual works in a secure and organized manner. The final control process aims to produce quality, professional, and satisfactory audio-visual output for partners. After the final control process is completed, the audio-visual work is ready to be handed over to the partner in a pre-agreed manner.

c. Monitoring and Evaluation

Activity evaluation is a process carried out to measure and assess the effectiveness, efficiency, relevance, impact, and sustainability of community service activities. It is done at the beginning, middle, and end of the activity. The initial evaluation aims to determine the level of understanding of partners with the material that will be provided in the training, which includes shooting, audio recording, and editing. The initial evaluation is carried out using a structured interview method. The results of the initial evaluation can be used as a basis for determining training strategies and methods that are tailored to the needs and conditions of partners.

Activity monitoring is a process carried out to observe and supervise the implementation of community service activities on a regular and systematic basis. Monitoring activities are carried out on the sidelines of activities. The purpose of monitoring activities is to determine their level of success and the possibility of their completion. Monitoring activities are carried out through observation, documentation, and discussion methods. The results of monitoring activities can be used as material to make improvements and adjustments if needed. Through the results of observation and monitoring, it can be seen that the level of community suitability in Banyumanik Village can empower the media through the concept and role of program implementation. This activity also monitors whether technicalities related to media empowerment are carried out properly by partners. In certain cases, the research team, together with students, also informs partners of potential difficulties they may experience when carrying out technicalities. Thus, preventive efforts are carried out by increasing the transfer of media empowerment knowledge that will be handled. This is also a form of realization of the digital village in question and its correlation with the human resources (HR) involved.

Figure 4. *Monitoring Activity*

The final evaluation is a process to measure and assess the results and impact of community service activities that are conducted together with the external monitoring team at the end of the activity. The purpose of the final evaluation is to determine the success rate of the activity as well as the possibility of continuing the program. The final evaluation was carried out using the methods of interviews and focus group discussions. This evaluation can be used as material for writing reports and recommendations for activities. Overall, the indicators of the success of the activity are reviewed from several parameters, namely (a) service output targets, (b) technology transfer through the creation of content for websites and integration profiles, and (c) the use of website content applications by stakeholders. Through these stages, it can be conveyed that the program is running well, and the challenges seen from background-related skimming can be overcome well by empowering effective and intense communication. With this approach, the program output evaluation stage can be fulfilled and in line with partners, namely Banyumanik Village.

Conclusion

Community service activities carried out by the community service team from UMBY together with partners from Banyumanik Village, Padukuhan, Semanu, and Gunung Kidul in the effort of "Implementation of Digital Village with Content Creation for Website as an Information Center in Banyumanik Village, Semanu, Gunung Kidul" aim to increase the capacity and skills of partners in the field of visual content to empower partners to become digital villages. This activity includes training and management of supporting content, village profiling through shooting, audio recording, and editing. This activity is expected to provide benefits for partners in terms of disseminating information, promoting potential, and empowering the community. This activity is also expected to be an example and inspiration for others to develop content or visual works as a communication and information medium.

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