Ngakan Ketut Acwin Dwijendra, Anak Agung Gde Djaja Bharuna S

The Impact of Local Culture-Based Design Innovation on Sustainable Tourism in Kintamani

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Desak Made Sukma Widiyani¹, I Dewa Gede Agung Diasana Putra², Ngakan Ketut Acwin Dwijendra², Anak Agung Gde Djaja Bharuna S²

¹Faculty of Engineering, Dwijendra University, Bali, Indonesia ²Faculty of Engineering, Udayana University, Bali, Indonesia

E-mail: sukmawidiyani@gmail.com

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ABSTRACT

The study aims to examine the impact of design innovations based on local culture on sustainable tourism in Kintamani. Known for its natural beauty and cultural richness, Kintamani has great potential for sustainable tourism development. Design innovations that incorporate local cultural elements can enhance tourist attractions, enrich visitor experiences, and support the preservation of local culture. The research methods used include both qualitative and quantitative approaches, with data collection through interviews, observations, and questionnaires to gain a deep understanding of the impact of culturally-based design innovations on sustainable tourism in Kintamani. SWOT analysis was applied to identify strengths, weaknesses, opportunities, and threats in the development of tourism in Kintamani. The results of the study indicate that culturally-based design innovations can significantly contribute to sustainable tourism in Kintamani. Development strategies involving collaboration between the government, local communities, and creative industry players are crucial to achieving tourism sustainability in the area. The study concludes that culturally-based design innovations have great potential to support sustainable tourism in Kintamani, provided there is support and active participation from all stakeholders.

Keywords: innovation, local culture, tourism, design, sustainable.

INTRODUCTION

Sustainable tourism has become a primary focus in the development of the travel industry in today's era of globalization. This concept aims to preserve local culture and traditions while promoting economic growth and job creation. Kintamani, as one of Indonesia's tourist destinations renowned for its natural beauty and cultural richness, has great potential for sustainable tourism development. However, tourism development in this area still faces various challenges, including the lack of a comprehensive strategy to optimize all tourism potential in Kintamani.

Innovation in tourism development becomes a key factor in improving the competitiveness and sustainability of this sector. Innovation serves as a tangible factor of change and the result of development activities (Pamularsih, 2020). In the context of sustainable tourism, design innovation based on local culture can be an effective approach to enhance tourist attraction while preserving cultural heritage.

Community-based tourism development is also an important aspect in realizing sustainable tourism. This approach involves active participation of local communities in planning, developing, and managing tourist destinations. In Kintamani, local communities already have the capital to develop sustainable tourism. However, further efforts are needed to optimize this potential through design innovations that integrate local cultural elements.

This research is important to ensure that design innovations applied in the tourism sector continue to respect and preserve local culture and traditions in Kintamani. This aligns with the goals of sustainable tourism which emphasize the preservation of cultural heritage as one of its main pillars (Samili et al., 2023). This study aims to examine the impact of local culture-based design innovation on sustainable tourism in Kintamani. By understanding the relationship between design innovation, cultural preservation, and tourism sustainability, it is hoped that this research can make a significant

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contribution to the development of effective sustainable tourism strategies in Kintamani and other areas with similar characteristics.

The research results show that local culture-based design innovation can make a significant contribution to sustainable tourism in Kintamani. Development strategies involving collaboration between the government, local communities, and creative industry players are crucial to achieving tourism sustainability in this region. This study concludes that local culture-based design innovation has great potential to support sustainable tourism in Kintamani, provided there is support and active participation from all stakeholders.

RESEARCH METHODS

The research method used is a descriptive qualitative approach. This method allows researchers to gain deep insights into the perceptions and experiences of local communities and tourists, directly observe the interactions between local cultural elements and tourism, and identify contextual factors that influence the success and challenges in implementing design innovations based on local culture. The goal is to provide a comprehensive overview of the impact of local culture-based design innovations on sustainable tourism in Kintamani.

Data collection methods include in-depth interviews with various stakeholders, such as local communities, tourism managers, tourists, and local government officials. Additionally, participatory observation at tourist sites is conducted to observe the implementation of design innovations and the interactions between tourists and local cultural elements. Documentation is also carried out by collecting relevant documents, including government reports, scientific articles, and other publications. Data analysis is performed using data reduction techniques, data presentation, and drawing conclusions and verification. To ensure the validity of the data, source triangulation techniques are used by comparing data obtained from various sources and collection methods.

RESULT AND DISCUSSION

A. Design Innovations in Tourist Facilities in Kintamani

The current state of design innovation in tourist facilities in Kintamani, particularly in terms of architecture, can be described as follows:

Integration of Traditional Architecture with Modern Needs

Efforts to integrate traditional Balinese architecture with modern needs are evident in the development of tourist facilities in Kintamani. The design of accommodations and tourist facilities combines traditional Balinese aesthetics with modern functionality and comfort. Principles of traditional Balinese architecture, such as *Tri Hita Karana* (the balance between humans, nature, and the divine) and *Tri Mandala* (spatial division based on sanctity levels), are integrated into modern designs to create harmony between buildings, the environment, and local culture.





Figure 1. Traditional and Modern Architecture in Tourist Facilities in Kintamani Source: www.tripadvisor.com

The image above illustrates how traditional concepts can be integrated with modern needs. The shape of the building is adopted from the traditional Balinese house structure known as *lumbung*. Despite using a more modern design approach, this tourist facility still respects the local context by utilizing the view of Mount Batur as a focal point, reflecting an appreciation for nature, which is an integral part of Balinese architectural philosophy.

Eco Friendly Design

Ngakan Ketut Acwin Dwijendra, Anak Agung Gde Djaja Bharuna S

The Impact of Local Culture-Based Design Innovation on Sustainable Tourism in Kintamani

Design innovations in Kintamani are increasingly moving towards eco-friendly concepts. One tangible manifestation of this trend is the concept of innovative accommodations that feature compact yet comfortable eco-friendly designs. Current tourism trends favor small, environmentally friendly buildings over large, high-rise resorts. This design aims to minimize the impact on the surrounding environment. Additionally, there is the development of accommodations with the "glamping" (glamorous camping) concept, which combines hotel comfort with outdoor camping experiences. This concept reflects efforts to create a balance between modern comfort and nature conservation. It allows tourists to enjoy luxury and comfort while still feeling close to nature.

Architecture that Utilizes Natural Potential

The architectural design in Kintamani extensively leverages the natural potential of the surrounding environment, such as the views of Mount Batur and Lake Batur. Tourist facilities are designed to maximize these natural vistas, for instance, by incorporating large windows or open areas that directly face these scenic views.

Many accommodations and cafes in Kintamani are designed with architectural concepts that allow visitors to enjoy the stunning natural scenery. One notable example is Okuta, a mountain-themed cafe that offers a clear and captivating view of Mount Batur. The interior design of Okuta uses natural elements such as stone floors and pillars resembling tree trunks, creating an ambiance that blends seamlessly with the surrounding nature.





Figure 2. Design of Tourist Facilities that Utilizes Natural Potential Source: www.pahdispecialtycoffee.com

This approach not only enhances the attractiveness of the tourist destination but also supports sustainable tourism principles. By maximizing the use of natural elements in the design, tourist facilities in Kintamani can offer a unique and authentic experience for visitors while preserving the local environment and culture.

Development of Educational Tourism Facilities

Kintamani has shown significant progress in creating innovative educational tourism facilities. This effort is evident from the intelligent integration of architectural design and educational function, creating a tourist experience that is not only visually appealing but also informative. One prominent example is the coffee edu-tourism facility in Kintamani. Its architectural design not only considers aesthetics but is also specifically designed to facilitate learning about the coffee processing process. Visitors can enjoy unique architecture while gaining in-depth insights into the local coffee industry, from planting to serving. This approach reflects the trend of modern tourism that prioritizes immersive and educational experiences. By combining elements of traditional architecture, modern technology, and educational content, Kintamani has successfully created a tourist attraction that not only entertains but also enriches visitors' knowledge about local culture and industry.

Innovation in the Use of Local Materials

There is creativity in the utilization of local materials for the construction and decoration of tourist facilities in Kintamani. This approach has two main benefits: supporting sustainability principles by using available local resources and creating an authentic and distinctive architectural atmosphere. The use of natural materials such as wood, bamboo, and natural stone from the surrounding environment is not only environmentally friendly but also strengthens the local architectural identity. This aligns with sustainable architectural concepts that emphasize harmony with nature and the preservation of local culture. This innovation reflects efforts to integrate local wisdom with modern

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tourism needs, creating unique and attractive designs for tourists while preserving the traditional Balinese architectural heritage.

B. Impact of Design Innovation on Sustainable Tourism in Kintamani

This research demonstrates that design innovation based on local culture has a significant impact on sustainable tourism in Kintamani. The following are some of the main impacts identified:

Increased Tourist Attraction

The implementation of design innovations that incorporate local cultural elements has proven to enhance the tourist appeal of Kintamani. The resulting creative products not only attract tourists but also contribute to the improvement of the local economy and the preservation of cultural heritage. For example, the development of educational tourism products that add facilities and infrastructure aligned with product characteristics such as education, adventure, culture, agriculture, and nature, can enrich the tourist experience and support tourism sustainability. This translation captures the key points of the original text, highlighting how design innovations rooted in local culture positively impact sustainable tourism in Kintamani. It emphasizes the dual benefits of attracting tourists and contributing to local economic growth and cultural preservation. The example provided illustrates how educational tourism products can enhance visitor experiences while supporting sustainable tourism practices.

Development of Tourism Infrastructure and Facilities

Architectural design innovation plays a crucial role in improving tourism infrastructure in Kintamani. This includes providing directional signs and information facilities related to various tourist attractions, as well as creating tourist maps that make it easier for visitors to explore attractions in Kintamani. Architectural designs that consider both functional and aesthetic aspects can enhance the tourist experience while strengthening local cultural identity.

Cultural and Environmental Preservation

Design innovations rooted in local culture play an important role in preserving local cultural heritage and the environment. By incorporating distinctive regional elements into architectural designs, an authentic and captivating atmosphere is created for tourists. This approach not only enhances the destination's appeal but also ensures that local cultural values are maintained and appreciated. Beyond aesthetics, designs based on local wisdom reflect a commitment to sustainable tourism principles. This concept emphasizes the importance of balancing tourism sector development with the preservation of cultural and natural assets. Thus, locally-based design innovations not only create unique tourism experiences but also contribute to long-term preservation efforts for Kintamani's cultural heritage and natural ecosystems.

Empowerment of Local Communities

Community-based tourism is a crucial component in realizing sustainable tourism. This model emphasizes the involvement and active participation of local residents in various stages of destination development, from planning and implementation to management. Through empowering local residents, such as providing training and involving them in the design process and management of tourist attractions, this approach has the potential to create new job opportunities and improve the living standards of communities around tourist sites. Thus, tourism not only provides economic benefits but also promotes the comprehensive development of capacity and welfare of the local community.

Development of Nature and Culture-Based Tourist Attractions

Innovations in architectural design can support the development of tourist attractions that integrate natural and cultural elements in Kintamani. Environmentally sensitive designs are applied to natural tourist attractions such as Mount Batur and Lake Batur, as well as the Batur Protected Forest and Geopark. Additionally, architectural design innovations also play a role in developing cultural tourist attractions such as Terunyan Village, while maintaining the authenticity and cultural values of the area.

Ngakan Ketut Acwin Dwijendra, Anak Agung Gde Djaja Bharuna S

The Impact of Local Culture-Based Design Innovation on Sustainable Tourism in Kintamani

Increasing Community Awareness and Participation

The application of design innovations rooted in local culture also encourages increased awareness and involvement of the community towards local cultural heritage and history. For example, the use of Geographic Information System (GIS) technology in mapping cultural tourism destinations in Batur Tengah Village has proven effective in fostering local residents' understanding of their village's cultural wealth and historical value. Furthermore, this system also makes it easier for tourists to plan and organize their visits to the village.

C. Research Implications

The findings of this study reveal that design innovations rooted in local culture have the potential to provide substantial positive impacts on the development of sustainable tourism in Kintamani. By implementing the proposed strategic recommendations, Kintamani has the opportunity to enhance its tourist appeal while preserving cultural heritage, promoting local economic development, and maintaining the natural environment, which is the main attraction of the area. The success of these efforts heavily depends on the active involvement of all relevant stakeholders, including the government, local communities, and creative industry players, in realizing sustainable tourism in the region. This study offers valuable perspectives for policymakers and practitioners in the tourism sector in designing and implementing development strategies that are not only sustainable but also deeply rooted in local cultural wealth. With this approach, Kintamani has the potential to become a successful model for sustainable tourism development that can inspire and be applied in other regions with similar characteristics.

CONCLUSION

This research reveals the crucial role of architectural design innovation in developing sustainable tourism in Kintamani. The main focus is on integrating traditional Balinese architecture with modern needs, applying concepts such as Tri Hita Karana and Tri Mandala into tourist facility designs. This approach creates harmony between buildings, the environment, and local culture, while meeting the comfort demands of modern tourists. Design innovations in Kintamani also trend towards ecofriendly concepts, evident in the development of compact accommodations and "glamping" that minimize impact on the surrounding nature. Utilizing natural potential, such as views of Mount Batur and Lake Batur, becomes a key element in tourist facility design, creating unique and authentic experiences for visitors. The development of educational tourism facilities, like coffee edu-tourism, demonstrates a smart integration between architectural design and educational function. This approach reflects modern tourism trends that prioritize immersive and educational experiences. Innovations in using local materials, such as wood, bamboo, and natural stone, not only support sustainability principles but also strengthen local architectural identity. Positive impacts of these design innovations are seen in increased tourist attraction, better infrastructure and facility development, and preservation of culture and environment. Empowering local communities through community-based tourism is also an important aspect, creating new job opportunities and improving the living standards of local residents. This research emphasizes the importance of developing nature and culture-based tourist attractions, as well as increasing community awareness and participation in preserving cultural heritage. The use of technology has proven effective in mapping cultural tourism destinations and facilitating tourist visit planning. Overall, design innovations rooted in local culture have great potential in supporting sustainable tourism in Kintamani. The success of these efforts depends on the active involvement of all stakeholders, including the government, local communities, and creative industry players. With this holistic approach, Kintamani has the potential to become a successful model of sustainable tourism development that can inspire and be applied in other areas with similar characteristics.

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http://ejournal.uika-bogor.ac.id/index.php/ASTONJADRO

reference for policymakers, tourism practitioners, and local communities in designing strategies that integrate traditional architecture with modern needs. It is my hope that this writing can raise awareness about the importance of design innovation rooted in local culture in supporting sustainable tourism. With close collaboration between the government, local communities, and creative industry players, I believe Kintamani can become a successful model that inspires other regions to develop sustainable and environmentally conscious tourism.

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Ngakan Ketut Acwin Dwijendra, Anak Agung Gde Djaja Bharuna S

The Impact of Local Culture-Based Design Innovation on Sustainable Tourism in Kintamani

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