

## Training on web blog development and management in Gandus Village, Gandus District, Palembang City in the development of knowledge in the field of ICT

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### ABSTRACT

One way to address the demand for digitally-based information dissemination is through ICT-based training activities. It was a proposal from the Gandus community so that they could share information with the community on a global scale using ICT-like weblogs. The issue was the local community's inability to use and benefit from the internet. Through a weblog or website, the local community was expected to be able to communicate with the outside world about the potential existing in the area in a fair, efficient, and effective manner. With instruction and assistance in creating and administering weblogs in the Gandus community, a weblog-based information system was created and managed by participants to allow for the widespread dissemination of a significant amount of information from the people of the Gandus village.

### KEYWORDS

weblog;  
information system;  
ict



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### 1. Introduction

Gandus sub-district is located in Palembang city, Indonesia. Because there are several rubber factories in this area, it is classified as an industrial zone. The potential of the Gandus sub-district is vast, and it must be widely and even globally publicized. Information can be spread globally and evenly using information technology information, such as weblogs. Gandus sub-district office has a sufficient number of employees, but no employees are able to create and manage weblogs, so there is currently no official weblog or website. The training program's target audience is sub-district officials and community representatives. Training for creating and managing blogs in Gandus Village, Palembang City, as part of the development of knowledge in the ICT sector, has been completed.

The current issue is that residents lack knowledge and expertise in internet use. With weblogs or the web, residents can bring the capabilities found in their community to the outside world more broadly and effectively. The community service has referred to several studies to support their programs. Hwang developed a training image database for vision-based site monitoring using web crawling [1]. Valentin investigated PADI-web 3.0, a new framework for extracting and disseminating fine information from the news for animal disease surveillance [2]. Li studied the Econometric Time Series Forecasting Framework for Web Service Recommendations on MyBatis-Plus [3]. Raghavendra designed a web mining framework and sentiment analysis for social tweets using machine learning [4]. Hu, using semantic similarity computing, analyzed web service recommendations [5].

Drought reconnects old food webs by altering plant nutrient content and herbivore feeding behavior, as studied by Rosenblatt [6]. Climate change affects the food web of coastal ecosystems, and Chapman investigated its implications for aquaculture [7]. Mousa analyzed dependency network-based trust management for context-aware web services [8]. Zhao reviewed interactive and personalized web-based clinical tools to support treatment decision-making in breast cancer [9]. Simplifying web application deployment for the international GEOGloWS initiative, Khattar used Tethys App Store [10]. Singh studied the Neural Net Time Series Forecasting Framework for Time-Aware Web Service

Recommendations [11]. Ahmad Sabri used WEID for a web data extraction approach for the deep web [12]. J. Morrison conducted an observational study comparing the usage of web and app-based stress management interventions [13].

J. Khairuddin used deep learning for web applications with a data-centric approach to sending decisive predictions [14]. Thungtong high-pressure sodium lamps to investigate a web-based control system for traditional street lighting [15]. Svec analyzed the impact of data pre-processing on discovered knowledge in predictive modeling [16]. Buber used RNN to do web page classification [17]. Chabot studied the use of Web images to train deep neural networks to detect sparsely distributed wildlife in large volumes of remote sensing imagery [18]. Kiselev researched Massive Open Online Course Platforms: Personalization and Semantic Web Technologies and Standards [19]. Masterton examined PageRank's ability to track the quality of web pages by aligning Google's crowd-policy justification with a scaleless web structure [20].

Mbunge analyzed trends, technologies, challenges, and ethical issues regarding a sensory-emotive web in virtual healthcare [21]. K.S, P. used a graph-based approach to analyze the impact of web structure [22]. Vargas-Salgado designed and implemented academic and research applications on an inexpensive web-based monitoring, control, and data acquisition system for microgrid testbeds [23]. The Great Basin land manager gave Zanoocco detailed feedback on the utility of two climate information web applications [24]. The integration of parametric modeling in web-based knowledge-based engineering applications was studied by Ortner-Pichler [25]. Kirrane investigated the gaps in intelligent software web agents [26]. The impact of cyberattacks on performance was analyzed by Almutairi, specifically on a web-based sales system [27]. Ismail identified the main problems with higher education websites using statistical measures of college websites [28]. Sambasivam used a QoS-based multifaceted matchmaking framework for web service discovery [29].

To improve the user experience of information systems, Pereira proposed a web-based voice interaction framework [30]. Kumar used a hybrid fuzzy rule-based multi-criteria framework for continuous security assessment of web applications [31]. Albukhitan deep learning with Arabic morphology to analyze semantic web annotation [32]. Sabir designed an end-to-end web-based trusted email system [33]. Phipps compared the administration of a direct problem-solving skills intervention to web-based care for parents of children with cancer in a randomized noninferiority trial [34]. Guermah used semantic web services in context-aware system development [35].

Many village potentials have not been widely disseminated to the public via data media that can be easily accessed by the local, national, or international community. The current status, data, and information about Gandus Village are unavailable on the internet. Gandus Village does not yet have a weblog or formal website to share information about the village's potential because it lacks administrators and operators who can create and manage them. Administrators and operators are also responsible for the continuity and update of information and data in the web management process. Based on the issues and the literature study used for references, web blog development, and management training are conducted in Gandus Village, Gandus District, Palembang City, for ICT knowledge advancement.

## 2. Method

### a. Execution method

Figure 1 depicts the method of implementing Web Blog Creation and Management Training in Gandus Village, Gandus District, and Palembang City for knowledge enhancement in the ICT sector. It shows a series of workshops, mentoring, and reporting.

#### 1. Workshop

A workshop on the implementation of weblog creation includes location observation, socialization, and training sessions. Training modules were distributed to the participants.

#### 2. Mentorship

At this point, the participants were given instructions on how to create weblogs. They were assisted by community service team members in creating a weblog until they were able to create a web blog on their own.

### 3. Activity Report

At this stage, the community service implementation team prepared a report on the activities outcomes and submitted it to Sriwijaya University.

#### b. Approach Method

Approach methods used during training:

1. Creating email to support weblogs
2. Training which includes:
  - a) Internet training as an ICT-based village data dissemination medium.
  - b) Weblog design according to the needs with the typical characteristics of the village
3. Creating Web Blog
4. Blog management
5. A discussion of the difficulties encountered during the training activity.
6. Web development exercises for each participant via direct demonstration using provided computer equipment and CDs. Training materials were included on the CD.
7. Assignment to create a blog.

### 3. Results and Discussion

#### a. Activity Implementation

Five training activities were completed. According to Table 1, the activities were carried out in two locations, namely the village head office and the Multimedia Laboratory, Faculty of Computer Science, Sriwijaya University, beginning with observation activities, followed by workshop, assignment, and finally evaluation activities.

#### b. Parties involved

Community service activities were carried out in the Gandus sub-district of Palembang, South Sumatra, and took place at the village head office and in the village hall room. External employees are involved in this activity. Representatives from different communities also took part in it.

#### c. Participant Role

Participants actively participated in community service activities. Participants took part in activities from the first to the last day. The team members kept encouraging them to improve their abilities. The village leader's role in motivating them to participate in the process is critical. Table 1 presents the participant's role in the activities.

**Table 1.** Participant's role in activities

Meeting	Steps done	Participant Role
1	Location observation	Participants take part in the initial discussion meeting in terms of determining the need for ICT
2	Socialization	Participants follow the material presented by the resource person
3	Workshop	Participants were enthusiastic in participating in every program demonstration by resource persons. In addition, the participants were also

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Meeting	Steps done	Participant Role
		enthusiastic in asking the speakers about the material presented
4	Assignment	Participants do each task given by the resource person.
5	Evaluation	Participants and teams both conduct evaluations to jointly correct deficiencies

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### Applied Model

The service comprised three stages: preparation, implementation, and evaluation. The preparatory stage consisted of five activities, the first of which was observation and interviews to determine the community's needs. Second, establishing a collaboration with the community. Third, making a schedule for carrying out activities. Fourth, discussing the facilities and infrastructure needed to support the activities. Fifth, technical preparation includes selecting training participants based on the village leader's recommendation, providing training facilities and infrastructure, creating modules for participants, and using WordPress software.

The implementation stage was divided into two parts: creating emails to support weblogs and training. The training included presenting materials, training on web blog design as needed and according to village characteristics, blog creation training, and management training. The evaluation stage took place at the end of the activity with questions and answers from practice sessions. The desired goal was minimum of 80% of the target audience could create a web blog for village promotion media as a medium for managing village community data. In general, the data collected in this activity would be training data. Four data types, namely interview sheets, observations, and documentation, were collected to consider further actions.

#### a. Interview

Unguided interviews were conducted as part of the implementation of this community service activity. An unguided interview is a simple interview that is unsystematic or independent (Sudijono, 2005). This interview was conducted between the team and the training participants. The question in this interview concerned the participants' ability to manage the creation of a weblog for village promotion.

#### b. Observation

The community service team conducted observations on the training participants using the observer sheet. Observations were made when the participants were listening or paying attention to the explanation of the implementation team, reading the management guide module based on ICT, asking the implementation team about the training materials, doing the assigned task, and discussing with friends and the team in carrying out the assignments. During program demonstrations, irrelevant behaviors such as irrelevant conversations, doing something irrelevant, and daydreaming were also recorded.

#### c. Documentation.

Documentation is accomplished by gathering data related to the training and photos of the participants taken during the training.



**Fig. 1.** Participants ask questions

Figure 1 depicts the participants' enthusiasm to participate in the training. Many participants were interested in the activity, as evidenced by enthusiastically asking questions to resource persons.



**Fig. 2.** Resource persons and the team are conducting mentoring activities.

The resource person and team are assisting the participants in demonstrating the weblog program, as shown in Figure 2. where the resource people had previously practiced the weblog program.



**Fig. 3.** Participants are focusing on paying attention to resource material.

Figure 3 shows that the participants were intent on paying attention to the material presented by the resource person because the material was both interesting and necessary for the participants.

#### 4. Conclusion

According to the outcomes of the training activities for creating and managing weblogs in the Gandus sub-district of Palembang City in developing knowledge in the ICT field, there is a high level of enthusiasm among participants for participating in the training, as evidenced by the process during the activity. During the training, participants can follow all of the material presented. Participants hope to have additional training shortly.

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#### Author Contribution

the author's contribution to meeting the needs of digital-based information dissemination is through ICT-based training activities. It was a suggestion from the Gandus community that they could share information with the community on a global scale using ICT-like weblogs.

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#### Conflict of Interest

The authors declare no conflict of interest.

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