

# DEVELOPMENT OF A VILLAGE WEBSITE TO EXPAND ACCESS TO INFORMATION: THE CASE OF SUMBEREJO VILLAGE, BESUKI

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Abstract— The importance of easily accessible information for rural communities drives the need to develop information technology at the village level. Sumberejo Village, Besuki, experiences challenges in disseminating information quickly and effectively to all its residents. Therefore, the purpose of this community service is to socialize and develop a village website as the main means of expanding the reach of information. The community service methods include the planning, training, implementation, and evaluation stages. The solution offered is the creation of a responsive and easily accessible website, as well as training for village officials to manage website content independently. The conclusion of this community service shows that the village website effectively increases the dissemination of information to the community. The recommendation from the results of this community service is the importance of regular maintenance and updating of the village website so that it remains relevant and functions optimally.

**Keywords**— Information; Technology; Village Website; Socialization; Community service.

# 1 Introduction

Sumberejo Village, located in Besuki District, Jember Regency, has around 2,500 people and offers excellent economic and social development potential. Most of the villagers depend on agriculture and small businesses for their livelihoods. However, one of the main challenges faced by the people of Sumberejo Village is limited access to relevant information regarding village programs, social activities, and government policies. Information that needs to be adequately conveyed helps community participation in village development and reduces the effectiveness of implementing existing programs [1].

This limited access to information hampers social and economic processes and reduces opportunities for people to adapt to technological developments and government policies that can improve their welfare [2]. Therefore, a solution is needed that can increase the dissemination of information effectively through media that is easily accessible to all elements of society, especially in digital form.

Socio-economically, Sumberejo Village has economic activities predominantly based on the agricultural sector, with most of its residents depending on agricultural businesses and local products. However, limited access to market information, modern agricultural technology, and economic empowerment programs means that many existing potentials must be optimally managed[3]. For example, although there are various assistance programs from the government, many residents need to learn about their existence and the requirements for accessing them due to the lack of adequate communication channels.

Access to health services and information related to social programs is also limited in the social sector. This impacts the need for more public awareness of their rights and delays in obtaining the necessary services, which worsens the village's quality of life [4].

From the situation analysis above, several main problems need to be addressed:

- **1. Lack of Access to Information:** Village communities need adequate information regarding village programs, health services, and government policies.
- 2. Limited Management and Communication: The information management system at the village level still needs to be improved, which causes uncertainty and confusion among the community in accessing relevant information.
- **3.** Low Community Involvement: Community participation in village programs tends to be low, mainly due to the lack of effective communication channels between village officials and the community [5].

Based on the identified problems, the formulation of the problem in this service is: How can a village website that can expand the reach of information in Sumberejo Village be developed? This service aims to develop a village website that the entire community and outside parties can access and to increase the capacity of village officials to manage and utilize information technology.

# 2 Method

The implementation method of this community service program consists of several stages designed to ensure the success of creating and utilizing the website for the people of Sumberejo Village. Each stage is carried out by considering the needs of the community and village officials and involving the active participation of all related parties.



Image 1: Survey

#### 1. Preparation

The initial stage of implementing this activity is preparation, which includes two main steps: the initial survey and needs Analysis.

# a. Initial Survey:

The initial survey was conducted to identify the information needs required by the community and village officials. This survey aims to understand the types of information important to the village, such as administrative services, village activity information, and other information that can be accessed online. This survey involved interviews with village officials, community leaders, and residents to explore their needs and preferences for the existence of a village website. Similar research has also been conducted [6], which

emphasizes the importance of community involvement in the technology planning process to ensure the relevance and sustainability of the use of digital platforms.

#### b. Needs Analysis:

After the initial survey, the next step is to analyze the collected data to prepare a plan for website features and structure. This Analysis aims to design a website that is easily accessible and meets the specific needs of the village. Some of the prioritized features include village activity calendars, contact information, public services, and articles related to village development. According to research [7], the importance of analyzing community needs in developing web-based information systems has been proven to increase the effectiveness and usability of the platform in local communities.

# 2. Website Development

After the preparation is complete, the next stage is website development.

#### a. Design and Structure:

The website design process is carried out by prioritizing the principle of user-friendliness or ease of access. The website design is designed so that the appearance and navigation are simple and easy to understand for users of various ages and educational backgrounds. This design must be adjusted to the characteristics of village communities with varying levels of digital literacy. A simple and easy-to-use website design is an essential factor that is also emphasized in a study by [8], which states that the success of website implementation in a village is greatly influenced by the extent to which the website is easy to use by villagers.

# b. Technical Development

The technical development of the website is carried out using a platform that makes it easy for village officials to manage content without requiring in-depth technical skills. The platform was chosen because of its flexibility and ease of use, allowing village officials to update information independently and ensure that the content remains current. Research by [9] shows that this technology can reduce technical barriers for non-technical users in managing village government websites.

# c. Installation and Testing

After the technical development, the website is installed and tested to ensure its functionality. The test involves village officials and several community members to identify potential problems and provide feedback on navigation, content, and existing features. This process also aims to overcome technical obstacles that may arise in the early stages of implementation.

## 3. Training and Socialization

Training and socialization are essential steps in ensuring the sustainability of website use by village officials and the community.



Image 2: Training session

#### a. Village Official Training:

Village officials are given training to manage the website, including updating content, adding new information, and monitoring website usage. This training aims to enable village officials to operate the website independently and ensure that the information presented remains relevant to the community's needs. Routine training has been proven to improve the digital skills of village officials in managing web-based information systems.

#### b. Community Socialization:

Socialization is done to educate the community about the benefits and how to use the village website. This activity aims to introduce the website as a means of information that residents can use to obtain information related to village activities, public services, and other important announcements. The socialization approach that involves the community in every stage of development is critical, as expressed by [10], which states that the success of technology-based programs is greatly influenced by active community participation.

# 4. Evaluation

Evaluation is crucial to ensure the website functions correctly and meets user needs.

# a. Monitoring

At this stage, website usage is continuously monitored to see how much community and village officials use the website. Monitoring is carried out by utilizing analytical tools to determine the frequency of visits, frequently used features, and user feedback regarding their experience using the website.

#### b. Adjustment

Based on the monitoring results and feedback, website improvements or adjustments are made. These adjustments can be made to content updates, feature enhancements, or technical improvements. Structured and ongoing evaluation is the key to keeping the platform relevant and able to be used optimally.

# 3 Findings And Discussion

The implementation of the Sumberejo Village website development program has successfully gone through several critical stages, from design, technical development, training, socialization, and evaluation. Based on the implementation results, this program has shown increased access to information for village communities and village officials. However, several technical challenges were found that require further improvement and development.

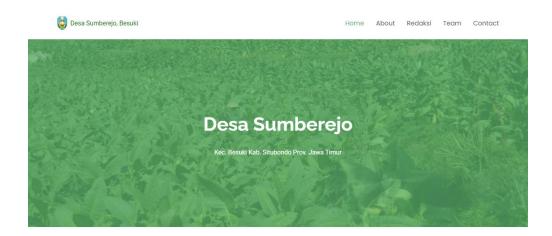


Image 3: Village website home

#### 1. Website Design

The website design process begins with an analysis of the needs of the community and village officials to design a simple and easy-to-use layout. The village website is designed with prominent features such as village news, activity calendars, and discussion forums. This responsive website design can be accessed well on both desktop and mobile devices.

#### 2. Technical Development

The Sumberejo Village website was developed using PHP, Bootstrap, and MySQL as the leading technologies. PHP was chosen for server-side development because of its flexibility and ability to handle application logic and database interaction. *MySQL* is a database management system that stores and manages information displayed on the website. Meanwhile, Bootstrap is used for interface design (UI) so that the website is responsive and can adjust its appearance to various screen sizes.

#### 3. Training and Socialization

Training is carried out in stages, focusing on primary website usage and how to manage content, especially for village officials. Socialization of village officials is carried out through offline meetings at the village office.

Training for village officials is essential to manage the website correctly and update content independently. In addition, socialization through direct meetings and social media is also effective in increasing public awareness of the benefits of village websites. This is in line with the findings of Rachmat & Yuniarti (2019), who emphasize the importance of socialization involving various communication channels to ensure the success of using digital platforms in villages.

## 4. Program Evaluation

Evaluation of the program shows that the village website has succeeded in increasing access to information among the community. The community now finds information about village activities, public services, and other important announcements more accessible. However, the evaluation also found several technical problems, such as server disruptions when traffic increases and compatibility issues with some older devices.

Although the village website has succeeded in increasing access to information, technical challenges such as server downtime and device compatibility issues still need to be fixed to improve performance and user experience. Therefore, it is essential to continue technical maintenance and increase the capacity of server infrastructure. This also reflects the importance of continuous evaluation and monitoring of website performance, as suggested by Setiawan & Hidayat (2021), who stated that routine maintenance is essential to maintain the quality and functionality of digital platforms in the village.

#### 5. Discussion and Follow-up Programs

Although the village website has shown positive results in terms of increasing access to information, there is a need for further development so that the website can be more beneficial for the community. Some new features that can be considered for addition are integration with the egovernment system to facilitate online administration services and the development of mobile applications to facilitate access to information for the community.

Follow-up programs include increasing the technical capacity of village officials through further training and planning more informative and sustainable content. In addition, routine maintenance and development of additional features, such as an online registration system for village activities or a public complaint feature, are expected to increase interaction between village officials and the community. According to research by [11], the development of sustainable village websites will depend heavily on the active participation of the community and the technical capacity of village officials in managing the platform.

# 4 Conclusion

The Sumberejo Village website development program has increased access to information for the village community and village officials. Developed using PHP, Bootstrap, and MySQL technologies, the website has met basic information needs such as village news, activity calendars, and discussion forums. The responsive and user-friendly design allows the community to access information quickly via desktop and mobile devices.

The training provided to village officials has enabled them to manage the website independently, although some technical challenges related to servers and device compatibility still need to be fixed. However, the evaluation shows that the website has provided significant benefits regarding information accessibility and interaction between the community and village officials. Several technical issues found during the evaluation, such as server disruptions when traffic increases, indicate the need for increased infrastructure capacity and routine maintenance to maintain website performance.

As a follow-up, it is essential to carry out further feature development, such as integration with an electronic-based village administration system and increasing the technical capacity of village officials in managing the website. With more structured content planning and ongoing maintenance programs, this website is expected to continue to grow and better meet the information needs of the village community in the future.

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