Strategic Analysis of Dive Tourism Development in Pramuka Island Thousand Islands Regency

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| | ABSTRACT |
|-----------------|---|
| Keywords: | This research was conducted on Pramuka Island, Panggang Island |
| Dive Tourism; | Village, North Thousans Island District, Thousans Island Administrative |
| Development | Regency, Daerah Khusus Jakarta Province. The implementation began |
| Strategy; SWOT; | in February 2024 and continued until March 2024. The purpose of this |
| Pramuka Island | research aims to formulate strategies for developing dive tourism on |
| | Pramuka Island. The method used in this study is a case study on dive |
| | tourism in Pramuka Island, gathering both primary and secondary data. |
| | The sampling method employed is purposive sampling. Data analysis |
| | was performed using SWOT Analysis processed with Microsoft Excel. |
| | Based on the conducted research, the best strategy for developing dive |
| | tourism on Pramuka Island using SWOT Analysis is in quadrant I, which |
| | involves implementing an SO strategy or aggressive growth strategy |
| | with the coordinate points 0.33; 0.21, meaning leveraging strengths to |
| | capitalize on existing opportunities. |

INTRODUCTION

Indonesia is the largest archipelagic country in the world, comprising 17,504 islands with a coastline of 108,000 km (Manafi et al., 2021). This makes Indonesia possess a highly diverse marine natural wealth, including mangrove ecosystems and coral reefs. This marine natural wealth is the main attraction for tourists, especially those interested in marine tourism. Marine tourism is a type of special interest tourism that utilizes the potential of marine and coastal landscapes, conducted directly through activities such as boating, swimming, snorkeling, diving, and fishing tourism (Nurisyah, 2001). One of the tourist spots currently used for marine tourism activities is Pramuka Island in the Thousand Islands Regency.

Pramuka Island is located within the cluster of the Thousand Islands in North Jakarta. Pramuka Island has become a popular tourist destination due to its underwater natural beauty. According to Fitriana (2019), the beauty and diversity of Pramuka Island's underwater landscape have been rated highly satisfactory by tourists engaging in snorkeling and diving activities, making it one of the main attractions on Pramuka Island (Fitriana, 2019). Out of 16 islands in the Thousand Islands frequently visited by tourists, Pramuka Island, as the administrative center,

ranked fourth in tourist visits with 58,398 visitors in 2023, an increase of 33.8 percent compared to 2022 with 43,636 visitors (Badan Pusat Statistik, 2024).

The increase in the number of tourists can provide economic benefits, but this condition can lead to several issues that may affect the number of tourist visits, such as poor human resource quality, limited information, inadequate infrastructure, coral reef damage, inappropriate tourism areas, and lack of promotion. Therefore, it is important to analyze the factors affecting development and formulate effective development strategies. In this context, SWOT analysis can be an effective tool to identify strengths, weaknesses, opportunities, and threats in the development of dive tourism on Pramuka Island, Thousand Islands Regency.

The underlying issue of this research is how to develop dive tourism strategies on Pramuka Island, Thousand Islands Regency. This research aims to analyze the development strategies for dive tourism on the island to find effective steps to enhance the attractiveness and sustainability of dive tourism in this area.

LITERATURE REVIEW

Pramuka Island is a marine tourism area with potential for development into an attractive destination that satisfies tourists. The underwater beauty of Pramuka Island makes activities such as snorkeling and diving appealing to visitors. Based on its potential and opportunities, tourism development is necessary to enhance economic growth and improve the welfare of the local community.

Several efforts can be undertaken to foster tourism industry growth, including providing adequate accommodation facilities, promotion, travel convenience, expanding and developing tourism areas, and introducing new tourism products. As an industry, tourism is supported by attractions, facilities, infrastructure, transportation, and the hospitality of the local community.

Internal and external environmental analysis is a method to effectively manage and plan the development of dive tourism in Pramuka Island, Thousand Islands. Through analysis of both internal and external environments, a comprehensive understanding of the situation and conditions from various aspects (internal and external) can be obtained. This process helps identify strengths and weaknesses from internal factors, as well as opportunities and threats from external factors. Subsequently, conducting further analysis using the SWOT analysis method involves identifying strengths, weaknesses, opportunities, and challenges to be included in the SWOT matrix. Following this, several strategic alternatives based on the SWOT analysis results can be formulated for the development of dive tourism in Pramuka Island, Thousand Islands.

METHOD

This research was conducted on Pramuka Island, Pulau Panggang Subdistrict, North Thousand Islands District, Thousand Islands Administrative Regency. The study took place from February 2024 to March 2024. This research employed a case study method with a quantitative approach, combining both qualitative and quantitative data (mixed method). The types of data used in this research include primary and secondary data. Primary data were directly obtained through field observations and interviews using questionnaires. Secondary data were acquired from reference books, research journals, the internet, and institutions related to this research, such as the Central Statistics Agency, Thousand Islands National Park, and the Thousand Islands Tourism Sub-Department.

The study used purposive sampling with 40 respondents selected based on certain criteria, including government officials, Pramuka Island tourism awareness groups (Pokdarwis), dive tourism business managers, and tourists. The number of tourist respondents was 30. The minimum sample size suitable for statistical analysis is 30 respondents (Mahmud, 2011). To determine the development strategies for dive tourism on Pramuka Island, this study utilized SWOT analysis. This process involved the identification and evaluation of internal and external factors. All elements in the SWOT analysis were collected through respondents' answers to the questions posed. The stages in the SWOT analysis included the creation of an IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) matrix, the development of a SWOT quadrant diagram, and the construction of a SWOT matrix.

RESULT AND DISCUSSION

SWOT analysis is used to determine strategies that can maximize strengths and opportunities while simultaneously minimizing weaknesses and threats (Kotler and Philip, 2002). Internal factors consist of strengths and weaknesses, whereas external factors consist of opportunities and threats. Internal factors are analyzed in the Internal Factor Analysis Summary (IFAS) matrix, while external factors are analyzed in the External Factor Analysis Summary (EFAS) matrix.

After identifying the internal strategic factors, which include strengths and weaknesses, as well as the external factors, which consist of opportunities and threats, the next step is to compile the IFAS table by assigning weights and ratings, as shown in Table 1. Meanwhile, the EFAS can be seen in Table 2.

| Code | Internal Factors (Strength) | Quality | Rating | Scor |
|----------------|--|---------|--------|------|
| S1 | Adequate tourism activities for beginners | 0,125 | 3,00 | 0,38 |
| S2 | Local community involvement in the development of dive tourism | 0,152 | 4,00 | 0,61 |
| S3 | Potential natural resources for dive tourism development | 0,153 | 4,00 | 0,61 |
| S4 | Comprehensive amenities with a variety of price and quality options | 0,129 | 3,00 | 0,39 |
| Total Strength | | 0,560 | | 1,98 |

| Table 1. IFAS Matrix Calculation Results | Table | 1. | IFAS | Matrix | Calcul | ation | Results |
|--|-------|----|------|--------|--------|-------|---------|
|--|-------|----|------|--------|--------|-------|---------|

| Code | Internal Factors (Weakness) | Quality | Rating | Scor |
|---------------------------------|--|---------|--------|------|
| W1 | W1 Limited departure schedules to Pramuka Island | | 3,00 | 0,44 |
| W2 | Promotion and publicity are not yet optimal | 0,150 | 3,00 | 0,45 |
| W3 Limited number of lifeguards | | 0,142 | 3,00 | 0,43 |
| Total Weakness | | 0,440 | | 1,32 |
| Total Internal Factors | | 1,00 | | 3,31 |

| Code | External Factors (Opportunity) | Quality | Rating | Scor |
|--------------------------------|---|---------|--------|------|
| 01 | 01 Increasing interest of tourists in marine tourism | | 4,00 | 0,55 |
| 02 | O2 Dive tourism as the main livelihood for the local 0,133 4,00 community | | | |
| 03 | Advancing information technology | 0,125 | 3,00 | 0,37 |
| 04 | Proximity to Jakarta, offering a wide market | 0,130 | 3,00 | 0,39 |
| | potential | | | |
| Total (| Opportunity | 0,524 | | 1,84 |
| Code External Factors (Threat) | | Quality | Rating | Scor |
| T1 | Environmental pollution | 0,128 | 3,00 | 0,38 |
| T2 | 2 Low awareness of tourists about the environment | | 3,00 | 0,33 |
| | and coral reefs | | | |
| Т3 | Overfishing activities | 0,130 | 3,00 | 0,39 |
| T4 | Unpredictable weather conditions 0,110 3,00 | | | |
| Total 7 | Threat | 0,476 | | 1,43 |
| Total External Factors1,00 | | | | |

Internal Factor Analysis Summary (IFAS)

The results of the IFAS calculation indicate that the main internal strengths are: the potential natural resources for dive tourism development with a score of 0.61, local community involvement in the development of dive tourism with a score of 0.61, comprehensive amenities with a variety of price and quality options with a score of 0.39, and adequate tourist activities for beginners with a score of 0.38. On the other hand, the main internal weaknesses are: promotion and publicity are not yet optimal with a score of 0.45; limited departure schedules to Pramuka Island with a score of 0.44; and the limited number of lifeguards with a score of 0.43.

External Factor Analysis Summary (EFAS)

The results of the EFAS table analysis indicate that the main opportunities influencing the development of dive tourism are: the increasing interest of tourists in marine tourism with a score of 0.55; dive tourism as the main livelihood for the local community with a score of 0.53; the proximity to Jakarta, offering a wide market potential with a score of 0.39; and the advancing information technology with a score of 0.37. Conversely, the main threats are: overfishing activities with a score of 0.39; environmental pollution with a score of 0.38; low awareness of tourists about the environment and coral reefs with a score of 0.33; and unpredictable weather conditions with a score of 0.33.

SWOT Quadrant Analysis

Based on the calculations of the IFAS and EFAS matrices, the final scores obtained are: strengths (S) with a score of 1.98; weaknesses (W) with a score of 1.32; opportunities (O) with a score of 1.84; and threats (T) with a score of 1.43. The results of the IFAS and EFAS matrix calculations indicate that Pramuka Island's dive tourism has dominant strengths compared to its weaknesses and greater opportunities compared to its threats, with the following calculation results:

$$= \frac{\text{Total strength score} - \text{Total weakness score}}{2}; \frac{\text{Total opportunity score} - \text{Total threat score}}{2}$$
$$= \frac{1,98 - 1,32}{2}; \frac{1,84 - 1,43}{2}$$
$$= 0,33; 0,21$$

From the calculations above, it can be concluded that the strength score is higher than the weakness score by a difference of 0.33, indicating that the strengths of Pramuka Island's dive tourism can minimize its weaknesses. Similarly, the opportunity score is higher than the threat score by a difference of 0.21, indicating that the opportunities available to Pramuka Island's dive tourism can be utilized to address the threats. The SWOT quadrant diagram can be seen in Figure 1.

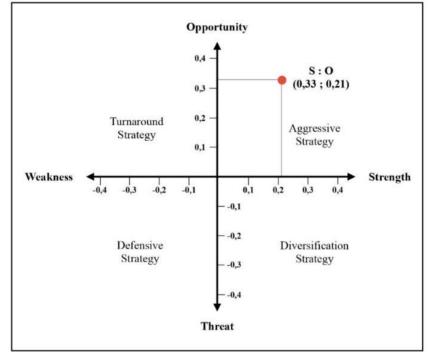


Figure 1. SWOT Quadrant Diagram Results

The Cartesian diagram in Figure 1 shows the position of Pramuka Island's dive tourism through the point (x, y), which is located in quadrant 1 with x and y values of 0.33 and 0.21, respectively. The position in quadrant 1 indicates that the potential of Pramuka Island's dive tourism becomes a strength and opportunity that

can be utilized for the development of dive tourism on Pramuka Island by supporting development policies with an aggressive strategy. The aggressive strategy aims to maximize every available opportunity in Pramuka Island's dive tourism by optimally utilizing the advantages of the resources available on Pramuka Island.

SWOT Matrix Strategy

The SWOT matrix is formulated based on the discussion of internal and external factors mentioned previously. Elements of internal and external factors are matched to obtain alternative strategies for developing dive tourism on Pramuka Island. The strategies resulting from the SWOT matrix can be seen in Table 3.

The results of the SWOT quadrant calculation show that the strategy for developing dive tourism on Pramuka Island is located in quadrant I or the aggressive strategy, balancing internal strengths and external weaknesses. Therefore, the development strategies for Pramuka Island's dive tourism are as follows:

1) Developing a Natural Resource Recovery Program Involving the Community and Tourists

To improve the quality of coral reefs, efforts must be made for rehabilitation and damage prevention. Maintenance and monitoring are crucial aspects of the coral reef rehabilitation process. Maintaining and caring for rehabilitated areas aims to maximize growth and success to ensure optimal conditions and continuous improvement (Subhan et al., 2023). One method of rehabilitation is regular transplantation and routine monitoring. Preventive measures include prohibiting the use of environmentally unfriendly fishing gear, recycling waste before it is discharged into the sea, managing waste from the island through processes like recycling or incineration, and organizing environmentally friendly snorkeling and diving training for the community and tour guides, which can then be communicated to visitors.

Community involvement is vital because ecotourism can be beneficial for the community (Nazarullail et al., 2017). According to [source], community involvement is a key factor in the success of coral reef rehabilitation efforts (Subhan et al., 2023). The local community needs to be actively involved in the rehabilitation process and play a significant role as participants in these activities. One strategy to increase community participation is through outreach programs aimed at raising awareness of the importance of coral reef rehabilitation. The contributions made by the community in rehabilitation efforts have a significant impact on maintaining and restoring the balance of the coral reef ecosystem. With active community involvement in coral reef rehabilitation efforts, various benefits can be achieved, such as optimal coral reef conservation, biodiversity recovery, enhancement of local livelihoods, increased environmental awareness, and the creation of cooperation and active participation between the government and local residents.

Training on coral reef knowledge, sustainable fishing techniques, and waste management awareness is essential. High community knowledge is considered to positively impact the quality of tourism on Pramuka Island. Providing education to tourists by tour guides before engaging in diving or snorkeling activities also has a significant impact. Installing informational boards about natural resource knowledge and conservation principles can further enhance tourists' understanding.

2) Optimizing the Use of Information Technology to Promote Dive Tourism Destinations

Information technology encompasses all integrated methods or tools for collecting, managing, transmitting, or presenting data electronically into various formats useful to its users (Rahmawati, 2008). Information technology has significantly positively impacted how tourism is conducted in this modern era (Kumar et al., 2020). The success of marine tourism marketing strategies will be determined by the involvement of the government and tourism business operators. The government needs to carry out intensive and equitable promotion efforts across all regions. Optimizing the use of information technology can effectively support these efforts. Promotion by business operators, such as disseminating information and promotional messages through digital mass media, websites, and social media, can help achieve marketing strategy success more broadly and efficiently. Information technology enables the distribution of digital leaflets and booklets providing guides to the underwater beauty of Pramuka Island to a global audience.

Additionally, information technology can be used to hold virtual exhibitions and promotions related to the diverse tourism potential in the Thousand Islands and establish partnerships with online travel agencies. Hosting international-scale events such as diving festivals, underwater photography exhibitions, and short film competitions about marine life through digital platforms will promote underwater beauty both locally and globally. Thus, information technology becomes key in disseminating the appeal of dive tourism on Pramuka Island to a broader and more diverse audience.

3) Improving Amenity Facilities in Terms of Quality and Quantity

Enhancing amenity facilities in terms of quality and quantity needs to be aligned with high demand. As interest in marine tourism grows, efforts to improve and expand amenity facilities become increasingly important. Facilities are crucial in efforts to enhance satisfaction; adequate facilities will provide convenience, meet needs, and create comfort for service users (Emmywati, 2016). Facilities that meet needs will make tourists feel satisfied. One way to improve amenity facilities is by increasing the number and quality of homestay services, adding more dive equipment rental places, and expanding culinary spots. This effort is not only to meet the high market demand but also as a primary source of livelihood for the local community. By enhancing the quality and quantity of amenity facilities, tourist destinations can attract more visitors, create sustainable economic opportunities for the local community, and provide a more satisfying experience for visitors.

| Table 3. SWOT Matrix Cal | | | | |
|--|------------|-----------------------------|-----|-----------------------|
| Internal Factors | Str | ength: | We | eakness: |
| | * | Adequate tourism | * | Limited departure |
| | | activities for beginners | | schedules to Pramuka |
| | * | Local community | | Island |
| | | involvement in the | * | Promotion and |
| | | development of dive | | publicity are not yet |
| | | tourism | | optimal |
| | * | Potential natural | •:• | Limited number of |
| | *** | | ••• | |
| | | resources for dive tourism | | lifeguards |
| | • | development | | |
| | * | Comprehensive amenities | | |
| | | with a variety of price and | | |
| External Factors | | quality options | | |
| Opportnity: | |) Strategy: | | O Strategy: |
| ✤ Increasing interest of | * | Developing a Natural | * | P |
| tourists in marine | | Resource Recovery | | and publicity of dive |
| tourism | | Program Involving the | | tourism in Pramuka |
| ✤ Dive tourism as the | | Community and Tourists | | Island |
| main livelihood for | * | Optimizing the Use of | * | Regenerate lifeguards |
| the local community | | Information Technology to | | through training and |
| ✤ Advancing | | Promote Dive Tourism | | certification |
| information | | Destinations | | |
| technology | ** | Improving Amenity | | |
| Proximity to Jakarta, | • | Facilities in Terms of | | |
| offering a wide | | Quality and Quantity | | |
| market potential | * | Empowering the | | |
| market potentiar | | Community as the Primary | | |
| | | Drivers of Tourism in | | |
| | | | | |
| Threat: | <u>с</u> 1 | Their Region Strategy: | 347 | T Strategy: |
| | | | | |
| | *** | Implement conservation | ** | Optimize promotion |
| pollution | | principles in the use of | | and publicity with |
| ✤ Low awareness of | • | natural resources | | engaging and |
| tourists about the | ** | Educate the community | | educational content |
| environment and | | and tourists about natural | | about underwater |
| coral reefs | | resources, especially coral | | beauty and |
| Overfishing activities | | reefs | | conservation efforts |
| ✤ Unpredictable | * | Monitor and address | * | Increase the number |
| weather conditions | | damage and pollution of | | of lifeguards to |
| | | natural resources | | prevent |
| | | | | environmental |
| | | | | pollution and coral |
| | | | | reef damage caused |
| | | | | by tourists |
| | | | | 5y (0011365 |

 Table 3. SWOT Matrix Calculation Results

4) Empowering the Community as the Primary Drivers of Tourism in Their Region

From the perspective of strengths, which include the natural beauty of the underwater environment, comprehensive amenities, and the potential for increasing tourist numbers, along with government support for tourism development and advancing technology, there is a need for strategies that can encourage local communities to become key players in tourism in their own areas. This can be achieved through business activities such as dive equipment rental, local guides, dive centers, catering services, accommodation rentals, and boat transportation for diving.

CONCLUSSION

The development strategy for dive tourism on Pramuka Island can be seen from the results of the SWOT analysis incorporated into the Cartesian diagram, resulting in coordinates (0.33;0.21) in quadrant I, which represents the SO strategy. This strategy supports aggressive growth policies that leverage strengths to seize existing opportunities. This can be achieved by developing natural resource recovery programs involving both the community and tourists, optimizing the use of information technology to promote dive tourism destinations, enhancing amenity facilities in terms of quality and quantity, and empowering the local community as primary drivers of tourism in their region.

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