

Conference Paper

Segunung Goes Digital: Application of Virtual Tour to Kampung Adat Segunung

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ABSTRACT

Kampung Adat Segunung, is one of the fostered areas and the partners of the Faculty of Social and Political Sciences UPN "Veteran" Jawa Timur since 2022. The condition of Kampung Adat Segunung which has become a popular tourism destination in Jombang regency requires that village tourism must also be managed properly. Therefore, it is necessary to prepare adequate tourism infrastructure and superstructure. In this article the author has formulated two main problems, namely 1) the threat of urbanization by Segunung youths, and 1) the existence of a technological gap from the village government and the people of Kampung Adat Segunung with the development of information technology. As one of the community service activities, the author uses two methods, they are a) asset-based community development (ABCD) as a method of social approach to the community and b) virtual tour production with a soft skills approach. The community service activities in the Kampung Adat Segunung produce virtual tour technology that can be used as a medium for disseminating tourism information on the Kampung Adat Segunung to the wider community.

Keywords: Tourism, technology, virtual tour, Kampung Adat Segunung

Introduction

In contemporary contexts, technology assumes a pivotal role, permeating various spheres of human endeavor, including the realm of work. Within the tourism sector, technology emerges as a lucrative instrument primarily within the domain of information dissemination (Danuri, 2019). Facilitating access to comprehensive destination-related information and streamlining ticket booking processes, technology revolutionizes the tourist experience, enabling seamless transactions from virtually anywhere (Putra, 2020). Consequently, there is a concerted effort to harness and deploy technological advancements to fortify tourist villages in Indonesia. This initiative finds expression in endeavors such as the integration of technology within the Carangwulung Tourism Village, renowned for its flagship destination, Kampung Adat Segunung. Nestled in the heart of Carangwulung Village, Kampung Adat Segunung, which initially comprised a modest hamlet nestled at the foothills of Mount Anjasmoro, has evolved into a celebrated tourist destination. Recognized for its natural splendor and rich cultural heritage, Kampung Adat Segunung beckons travelers from far and wide, serving as a quintessential example of Jombang Regency's tourism prowess.

Kampung Adat Segunung, situated within the Carangwulung Village precinct, has been a recipient of support from the Faculty of Social and Political Sciences of UPN "Veteran" Jawa Timur since 2022. The collaborative effort between Carangwulung Village and the aforementioned faculty commenced with the establishment of a Cooperative Research and Community Service

How to cite:

Alawi, A. M., Setiyowati, A., & Nuryananda, P. F. (2024). Segunung goes digital: Application of virtual tour to Kampung Adat Segunung. *8th International Seminar of Research Month 2023*. NST Proceedings. pages 263-268. doi: 10.11594/nstp.2024.4142

Agreement. Designated as a national tourist village in 2015, Carangwulung Village serves as a pivotal partner in this collaboration. The formalization of this partnership was marked by the signing of a Cooperation Agreement, paving the way for synergistic endeavors. Kampung Adat Segunung, positioned as a key tourist destination in the Wonosalam District of Kab. Jombang, boasts geographical features conducive to tourism development, with its proximity to mountains and hills. Recognizing this potential, the local community in Segunung has been proactive in nurturing and harnessing the area's tourism prospects. Leveraging Segunung's tourism potential holds promise for comprehensive village development, with Carangwulung Village serving as its nurturing ground. In 2022, government funding was allocated to Kampung Adat Segunung to bolster its tourism infrastructure. Beyond its role as a tourist spot, Kampung Adat Segunung serves as a strategic locale for promoting captivating values. Strengthening tourism in the region necessitates concerted efforts, including the enhancement of human resource capacity, fostering socio-cultural adaptability within the community, and embracing innovation and information technology to bolster Kampung Adat Segunung's tourism trajectory.

Kampung Adat Segunung is managed by the community and assisted by the local community. Kampung Adat Segunung is a nature-based tourist attraction. There are several tour packages owned by Kampung Adat Segunung. Examples of tour packages offered by the Kampung Adat Segunung are livestock education tours, plantation education tours, nature education tours, MSME products, cultural performances, batik training, and omah cangkruk. The community actively participates in managing all tourist packages in the Kampung Adat Segunung. Of the various tour packages offered, Kampung Adat Segunung has access technology for ticket reservations for tourists who want to visit. In 2019, Kampung Adat Segunung has social media in the form of Instagram, Facebook and TikTok to promote its tourist village. Kampung Adat Segunung will have a website in October 2022. From the start of the Kampung Adat Segunung, the management used Instagram and the website to provide reservation access to tourists. On Instagram and the Kampung Adat Segunung website there is information in the form of a Whatsapp contact number. The website is used to find all information related to attractions in the Kampung Adat Segunung tourist village. Several online platforms, especially social media, have indeed been created for the tourism purposes of the Kampung Adat Segunung, but not all social media and website pages that have been created have been effective in increasing visits and introducing the Segunung tourist destination to the public.



Figure 1. Kampung adat segunung as the tourism branding in Segunung, Jombang

The Kampung Adat Segunung once used an online ticket system in the form of a ticket reservation service feature on *loket.com*. The use of online tickets in the *loket.com* application is only used when there is an event taking place in the Kampung Adat Segunung. Tourists can make online ticket reservations to visit the Kampung Adat Segunung via the *loket.com* application. However, it turns out that using the online ticketing system is not as simple as the managers of the Kampung Adat Segunung destination had assumed. One of the problems that later emerged in the management of online ticketing in the Kampung Adat Segunung was that the website manager was a third party and was not in the same location as the other managers. This creates geographical barriers and communication barriers so that the online ticketing system is now starting to be no longer considered the main service for ticket reservations in the Kampung Adat Segunung.

As an initial step in developing the Kampung Adat Segunung and the first aim of this scientific article is as an academic contribution by the community service team for the Kampung Adat Segunung community. This is in line with the second goal, namely publication. The publication will provide additional academic exposure to the Kampung Adat Segunung as one of the villages that is the focus of tourism development in Jombang Regency. Meanwhile, the third, or final, objective, namely the inventory, will provide scientific archival documentation of the development of Segunung tourism which can later be used as an asset for future village development.

Material and Methods

Virtual tourism, often referred to as virtual tours, involves the online presentation of sounds, text, and images depicting real-world locations, enabling travelers to indirectly experience these destinations (Yeganegi & Zarghami, 2015). Furthermore, Lyck et al. (2012) elucidated that virtual tourism offers accessible information in various formats, including text, visuals, and audio, related to tourist spots. It offers tourists an indirect travel encounter (Voronkova, 2018). This virtual tour serves as a platform for connecting the people of Segunung with potential tourists and the broader public. Here, we present several instances of virtual tours applied to global tourist destinations. Unlike simply watching videos on platforms like YouTube, virtual tours are led by experienced guides who can engage with residents and stakeholders. Additionally, participants in virtual tours have the option to purchase souvenirs, which will be delivered to them. One significant advantage of virtual tours is their convenience in accessing tourist attractions. Moreover, international participants can partake in these virtual tours, which benefits both tourism managers and the government as a means of promoting Indonesian tourism.

Virtual tourism serves as an effective promotional tool for specific tourist attractions and destinations. Museums, in particular, frequently utilize virtual tour platforms to introduce and popularize historical tourism, a strategy especially valuable during challenging times like the recent pandemic. This form of virtual tourism, often referred to as a panoramic tour, immerses tourists in real-time visits to various destinations through screen presentations. Typically, virtual tourism harnesses services from Google, such as Google Maps and Google Satellite. The utilization of a 360-degree perspective in virtual tourism involves integrating geolocation services to map locations with potential for innovative, creative, and communicative promotional campaigns, effectively reaching a broad audience at reasonable costs (Widiastini et al., 2020). It's crucial to distinguish virtual tourism from augmented reality, as the former aligns closely with the concept of virtual reality. Virtual reality is a digital technology service that offers users experiences akin to reality without necessitating physical activity. For instance, individuals can "fly" to view the roof of a building without any physical movement, with the visual experience facilitated through technological media like Oculus glasses, frequently used in gaming. In contrast, augmented reality melds virtual and artificial reality, altering the virtual reality experienced by individuals. Virtual tourism has yet to delve into augmented reality due to the intricate nature of existing systems (Guerra et al., 2015).

The community service activities are conducted through three distinct methods. First method is Asset-Based Community Development (ABCD). This method employs a social approach, undertaken by the community service team in Kampung Adat Segunung, to engage with the local community. ABCD places a significant role on communities or individuals within tourist areas. It involves mapping the available assets, concentrating on analyzing current strengths and resources, establishing inspiring objectives and shared visions, crafting transformative and inclusive plans for change, fostering competencies among all community members, and empowering them for community development initiatives. ABCD emphasizes greater participation by local communities, involving them in all stages of planning, implementation, and evaluation of development and empowerment endeavors (Suksmawati et al., 2021). The second method is Asset-based Community Development. This concept, emerging as a more fitting paradigm, views ABCD as a "strength-based" approach that leverages the diverse potentials, strengths, and capacities within the community to enhance their quality of life. It maintains a close connection to the community and is guided by four core principles: change should originate within the community, development should align with the community's capabilities and assets, change should stem from community relationships, and the goal should be to ensure the community's sustainability in the future (Mijiarto et al., 2021). The third method is mentoring. Mentoring serves as an empowerment technique, also recognized as a community empowerment strategy frequently employed by both governmental and non-governmental organizations. Its primary aim is to enhance the competence and self-sufficiency of individuals, enabling them to autonomously address challenges. To facilitate the seamless execution of this community service initiative, the support provided by the proposing team will be comprehensive and enduring. As per Wong and Premkumar (2007), mentoring is a purpose-driven process that imparts both intention (goal) and enlightenment (inspiration). In the context of this community service endeavor, integrated assistance implies that the proposing team will not merely guide partners and partner communities in applying theoretical knowledge but will also provide conceptual explanations. The mentoring approach shares similarities with job instruction, furnishing guidance to participants in executing prepared activities, which are task-oriented and aimed at specific work objectives. One such advantage is its ability to embrace social diversity and varying social capacities, a feature often absent in other social approaches. Conventional approaches frequently compel cultural conformity in targeted communities, potentially missing the core issues due to differing perspectives. By accommodating diversity and social capacity, a participatory approach achieves its second benefit – equitable empowerment distribution. In this approach, the community collaborates with empowerment agents in formulating empowerment policies. When empowerment and assistance are evenly distributed and managed by the community itself, the likelihood of targeted and effective empowerment increases substantially. This emphasis on effectiveness led the community service team to opt for participatory methods in this initiative.

Results and Discussion

Community service in the Kampung Adat Segunung is generally divided into three stages, namely the Pre-Production Stage, Production Stage, and Post-Production Stage. These three stages are an agreement from each service team that has received approval from the local community as well as in the Kampung Adat Segunung. Approval from the Segunung community is also important in implementing this community service activity. The explanation of these three phases is as follows, first is the Pre-production stage. The pre-production phase commences with the formation of the team, manuscript creation, and dissemination within the tourist village community, notably the tourism unit. In terms of academic expertise, the community service team hailing from both programs has a firm grasp of the intellectual dimensions required for executing virtual tours in village-located tourism, such as Kampung Adat Segunung. However, it's crucial to acknowledge that the practical implementation of virtual tours has undergone numerous adjustments.

The second phase is the production phase. The production phase involved visiting various tourist attractions within the Kampung Adat Segunung. During this phase, the team captured images and videos of attractions, assessed accessibility, and documented existing facilities using 360 cameras and drones. Notable tourist spots included Omah Nenek, which serves as the primary attraction and symbol of the Kampung Adat Segunung, a dairy farm, a spice production facility, and a batik workshop. This extensive shooting process spanned multiple days and engaged UPN "Veteran" Jawa Timur students, alongside the tourism unit, as they embarked on this virtual tour creation journey. Notably, this photography session served as hands-on training for the tourism unit in virtual tour development. An interesting aspect of the production phase was the unexpected increase in the crew size. Originally estimated to require only three individuals, the team expanded to include four more participants, resulting in a total of seven team members. During production, one team member operated a 360 camera, aided by another team member tasked with arranging and identifying optimal locations for capturing photos and videos. Meanwhile, four additional team members played roles as simulated tourists exploring the Kampung Adat Segunung. Notably, local residents displayed enthusiasm and actively participated in the photo and video capturing process for the virtual tour.

Taking photos and videos for the virtual tour took three days and two nights. The community service team stays overnight in residents' homes or what is called the live-in concept. This live-in concept provides an insight into the atmosphere and aspirations of the local community, thereby providing its own meaning for the community service team to determine the points for taking photos and videos for virtual tourism. The village government and tourism unit also always accompany the community service team to provide suggestions and input for locations where virtual tourism photos and videos can be taken. On the first day of the photo and video taking process, the community service team immediately targeted Omah Nenek. There are approximately 1-3 photo and video taking points in this surrounding area. The process of taking photos and videos continued on the second day. On the second day, the community service team focused on taking pictures of the area around the dairy farm and batik crafts. After that, the community service team also added several photo and video points in the area around the main village entrance.

Prior to commencing the production phase, the community service team collaboratively prepares a comprehensive manuscript alongside the Segunung tourism unit. This manuscript is centered around the selection of locations and attractions where photos or videos will be captured. Subsequently, the manuscript is submitted to the Karangwulung officials, which will subsequently accompany the team in the creation of the virtual tour, in conjunction with the tourism unit. The prepared manuscript encompasses critical elements, including the planned shooting route, detailed descriptions or narratives for each shooting point, and the meticulous design of visual connectivity between individual images, accomplished by adjusting shooting angles. This manuscript holds significant importance as it ensures that the virtual tour, presented through the provider system, delivers an enjoyable experience to its users. Additionally, it serves the purpose of educating the public about the digitalization of tourism villages. To facilitate this understanding, educational materials are furnished to the community, primarily represented by the Kampung Adat Segunung's tourism unit. These materials predominantly delve into the role of technology in advancing tourism villages. Distribution of this material takes place during field missions and through online channels, with mutually agreed-upon timeframes. The overarching goal of this outreach initiative is twofold: to impart a comprehension of the function of digitalization in tourist villages to the public and to equip them with the knowledge of how to effectively utilize these technological tools. In this manner, this community service activity not only provides valuable resources to the local community but also actively engages in collaborative problem-solving efforts.

The third phase is the post-production phase. The post-production phase encompasses several key components, including the editing process, website monitoring, and community

support. A critical aspect of the post-production stage involves fine-tuning the virtual tourist points and routes to be implemented on the website. Ensuring that the virtual tourist route captures the same interpretation and ambiance as experienced during an in-person visit to Kampung Adat Segunung is paramount. Consequently, the service team meticulously executes the application of the virtual tourist route on the website to provide virtual visitors with an authentic experience mirroring an actual visit to the village. In addition to website editing and monitoring, the post-production phase extends support to the community. Recognizing that creating a virtual tour is a novel undertaking for Segunung's tourism unit, it's imperative to facilitate their understanding of the platforms and applications utilized in virtual tour activities, website management, and the editing process. This knowledge transfer empowers individuals to independently manage and maintain the virtual tour effectively.

Conclusion

Creating virtual tours serves not only as an innovative approach to advancing Kampung Adat Segunung but also as a valuable promotional tool, particularly in the challenging context of a pandemic that has adversely affected the tourism and service sectors. Kampung Adat Segunung, like many others, had ambitious plans for development and enhancement before the pandemic struck. However, the outbreak forced a pause in these plans as the village government had to redirect resources and efforts toward pandemic management.

The introduction of virtual tourism innovation now offers a promising avenue for promoting the ongoing development and growth of Kampung Adat Segunung, both during the pandemic and in the post-pandemic future. Nevertheless, since this represents a novel concept for Segunung's tourism unit, further outreach and support are essential to empower the community to autonomously manage the created virtual tour. This self-sufficiency in virtual tourism management is pivotal, as it aligns to enhance technological capabilities and human resources within Kampung Adat Segunung. The community service team anticipates that the integration of virtual tourism with the website will not only contribute to the village's technological capacity but also foster an increase in human resource capacity, thereby advancing the overall development of Kampung Adat Segunung.

Acknowledgment

The author would like to thank LPPM UPN "Veteran" Jawa Timur for providing an internal grant so that this service activity can be carried out.

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