

Optimization of Tourism Management, Promotion of Tourist Attractions, and Creative Economy Based on Android Application in Kulu Village, Wori District, North Minahasa Regency

Mita Takaendengan, Vincentius Pantow, Maruto Loegimin, Kevin Pangemanan

¹Department of Tourism, Politeknik Negeri Manado, Jl. Raya Politeknik, Buha, Kec. Mapanget, Kota Manado, Sulawesi Utara, Indonesia

²Department of Business Administration, Politeknik Negeri Manado, Jl. Raya Politeknik, Buha, Kec. Mapanget, Kota Manado, Sulawesi Utara, Indonesia

³Department of Electrical Engineering, Politeknik Negeri Manado, Jl. Raya Politeknik, Buha, Kec. Mapanget, Kota Manado, Sulawesi Utara, Indonesia

⁴Department of Business Administration, Politeknik Negeri Manado, Jl. Raya Politeknik, Buha, Kec. Mapanget, Kota Manado, Sulawesi Utara, Indonesia

*Corresponding author's email: takaendenganmita@gmail.com

Abstract

Kulu Village is one of the villages in North Minahasa Regency with untapped tourism potential. The research object is Kulu Village, North Minahasa Regency, which has the potential for diving spots, fishing spots, mangrove forest, paniki Island, legend of posi-posi kuning, local culture and traditions that have not been optimized, as well as the Kulu village community, which has creative economic businesses. Therefore, this research aims to optimize the tourism management model, promote tourist attractions, and develop creative economies based on Android (Website & All Social Media Platforms) in Kulu village. The research method used is the Qualitative Method with data collection techniques of observation, interviews, and questionnaires. Information is obtained from stakeholders, including the village government, tourism economic actors, and the community related to tourism, the promotion of tourist attractions, and the creative economy in Kulu village. Meanwhile, the data analysis technique uses the Scoring system and FGD (*Focus Group Discussion*). The research concluded that Kulu Village's tourism potential can be maximized through infrastructure improvements, digital promotion via websites and social media, local product integration, and stakeholder partnerships. Developing an Android-based web application and providing community training is crucial for promoting tourism and enhancing the local creative economy. Kulu Village has rich natural and cultural tourism potential. However, to fully harness this potential, infrastructure improvements, institutional strengthening, and promotion through websites and social media platforms like Instagram, Facebook, TikTok, and YouTube are essential to attract both local and international tourists. Strengthening partnerships with stakeholders, such as travel agents, online booking platforms, and influencers, is also crucial to increase the visibility of Kulu Village's tourism destinations. Additionally, local products such as handicrafts and traditional cuisine can be integrated into the tourism ecosystem through digital platforms, including websites and social media.

Keywords: Tourism management; promotion; creative economy; android; kulu village

1. INTRODUCTION

Museums The development of Information Technology (IT) in Indonesia has been driven by factors such as economic growth, broad internet penetration, government policy support, startup innovation, and the digitalization of traditional sectors (Rabbani, et al. 2023). Despite facing challenges such as unequal access to technology, data security concerns, and limited IT infrastructure in some regions, the potential for IT growth remains vast and continues to be a primary focus for stakeholders in Indonesia (Wibawa, I. P. A. et al, 2022). As with the digitalization of traditional sectors, many traditional industries in Indonesia, such as tourism, banking, education, and healthcare, have also undergone digital transformation (Darmayanti, P.W. et al. 2023). This includes the



adoption of new information systems, mobile applications, and online platforms to enhance access and efficiency (Kuo, Tung-Sheng, et al. 2019).

In the tourism sector, the implementation of Information Technology (IT) has changed the way tourists plan their trips through online bookings, mobile applications, and NFC/QR technologies for payments and entry tickets (AT Mumtaz, 2021). Hotel management systems and data analytics help improve operational efficiency, while virtual and augmented reality provide a more immersive experience (Kurniawan, Ady Purna et al. 2020). IT-based destination management also helps preserve the environment and provides real-time information to visitors (Yanti, 2020). Thus, the implementation of IT has increased the competitiveness of the tourism industry, improved the experience for tourists, and brought significant economic benefits to destinations and local communities (Setiawan, 2017).

Kulu Village, located in North Minahasa Regency, has significant marine tourism potential and was officially declared a Tourism Village by the government in October 2023. The potentials in Kulu Village include the Mangrove Forest, Paniki Island, Warirang Hill, Kulu Waterfall, and Local Culture (Seska Mengko and Vesty Sambeka, 2020). Unfortunately, these potentials have not yet been fully optimized. This study, titled "Optimization of Tourism Management, Promotion of Tourist Attractions, and Creative Economy Based on Android Application in Kulu Village, Wori District, North Minahasa Regency," aims to investigate and provide solutions for developing a model of tourism management, promotion of tourist attractions, and creative economy based on an Android application (Website & All Social Media Platforms) in Kulu Village. By analyzing stakeholder needs and exploring how to increase community income through optimizing tourism management, promotion of tourist attractions, and the creative economy using Android-based technology (Website & All Social Media Platforms), it is hoped that this model can stimulate active participation of the local community in the tourism industry.

Specific Objectives

The specific objectives of this research are as follows:

1. To optimize the tourism management model, promotion of tourist attractions, and creative economy.
2. To provide an Android-based application (Website & All Social Media Platforms) for partners to enhance tourism management, promotion of tourist attractions, and the creative economy.
3. To implement the tourism management model, promotion of tourist attractions, and creative economy by involving relevant stakeholders.
4. To strengthen research collaboration between higher education institutions and partners, as well as business actors.
5. To encourage multidisciplinary research collaboration among internal lecturers in higher education, including students in relevant fields of study.

Research Urgency

The urgency of this research is as follows:

1. Many tourism potentials in Kulu Village are not being managed optimally.
2. The management and promotion of tourist attractions are still traditional in nature.
3. To assist partners in overcoming limitations in managing tourism, promoting tourist attractions, and developing the creative economy.
4. To improve tourism management, promotion of tourist attractions, and the creative economy through the utilization of platforms like WhatsApp and Telegram.
5. To support the development of digital tourism and creative economy, which has become a priority in the national development program by the government.
6. To support the strategic research plan (renstra) of Politeknik Negeri Manado, especially within the Department of Tourism, with a research focus in line with the department's strategic research plan, namely: "Development of a Waste Management System for Accommodation Businesses in Marine Tourism Destinations."

2. RESEARCH METHODOLOGY

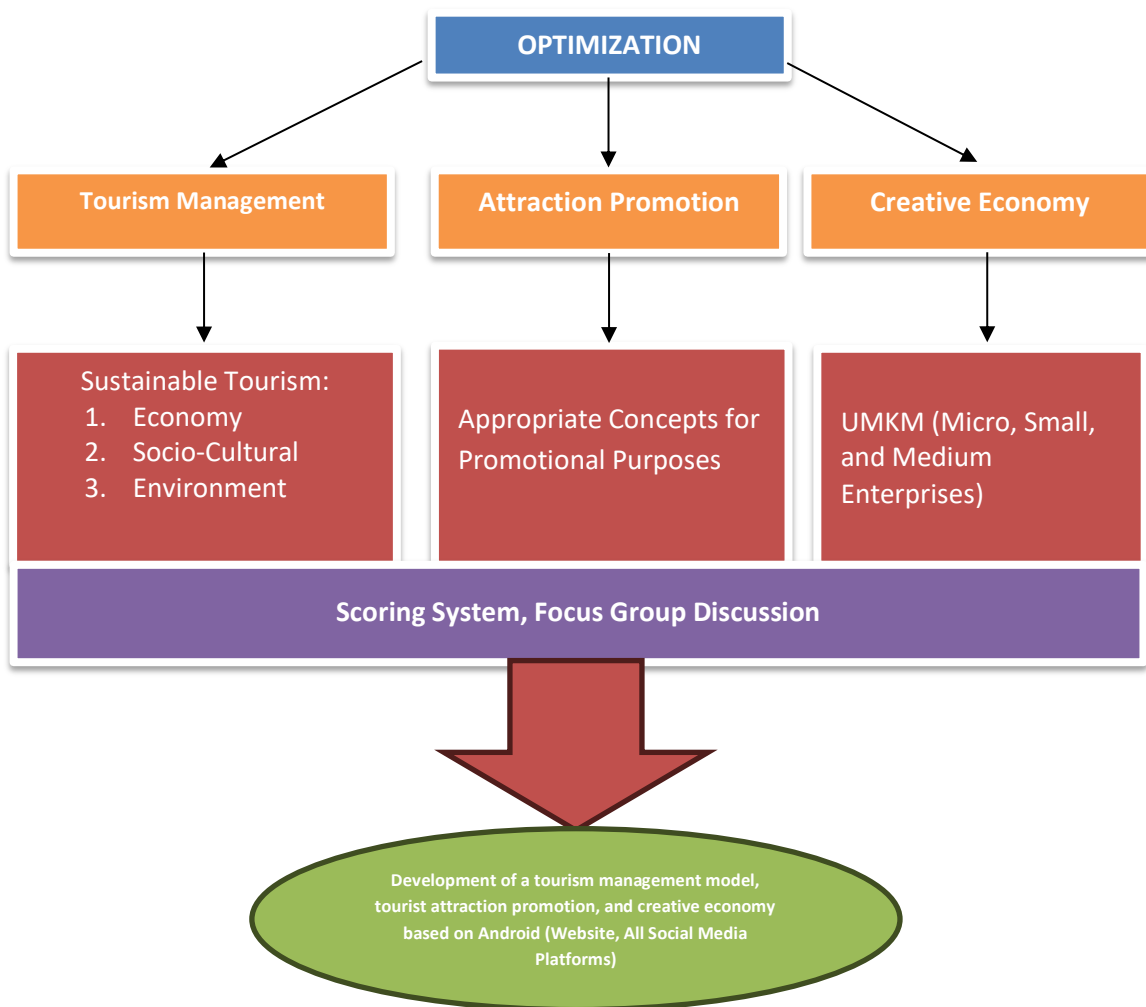
This study employs a qualitative research approach, a scientific method commonly used by a group of researchers in the social sciences. Qualitative research is conducted to build knowledge through understanding and discovery. The qualitative research approach is a process of inquiry and understanding based on methods that investigate social phenomena and human problems.

Primary data in this research is collected through observation, interviews, and questionnaires. Observations and interviews are conducted to gather information related to optimizing tourism management and the creative economy in Kulu Village, Wori District, North Minahasa Regency. The questionnaire is designed with closed-ended questions, focusing on aspects related to the research topic. The questionnaire uses a scoring system, which is a simple and commonly used structure for qualitative assessments. The key aspects of sustainable tourism and technology are the main points that will be discussed and analyzed using group discussions, involving stakeholders to solve existing problems, both practical issues faced by individuals and groups.

Research Stages

The implementation of this research will be carried out in three stages as follows:

1. Preparation
In this stage, location observations and discussions with partners are conducted to align perceptions and identify existing problems.
2. Activity Implementation Process
The development of the concept and in-depth interviews with partners takes place, where the digital marketing concept is created by considering the relevance of the findings from the in-depth interviews with the partners. This process aims to ensure accuracy between the message, the story being highlighted, and the actual conditions of the partners in running their business.
3. Planning the use of tools and materials as well as analyzing the readiness for implementation
In this stage, Politeknik Negeri Manado's departments of Tourism, Electrical Engineering, and Business Administration collaborate with all available competencies to assist partners. This involves professional participation and creative industry players at the research site to design a model for tourism management, promotion of tourist attractions, and a creative economy based on Android applications (Website & All Social Media Platforms).
Chart of the flow chart for the implementation of research activities to achieve solutions:



Picture 1. Flow chart for the implementation of research activities

3. FINDINGS AND DISCUSSION

The results from the Focus Group Discussion between researchers and the resource persons covered several key points:

Tourism Management:

1. Identification of Tourism Potential: Kulu Village and Wori District have various natural potentials such as Paniki Island, yellow mangrove, dive spots, fishing locations, and the dugong migration route. Additionally, there is cultural art, including the Masamper dance and dances accompanied by keroncong and trump bass music.
2. Infrastructure Strengthening: One of the main challenges in tourism management is adequate infrastructure, such as road access, supporting facilities (toilets, parking lots, accommodation), as well as security systems and tourist information. There are already gazebos on the sea as rest areas where visitors can enjoy views of the ocean and mangroves.
3. Institutional Management in Kulu Village: It was suggested that management should be geared towards a foundation, as receiving government grant funds would be easier compared to BUMDES (*Village-Owned Enterprises*).

Promotion of Tourist Destinations:

1. Importance of Digitalization: In the technology era, promoting tourism through websites is considered an effective solution to expand the reach of potential tourists, both domestically and internationally.
2. Use of Social Media: Utilizing social media platforms like Instagram, Facebook, TikTok, and YouTube is seen as an effective method for maximizing the promotion of Kulu Village as a tourist destination.
3. Partnership with External Parties and Related Stakeholders: The discussion also highlighted the importance of collaborating with travel agents, online booking platforms, and influencers to increase tourism visibility.

Creative Economy:

1. Utilization of Local Products: One of the topics discussed in the focus group discussion was how to integrate local products such as handicrafts, local culinary offerings, and cultural arts into the local tourism ecosystem.
2. Website and Social Media Applications as Marketplaces: An Android-based website application can be developed as a platform to sell creative economy products from Kulu Village, helping local entrepreneurs to market their products more widely. Creative Business Training: There is a need to provide training to the local community on creative product development, digital marketing, and packaging techniques to increase product marketability.

Android Application Development:

1. Application Features: An Android-based website application with features such as village profiles, village data, tourism information, UMKM (micro, small, and medium enterprises) group data, complete destination information, local event calendars, as well as options for booking or reserving and purchasing UMKM products from Kulu Village.
2. Website Management: The website should be managed by an administrator from Kulu Village.
3. Stakeholder Involvement: Active participation from the Kulu Village Government, North Sulawesi Tourism Department, North Minahasa Tourism Department, and the local community is essential in the development and maintenance of the application.
4. Socialization and Implementation: The FGD discussed the importance of educating the local community and tourists on using the Android-based website and social media applications to ensure optimal utilization.

3. CONCLUSION

Kulu Village needs to urgently improve its tourism infrastructure through collaboration between the local government and the village, including the enhancement of transportation access, public facilities, and the development of local human resources. The development of a website and Android-based applications must also be accelerated, involving local youth in social media management training to ensure the sustainability of digital promotion. Additionally, training programs to enhance creativity in developing unique and competitive creative economy products, as well as digital marketing skills, are crucial. Kulu Village should also establish partnerships with travel agents, digital platforms, and influencers to expand promotion and attract more tourists. By leveraging digitalization and strengthening synergies among stakeholders, the village's tourism sector can develop sustainably and improve the economic welfare of the local community.

REFERENCES

- A'inun, F., Hetty, K., & Rudi, S. D. (2015). Pengembangan desa wisata melalui konsep community based tourism. *Prosiding KS : Riset & PKM*. No 3 Vol 2.
- A Priadi, VLD Pasaribu, S Virby, S Sairin, WG Wardani - Abdi Laksana: Penguatan Ekonomi Kreatif Berbasis Sumber Daya Desa Dikelurahan Rempoa. *Jurnal Pengabdian Kepada Masyarakat*, 2020.

- Bere, F., Fanggidae, A., Kurniawati, M., & Fanggidae, R. (2023). STRATEGI PENGEMBANGAN POTENSI PARIWISATA ALAM PANTAI PANMUTI DI KABUPATEN KUPANG. *GLORY Jurnal Ekonomi Dan Ilmu Sosial*, 4(6), 1375-1388.
- Darmayanti, P.W., I Made Darma Oka and Fransiska Fila Hidayana 2023. The Role of Digital Marketing for Village Tourism Development in Tabanan Regency. *Jurnal Kajian dan Terapan Pariwisata*. 3, 2 (May 2023), 21-29. DOI:<https://doi.org/10.53356/diparojs.v3i2.78>.
- Hastutik, D., Padmaningrum, D., Wibowo, A. (2021) Peran Badan Usaha Milik Desa (BUMDes) dalam Pengembangan Desa Wisata di Desa Ponggok Kecamatan Polanharjo Kabupaten Klaten. *Journal of Agricultural Extension*. 45(1), 46-58, 2021. <https://doi.org/10.20961/agritexts.v45i1.51539>.
- I Gde Pitana; I Ketut Surya Diarta. *Pengantar ilmu pariwisata / I Gde Pitana, I Ketut Surya Diarta*. Yogyakarta :Andi, 2009.
- Karman, Joni. 2019. Sistem Informasi Geografis berbasis Android Kasus Aplikasi SIG pariwisata. Yogyakarta: CV BudiUtama
- Kondo, T., Takaendengan, M., Gumolili, Y., J., H., Solang, J., A. (2023) Studi Kolaboratif Sebagai Model Pengelolaan Pariwisata Bahari Berbasis Masyarakat. *Jurnal Ekonomi dan Pendidikan* Volume 6 Nomor 2. Hal. 84-92 p-ISSN: 2614-2139; e-IS SN: 2614-1973, <http://ojs.unm.ac.id/JEKPEN>
- Kondo, T., Takaendengan, M., Pua, M., Manginsela, A., Kholiq, I., Dalanggo, O., & Malaru, K. (2022). Potensi Wisata Melby'ls Beserta A4 (Attraction, Amenity, Accessibility, Ancilliary) di Kecamatan Tomohon Timur Kelurahan Kumelembuay. *Prosiding Seminar Nasional Produk Terapan Unggulan Vokasi*, 1(2), 134-152. Retrieved from <https://jurnal.polimdo.ac.id/index.php/semnas/article/view/538>
- Kuo, Tung-Sheng & Huang, Kuo & Thang, Nguyen & Phuc Hung, Nguyen. (2019). Adoption of mobile applications for identifying tourism destinations by travellers: an integrative approach. *Journal of Business Economics and Management*. 20. 860-877. 10.3846/jbem.2019.10448
- Kurniawan, Ady Purna et al. Android Mobile Application for Promotion of Pangandaran Leading Tourism in Augmented Reality Technology. *IJAIT (International Journal of Applied Information Technology)*, [S.l.], p. 10-16, July 2020. ISSN 2581-1223.
- Mengko, S., & Sambeka, V. (2020, July 31). Identifikasi Potensi Objek Wisata Pulau Paniki di Desa Kulu Kecamatan Wori Kabupaten Minahasa Utara. *HOSPITALITY AND TOURISM*, 3(2).
- Mumtaz, A. T. Digitalisasi Wisata di Desa Wisata. *Jurnal Kajian Ruang*. Vol.1 No.1 . 2021.
- Oktandi, N. F., & Ardiansyah, I. (2023). LITERATURE REVIEW REVOLUSI INDUSTRI 4.0 PADA BISNIS: DALAM BUKU REVOLUSI INDUSTRI 4.0. *Mufakat: Jurnal Ekonomi, Manajemen Dan Akuntansi*, 2(4), 355–360.
- Pedrana, M. (2014). Location-based services and tourism: possible implications for destinations. *Current Issues in Tourism*, 17(9), 753-762. <https://doi.org/10.1080/13683500.2013.868411>
- Peraturan Pemerintah Nomor 72 Tahun 2005 tentang Desa. Jakarta : Direktorat Jendral Otonomi Daerah.
- Rabbani, Dana & Najicha, Fatma. (2023). Pengaruh Perkembangan Teknologi terhadap Kehidupan dan Interaksi Sosial Masyarakat Indonesia.
- Raharjo Budi. Herianto Imam. RK Enjang. 2012. Modul Pemrograman Web (HTML,PHP & MYSQL) ISBN : 978-602-8759-18-2
- Ridzal, N. A dan Hasan. W. A. Penguatan ekonomi kreatif berbasis potensi lokal dengan meningkatkan jiwa wirausaha dalam pemanfaatan sumber daya alam di keluarahan Masiri Kecamatan Batauga Kabupaten Buton Selatan. *Jurnal Pengabdian kepada masyarakat membangun negeri*. Vol 3. No.3. 2019
- Sari, Anggri Puspita, dkk. 2020. *Ekonomi Kreatif*. Yayasan Kita Menulis. ISBN: 978-623-6761-59-5



- Saragih, Megasari & Surya, Elfitra & Mesra, B. (2021). *Kajian Dasar Pariwisata*. ISBN : 978-623-96596-8-4
- Setiawan, W. Era Digital dan Tantangannya. In Seminar Nasional Pendidikan 2017.
- Takaendengan, M. E., Avenzora, R., Darusman D., & Kusmana, C. (2022). Financial Feasibility of Communal Homestay Business in Eco-Rural Tourism. *Indonesian Journal of Business and Entrepreneurship (IJBE)*, 8(1), 59. <https://doi.org/10.17358/ijbe.8.1.59>
- Takaendengan, M. E., Avenzora, R., Darusman, D., & Kusmana, C. (2022). Socio-cultural Factors on The Establishment and Development of Communal Homestay in Eco Rural Tourism. *Jurnal Manajemen Hutan Tropika*, 28(2), 91. <https://doi.org/10.7226/jtftm.28.2.91>
- Tjiptono, Fandy. 2008. *Strategi Pemasaran*, Edisi 3. Jakarta: Andi.
- Undang-Undang Nomor 32 Tahun 2004 tentang Pemerintah Daerah. Jakarta, Direktorat Jenderal Otonomi Daerah.
- Utama, I. G. B. R. U. *Pengantar Industri Pariwisata*. 2015. ISBN : 978-602-280-781-0
- Wibawa, I. P. A. ., Astawa, I. P. ., Sukmawati, N. M. R. ., Arjana, I. W. B. ., & Sutarma, . I. G. P. (2022). Digital Marketing and Sustainable Tourism for Tourist Villages in Bangli Regency. *International Journal of Glocal Tourism*, 3(2), 88-99.
- Wibowo, T. I., & Setiyanto, N. A. (2012). Aplikasi mobile informasi pariwisata kota Semarang berbasis android. *Techno.com*, 11(3), 124-133.
- Yanti, D. (2020). Pengaruh Digital Marketing Terhadap Peningkatan Kunjungan Wisata Di Danau Toba The Effect Of Digital Marketing Toward Enhancement Tourist Visit In Toba Lake. *Khasanah Ilmu: Jurnal Pariwisata Dan Budaya*, 11(1).

