



WEBSITE OPTIMIZATION TRAINING FOR VILLAGE OFFICIALS AND CADRES IN GROGOL VILLAGE, TULANGAN DISTRICT, SIDOARJO

Rabiatul Adawiyah*, Artanti Indrasetianingsih, Alfisyahrina Hapsery, Maria Kristina Lusia Geong, Elvina Syahra

Statistics Study Program, Faculty of Engineering and Science, Universitas PGRI Adi Buana Surabaya, Surabaya, Indonesia

*Correspondence: rabiatuladawiyah@unipasby.ac.id

ABSTRACT

Background: Information technology-based village development is essential for enhancing public services and government transparency. However, the utilization of the Grogol Village website remained suboptimal due to the limited technical skills of village officials. **Objective:** To address this issue, a community service initiative was conducted to improve the competence of village officials and cadres in website management using OpenSID and WordPress. **Method:** The program was delivered through lectures, hands-on practice, and ongoing mentoring. Program effectiveness was evaluated using a post-test for participant comprehension and a five-point Likert scale questionnaire to assess overall satisfaction regarding materials, facilitators, facilities, and benefits. **Results:** The results demonstrated a significant increase in participant competence, with post-test scores ranging from 53.3% to 86.7%. The highest achievement was recorded in the OpenSID menu indicator (86.7%), whereas social media integration scored the lowest (53.3%). Overall participant satisfaction was categorized as good to very good, highlighted by a peak mean score of 4.6 out of 5 for the program's usefulness. **Conclusion:** further mentoring is strongly recommended particularly focusing on social media integration, website security, and digital content creation to ensure the village website is managed optimally and sustainably over the long term.

Keywords: Website Optimization; OpenSID; Digital Village; E-Government; Community Empowerment;

Article History:

Received: 09-05-2026

Revised : 27-05-2026

Accepted: 28-05-2026

Cite this as

Adawiyah, R., Indrasetianingsih, A., Hapsery, A., Geong, M. K. L., & Syahra, E. (2026). Website optimization training for village officials and cadres in Grogol Village, Tulangan District, Sidoarjo. *Journal of Community Research and Engagement*, 3(1), 18-27.

A. BACKGROUND

Although many villages have adopted digital technologies, the implementation of digital governance remains uneven. Common challenges include limited digital literacy among village officials, inadequate technical skills, inconsistent website content updates, and the absence of sustainable website management practices. These issues hinder the

role of village websites as instruments for transparency, public participation, and service delivery (Nugroho dan Wibowo, 2022). As the foremost unit of governance, villages hold a strategic role in implementing various development programs across social, educational, economic, and public service sectors. The success of village development is significantly influenced by the capacity of village governments to manage resources effectively and to disseminate information efficiently to the community (Purwanto dan Asbar, 2022).

Recent studies indicate that digital transformation at the village level has become a strategic approach to improving governance quality, strengthening transparency, and increasing community participation through information technology-based public services. The implementation of digital village initiatives encourages village governments to utilize village information systems and official websites not only as information dissemination media but also as instruments for accountable and responsive governance.

Previously, the website focused on technical introductions to the website platform, such as simply providing information on the existence and usage of village websites, but failed to provide guidance to village officials regarding maintenance (Fitriani dan Handayani, 2022). As a result, village officials often encountered difficulties maintaining website content, integrating digital communication channels, and ensuring the sustainability of website management. Therefore, a training model combined with practical sessions and follow-up mentoring was deemed more appropriate for strengthening participant competency.

Recent studies also emphasize that improving digital literacy among village officials is a key factor influencing the successful implementation of digital governance. This training aims to build sustainable capacity through practical training and mentoring, which has been proven to improve website management competency and encourage the sustainable use of village information systems.

The uniqueness of this community service program lies in the integration of conceptual training, hands-on practice using the OpenSID and WordPress platforms, and post-training evaluation. The program provides a fresh perspective and emphasizes participants' practical competency in independently managing village website content by village officials themselves.

B. METHOD

This community service activity was conducted through a structured training and mentoring approach aimed at improving the capacity of Grogol Village officials in managing the website as a medium for disseminating information and providing public services. This method was designed based on the needs of participants identified

through initial observations, particularly related to limited understanding and technical skills in managing village websites. The training participants were 15 village officials who attended the training, accompanied by the Grogol village head and 18 students who happened to be on Community Service Program (KKN) to assist and learn from the village officials.

The first stage involves identifying problems and needs through direct observation at the activity location. This stage was conducted one month before the training through individual discussions. Then, one week before the training, coordination and discussions were conducted with village officials responsible for village management. These discussions aimed to assess the initial conditions of village website utilization and identify challenges faced by village officials and cadres in conveying information to the community. The results of the discussions showed that village officials lacked understanding of website management and maintenance. This is in line with the importance of effective information management in supporting village development (Badan Pusat Statistik, 2023)

The second phase consists of lectures. Participants are given an understanding of the basic concepts of websites, the benefits of websites in the digital era, and their role as a tool for website transparency, communication, and public services (Kementerian Komunikasi dan Informatika Republik Indonesia, 2021). The material covers the following topics: What is a website?, What is its importance?, The role of websites in village development?, Benefits of websites for rural communities. Characteristics of a good website: This topic is presented to build a cohesive theoretical foundation before moving on to the practical session. The duration of the material delivery is 1 hour with discussion, followed by phase 3 with a 2-hour practical session with discussion, for a total of 3 hours.

The third stage was implementation through hands-on practice using OpenSID and WordPress platforms. Participants were trained in content management, information updating, and documentation of village activities. This approach supports the utilization of information technology in improving the quality of public services and government transparency (Sutanta, 2018).

The fourth stage is evaluation. In addition to a post-test to measure participants' understanding and a Likert scale to assess the quality of the material, evaluation was also conducted using questions. The questions posed were still basic; meaning, village officials only knew about websites, but did not yet understand their broad uses and functions. For example, a question essentially asked whether websites were so important, suggesting that the material presented seemed to suggest they were essential. This question illustrates that participants have a basic understanding of

websites and their importance. The post-test and Likert questions can be seen in Figures 4 and 5. The questions posed were general, not specific to practice or material, as most participants were unfamiliar with websites.

The final stage is mentoring, the mentoring referred to is a practical session, because in the practical session it is carried out by accompanying participants, this stage lasts for 2 hours and is continued with a follow-up session, namely the online discussion stage if there are questions or obstacles from the managing village officials, the duration is until the village officials understand the obstacles experienced, this stage is a follow-up effort to ensure the sustainability of the program, namely by providing new knowledge, especially direct practice with the website. This mentoring focuses on strengthening the ability of village officials in managing websites, including social media integration and digital content development. This is in line with the role of higher education institutions in knowledge transfer through community service activities as well as supporting the optimization of information technology to expand public services and communication.

In Grogol Village, the official website remained inactive due to the limited technical skills of village operators. To address this issue, this program provided practical training and mentoring focused on website content management, platform operation, and routine site maintenance for village officials and cadres.

The community service program was conducted at the Grogol Village Hall, Tulangan District, Sidoarjo Regency, East Java. The training session was delivered by Rabiatul Adawiyah, S.Kom., M.Tr.Kom., focusing on website optimization for village governance. To ensure an effective transfer of knowledge, the activity was structured into technical modules with distinct learning objectives and time allocations, as detailed in Table 1.

Table 1 Training Modules, Learning Objectives and Duration

Phase and Topic	Learning Objectives	Duration
Phase 1: Conceptual Lecture • Basic Website Concepts & Role in Village Governance	Participants understand the fundamental concepts of village websites, public transparency, and digital service benefits in rural governance.	60 mins
Phase 2: Hands-on Practice • OpenSID Management • WordPress Content Creation	Participants gain practical skills in operating OpenSID for administrative data and updating news/gallery content using WordPress.	120 mins

Phase and Topic	Learning Objectives	Duration
Phase 3: Mentoring & Evaluation • Social Media Integration & Technical Troubleshooting	Participants can integrate social media channels and perform routine site maintenance with direct facilitator assistance.	120 mins

D. RESULTS AND DISCUSSION

The community service program successfully enhanced the digital capacity of village officials and cadres in Grogol Village, Tulangan District, particularly in managing and optimizing the village website. Overall, the program achieved a high participant satisfaction score (average 4.60 out of 5.00) and demonstrated a significant improvement in technical understanding, with post-test scores reaching up to 86.67% in key operational modules. The activity was executed through a combination of conceptual lectures and hands-on practical sessions using OpenSID and custom WordPress platforms, covering foundational website management, information transparency, and public service digital integration (Hasanah & Pratama, 2023).



Figure 1. Important Website Concepts

As illustrated in Figure 1, the delivery of foundational concepts covering essential website design principles, functional benefits, and digital marketing strategies served as the cognitive baseline for the participants. By breaking down technical elements such as layout structure, color consistency, and menu hierarchy into intuitive visual guides, participants gained a practical understanding of website management. This structured conceptual introduction directly contributed to the high post-test performance, where

80% of participants demonstrated a strong comprehension of digital website functions in public administration.



Figure 2. Presentation of Material

Figure 2 illustrates the material presentation session held at the Grogol Village Hall. During this session, active participant engagement was encouraged through a two-way interactive learning approach. The facilitators combined lecture presentations with open discussion forums, allowing village officials and cadres to ask questions directly regarding real world digital administration challenges in their village. Furthermore, facilitators provided hands on *one-on-one* guidance during the session, ensuring that participants actively followed the technical steps on their respective laptops rather than passively listening

The evaluation results demonstrated the participants achieved level of technical understanding regarding village website concepts and management following the training. As shown in Figure 3, evaluation was conducted through a post-test covering six core indicators. Overall, the majority of participants successfully met the competency benchmark across all tested operational modules.

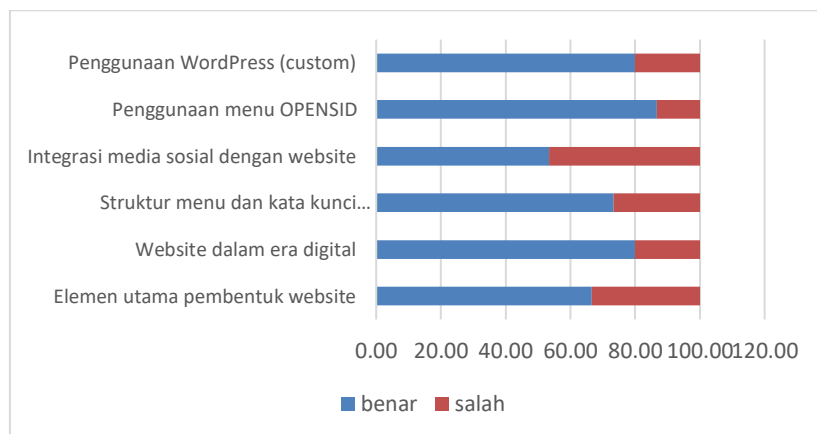


Figure 3. Results of Understanding the Material

The post-test results, conducted with a total of 29 participants (N = 29) out of 35 invited attendees, presented in bar chart form, provide a visual representation of the distribution of correct and incorrect answers for each question.

The post-test results, conducted with total participants (N = 29 out of 35 invited attendees), presented in bar chart form, provide a visual representation of the distribution of correct and incorrect answers for each question. The graph clearly demonstrates the predominance of correct answers across all questions, with the highest achievement rate for the "Use of the OpenSID Menu" indicator at 86.7% and the lowest for "Integrating Social Media with Websites" at 53.3% (Indah & Rahmawati, 2024).

The high performance in OpenSID stems from its standardized interface and direct relevance to daily administrative routines. Conversely, participants faced more challenges with social media integration due to the complexity of multi-platform linkage and content management. This finding aligns with previous studies on rural digital literacy, which report that village officials master single purpose administrative systems more rapidly than dynamic cross-platform integrations (Lestari & Kurniawan, 2023). Practically, this suggests that future training programs should reallocate schedule proportions, reserving more dedicated hand on sessions for social media and digital content workflows.

The activity evaluation was completed by all 29 participants (100% valid response rate) using a 5point Likert scale to assess the material, quality of presentation, facilities, implementation time, and overall benefits. The results show that all indicators fell within the good to very good category, with the highest score recorded for the "useful activity" indicator at 4.6 out of 5. However, the "implementation time" indicator received a relatively lower score because the single day schedule proved tight for absorbing technical skills (Wijaya & Pratama, 2023). Future community service program will extend the practical workshop duration into multi day sessions to ensure gradual skill absorption.

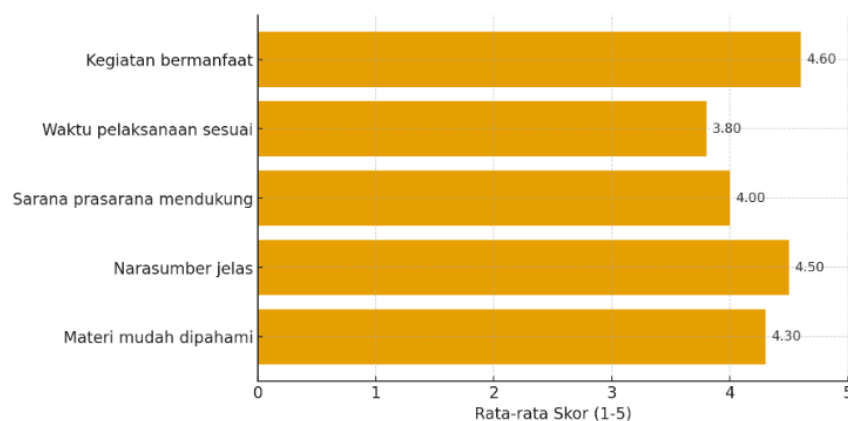


Figure 4. Evaluation of Training Results

To capture the overall implementation and spirit of collaboration during the program, documentation was recorded at the end of the activity. As shown in **Figure 5**, the training concluded with a group photo session involving all participants, village representatives, and the community service team



Figure 5. Group Photo at the End of the Event

In terms of implementation, participants successfully practiced managing village websites, including uploading news, updating information, and managing official profiles. This high practical engagement, combined with post-test achievement rates exceeding 70% across core modules, demonstrates that combining lectures with hands on practice was effective in improving technical skills.

This activity evaluated participant competency solely through post-test assessments due to time constraints and a single day schedule setup. The absence of a pre test baseline and the limited sample size ($N=29$) restrict direct quantitative comparison of knowledge gains, representing limitations of this study. Future program should incorporate multi day workshops and paired pre and post-test for comprehensive evaluation.

E. CONCLUSION AND SUGGESTION

Overall, this community service activity successfully improved the knowledge and skills of village officials in website management, evidenced by post-test competency achievement rates and a high overall satisfaction score of 4.6 out of 5.0. Village websites are understood not only as information media but also as strategic tools for increasing transparency, public communication, and promoting village potential.

However, several challenges remain, particularly in the areas of social media integration, website security, and the development of more engaging digital content.

Therefore, follow-up support is needed to ensure participants' skills continue to develop and the village website can be optimally managed.

Thus, this community service activity makes a real contribution to promoting more effective, transparent, and information technology-based village governance, and is the first step towards sustainable digital village development. Practically, this framework provides a replicable roadmap for other villages seeking to optimize digital governance through structured capacity building.

ACKNOWLEDGMENT

We would like to express our gratitude to all parties, especially to the Head of Grogol Village, Tulangan, Sidoarjo, East Java, the Head of the Statistics Study Program, Faculty of Engineering and Science, Adi Buana University, all Statistics Lecturers who participated in the community service and all village officials and village cadres who participated in this activity, so that the activity could be completed well.

REFERENCES

- Badan Pusat Statistik. (2023). *Statistik Desa dan Kelurahan*. Badan Pusat Statistik Republik Indonesia.
- Fitriani, R., & Handayani, P. W. (2022). Evaluation of village information system implementation in Indonesia: Challenges and success factors. *Journal of Science and Technology Policy Management*, 13(4), 812–830. <https://doi.org/10.1108/ISTPM-02-2021-0028>
- Hasanah, U., & Pratama, A. (2023). Pelatihan dan pendampingan pengelolaan website desa berbasis OpenSID untuk transparansi publik. *Journal of Community Research and Engagement (JCORE)*, 4(1), 12–23. <https://doi.org/10.25273/jcore.v4i1.15234>
- Indah, R. N., & Rahmawati, E. (2024). Digital literacy enhancement for village officials through WordPress-based web management training. *Journal of Information Technology and Community Services*, 3(1), 45–56. <https://doi.org/10.25105/jitcs.v3i1.16432>
- Kementerian Komunikasi dan Informatika Republik Indonesia. (2021). *Panduan Pengelolaan Website Pemerintah Desa*. Kominform RI.
- Lestari, S., & Kurniawan, D. (2023). Strategi integrasi media sosial pada portal informasi publik desa berbasis digital. *Jurnal Komunikasi Pembangunan*, 21(1), 78–89. <https://doi.org/10.29244/jurnalkp.v21i1.41235>
- Nugroho, A. A., & Wibowo, S. (2022). Pemanfaatan sistem informasi desa (OpenSID) untuk mewujudkan transparansi tata kelola desa. *Jurnal Ilmiah Ilmu Pemerintahan*, 7(2), 201–212. <https://doi.org/10.14710/jiip.v7i2.14512>
- Sutanta, E. (2018). *Sistem basis data*. Graha Ilmu.
- Purwanto, A., & Asbari, M. (2022). Analisis efektivitas pelatihan literasi digital bagi perangkat desa di era masyarakat 5.0. *Jurnal Edukasi Nonformal*, 3(1), 312–321.
- Wijaya, C., & Pratama, M. R. (2023). Evaluasi kepuasan pengguna terhadap pelatihan sistem informasi desa berbasis skala Likert. *Jurnal Riset Teknologi Informasi*, 8(2), 142–151. <https://doi.org/10.30700/jst.v8i2.1321>