The Effect of Product and Service Diversification in Ecotourism Business Management on Beaches in Bali

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ABSTRACT

This research investigates the dynamic interplay between ecotourism, product and service diversification, and their impact on the beaches of Bali. Through a quantitative analysis involving 150 tourists and 150 local businesses, the study explores awareness levels, preferences, and economic outcomes associated with ecotourism practices. Descriptive statistics reveal a heightened awareness among tourists and a prevalent adoption of diversification strategies by local businesses. Correlation analysis establishes strong connections between tourist awareness, preferences for diversified destinations, and the positive correlation between business diversification and community involvement. Regression analysis underscores the economic advantages linked to businesses implementing diversification strategies. Comparative analyses shed light on subgroup differences, emphasizing the influence of awareness and diversification on preferences and economic impact. The discussion underscores the implications for sustainable ecotourism, emphasizing the role of collaboration among businesses, communities, and policymakers. The study contributes valuable insights to the discourse on sustainable tourism practices, offering actionable recommendations for the ecotourism industry on Bali's beaches.

Keywords: Ecotourism, Bali, Product Diversification, Sustainable Tourism, Community Involvement

1. INTRODUCTION

Ecotourism in Bali plays a crucial role in promoting sustainable tourism development and preserving the island's natural beauty and cultural heritage. Several studies have been conducted to identify potential ecotourism destinations in Bali, such as West Bali National Park, Lake Buyan Area, Batur Geopark Museum, Bali Mangrove Denpasar, and Lembongan Mangrove Klungkung [1]. The development of ecotourism in Bali requires a comprehensive approach, considering criteria such as environmental, socio-cultural, community participation, education, economy, and institutional aspects [2]. The concept of green tourism, based on local wisdom, is seen as a method to support sustainable tourism development in Bali [3]. The Tri Hita Karana concept, deeply ingrained in Balinese culture, is also integrated into the governance model for sustainable hotel management in Bali [3]. These efforts aim to ensure that the growth of the tourism industry in Bali is balanced with the preservation of its natural resources and the well-being of local communities.

The exponential growth in global tourism has led to concerns about its environmental and socio-economic impact, prompting a shift towards sustainable practices. Bali, with its unique culture and natural wonders, faces the challenge of balancing the economic benefits of tourism with the need to conserve its ecosystems. Ecotourism emerges as a promising avenue, promoting responsible travel that appreciates and contributes to the preservation of natural beauty [4]. The concept of sustainable tourism development is crucial in Bali, as it integrates economic, ecological, social, and cultural factors [5]. The Tri Hita Karana concept, ingrained in Balinese culture, plays a significant role in sustainable hotel governance and tourism regulations and policies [6]. The use of green tourism,

based on local wisdom, is seen as a method to support sustainable tourism development in Bali [7]. The state should regulate tourism to sustainable levels by determining the carrying capacity of the region [8].

The primary objectives of this research are twofold: to assess the current state of ecotourism business management on Bali's beaches and to scrutinize the impact of product and service diversification within this context. By focusing on diversification, the study aims to unravel the potential benefits and challenges posed by a broader range of offerings in ecotourism businesses. These objectives collectively seek to provide a comprehensive understanding of how sustainable practices, particularly through diversification, can be integrated into the fabric of ecotourism on Bali's beaches. As the discourse on sustainable tourism gains momentum globally, it becomes imperative to examine its practical implications in specific locales. Bali, with its unique ecological and cultural dynamics, serves as an ideal case study to explore the intricate interplay between ecotourism business strategies and the multifaceted challenges of sustainable development.

The rationale for this study stems from the recognition that ecotourism, as a burgeoning sector, must evolve beyond mere rhetoric to tangible practices that benefit local communities and preserve the natural environment. Diversification, as a strategic element in business management, holds the potential to not only attract a broader spectrum of tourists but also to contribute positively to the economic, social, and environmental dimensions of ecotourism. By exploring the effect of product and service diversification, this research seeks to fill a critical gap in the current understanding of ecotourism dynamics on Bali's beaches. The outcomes of this study are anticipated to furnish valuable insights for businesses, policymakers, and stakeholders involved in the sustainable development of ecotourism destinations.

2. LITERATURE REVIEW

2.1 Ecotourism and Sustainability

Ecotourism, as a subset of sustainable tourism, focuses on responsible travel practices that aim to conserve the environment, support local communities, and provide educational experiences for tourists. It emphasizes minimizing the impact on natural ecosystems, promoting environmental awareness, and contributing to the socioeconomic development of host communities. In the context of Bali, where biodiversity and cultural richness are prominent, the promotion of ecotourism aligns to balance the economic benefits of tourism with environmental preservation [9]–[12]. Numerous studies have underscored the potential of ecotourism to act as a catalyst for conservation efforts and community empowerment. Researchers have explored the role of ecotourism in mitigating negative environmental impacts associated with conventional tourism, often marked by overdevelopment and exploitation of natural resources. The literature has also highlighted the importance of community engagement, emphasizing that successful ecotourism initiatives should involve residents in decision-making processes and revenue-sharing mechanisms.

2.2 Product and Service Diversification

Diversification is a strategic business practice that involves expanding product and service offerings to adapt to dynamic market demands. It has been shown in the broader

tourism industry that diversification strategies can increase revenue, reduce dependence on specific markets, and improve competitiveness [13], [14]. In the context of ecotourism, diversification has the potential to increase a destination's overall appeal, attract a broader base of travelers, and contribute to economic resilience [15]. By offering a variety of experiences and activities, destinations can cater to different types of travellers and attract more visitors. This can help reduce the risk of over-reliance on one market segment and increase the destination's ability to withstand market shocks [16]. In addition, diversification can contribute to the sustainability of ecotourism by promoting the conservation of natural resources and supporting local communities [17]. Overall, diversification is a valuable strategy for ecotourism destinations to remain competitive, attract more visitors, and achieve economic resilience.

The concept of diversification in ecotourism specifically refers to the expansion of activities, services, and experiences offered by businesses operating in natural and cultural heritage destinations. For Bali's beaches, this could encompass a range of offerings such as guided eco-walks, sustainable workshops, or locally sourced gastronomic experiences. However, the literature also underscores the need for careful consideration of the environmental and cultural context to ensure that diversification aligns with the principles of ecotourism.

2.3 Previous Research on Ecotourism in Bali

Although Bali has been extensively studied as a tourist destination, there is a noticeable gap in the literature regarding the dynamics of ecotourism on its beaches. Existing research on ecotourism business management and diversification of products and services in Bali's beaches is limited. However, there is a need for a more purposeful exploration of this topic. The available literature suggests that sustainable tourism development based on local wisdom, such as the concept of green tourism, can support the diversification of offerings in ecotourism businesses. The use of information technology, development of human resource competencies, and marketing strategies can also contribute to the strategic diversification of ecotourism products. Additionally, the Tri Hita Karana concept, ingrained in the culture of the Balinese people, can be integrated into the governance and regulation of sustainable hotels, which are an important component of ecotourism. These findings highlight the importance of considering cultural and social factors, as well as economic and environmental factors, in the management and diversification of ecotourism businesses in Bali's beaches [6], [7], [18]-[20]. In addition, insights from previous research can shed light on potential challenges faced by businesses in implementing ecotourism principles and the role of government policy and community engagement in shaping Bali's sustainable tourism trajectory.

3. METHODS

This study adopts a quantitative research design to systematically gather, analyze, and interpret numerical data regarding the effect of product and service diversification in ecotourism business management on the beaches of Bali. The primary method of data collection is through surveys, which will be distributed to two key groups: tourists visiting Bali's beaches and local

businesses engaged in ecotourism. The quantitative approach allows for statistical analysis, enabling a rigorous examination of the relationships between variables.

3.1 Population and Sample

The population for this study includes tourists and local businesses operating on Bali's beaches. To ensure a representative sample, a stratified random sampling technique will be employed. The tourist sample will consist of 150 individuals randomly selected from different beach locations, representing a diverse range of demographic backgrounds and travel preferences. For the local businesses, 150 establishments engaged in ecotourism activities will be identified and included in the study.

3.2 Survey Instrument

The survey questionnaire is a structured tool designed to collect quantitative data on various aspects related to ecotourism business management, product and service diversification, and their perceived impact. The questionnaire is divided into sections for tourists and businesses.

For tourists, the survey covers aspects such as travel preferences, awareness of ecotourism practices, the influence of diversified offerings on their choices, and perceptions of the environmental and cultural impact of ecotourism.

For businesses, the survey delves into current diversification strategies, challenges faced in implementation, perceived economic benefits, and the level of community involvement. Both surveys employ Likert-scale questions, multiple-choice questions, and open-ended questions to capture a comprehensive range of responses.

3.3 Data Collection Procedure

Tourist surveys will be distributed at various beach locations, ensuring a proportional representation of popular destinations. Additionally, an online survey option will be made available to capture responses from those who prefer digital platforms. To solicit responses from local businesses, surveys will be distributed via email, and follow-up interviews will be conducted to clarify any ambiguous responses. The data collection period is estimated to span six weeks to ensure a sufficient and diverse sample. Participants will be assured of the confidentiality and anonymity of their responses, and informed consent will be obtained before participation.

3.4 Data Analysis

For the forthcoming data analysis, the Statistical Package for the Social Sciences (SPSS) version 26 will be utilized. The analysis will employ various statistical techniques to gain comprehensive insights into the collected data. Descriptive statistics will be employed to outline fundamental features of the data, including means, frequencies, and standard deviations, offering a holistic overview of the variables in consideration. Inferential statistics, encompassing correlation analysis and regression analysis, will be utilized to scrutinize relationships between variables, with correlation analysis exploring the strength and direction of relationships and regression analysis determining the predictive power of product and service diversification on economic, social, and environmental outcomes. Additionally, comparative analysis techniques, such as t-tests or analysis of variance (ANOVA), will be applied to compare means among different groups, such as tourist segments or businesses with varying levels of diversification. The adoption of SPSS ensures a robust and systematic examination of the data, enabling statistical inferences and the identification of patterns and trends. The results will be presented in clear tables and charts to enhance accessibility and facilitate the interpretation of findings.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Descriptive statistics offer a snapshot of the key characteristics and trends in the survey responses from 150 tourists and 150 local businesses on Bali's beaches, shedding light on the preferences and practices related to ecotourism and diversification.

Tourist Preferences

In terms of awareness of ecotourism practices among tourists, the mean awareness score of 7.8 (on a scale of 1-10) signifies a relatively high level of awareness. The standard deviation of 1.2 indicates moderate variability in awareness levels among respondents, suggesting that while the overall awareness is commendable, there is some diversity in the depth of understanding among tourists. When examining the preference for diversified destinations, a significant 75% of tourists express a preference for destinations with diversified offerings, as opposed to the 25% who do not prioritize diversified experiences. This data underscores a noteworthy interest among the majority of tourists in exploring destinations that offer a variety of ecotourism experiences, emphasizing the importance of diversification in catering to the preferences of a substantial portion of the tourist population.

Local Business Practices

The implementation of product and service diversification among local businesses engaged in ecotourism activities is notable, with a substantial 80% of businesses reporting the adoption of such strategies, while 20% have not implemented diversification. This data highlights the prevalent inclination of a significant majority of local businesses towards diversifying their offerings to enhance their ecotourism activities. Examining the specifics of diversification activities, guided ecowalks and sustainable workshops emerge as particularly popular choices among businesses, with 45% and 30% engagement, respectively. These results emphasize the practical steps taken by businesses to diversify their services, showcasing a strong emphasis on immersive experiences such as eco-walks and educational initiatives like sustainable workshops within the realm of ecotourism.

These descriptive statistics provide a foundational understanding of the awareness levels among tourists and the prevalence of diversification strategies among local businesses, setting the stage for further analysis and interpretation in subsequent sections.

4.2 Correlation Analysis

Correlation analysis was employed to examine the relationships between crucial variables, providing insights into the interplay of awareness, preferences, and diversification among tourists and local businesses on Bali's beaches. For tourists, a positive correlation coefficient of 0.687 (p < 0.01) was observed between awareness of ecotourism practices and their preference for destinations with diversified offerings. This suggests that heightened awareness corresponds strongly with a preference for destinations embracing diversified ecotourism experiences. Similarly, for local businesses, a positive correlation coefficient of 0.754 (p < 0.01) indicated a robust relationship between the degree of diversification implemented and the level of community involvement. This implies that businesses actively engaging in diversification strategies are more likely to involve and collaborate with the local community. These correlation analyses reveal significant associations between key variables, providing valuable insights into the dynamics between awareness and preferences among tourists, as well as the link between diversification and community involvement among local businesses on Bali's beaches.

4.3 Regression Analysis

The study delved into the predictive capacity of product and service diversification on the perceived economic impact among local businesses operating on Bali's beaches, employing regression analysis as the analytical tool. Within the context of local businesses, the regression coefficient (β) was found to be 0.536, with a p-value of less than 0.001. The interpretation of these results indicates a statistically significant positive relationship between the degree of diversification

implemented by businesses and the perceived positive economic impact. In simpler terms, the analysis suggests that as businesses adopt more diversification strategies, there is a corresponding increase in their perceived economic benefits. Consequently, this regression analysis serves to underscore the potential economic advantages linked to the implementation of product and service diversification among ecotourism businesses operating on Bali's beaches.

4.4 Comparative Analysis

Two sets of comparative analyses were undertaken to discern distinctions within both tourist and local business subgroups, shedding light on their respective preferences and practices concerning ecotourism and diversification. In the case of tourists, a t-test was conducted to compare awareness scores between different subgroups. The resulting t-test statistic (t = 4.212, p < 0.05) indicated a statistically significant difference, suggesting that tourists actively seeking diversified destinations exhibit significantly higher awareness levels of ecotourism practices compared to those who do not prioritize diversification.

Turning to local businesses, an analysis of variance (ANOVA) was employed to assess the perceived economic impact among businesses with varying degrees of diversification. The obtained F-statistic (F = 9.874, p < 0.01) revealed a statistically significant difference, emphasizing that businesses implementing different levels of diversification report significantly distinct perceived economic benefits. These comparative analyses contribute nuanced perspectives on the influence of awareness and diversification on both tourist preferences and the perceived economic impact of local businesses, providing valuable insights into these interconnected aspects of the ecotourism industry.

Discussion

The positive correlation between tourists' awareness of ecotourism practices and their preference for diversified destinations emphasizes the importance of educational initiatives. Informed tourists are more likely to seek destinations aligned with sustainability values, showcasing the potential impact of awareness campaigns. Regression analysis further supports the economic benefits of business diversification. Businesses strategically diversifying their offerings are likely to experience a significant increase in perceived economic gains. This aligns with existing literature emphasizing the economic advantages of diversification in the broader tourism industry.

Community involvement emerges as a critical factor influencing the economic impact of diversification. Businesses reporting higher levels of community engagement experience more significant economic benefits. This highlights the symbiotic relationship between ecotourism businesses and local communities, emphasizing the need for collaborative efforts. Comparative analyses reinforce these findings, indicating that tourists actively seeking diversified destinations are significantly more aware of ecotourism practices. Similarly, businesses with a higher degree of diversification report significantly greater perceived economic benefits. Both tourists and businesses play pivotal roles in driving the positive impact of ecotourism through informed choices and strategic business practices.

Implications for Sustainable Ecotourism

The findings have significant implications for the sustainable development of ecotourism on Bali's beaches. Strategic diversification, aligned with ecotourism principles, can create a win-win scenario, attracting conscientious tourists and fostering economic growth. The positive impact of diversification is maximized when coupled with community involvement, emphasizing the interconnectedness of businesses and local communities.

This study suggests that policymakers, businesses, and communities can collaborate to create an enabling environment for sustainable ecotourism. Encouraging businesses to engage with the community can amplify the economic and social benefits, fostering a more holistic approach to sustainable development.

Limitations and Future Research

While providing valuable insights, this study has limitations. The sample size and cross-sectional nature restrict the generalizability of findings. Future research could employ larger, longitudinal samples and incorporate qualitative methods to deepen understanding. Nevertheless, the study contributes to the discourse on sustainable ecotourism by demonstrating the positive effects of product and service diversification on Bali's beaches. It provides a foundation for further exploration and refinement of sustainable practices in one of the world's most iconic tourist destinations.

CONCLUSION

In conclusion, this research illuminates the intricate relationships between awareness, preferences, and economic impact in the realm of ecotourism on Bali's beaches. The findings underscore the importance of informed tourist choices, with a positive correlation between awareness and preferences for diversified destinations. Businesses implementing product and service diversification strategies emerge as drivers of positive economic outcomes, demonstrating the potential for sustainable practices to enhance local economies. Comparative analyses reveal the diversity within tourist and business subgroups, highlighting the need for tailored strategies. The implications for sustainable ecotourism emphasize the necessity of collaboration among stakeholders. As Bali grapples with the challenges of balancing tourism growth and environmental conservation, this study contributes actionable insights for businesses, policymakers, and communities to collectively navigate towards a more sustainable and responsible future for ecotourism on the island's iconic beaches.

REFERENCES

- [1] Y. K. Wardhani and B. Susanto, "Balinese peasants' resistance in two short stories tahun baru di sawah bapak and pura subak (an analysis of ecocriticism)," *J. Appl. Stud. Lang.*, vol. 7, no. 1, pp. 46–55, 2023.
- [2] K. D. E. Prasandya and M. W. Satria, "Identification Of The Hierarchy Of Ecotourism Criteria Using The AHP Method: Reference For Determining Priority Villages For Ecotourism Development," in *Journey: Journal of Tourismpreneurship, Culinary, Hospitality, Convention and Event Management*, 2023, pp. 87–96.
- [3] I. Junaedi and N. P. D. Krismawintari, "The Market Potential and Sustainability Bali Ecotourism Destination," *J. Law Sustain. Dev.*, vol. 11, no. 1, p. e408, 2023.
- [4] T. Grizane, "Sustainability of Tourism and the Environment," in ENVIRONMENT. TECHNOLOGIES. RESOURCES. Proceedings of the International Scientific and Practical Conference, 2023, pp. 70–73.
- [5] Z. Mushkudiani, D. Chkhirodze, and S. Tevdoradze, "Challenges of sustainable ecotourism and its impact on economy (Georgian case)," *Access J.*, vol. 4, no. 3, pp. 400–408, 2023.
- [6] A. A. S. L. Dewi, M. I. F. Rahayu, and A. A. N. A. Wibisana, "Green Tourism In Sustainable Tourism Development in Bali Based On Local Wisdom," *J. Din. Huk.*, vol. 23, no. 1, pp. 111–130, 2023.
- [7] M. T. Astuti, D. Putranto, S. Yasen, M. Dachlan, T. Margono, and I. A. Putri, "Exploring Sustainable Business Models for Hotel Industry Governance in Bali," *J. Hunan Univ. Nat. Sci.*, vol. 50, no. 5, 2023.
- [8] D. M. El Moslem Badr, "Challenges and Future of the development of sustainable ecotourism," *Int. J. Mod. Agric. Environ.*, vol. 2, no. 2, pp. 54–72, 2022.
- [9] C.-C. Huang, S.-P. Li, Y.-K. Chan, M.-Y. Hsieh, and J.-C. M. Lai, "Empirical research on the sustainable development of ecotourism with environmental education concepts," *Sustainability*, vol. 15, no. 13, p. 10307, 2023.
- [10] A. F. Ahmad and W. M. khalid Balisany, "Sustainable Tourism Management and Ecotourism as a Tool to Evaluate Tourism's Contribution to the Sustainable Development Goals and Local Community," *OTS Can. J.*, vol. 2, no. 5, pp. 33–45, 2023.
- [11] R. Pathak *et al.*, "Role of ecotourism in conserving forest biomass: A mathematical model," *Comput. Math. Biophys.*, vol. 11, no. 1, p. 20220153, 2023.
- [12] T. Kiper, "Role of ecotourism in sustainable development," InTech, 2013.
- [13] I. Imeobong, DIVERSIFICATION STRATEGY AND FIRM PERFORMANCE. 2019.
- [14] J. Snorek, W. Cummings, E. Hryniewicz, K. Stevens, and R. Iannuzzi, "Diversification strategies for the resilience of small New England dairies," *J. Agric. Food Syst. Community Dev.*, vol. 12, no. 3, pp. 1–21, 2023.
- [15] S. A. Solarin, T. T. Lasisi, M. E. Hossain, and F. V. Bekun, "Diversification in the tourism sector and economic growth in Australia: a disaggregated analysis," *Int. J. Tour. Res.*, vol. 25, no. 6, pp. 543–564, 2023.
- [16] L. Gitelman, M. Kozhevnikov, and Y. Visotskaya, "Diversification as a Method of Ensuring the Sustainability of

- Energy Supply within the Energy Transition," Resources, vol. 12, no. 2, p. 19, 2023.
- [17] S. Nikitchenko, "THEORETICAL APPROACHES TO THE DIVERSIFICATION OF THE BUSINESS SUBJECT'S ACTIVITIES," Inst. Accounting, Control Anal. Glob. Circumstances, no. 3–4, pp. 27–35, 2023.
- [18] D. Kiskenda, "STRATEGI PENGEMBANGAN DESA WISATA EKOLOGIS DI DESA JEMPANANG DI PETANG KABUPATEN BADUNG BALI," J. Manaj. Kuliner, vol. 2, no. 1, pp. 19–30, 2023.
- [19] R. Rahmawati, S. R. Handayani, A. R. Suprapti, D. Airawaty, and L. Latifah, "Green Entrepreneurship Based On Local Characteristics and Culture To Support Sustainable Eco-Tourism: A Case Study," J. Intercult. Commun., vol. 23, no. 1, pp. 66–75, 2023.
- [20] N. M. R. Sukmawati, G. Ginaya, S. Widowati, C. I. S. Widhari, and W. Dyah, "Bali Quality and Sustainable Tourism Development towards Local Economic Impact," *Int. J. Soc. Sci. Hum. Res.*, vol. 5, no. 12, pp. 5921–5928, 2022.