

DEVELOPMENT STRATEGIES OF BANGSRING UNDERWATER ECOTOURISM INDONESIA

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Abstract

Ecotourism is a crucial sector for supporting government tourism development. However, ecotourism development in East Java faces several challenges that require appropriate strategies. This study aimed to describe the business model, analyze the development strategies for Bangsring Underwater Ecotourism, and analyze strategic priorities for Bangsring Underwater Ecotourism. Data analysis for research at Bangsring Underwater Ecotourism employed the Business Model Canvas, SWOT analysis, and QSPM analysis. The Business Model Canvas focused on nine aspects: customer segment, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structures. The key partners included the government, private companies, universities, entrepreneurs, water police, and community leaders. The value proposition centered on natural beauty, stunning underwater panoramas, Fish Apartments, a shark clinic, fascinating attractions, affordable ticket prices, comprehensive and comfortable public facilities, and a strategic location. The customer relationship in ecotourism cultivated partnerships and facilitated easy community licensing. The cost structure regulated the fixed costs came to Rp 187,497,420, while variable costs amounted to Rp 505,219,987. Revenue streams included Rp 8,768,918,500 from attraction ticket sales, Rp 448,350,000 from homestay rentals, and Rp 352,100,000 from ecotourism entrance ticket sales. Customer segmentation applied in Bangsring Underwater Ecotourism was based on the geographic segments of local and foreign tourists. The key resources of this ecotourism included natural resources, ecotourism support facilities, and human resources. The channels used were social media platforms like Instagram and Facebook, cultural festivals, and partnerships. The development strategy derived from the SWOT analysis was an aggressive one. Strategic priorities obtained from the QSPM analysis were to use technology to enhance the safety and cleanliness of the ecotourism environment, improve visitor experience, and promote via maximizing existing social media.

Keywords: BMC, SWOT, QSPM, Bangsring Underwater.

INTRODUCTION

Coral reefs are ecosystems that provide many benefits, including habitat for fish (Ekawati et al., 2020). Coral reef ecosystems are one of the biodiversity whose main components, namely corals, have been traded in various sizes. Coral is helpful for marine ecotourism, and the current trend of ornamental corals has become a legal hobby (Intyas et al., 2023). Bangsring Underwater is an ecotourism that utilizes the coral reef ecosystem and swimming with sharks as the main attraction (Fattah et al., 2023). Bangsring Underwater (Bunder) Ecotourism is a beach located east of Java Island, Wongsorejo District, Banyuwangi Regency, East Java. Bangsring Beach borders Kampe Beach on the north and Watu Dodol Beach on the south. The distance from Bangsring Beach to Wongsorejo Subdistrict Office is 9 km towards Situbondo,

which can be reached in about 25 minutes by motorbike, while the distance to the city is 21 km to the south, which takes about 40 minutes. The marine area of Bangsring is 88.23 hectares, and the protected area of Bangsring Underwater is 15 hectares. In 2014, Mina Wisata Bahari Bangsring Underwater (Bunder) was established, which is managed with a self-help system based on education and conservation to improve fishermen's economy and as an educational tour about conservation.

Bangsring Underwater (Bunder) Ecotourism is a marine ecotourism based on education and community empowerment around ecotourism. Education in Bunder ecotourism includes education on coral reef transplantation, introducing fish apartments, planting cypresses using coconut waste, reading parks, introducing shark clinics, and planting corals and different types of ornamental fish (Aini et al., 2018).

Bangsring Beach is famous for its underwater beauty and has a beautiful natural landscape, with views of the Bali Strait, Tabuhan Island, Menjangan Island, and a beautiful view at sunrise. It is suitable to be used as a place to travel with family. The activities offered are snorkeling, diving, playing, jet skiing, canoeing, and learning how to conserve coral reefs and other marine life (Ridla et al., 2021). The underwater Bangsring has a high potential as an ecotourism attraction for international tourists (Sumarmi et al., 2022). Tourists' perception of diving infrastructure facilities shows an average percentage of 88%. The percentage of Bunder tourism respondents is > 79%, so it can be said that the infrastructure facilities in Bunder tourism can be categorized as good. Perception of snorkeling trips in Bunder has a percentage of 88.6% with an excellent category. Moreover, these results show that snorkeling is a favorite vehicle for tourists to have an excellent percentage (Hanafi et al., 2021).

Better tourism development is due to the management of the tourist attraction development strategy by prioritizing the provision of facilities and infrastructure, increasing the role of the surrounding community, service quality, and promotion (Lailatufa et al., 2019). Some of the coral reefs in the underwater area of Bangsring began to be damaged, and there was also garbage near the floating house. At a depth of 3 m in the southern part, some dead corals are covered with algae, around 48.3% of the living coral reefs.

The depth of 6 m in the northern part is dominated by sea anemones and soft corals, around 46.7% and most of it is sand, which is 30%. Factors affecting coral reef damage are tourist activities due to global warming in Indonesia and garbage thrown into the sea.

The stream in Bangsring Underwater is slow and tends to go south, but it greatly affects the growth of coral reefs. The current stream tends to go south, so many coral reefs grow in the south. However, many tourists go south following the direction of the stream and also the garbage carried by the current (Aprillita & Luthfi, 2019). Based on the backgrounds, the objectives of this study are 1) to describe the business model, 2) to analyze the development strategy of Bangsring Underwater Ecotourism, and 3) to analyze the strategic priorities of Bangsring Underwater Ecotourism.

RESEARCH METHODS

This research was conducted at Bangsring Underwater Banyuwangi Regency, East Java, from July to September 2023. This research place was chosen because Bangsring Underwater Ecotourism has rich biodiversity and a beautiful environment that made this ecotourism attract many visitors. The visitors' high interest inspired the authors to identify the development needs of Bangsring Underwater Ecotourism so that its reputation is maintained and increased. Sampling was carried out at Bangsring Underwater Ecotourism, namely by the chairman and core management of Pokdarwis. The sampling technique was carried out by the purposive sampling method. The analysis used was BMC, SWOT, and QSPM.

The Business Model Canvas (BMC) method was used to describe the business in Bangsring Underwater Ecotourism, and it focused on nine aspects, namely customer segment, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and costs structures. Meanwhile, the SWOT analysis was based on BMC (Tjahjono et al., 2022) with the following stages:

1. Identify BMC's strengths, weaknesses, opportunities and threats
2. Carry out a weight assessment with the condition that the sum of S -W and O -T is a maximum of 1
3. Carry out a rating assessment based on the results of the assessment with a value of 1-4
4. Calculate the score by multiplying the weight by the rating
5. Carry out grand strategy matrix calculations to determine quadrant positions and prepare a SWOT matrix to produce management strategies.

Determining strategic priorities used the Quantitative Strategic Planning Matrix (QSPM) Method. QSPM is a highly effective approach to establishing strategic priorities. By analyzing previously identified key internal and external success factors, QSPM facilitates the identification of the effectiveness of various strategies based on the extent to which internal and external key success factors are utilized or improved. The QSPM calculates the relative attractiveness of each strategy within a set of alternatives by determining the cumulative impact of key external and internal success factors. The number of alternative sets and strategies in one set can vary, but only strategies in the same set can be evaluated against each other (David, 2011).

RESULTS AND DISCUSSIONS

Bangsring Underwater Ecotourism Business Model Canvas

The Business Model Canvas (BMC) approach is designed to easily describe and manipulate business models to generate alternative strategies in the form of new, better, and more competitive business models. The BMC assesses nine elements (Osterwalder dan Pineur, 2012). An analysis of the business at Bangsring Underwater Ecotourism using the Business Model Canvas is illustrated in Figure 1.

The nine elements of BMC Analysis consist of four dimensions: value, the structure of the Company's relationships with its partners, the Company's actions, and financial aspects, which include nine key elements.

Key partnership is a strategic alliance between companies, not competitors, of Bangsring Underwater Ecotourism. Bangsring Underwater Ecotourism has multiple key partners to aid with ecotourism ventures. The tourism sector engages in key activities, with service being central. Partnerships with universities, local government, entrepreneurs, private companies, Marine Police, and community leaders are needed to enhance tourist service delivery. Typically, academic collaborations with the University are focused on internships and research students. The benefits of Bangsring Ecotourism arise from the direct contribution and knowledge produced by research results generated by students. This knowledge can be used to foster ecotourism development. Collaborations between the Regional Government and Private Companies materialize through physical structures, including underwater statues, gazebos, information boards, rubbish bins, hand washing stations, and gates. Entrepreneurs in the travel and lodging industries cooperate with Bangsring Underwater Ecotourism by developing tour packages and suggesting visits to their clients. Additionally, local water police and community leaders work to raise awareness of the importance of protecting and preserving the environment at Bangsring Underwater Ecotourism. Several ecotourists in Indonesia are also exercising this type of collaboration. For example, (Intyas et al., 2021) researched three ecotourism sites: Beejay Bakau Resort (BJBR) Probolinggo, Kampung Blekok Situbondo, and Pancer Cengkong Trenggalek. Among these sites, Kampung Blekok Situbondo was found to have the most effective key partner.

Key activities at Bangsring Underwater Ecotourism, engaged in tourism, primarily involve service operations. Services begin with the maintenance and upkeep of the ecotourism area to ensure that tourists can enjoy the location comfortably. Additionally, services are provided in the field of rides and attractions. Research on ecotourism resources was conducted by (Swara and Intyas, 2021) on three ecotourism sites. One of these sites was BJBR, which was professionally managed and had more complete facilities. However, there is a need to improve the completeness of information and logistics delivery. The second ecotourism site, CBT-based Kampung Blekok Situbondo, offers exciting activities for visitors, but some activities need improvement, such as adding tour package options and improving accommodations and transportation facilities. Meanwhile, the CBT-based program at Pancer Cengkong Trenggalek requires significant improvements in all aspects and activities.

<p>Key Partner</p> <ul style="list-style-type: none"> Local Government and Private Companies (Bank Mandiri, Bank BRI, Pertamina, Link Aja) University Entrepreneurs (travel and lodging) Marine Police and community leaders 	<p>Key Activities</p> <ul style="list-style-type: none"> Productive conservation activities (Restocking; Fish Apartment planting; Floating house supervision; Coral reef transplantation and monitoring; Planting cypress and Coastal Cottonwood vegetation; Cleaning the ecotourism area) Service activities (ticket cashier; guide) 	<p>Value Proposition</p> <ul style="list-style-type: none"> Natural beauty and underwater panorama Fish Apartment Shark Clinic Attractions Cheap ticket prices Complete and comfortable public facilities Strategic location 	<p>Customer Relationships</p> <ul style="list-style-type: none"> Relationships with partners Ease of licensing for the community 	<p>Customer Segment</p> <ul style="list-style-type: none"> Local travellers Foreign travellers
	<p>Key Resources</p> <ul style="list-style-type: none"> Natural Resources Ecotourism support facilities Human resources of the management 		<p>Channels</p> <ul style="list-style-type: none"> Direct distribution via the internet (Instagram and Facebook) and cultural festivals Partnerships 	
<p>Cost Structure (dalam setahun)</p> <ul style="list-style-type: none"> Fixed Costs: IDR 187,497,420, -. The largest expenditure of fixed costs is employee salary costs of Rp 159,600,000. Variable Costs: IDR 505,219,987, -. The largest expenditure of variable costs is tax payments of Rp 63,997,500. 		<p>Revenue Streams (dalam setahun)</p> <ul style="list-style-type: none"> Admission ticket sales: IDR 352,110,000, - Attraction ticket sales: IDR 8,768,918,500, - Homestay sales: IDR 448,350,000, - The largest source of revenue is from attraction ticket sales of Rp 8,768,918,500, - 		

Figure 1: Business Model Canvas for Bangsring Underwater Ecotourism

Key resources enable a company to perform its core activities to create superior value, enter the market, maintain relationships with different market segments, and generate revenue. Key resources are the primary resources utilized by the Company in its operational activities. Bangsring Underwater Ecotourism's resources include:

- a. Physical resources: Bangsring Underwater Ecotourism has several physical resources including Wifi, CCTV, Water Taps, Hand Taps, Tourist Location Maps, Entrance Appeal Boards, Pier Appeal Boards, Attraction Information Boards, Organic Waste Bins, Inorganic Waste Bins, Floating House Boats, Inter-Island Boats, Compressor Machines, Scuba Oxygen Tubes, Buoyancy Compensation Device (BCD), Fin diving, Scuba Regulator, Weight Belt (weight system), Life Jacket, Snorkle, Mouthpiece, Drum, Floating Net Cages, Coral Reef Substrates, and Glasses.
- b. Natural resources: Bangsring Underwater Ecotourism presents a view of the sunrise and the splendor of Bali Island. Along the Bangsring Beach line are arranged sea pine trees that make Bangsring Beach cool and shady. Although Bangsring Beach has black sand, this beach is immaculate and has water with a level of clarity and brightness that is ideal for snorkeling and diving activities.
- c. Human resources: Bangsring Underwater Ecotourism has quality human resources in its field, as evidenced by all its human resources must be able to swim and have a diving certificate. That is because all employees work simultaneously as a guide for tourists who want to use guide services. So far, Bangsring Underwater Ecotourism has seven employees.

The cost structure is utilized to assess the incurred expenses of a business enterprise. Financial viability is crucial in conducting a feasibility study of a business, as any weak financial aspect would lead to the rejection of the proposed idea due to its inability to generate substantial economic benefits (Intyas et al., 2019). Although a well-established ecotourism business generates income, many expenses still need to be incurred to keep the business running. The cost structure for Bangsring Underwater Ecotourism comprises fixed and variable expenses, as presented in Table 1.

Table 1: Fixed Costs and Variable Costs of Bangsring Underwater Ecotourism

No	Fixed Costs	Unit	Quantity	Unit Price	Total per month	Total per year
1	Depreciation	-	-	-	9,198,806	110,385,667
2	Maintenance				1,711,408	20,536,900
3	Salaries	person	7	1,900,000	13,300,000	159,600,000
4	Property tax.					2,000,000
5	Meal allowance	person	7	10,000	2,100,000	25,200,000
Total of Fixed Cost (FC)						317,722,567
No	Variable Costs	Unit	Quantity	Unit Price	Total per month	Total per year
1	Tabuhan Boat Transportation	Trip	8	350,000	2,800,000	33,600,000
2	Boat Gasoline	Litre	30	70,000	2,100,000	25,200,000
3	Trash Fish	Kg	60	12,000	720,000	8,640,000

4	Ticket Paper	Ream	10	15,000	150,000	1,800,000
5	Pen	Unit	10	3,000	30,000	360,000
6	Whiteboard marker	Unit	5	10,000	50,000	600,000
7	Red Crackle	Pcs	10	30,000	300,000	3,600,000
8	Soap	Unit	30	50	1,500	18,000
9	First Aid	Package	1	100,000	100,000	1,200,000
10	Electricity cost	Kwh	608	1,645	1,000,160	12,001,920
11	Gasoline	Litre	210	14,000	2,940,000	35,280,000
12	Income tax		1		5,333,125	63,997,500
13	Shark Medicine	Bottle	5	20,000	100,000	1200000
	Total of Variable Costs (VC)					187,497,420
	Total Costs					505,219,987

The value proposition is the additional value that a company provides to consumers. This added value arises from the processing, transportation, and storage of goods in a production process that incorporates the use or provision of functional inputs, increasing in value (Hayami et al., 1987). This superior value is the driving force that prompts customers to switch from one Company to another. Developing a successful business necessitates careful consideration throughout every aspect, including production activities that yield market-ready products attuned to their inherent value (Intyas et al., 2022). The implementation of a value proposition can generate positive brand equity through the provision of consumer-friendly products. Bangsring Underwater Ecotourism utilizes a collaborative process involving multiple parties to increase production. Bangsring Underwater Ecotourism has several advantages offered to its consumers, namely:

- a. Natural beauty and underwater panorama
- b. Diverse rides and attractions
- c. Cheap entrance ticket prices
- d. Ticket prices for cheap rides and attractions
- e. Addition of public facilities (such as information boards, availability of clean water, and other facilities)
- f. Strategic location

The revenue Stream describes how a company can generate profits from customer segments. Based on observations, questionnaires, and interviews, Bangsring Underwater Ecotourism has several revenue streams, from area entrance fees, vehicles, attraction fees, and donations. Those are the primary sources of income from Bangsring Underwater Ecotourism, which is used to build and finance operational activities.

Customer Relationship. Bangsring Underwater Ecotourism builds relationships with consumers through partnerships and community involvement. Travel agents, public transportation providers, and local inns in the ecotourism industry recommend Bangsring Underwater Ecotourism as a preferred destination. The community of divers offers services that indirectly enhance customer satisfaction and build lasting relationships.

Distribution Channel. The manager of Bangsring Underwater Ecotourism collaborates with the Banyuwangi Culture and Tourism Office to promote ecotourism at Bangsring both domestically and internationally. Distribution channels via the internet and cultural festivals and partnering with travel agents, inns, local communities, and guides are utilized.

Customer Segments. Customers are the core of all business models. The research at Bangsring Underwater Ecotourism yielded two customer segments: local and foreign tourists. Local tourists primarily residing in East Java tend to travel in large groups. Foreign tourists generally come from Bali Island and choose Java Island. Consumer segments in ecotourism can be different depending on the target market, as in research (Sofiati et al., 2023), which researched BJBR Probolinggo ecotourism, which is still dominant in local tourists in the youth to adult category.

Bangsring Underwater Ecotourism Development Strategy

Internal Environment of Bangsring Underwater Ecotourism

1. Ecotourism Monitoring and Maintenance

The managers at Bangsring Underwater Ecotourism uphold the maintenance of the ecotourism environment by cleaning the area before and after ecotourism hours, at 5:00 AM and 5:00 PM. Nevertheless, the managers do not monitor nor maintain the ecotourism environment during operating hours. Hence, the ecotourism environment, mainly the shoreline, is frequently cluttered with garbage during peak hours from 11:00 AM to 5:00 PM.

2. Marine Police and Community Leaders in Key Partners

For several reasons, Marine Police and community leaders are at a competitive disadvantage in Bangsring Underwater ecotourism. Firstly, the Marine Police frequently encounters limited resources and budgetary constraints when enforcing sustainability regulations in the underwater environment. These limitations can impede efforts to maintain crucial marine ecosystems that support ecotourism sustainability. Second, leaders in the Bangsring Underwater ecotourism management team may lack sufficient knowledge and skills to preserve the underwater environment.

3. Direct distribution on Channels

Bangsring Underwater has several social media platforms that help it reach customers or tourists. These platforms include Instagram, Twitter, Facebook, and Tiktok. Unfortunately, the only active platform is Instagram. The Twitter platform was last active in 2017, while the tiktok platform only has 1 video content.

4. Natural Beauty and Underwater Panorama

The natural beauty and underwater panoramas of Bangsring Underwater ecotourism offer significant sustainable competitive advantages. The area features spectacular underwater scenery, intact coral reefs, abundant biodiversity, and stunning natural beauty. The authenticity and uniqueness of this underwater environment serve as a major attraction for tourists seeking an authentic and sustainable tourism experience. The well-preserved natural quality and

breathtaking underwater scenery offer opportunities for ecotourism activities such as snorkeling and diving.

5. Productive conservation activities

Conservation activities in Bangsring Underwater ecotourism provide a sustainable competitive advantage. Such conservation efforts are rare in other ecotourism sites, further highlighting the significance of Bangsring's adoption of sustainable practices. These activities are unique in their structured approach and adherence to established rules. The resulting value proposition makes Bangsring Underwater ecotourism an attractive destination for tourists.

6. Affordable attraction ticket prices

Affordable attraction ticket prices are one of the sustainable competitive advantages of Bangsring Underwater Ecotourism. This destination can attract tourists from various backgrounds, including budget travelers, by offering affordable prices. Affordable prices allow more people to experience the beauty of the underwater world and experience snorkeling, diving, or other activities at Bangsring Underwater. It supports social inclusion in tourism, where tourists with various backgrounds can enjoy and experience the beauty of nature equally. In addition, by offering low ticket prices, this destination can help promote sustainable and responsible ecotourism.

7. Natural resources in key resources

The Bangsring area boasts incredible natural resources, including intact coral reefs, abundant marine biodiversity and healthy underwater ecosystems. The beauty and uniqueness of these natural resources are a major attraction for tourists seeking an authentic and sustainable ecotourism experience.

8. Human resources in key resources

The success of ecotourism depends not only on the natural resources available but also on the vital role of human resources in the management and services of tourists. In Bangsring, local communities, such as divers, tour guides, diving instructors and destination management staff, are involved in the tourism industry. Their expertise in preserving the underwater environment, knowledge of local flora and fauna, and friendly and professional service skills are key factors in providing an excellent and sustainable tourism experience.

9. Local government and private companies as key partners

The collaboration between local governments and private companies plays a pivotal role in developing and managing ecotourism destinations, ensuring their sustainability. Local governments provide the necessary policies, regulations and infrastructure to support the development of these destinations, including eco-protection, waste management and tourist safety. On the other hand, private companies offer funding, management expertise, and experience in the tourism sector. The collaboration between local governments and private enterprises generates mutual benefits, enabling the effective incorporation of economic, environmental, and social interests.

10. University as a key partner

Ecotourism destinations can leverage academic and research expertise through collaborations with universities to promote sustainable development and management. Universities can aid in scientific research, environmental monitoring, data analysis, and developing ecotourism innovations. This partnership can aid in comprehending and dealing with the obstacles encountered in sustaining ecological durability, preserving natural resources, and advancing eco-friendly management techniques. Furthermore, institutions of higher learning play a crucial part in educating and training the public to raise awareness and understanding about the significance of ecotourism and environmental preservation.

11. Relations with partners in customer relationships

By establishing partnerships with entities like travel agencies, tour operators, and other relevant stakeholders, this tourist destination has the potential to create sustainable and mutually beneficial collaborations. Effective communication, cooperation, and information exchange will enable Bangsring ecotourism to consistently provide customers with top-tier tourism experiences. Strong collaboration with partners enables destinations to enhance their market reach, effectively promote tourist destinations, and expand marketing networks.

12. Fixed costs and variable costs in the cost structure

In operational management, achieving economic sustainability entails minimizing fixed costs and managing variable costs. The tourist destination can maintain efficient and sustainable operational costs by optimizing resource use and reducing waste. Appropriate technology can also reduce costs, increase efficiency, and minimize environmental impact. Additionally, efficient cost management in Bangsring ecotourism enables tourists to enjoy competitive pricing, increasing market affordability and appeal.

13. Admission fees, attraction and ride fees, and donations to revenue streams

Appropriate and measurable entry fees contribute to financing destination operations and development, ensuring long-term financial sustainability. Providing competitive prices for attractions and rides that reflect the value tourists receive can enhance visitor attraction and satisfaction. Partner donations play an essential role in supporting existing ecotourism facilities.

14. Exciting attractions

The diversity of rides and attractions offers a unique and different experience each time visitors come, creating a sustainable appeal. By regularly updating and presenting new rides and attractions, the destination can maintain the interest of visitors who want to return to try new experiences.

15. Ecotourism facilities and infrastructure

Ecotourism facilities and infrastructure at Bangsring Underwater fall under temporary advantages that enhance the visitor experience. In order to provide modern, comfortable facilities in line with the latest technological developments, updates and upgrades to the

facilities and infrastructure are regularly conducted. These temporary amenities comprise state-of-the-art rentals for diving equipment, comfortable changing rooms, hygienic bathing areas, and other supplementary services.

16. Foreign Tourists

Foreign tourists are a temporary advantage to Bangsring Underwater ecotourism because they positively impact the growth and sustainability of the destination. Foreign tourists contribute significantly to local income and economy and provide opportunities for international destination promotion. Foreign tourists also bring cultural diversity, perspectives, and experiences, enriching interactions between local communities and visitors. In addition, foreign tourist visits can also trigger innovation and the development of businesses related to the tourism industry, such as lodging, restaurants, and transportation services. However, it is vital to maintain a balance in promoting the presence of foreign tourists and protecting environmental integrity and local wisdom.

17. Activities and Services

The attractions and rides team provides professional and amicable service, ensuring visitors are fully immersed and at ease in the underwater activities. In addition, they deliver informative explanations about the biodiversity and marine ecosystems around Bangsring Underwater, adding educational value to the experience. This high-quality service enhances visitors' impressions and strengthens Bangsring Underwater's reputation as an exceptional ecotourism destination focused on safety, professionalism, and customer satisfaction.

18. Entrepreneurs (travel and lodging) in key partners

Collaboration with entrepreneurs in the travel and lodging sector enhances visitor accommodation facilities, transportation, and services. By partnering with highly skilled and committed entrepreneurs, the destination offers diverse lodging options that cater to visitors' varied preferences and budgets. The network of travel entrepreneurs facilitates trip planning for visitors to Bangsring Underwater with well-coordinated tour packages and special offers.

19. Local tourists

Local tourists have a positive social and economic impact on the destination. The local tourists not only contribute to local revenue, but they also sustain ecotourism by promoting environmental awareness and nature conservation. Local tourists can also become ambassadors for the destination, sharing their experiences with their families, friends, and communities. Local tourists can potentially become essential actors in preserving the underwater ecosystem in Bangsring.

20. Ease of licensing for the community

Facilitating licensing for communities enables this destination to promote lively participation from local communities in managing and developing ecotourism. A simple and transparent licensing process provides opportunities for local communities to be directly involved in ecotourism activities, such as land management, provision of local products, or implementation

of cultural activities.

21. Strategic location

Bangsring's strategic location, bordering the Bali Strait in the Banyuwangi area and conveniently located near the terminal, harbor, and station, allows easy access to this popular tourist destination. Tourists can easily visit Bangsring and enjoy the fantastic underwater beauty due to its strategic location. Furthermore, the immediate vicinity of other tourism sites in Banyuwangi, such as Ijen Crater and Baluran National Park, allows visitors to incorporate trips to multiple appealing destinations into their itinerary. It adds value to Bangsring Underwater ecotourism and improves its overall allure as a complete tourist destination. From the aforementioned competitive implications and economic performance, strengths are characterized as sustainable and temporary competitive advantages with above-average economic performance. Weaknesses, on the other hand, are identified as competitive disadvantages with below-average economic performance. Based on the above explanation, Table 2 highlights the IFE (Internal Factor Evaluation) matrix variables researchers utilize to assess the weight and rating of the Company's current resources.

Table 2: Results of the IFE (Internal Factor Evaluation) Matrix

Internal Factors	Weight	Rate	Weight x Rate
Strengths			
- Natural beauty and underwater panoramas	0.080	4	0.320
- Productive conservation activities	0.080	4	0.320
- Local government and private companies	0.065	3.25	0.211
- Affordable ticket price	0.060	3	0.180
- Natural resources	0.075	3.75	0.281
- Ecotourism facilities and infrastructure	0.060	3	0.180
- Ecotourism human resources	0.080	4	0.320
- Attractive attractions	0.080	4	0.320
- University	0.070	3.5	0.245
- Foreign tourists	0.060	3	0.180
- Relationships with partners	0.065	3.25	0.211
- Costs	0.060	3	0.180
- Sales of admission tickets, attractions, and rides	0.075	3.75	0.281
Total Strengths			3.230
Weaknesses			
- Ecotourism monitoring and maintenance	0.035	1.75	0.061
- Marine Police and community leaders	0.025	1.25	0.031
- Direct distribution	0.030	1.5	0.045
Total Weaknesses			0.138
Total Overall Internal Environment	1.000		3.364

Source: processed primary data, 2023

The internal factors evaluation in Table 2 of Bangsring Underwater Ecotourism demonstrates that its primary strengths include the natural beauty and underwater panorama, conservation-focused product activities, exciting attractions, and skilled human resources, with a total value of (0.320). The weaknesses of ecotourism consisted of Marine Police and community leaders

(0.031), direct distribution channels (0.045), and monitoring and maintenance (0.061). The total score of internal factors is 3.368. It showed that internal ecotourism was above average (2.5) in utilizing strengths and minimizing existing weaknesses.

Analysis of the External Environment of Bangsring Underwater Ecotourism

Aspects of the external environment that affect Bangsring Underwater Ecotourism are political, economic, social, technological, environmental, and legal. The following sections explain some of these influences:

1. Political Aspects

Bureaucratic aspects and changes in the leadership of the Banyuwangi local government can impact Bangsring Underwater Ecotourism. Leadership changes and bureaucratic shifts created uncertainty in government policies and tourism development support. Modifications to policies or delays in licensing can impede the development or enhancement of infrastructure around floating houses, thus affecting the quality and appeal of the tourist destination. Furthermore, alterations in leadership can impede the consistent promotion and marketing of Bangsring Underwater Ecotourism, which necessitates unwavering support from the local government.

2. Economic Aspects

The prohibition of constructing hotels with three or more stars can positively affect Bangsring Underwater Ecotourism. This regulation preserves the floating houses' distinct features as an exclusive and genuine tourist attraction. With this prohibition, Bangsring's floating houses remain a top choice for tourists looking for a different experience and close to nature. It can preserve the allure of Bangsring Underwater Ecotourism as a distinctive destination compared to top-rated hotels in other regions. Additionally, this prohibition can bolster the local community's economic and social sustainability since locals typically oversee floating houses. Moreover, visitors to Bangsring's floating houses can directly support the local community by buying local products and utilizing local amenities. Thus, implementing a prohibition on three-star hotels and above can strengthen the identity and sustainability of Bangsring Underwater Ecotourism and benefit the local community. The proximity of other tourism can have diverse impacts on Bangsring Underwater Ecotourism. Complementary facilities surrounding the floating houses can enhance their attraction and generate greater interest. Tourists who arrive near the attractions may also be motivated to explore and engage with Bangsring Underwater Ecotourism as part of their visit. It could result in an uptick in tourism traffic, fostering regional growth. Nevertheless, there may be obstacles to overcome if competing tours provide superior amenities or more desirable sights. Insufficient village funding for Bangsring Underwater Ecotourism can result in significant adverse impacts. Insufficient funding can impede the development and maintenance of essential infrastructure and tourist facilities required to attract tourists, thus affecting service quality, cleanliness, care, and maintenance of the floating houses. Consequently, tourists may experience an unsatisfactory ecotourism experience, potentially tarnishing the destination's reputation. Additionally, insufficient funding, promotion, and marketing efforts will constrain Bangsring Underwater Ecotourism's development.

3. Social Aspects

The behavior of individuals with an affinity for travel significantly benefits Bangsring Underwater Ecotourism. Tourists who pursue traveling as a hobby are typically enthusiastic and active seekers of novel experiences, rendering them potential supporters for expanding the market and enhancing tourism to this destination. In terms of promotion, the actions of travel enthusiasts can aid in disseminating their experiences via social media, online reviews, or referrals to acquaintances and relatives. Such actions can serve as a significant motivator for other travelers to explore Bangsring's floating houses. Furthermore, the conduct of visitors who demonstrate a commitment to environmental and cultural conservation can significantly enhance the prospects of floating-house tourism. Tourism enthusiasts demonstrate greater appreciation and support for sustainable practices, including environmentally friendly usage, ecotourism activities, and participation in natural and cultural preservation efforts. Consequently, their conduct plays a significant role in contributing to the success and sustainability of Bangsring Underwater Ecotourism. The impact of conflict and social tension in the Bangsring Village area can be a severe challenge for Bangsring Underwater Ecotourism. Social conflicts and tensions can disrupt the atmosphere and harmony around tourist destinations, reducing tourists' interest in visiting the floating house. Social conflicts, such as disputes between local communities, conflicts between tourism managers and local people, or ethnic or religious tensions, can create a non-conducive atmosphere and raise tourist safety concerns. In addition, social tensions can also damage the image and reputation of tourist destinations, thereby reducing the number of tourist visits.

4. Technological Aspects

The rapid technological development has positively impacted Bangsring Underwater Ecotourism. Tourism managers can now utilize technology to enhance the tourist experience. For instance, online booking platforms simplify reservations and payments and offer greater access to details regarding the park's amenities, activities, and tour packages. Furthermore, the utilization of technology can enhance visitor safety and comfort. It can be achieved by implementing integrated security systems, smart cards for entry access, and digital tour guide applications that offer interactive information about the destination. Technological advancements also help promote and market Bangsring Underwater Ecotourism through social media, websites, and travel apps.

5. Environmental Aspects

Unpredictable weather changes can significantly impact Bangsring Underwater Ecotourism. Heavy rain, storms, and high waves can suddenly disrupt tourist activities and reduce the destination's attractiveness. Tourists may experience discomfort and cannot enjoy snorkeling, diving, or swimming around the floating houses. Furthermore, inclement weather may hinder access to the floating houses in Bangsring, such as through travel routes impacted by flooding or landslides, thereby impeding travel plans and reducing tourist numbers.

6. Legal Aspects

Minister of Marine Affairs and Fisheries Regulation Number 93/PERMEN-KP/2020 has significantly impacted Bangsring Underwater Ecotourism. This regulation provides clear direction and supports the management and development of these tourist destinations. With this regulation, Bangsring Underwater Ecotourism managers can improve the sustainability and preservation of marine and fisheries resources in the vicinity. It includes better waste management regulation, biodiversity maintenance, and seawater quality monitoring. With the protection provided by this regulation, the Bangsring floating house becomes a sustainable and eco-friendly tourist destination, attracting tourists who care about environmental conservation. Permenparekraf Number 9 of 2021 has positively impacted the Bangsring Underwater Ecotourism industry. This regulation strengthens the management and development of these tourist destinations by providing a clear legal framework. With this regulation, managers of Bangsring Underwater Ecotourism can enhance service quality, safety, and environmental sustainability. Furthermore, the regulation allows tourists to gain a deeper understanding and appreciation of the uniqueness of the local culture and the natural beauty around the floating house. PP No. 50 of 2011 has significantly impacted Bangsring Underwater Ecotourism. This regulation establishes a clear legal framework, strengthening the management and development of the floating house tourism destination. The PP also provides guidelines for Bangsring Underwater Ecotourism managers regarding marine space, marine resource utilization, and environmental protection. This regulation enables tourism managers to enhance the sustainability and preservation of the marine ecosystem surrounding the Bangsring Floating House. Moreover, it ensures tourists' security and safety when visiting the destination. Through implementing numerous management strategies aligned with the regulations established in the PP, Bangsring Underwater Ecotourism has achieved status as a sustainable tourist destination. Additionally, it successfully preserves the region's natural beauty and existing cultural traditions while contributing positively to the local economy and community welfare. Based on the explanation provided, Table 3 presents an EFE matrix that comprises both opportunity and threat variables.

Table 3: EFE (External Factor Evaluation) Matrix Results

External Factors	Weight	Rate	Weight x Rate
Opportunities			
- Aspects of bureaucracy and changes in the governance of Banyuwangi regional government	0.089	3	0.267
- Prohibition of the establishment of 3-star hotels and above	0.119	4	0.474
- There are other tours nearby	0.089	3	0.267
- The behavior of people who like to travel	0.119	4	0.474
- Rapid technological development	0.096	3.25	0.313
- Minister of Marine Affairs and Fisheries Regulation No. 93/PERMEN-KP/2020	0.119	4	0.474
- Government Regulation No. 50 of 2011	0.096	3.25	0.313
- Permenparekraf No.9 of 2021	0.096	3.25	0.313
Total Opportunities			2.894
Threats			

- No village funding	0.044	1.5	0.067
- Social conflict and tension	0.030	1	0.030
Total Threats			0.153
Total Overall External Environment	1.000		2.991

Source: Primary data processed 2023

The findings from Table 3's analysis of external factors affecting Bangsring Underwater Ecotourism revealed several opportunities for its development, including the prohibition of 3-star hotels and higher, the behavior of travel enthusiasts, and Permen Marine & Fisheries No. 93/PERMEN-KP/2020 (valued at 0.474). The most significant threats to Bangsring Underwater Ecotourism were conflict and social tension (0.030) and insufficient village funding (0.067). The total score for the external factor evaluation is 2.991, indicating that Bangsring Underwater Ecotourism can capitalize on its existing opportunities and surmount external threats. Table 4 represents the development of Bangsring Underwater Ecotourism, which involves strategic planning in the SWOT matrix, which is segregated into four categories: S-O, W-O, S-T, and W-T.

Table 4: SWOT Matrix of Bangsring Underwater Ecotourism Development

Internal Factors	Strengths (S)	Weakness (W)
External Factors	(S1) Natural beauty and underwater sea panorama	(W1) Ecotourism monitoring and maintenance
	(S2) Interesting attractions	(W2) Marine police and community leaders
	(S3) Cheap ticket price	(W3) Direct distribution
	(S4) Natural resources	
	(S5) Ecotourism facilities and infrastructure	
	(S6) Ecotourism human resources	
	(S7) Local government and private companies	
	(S8) University	
	(S9) Foreign tourists	
	(S10) Relationship with partners	
	(S11) Costs	
	(S12) Ticket sales & donations	
	(S13) Conservation productive activities	
Opportunities (O)	Strategy S-O	Strategy W-O
(O1) Bureaucratic aspects and changes in the relay of Banyuwangi regional government leadership (O2) Prohibition of the establishment of 3-star hotels and higher (O3) There are other tours nearby (O4) The behavior of people who like to	1. (S1, S2, S3, S4, O4, O5) Utilizing technology to improve the safety and cleanliness of the ecotourism environment, improve visitor experience, and as a means of promotion by maximizing social media that displays the natural beauty of ecotourism. 2. (S6, S8, S9, O7) Improve the quality of natural and human resources in the field of ecotourism in line with the requirements set out in PP No. 50 of 2011.	(W2, O4) Involve the Marine Police and community leaders as active partners in educating and supervising tourists on environmentally friendly behavior.

travel (traveling) (O5) Rapid technological development (O6) Minister of Marine Affairs and Fisheries Regulation No. 93 / PERMENKP / 2020 (O7) Government Regulation No. 50 of 2011 (O8) Permenparekraf No.9 Year 2021 (O9) Availability and good water quality		
Threats (T)	Strategy S-T	Strategy W-T
(T1) Insufficient village funding (T2) Social conflict and tension	(S2, S3, S5) Increase the diversification of attractions and rides enjoyed on land during bad weather and in the water during good weather.	(W3, T1) Develop partnerships with local travel agencies or digital platforms to expand marketing reach and improve distribution of ecotourism products.

Bangsring Underwater Ecotourism had an X-axis worth 3,092. This value was obtained by reducing the internal strength factor, worth 3,230, minus the internal weaknesses factor, which was worth 0.138, while the SWOT diagram on the Y axis was worth 2,798. After finding the X and Y coordinate points, a straight line was drawn to connect the X and Y coordinate points (3,092; 2,798), resulting in an aggressive strategy type in quadrant 1 of the SWOT quadrant (Figure 2).

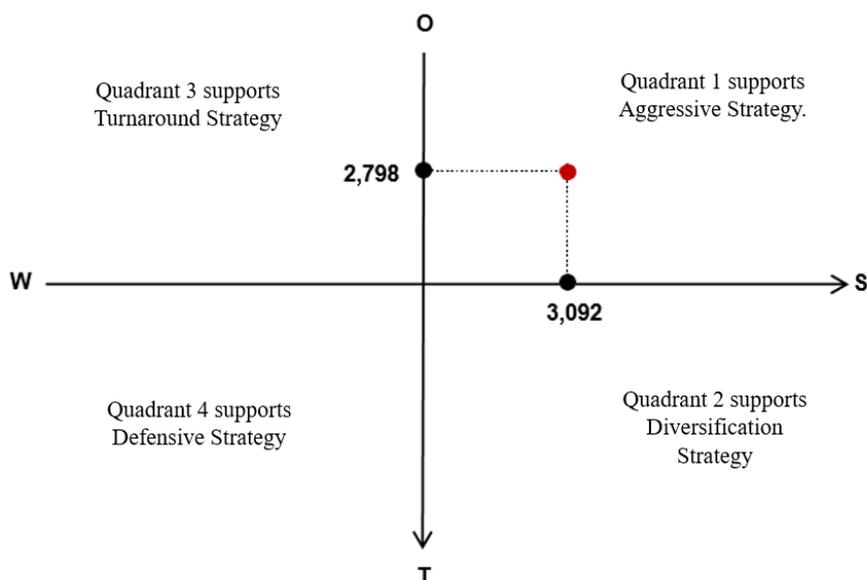


Figure 2: SWOT Strategy Quadrant

S-O strategy in the development of Bangsring Underwater Ecotourism

1. Utilizing technology to improve the safety and cleanliness of the ecotourism environment, improve visitor experience, and promote by maximizing social media that displays the natural beauty of ecotourism (S1, S2, S3, S4, O4).

This strategy involves utilizing technology to improve the visitor experience and expand the reach of ecotourism promotion through social media. Bangsring Ecotourism has several social media including Instagram, Facebook, Twitter, and Tiktok. However, the only active social media is Instagram. This strategy suggests that managers maximize the use of all social media, especially Tiktok, to reach a broader range of customers. By utilizing social media as a promotional tool, social media can be used as a platform to share photos, videos, and exciting stories about Bangsring Underwater Ecotourism with online users worldwide, thereby increasing the visibility and attractiveness of the destination. This strategy provides visitors with a richer experience, helps promote ecotourism's natural beauty, and attracts new tourists to visit the destination.

Furthermore, this ecotourism strategy utilizes technology to enhance the security and cleanliness of the area, preventing overcapacity and consequent pollution. The management can implement a website with a reservation system to ensure daily visitor capacity remains controlled, and the ecotourism party can maintain monitoring of the environment's safety and cleanliness.

2. Improve the quality of natural and human resources within ecotourism following the guidelines outlined in PP No. 50/2011 (S6, S8, S9, O7).

In improving the quality of natural resources, the strategy that needs to be adopted is sustainable management. It involves an in-depth understanding of the surrounding natural environment and careful planning to ensure ecosystem sustainability. Applying ecotourism principles such as conservation of natural resources, reduction of negative impacts, and preservation of biodiversity are essential parts of this strategy. In addition, regular monitoring and evaluation of the condition of natural resources is necessary to ensure that actions taken have a positive and sustainable impact.

Ecotourism human resources are the key to providing a quality and sustainable tourism experience. The staff at Bangsring Underwater Ecotourism demonstrates a high level of proficiency in their respective fields, such as the cashier and the guide. Despite their commendable efforts, the team lacks fluency in English, an important skill to master, considering the influx of foreign tourists. Despite occasional issues with speech, communication remains feasible. The ability of the Bangsring Underwater Ecotourism manager to communicate fluently with foreign tourists would enhance their experiences. By training and developing their English language skills, tour guides, and ecotourism staff can become experts in delivering information about ecotourism to tourists. Universities can contribute to improving such human resources by offering English language training programs, making them valuable partners. Improving the quality of human resources in ecotourism allows Bangsring Underwater Ecotourism to provide foreign tourists with a quality and

environmentally friendly tourism experience, meeting the requirements of PP No. 50 of 2011.

Bangsring Underwater Ecotourism Development Priorities

The Quantitative Strategic Planning Matrix (QSPM) method is used to analyze the priority of strategies obtained from the results of SWOT formulation. The development of Bangsring Underwater ecotourism has two strategies that are the main priorities. The first priority strategy is to utilize technology to improve the safety and cleanliness of the environment, improve visitor experience, and promote by maximizing social media that displays the natural beauty of ecotourism. The Total Attractive Score (TAS) value obtained from this strategy is 5.51. The second priority strategy is to improve the quality of natural and human resources in the field of ecotourism in line with the requirements set out in PP No. 50 of 2011. The TAS value obtained is 5.41 (Table 5).

Table 5: Prioritized Alternative Strategies based on the QSPM Matrix

No	Alternative Strategies	Total Score
1	Utilizing technology to improve the safety and cleanliness of the ecotourism environment, improve visitor experience, and promote by maximizing social media that displays the natural beauty of ecotourism.	5.51
2	Improving the quality of natural and human resources in the field of ecotourism, adhering to the requirements outlined in Government Regulation No. 50/2011	5.41
3	Involving the Marine Police and community leaders as active partners in educating and supervising tourists towards environmentally friendly behavior.	5.00
4	Increasing the diversification of attractions and rides enjoyed on land during bad weather and in the water during good weather.	4.38
5	Improving environmental monitoring and maintenance systems to anticipate and respond to unpredictable weather changes.	3.87
6	Developing partnerships with local travel agents or digital platforms to expand marketing reach and improve distribution of ecotourism products.	4.35

Source: Processed data, 2023

CONCLUSIONS AND SUGGESTIONS

The Bangsring Ecotourism Business Model Canvas is deemed effective for meeting the standards of the nine BMC elements. The attraction development strategy for Bangsring Underwater Ecotourism, derived from the SWOT analysis, is aggressive. Ecotourism managers may capitalize on internal strengths to seize external opportunities, address internal weaknesses, and counteract existing external threats. Strategic priorities can be identified to enhance Bangsring Underwater Ecotourism. The primary strategic priorities are utilizing technology like CCTV and loudspeakers to increase the safety and cleanliness of the ecotourism area, providing a variety of attractions to enrich the visitor experience, and employing social media as a promotional tool by maximizing its potential to showcase tourist sites and boost their appeal. Suggestions for this study include: 1) Bangsring Ecotourism needs to keep pace with rapidly developing technology. Its stunning natural beauty, panoramic ocean views, and many affordable rides and attractions make it an ideal destination for promotion

through social media to attract new visitors. 2) Employees should receive training in English language skills to facilitate communication with foreign tourists who arrive daily. 3) Implement refined ecotourism cleanliness measures during operational activities to ensure the happiness of travelers and prevent pollution of the ecotourism environment. 4) On national holidays and other select days, the number of tourists increased significantly, resulting in a less conducive ecotourism area and increased littering. Making a reservation before visiting the ecotourism area is preferable, ensuring management supervision is maintained. 5) Technology can be utilized to purchase entrance tickets online and track daily visitor capacity to avoid overcapacity.

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