

WEBSITE-BASED DIGITALIZATION OF AGROTOURISM IN THE COMMUNITY EMPOWERMENT FORUM OF LAMBUNG BUKIT SUBDISTRICT

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Abstract

Digitalization of Agrotourism in Lambung Bukit Subdistrict, Pauh District, Padang City, as an Effort to Improve Access to Information and Tourism Promotion in Remote Areas. The background of this project stems from the lack of organized information, resulting in insufficient and incomplete data availability. A team from Nahdlatul Ulama University of West Sumatra, in collaboration with the local Community Empowerment Forum, developed a digital-based website as a solution to promote the destination and provide easily accessible information. The method implemented consists of three main stages: socialization, website management training, and evaluation. In the socialization phase, the community was introduced to the importance of a website for tourism promotion. Training was conducted to equip residents with the skills needed to independently manage and update website content, while the evaluation phase aimed to ensure the success and sustainability of the platform managed by the local community. The results showed that the community was able to effectively manage the website, significantly improving the visibility of Lambung Bukit's agrotourism. The digital platform makes it easier for visitors to find information, provide feedback, and facilitates broader promotion, extending beyond the province to international audiences. The conclusion of this study is that website-based digitalization is an effective tool for local economic empowerment. By providing better access to information, this initiative enhances tourism potential and empowers the community to independently and sustainably develop agrotourism.

Keywords: Agrotourism, Digitalization, Website, Nahdlatul Ulama University of West Sumatra

A. Introduction

Community Partnership Empowerment is carried out by a team of lecturers from Nahdlatul Ulama University of West Sumatra, involving the Informatics Engineering Program, Environmental Engineering Program, and Agribusiness Program, in collaboration with the Community Empowerment Forum of Lambung Bukit Subdistrict. Lambung Bukit is located in Pauh District, Padang City, West Sumatra Province. Nestled at the foot of the hills, it lies far from the center of Padang City and boasts pristine and beautiful natural surroundings. The economy of the Lambung Bukit community largely relies on natural resources, including rice farming, durian cultivation, livestock, and other agricultural activities.

Agrotourism is an increasingly developing sector of tourism that combines agricultural activities with tourism experiences. Visitors can learn about agricultural practices firsthand while enjoying the rural atmosphere. However, one of the main challenges in developing agrotourism is how the local community receives and utilizes feedback from visitors for service improvement. The availability of

easily accessible information for visitors through digital platforms or websites is crucial for promoting agrotourism. Still, without an effective mechanism to collect and manage feedback, local communities may struggle to respond to the needs and expectations of tourists.

Information that is too easily accessible and overly focused on agrotourism facilities, without a strong strategy for managing feedback, can result in a lack of direct community involvement in service improvement. Visitors may feel more comfortable providing reviews or suggestions online through the available platforms, but if this feedback does not effectively reach the community or is not optimally managed, the process of improving the quality of agrotourism services will be hindered. As a result, the local community misses opportunities to enhance visitor experiences and, in turn, optimize the economic benefits of this sector.

Given these challenges, the importance of website-based digitalization of agrotourism is particularly crucial in areas like Lambung Bukit Subdistrict. However, this digitalization must be designed carefully to serve not only as an information medium for visitors but also as a platform that strengthens the relationship between visitors and the local community. A system is needed that can connect the feedback received digitally with the community's direct efforts to improve services. Without this, an abundance of information could lead to gaps in agrotourism management, ultimately hindering the development and empowerment of the local community.

Lambung Bukit Subdistrict has agrotourism destinations managed independently by the local community. Agrotourism has become an increasingly popular alternative for tourists, both domestic and international. It is a type of tourism that combines natural beauty, agricultural activities, and rural cultural experiences. In Indonesia, agrotourism offers tourists the opportunity to engage directly in farming activities, such as picking fresh fruits, trying traditional foods, and learning traditional farming techniques. Agrotourism in Lambung Bukit features several destination points, with significant distances between them and challenging routes due to the hilly terrain. Additionally, there are very few residential areas, resulting in limited information. The lack of accessible roads and public transportation means that not many tourists are aware of the agrotourism locations in Lambung Bukit. As noted, adequate access to roads, transportation, and communication greatly influences the development and recognition of an agrotourism location (Asful, 2019).

In addition to the challenging terrain and limited information about the agrotourism locations in Lambung Bukit Subdistrict, another issue frequently encountered at these agrotourism destinations is the variation in the names of different objects. This situation leads visitors to create their own names for the locations they discover. Such a condition is detrimental to the managers of agrotourism in Lambung Bukit. For example, when visitors want to share their experiences at the agrotourism site and post them on social media using the names they've coined, these posts may receive responses from other visitors. On the other hand, this can also create confusion for prospective visitors who intend to visit the agrotourism locations in Lambung Bukit. Based on the complex issues faced by agrotourism in Lambung Bukit, it can be concluded that the lack of accessible information about agrotourism will likely result in suboptimal feedback received by the local community. Furthermore, the Lambung Bukit Subdistrict has yet to establish an information system, such as a website, that can serve as a comprehensive information platform.

In response to the problems faced by the agrotourism locations in Lambung Bukit Subdistrict, the Community Service team from Nahdlatul Ulama University of West Sumatra initiated a Website-Based Digitalization of Agrotourism in the Community Empowerment Forum of Lambung Bukit. This initiative aims to create an effective and efficient information and promotion platform for the agrotourism in Lambung Bukit. With the establishment of the agrotourism website for Lambung Bukit, the Community Service team from Nahdlatul Ulama University of West Sumatra can provide solutions to the existing issues in Lambung Bukit's agrotourism. The solutions implemented include:

(1) socialization of website digitalization; (2) training in website management; and (3) evaluation of the activities or materials provided.

The final outcome of the Community Service activities conducted by Nahdlatul Ulama University of West Sumatra in partnership with the Community Empowerment Forum of Lambung Bukit Subdistrict is that the website can serve as a beneficial medium for information and promotion of agrotourism in Lambung Bukit.

B. Literature Review and Hypothesis Development

1. Digitalization

Digitalization is the process of converting information, processes, or services that were originally analog into digital format. This process involves the application of digital technology to enhance efficiency, accessibility, and effectiveness in various aspects of life. Digitalization can be applied across multiple sectors, such as education, healthcare, business, and tourism (Verhoef, P. C; Broekhuizen, 2021) (Vial, 2019).

a) Benefits of Digitalization:

- **Operational Efficiency:** Accelerates work processes and reduces operational costs.
- **Easy Access to Information:** Facilitates access to data and information anytime and anywhere.
- **Improved Customer Service:** Enables faster and more responsive services.
- **Increased Productivity:** Reduces human errors and enhances output.

b) Examples of Digitalization:

- **E-Government:** Government services that can be accessed online.
- **E-Commerce:** Trade of products and services through digital platforms.
- **Smart Farming:** Use of sensors and data to enhance agricultural yields.
- **Digital Learning:** Utilization of online learning platforms.

c) Challenges of Digitalization (Hanelt, A; Bohnsack, R., Marz, 2021):

- **Data Security:** Risks to information security and privacy.
- **Technology Access:** Disparities in access to technology in various regions.
- **Human Resource Adaptation:** Requires new skills for the workforce to adapt to technology.

2. Agrotourism

Agrotourism is a form of tourism activity that utilizes agricultural enterprises (agro) as tourist attractions. This activity aims to provide educational and recreational tourism experiences while strengthening the relationship between the agriculture and tourism sectors. Agrotourism combines agricultural activities with tourism to create unique experiences for tourists while promoting local products and agricultural culture (Jeklin, 2016).

Agrotourism is a strategic effort that integrates tourism with agriculture to generate economic, social, and environmental benefits. By emphasizing hands-on experiences and education, agrotourism has the potential to enhance appreciation for the agricultural sector and connect tourists with local nature and culture. Efforts to develop agrotourism need to be supported by good management, innovation, and technological support to ensure the sustainability and growth of this sector (Alfian et al., 2022).

1) Objectives of Agrotourism:

- **Education:** Providing knowledge to tourists about agricultural processes, livestock management, and food product processing.
- **Recreation:** Offering a place for healthy recreation that is close to nature.
- **Economic Empowerment:** Increasing the income of farmers and local communities through business diversification.

- Cultural Preservation: Maintaining and promoting traditional agricultural culture to younger generations and tourists.
- 2) Types of Agrotourism (Rachmawati, N., & Suryanto, 2019):
 - Garden Tours: Inviting tourists to tour fruit, vegetable, or ornamental plant gardens, often allowing them to pick the harvest.
 - Farm Tours: Experiences of visiting farms with cattle, goats, sheep, or poultry, and learning about their care.
 - Plantation Tours: Visiting coffee, tea, chocolate, or palm oil plantations and observing the processing methods.
 - Fishing Tourism: Activities such as fishing, observing fish farming, and learning about water management.
 - Rural Tourism: Staying in a village and experiencing daily activities such as farming, cooking traditional food, and handicrafts.
- 3) Benefits of Agrotourism:
 - Local Economic Growth: Creating job opportunities and increasing the income of farmers and local businesses.
 - Knowledge Enhancement: Tourists gain new insights into agriculture and the importance of environmental sustainability.
 - Environmental Conservation: Encouraging more environmentally friendly farming practices and considering natural resource conservation.
 - Social Interaction: Strengthening relationships between rural communities and tourists, fostering a collaborative and learning atmosphere.
- 4) Challenges of Agrotourism:
 - Accessibility: Remote locations and lack of transportation infrastructure can be obstacles.
 - Community Awareness: Not all community members are aware of the potential of agrotourism and the importance of their role in maintaining service quality.
 - Environmental Management: It is essential to ensure that agrotourism activities do not harm the environment or disrupt local ecosystems.

3. Website

A website is a collection of pages accessed via the internet that serves to display information or provide services to users (Sukma & Melladia, 2023). Websites can be used for various purposes, such as sharing information, communicating, conducting business, or providing entertainment (Kurnia et al., 2022) (Wisata et al., 2022).

1. Types of Websites:
 - Static Website: Its content is fixed and rarely changes, suitable for information that does not require frequent updates.
 - Dynamic Website: Its content can be easily updated by the owner, often using a content management system (CMS) like WordPress.
 - E-commerce: Designed for selling products or services online.
 - Blog: A website containing articles or personal writings.
 - Portal: Provides a variety of information and services, such as news, email, and community resources.
2. Main Components of a Website:
 - Domain Name: A unique address used to access the website (e.g., www.example.com).
 - Hosting: A place to store website files so they can be accessed via the internet.
 - Frontend: The part of the website that users see, including design, text, and images.
 - Backend: The part of the website that manages logic, databases, and servers.
3. Website Development Stages:

- Planning: Determining the goals, audience, and structure of the website.
 - Design: Creating the visual appearance of the website using graphic design.
 - Development: Writing code and building the functionality of the website using HTML, CSS, JavaScript, and other programming languages.
 - Testing: Testing the website to ensure there are no bugs and that all features work correctly.
 - Launch: Publishing the website on the internet and ensuring it is accessible to users.
4. Benefits of a Website:
- Online Visibility: Increases online presence and reaches a broader audience.
 - Branding: Helps build and strengthen brand identity.
 - Communication: Facilitates communication with customers or users.
 - Transactions: Facilitates business transactions, whether selling products, services, or information.

With this understanding, you can begin the digitalization process by creating a website as an essential step in developing or promoting agrotourism or other businesses.

C. Research Method

The method used in the implementation of the Community Partnership Empowerment activities is through socialization and training on Digitalization of the Agrotourism Website as an Information and Promotion Center for Agrotourism in Lambung Bukit Village. The stages of Community Service are as follows:

1. Time and Place of Implementation

The Community Partnership activities are carried out from August to October 2024. The activities take place in Lambung Bukit Village, Pauh District, Padang City, West Sumatra Province.

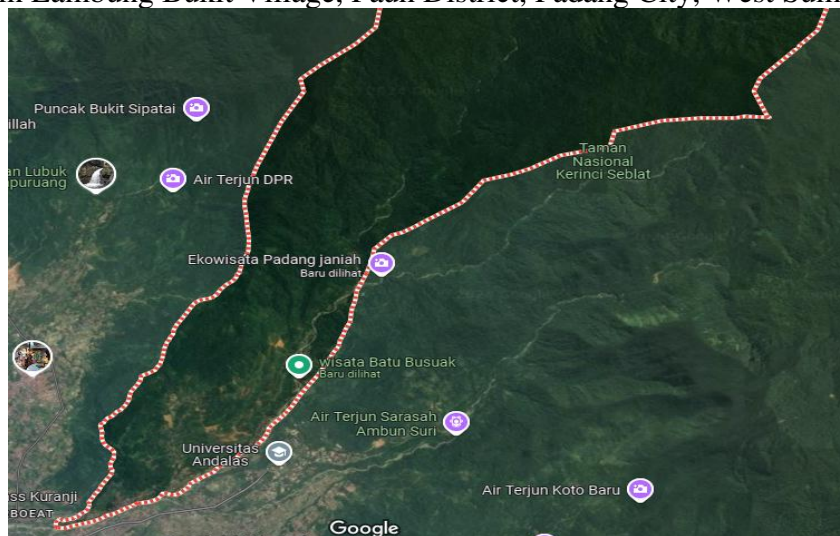


Figure 1. Map of Lambung Bukit Village Area

Source: Google Maps

2. Planning Stage

This stage is the first step taken during the planning phase, which includes activities such as observation, interviews, and site surveys for the Community Partnership activities. These activities are conducted to identify existing issues and to see the location firsthand.

3. Preparation Stage

In this stage, several tasks need to be accomplished, including coordinating with the team of lecturers and students to plan the implementation of activities conceptually and operationally, as well as assigning tasks to each Community Partnership team and

determining the training participants. The next preparation involves coordinating with the partner, namely the Community Empowerment Forum of Lambung Bukit Village, as well as the village administration and its staff. During this stage, data collection is also conducted, including from the location, community interviews, and Lambung Bukit Village.

4. Implementation Stage

The implementation stage consists of two phases:

1. The socialization phase is conducted to introduce the website-based agrotourism digitalization to the community.
2. The development and assistance phase focuses on website management for the Community Empowerment Forum of Lambung Bukit Village.

5. Evaluation Stage

This stage is carried out to review whether the website management has been conducted effectively and maximally.

D. Discussion

The Community Partnership Empowerment activities conducted by the PkM team from Nahdlatul Ulama University have provided the Forum for Community Empowerment in Lambung Bukit Village with an understanding of agritourism and website management. This website-based agritourism digitalization serves as an information center and a promotional tool for agritourism in Lambung Bukit Village. The activities were carried out in stages with the following results:

1. Initial Technology Readiness Survey

Conducting a survey of the local community, especially those involved in managing agritourism, to determine their level of technology literacy. This survey can cover aspects such as:

1. The community's ability to use technological devices (smartphones, computers).
2. The community's understanding of the internet and digital platforms.
3. Internet accessibility in the agritourism area and the readiness of technical infrastructure.

The results of this survey can provide an overview of the community's ability to embrace new technology and participate in the use of the website for agritourism.

2. Socialization

During the socialization activities, conduct a focus group discussion (FGD) to gauge the community's motivation to utilize technology for developing agritourism. Several indicators that can be measured include:

1. Enthusiasm for technology-based development.
2. The community's perception of the benefits of a website for agritourism.
3. The community's willingness to engage in website management and interact with visitors digitally.

This activity involves presentations from the implementing team, followed by discussions and a question-and-answer session regarding website-based digitalization in agritourism at the Forum for Community Empowerment in Lambung Bukit Village. The socialization activities can be seen in the image below:



Figure 2. Presentation of Materials, Discussion, and Question and Answer Session

In the material presentation session, the community service team presented and introduced the benefits of website-based digitalization to the visitors of agrotourism. The role of the website, in addition to providing information, is also to serve as an additional information resource for visitors before arriving at the location. This aims to provide extra knowledge to visitors about what they need to prepare before visiting the agrotourism area of Lambung Bukit Village.



Figure 3. Community Service Team Socialization at the Agrotourism Location with Partners

3. Development and Assistance

In this stage, the community service team developed the website and provided support to the community empowerment forum in Lambung Bukit in managing the agrotourism website. This activity can be seen in the image below:



Figure 4. Presentation on Agrotourism Website Management

4. Evaluation

In this stage, the PkM team conducted monitoring and evaluation related to the management of the agrotourism website that has been managed by the partner following the website development carried out by the PkM team. Furthermore, during the evaluation activities, the PkM team, assisted by several students from the Informatics Engineering and Agribusiness programs, checked the website to see if it had been managed by the partner regarding the digitization of agrotourism based on the website. The appearance of the website can be seen in the image below:

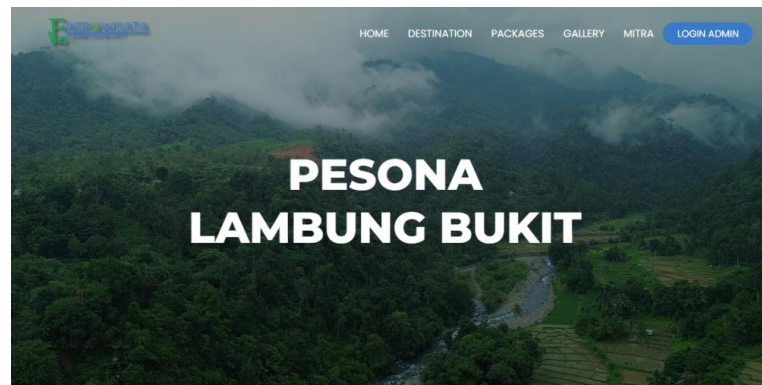


Figure 5. Evaluation of the Agrotourism Website Management Results by the Partner

Next, in the stage of measuring the knowledge and skills of the partner community empowerment forum of Lambung Bukit Village in managing the agrotourism website, the results can be seen in the following image:

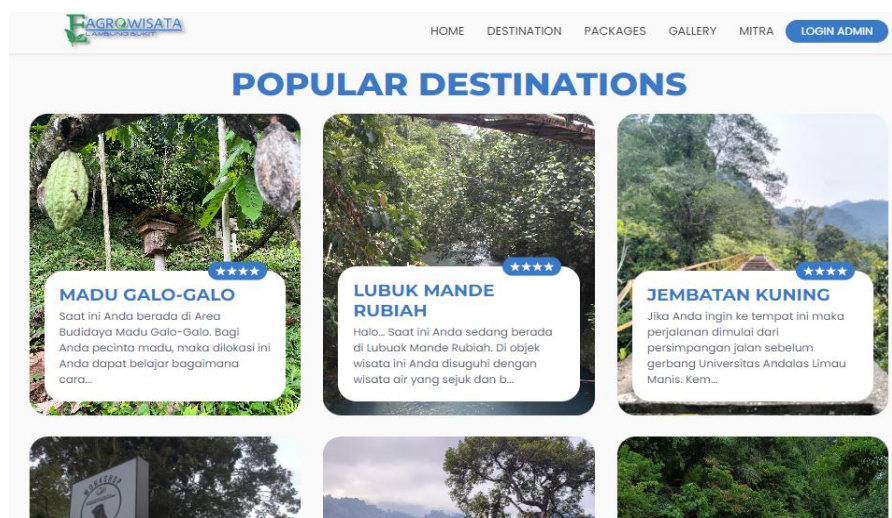


Figure 6. Level of Achievement in Managing the Agrotourism Website by the Partner

In the above Figure 5, it can be seen that from the evaluation results conducted with the partner of the Community Empowerment Forum in Lambung Bukit, after the socialization and assistance, it was found that the partner has been able to manage the agrotourism website effectively.

Digitalization in the tourism sector based on websites is something that should be urgently transformed by the relevant partners in the face of the rapid advancement of digital development today. Through the website, not only the residents of Padang City can easily access tourism information, but this website can also reach beyond the province, even internationally.



Figure 7. The PkM Team from UNU Sumbar, Partners, and the Community

The implementation of community service activities in the Lambung Bukit Village has been carried out smoothly and met expectations. The results of the agrotourism website developed by the PkM team from the Nahdlatul Ulama University of West Sumatra for the Forum for Community Empowerment in Lambung Bukit Village can now be managed by the partners with a good rating in website-based agrotourism digitization.

E. Conclusion

The Community Partnership Empowerment activity conducted by the team from Nahdlatul Ulama University of West Sumatra aims to digitize agritourism in Lambung Bukit Village through the development of an information-based website. This step is taken in response to various obstacles faced by Lambung Bukit agritourism, such as limited information and accessibility that hinder visitors from providing optimal feedback. Other challenges include the considerable distance between agritourism locations, difficult terrain, and a lack of organized information related to these tourist destinations.

Through the development of this website, it is hoped that an effective information and promotion platform will be created, making it easier for visitors to access information while providing a means for the community to manage feedback more effectively. Several activities carried out include socialization of digitization, training on website management, and evaluations to ensure that the people of Lambung Bukit Village can manage the website independently. The final results of the activity show that the partners in Lambung Bukit Village are already capable of managing the agritourism website well, which can enhance the local economic potential through digital tourism promotion.

The digitization of agritourism through this website provides an effective solution to increase the visibility of Lambung Bukit agritourism, enhance visitor interaction with the community, and open up greater opportunities for technology-based agritourism development

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