

Digital Marketing Strategy Development for Recovery Ecotourism Visit After COVID-19 Pandemic: A Comparison Study on BJBR and Kampung Blekok Mangrove Ecotourism, Indonesia

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Abstract

Ecotourism is a form of tourism that can help overcome the problem of low welfare of local communities. The digital cultural transformation that occurred in the era of revolution 4.0, especially during the COVID-19 pandemic, was able to change the entire cycle of the tourism ecosystem. Besides, several ecotourism experiences have experienced a significant decline in tourist visits, including Bee Jay Bakau Resort and Kampung Blekok ecotourism. This research aims to develop a digital marketing strategy for ecotourism at Bee Jay Bakau Resort and Kampung Blekok to restore visitation levels after the COVID-19 pandemic. This research uses a qualitative approach with SWOT analysis and is quantitatively calculated using the Quantitative Strategic Planning Matrix (QSPM). Data were collected through interviews with ecotourism managers including marketing employees, and HRD managers; visitors, local communities, Tourism Awareness Groups, and the Environmental Service (DLH). Also, direct observation of the ecotourism conditions studied, documentation, and literature studies. The research results show that the strengths and opportunities of BJBR and Kampung Blekok are greater than the weaknesses and threats, so the strategy formulated is aggressive (growth-oriented strategy). The strategic priority lies in optimizing the use of information technology and social media as promotional media, especially the frequency of promotions. The strategy used is none other than to increase the value of ecotourism as a form of growth so that it can compete with other ecotourism in returning the level of tourist visits after the COVID-19 pandemic.

Keywords

SWOT analysis, QSPM, social media, mangrove ecotourism, digital marketing.

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Introduction

Tourism is an important factor in the economic development of a region (Del P. Pablo-Romero and Molina, 2013). Ecotourism development is an alternative tourism development that can help overcome the problem of minimal welfare of local communities. It is the practice of traveling to relatively rarely exploited natural destinations to appreciate the natural environment, gain knowledge about wildlife, and enjoy the local culture in an authentic atmosphere while

preserving the environment at the destination (Lee and Jan, 2019). The use of mangrove ecosystems for ecotourism is in line with the shift in tourist interest from old tourism, namely tourists who only come to do tourism without any elements of education and conservation, to new tourism, namely tourists who come to do tourism that includes elements of education and conservation (Sutjiatmi and Edy, 2018). Bee Jay Bakau Resort (BJBR) is a mangrove conservation ecotourism area located in Mayangan Fishing Port, Probolinggo and has been established since 2012. The tourist activities

offered by BJBR include natural, historical, cultural, culinary, shopping, and educational tourism. Apart from offering beautiful natural views, especially the sea, BJBR also has facilities such as a multi-purpose meeting hall, cafe, swimming pool, restaurant, bungalows as a beautiful place to stay above sea level, lots of photo spots, education on flora and fauna in BJBR ecotourism, several playgrounds, and there is also a gift shop with interesting products. Meanwhile, Kampung Blekok, which is located in Klatakan Village, Situbondo Regency, is the only ecotourism site with thousands of fish birds living in the mangrove conservation area of Kampung Blekok. The types of fish birds in Kampung Blekok are very diverse, including the blekok rice field (*Ardeola speciosa*), the little egret (*Egretta garzetta*), the buffalo egret (*Bubulcus ibis*), the gray night kowak (*Nycticorax nycticorax*), the gray heron (*Ardea cinerea*), the cangak red (*Ardea purpurea*), and sea cockroach (*Butorides striatus*). This area is dominated by mangrove forests at 60% (Dassucik et al., 2023). This ecotourism exists as a form of awareness of the importance of mangrove conservation ecotourism which can be used as a protected forest for the surrounding community. Apart from that, the same as BJBR, the Kampung Blekok ecotourism also offers views of the beach that are no less beautiful, facilitated by a coffee shop, and craft souvenir shop, typical of the surrounding community as a shopping tour and educational tour which allows tourists to interact directly with mangroves from nurseries to making crafts.

The demand for natural tourism destinations for physical and mental relaxation has increased dramatically during and after the COVID-19 pandemic in many countries (Li et al., 2021). With the beautiful natural scenery and value that BJBR and Kampung Blekok offer to tourists, this ecotourism should be able to bring in a lot of new and old visitors after the COVID-19 pandemic. However, the number of tourists visiting BJBR has gone down since 2019 (Fattah et al., 2020). A similar thing was also experienced by the Kampung Blekok tourist attraction, where during the pandemic there was a decline in visitors. This makes it difficult for managers to improve and develop tourism and causes a reduction in the income received (Khomsah et al., 2022). In fact, in East Java, mangrove areas that contribute to conservation still lack tourist travel programs (Utami et al., 2022). The digital transformation that has occurred in the recent 4.0 revolution era has also been able to change the entire cycle

of the tourism ecosystem, including being the cause of a shift in cyber and visual culture for tourists. The impact of the shift in cyber culture that can be seen from digital transformation in the era of revolution 4.0 is a change in the decision-making process for traveling (Eddyono et al., 2021). Thus, changes in travel decision-making require ecotourism destination managers to adapt in managing digital marketing aspects of ecotourism to meet tourist needs to recover the level of tourist visits.

Mkwizu (2019) considers digital marketing opportunities to be very valuable for tourism industry. Digital technology has the potential to improve performance while facilitating ecotourism marketing activities. In addition, digital technology functions as an effective medium for generating ideas that drive ecotourism toward sustainability (Bruce et al., 2023). Dassucik et al. (2023) found that tourist information and comments on social media can influence the decision to visit an ecotourism destination. The COVID-19 pandemic has increased the use of social media communication at a time when people cannot leave their homes due to lockdown policies (Mele et al., 2023). However, the current literature focuses more on various factors such as brand image, brand trust, relationship quality, and service quality (Fu and Timothy, 2021). The lack of identified research on how ecotourism destination marketing managers utilize digital media during the global health crisis (Mele et al., 2023) as one of the ecotourism digital marketing strategies, explains the current lack of research in the ecotourism marketing literature and this gap needs to be addressed urgently.

It is important to understand the relationship between marketing and ecotourism because this will impact protected areas, conservation, and local communities. Much controversy concerns the marketing of ecotourism in its efforts to consider the dual objectives of protected areas and local communities on the one hand and the objectives of the tourism industry on the other. Meanwhile, ecotourism is also related to rural development. Activities of ecotourism have the potential to promote sustainable village development through proceeds from conserving such facilities (Bonye et al., 2021). It also can be a significant driver of economic growth in rural areas. By attracting tourists interested in natural environments and cultural heritage, ecotourism generates revenue through accommodation, food services,

local transportation, and guided tours (Boley and Green, 2016; Das and Chatterjee, 2015). This income can provide jobs and stimulate local businesses, reducing poverty and enhancing the overall economic well-being of rural communities (Martínez et al., 2019; Snyman, 2017). In many developing countries, ecotourism has become an essential source of income, enabling communities to diversify their economies beyond traditional agriculture (Das and Chatterjee, 2015; Cobbinah et al., 2017). The growth of ecotourism often necessitates the development of infrastructure in rural areas, such as roads, communication networks, and basic amenities (Cobbinah et al., 2017; Martínez et al., 2019). While this infrastructure is primarily intended to support tourism, it can also benefit local residents by improving access to education, healthcare, and other essential services (Snyman, 2017; Das and Chatterjee, 2015). Better infrastructure can help integrate rural communities into the broader economy and enhance their quality of life (Boley and Green, 2016; Martínez et al., 2019).

This research aims to develop an ecotourism digital marketing strategy towards appropriate sustainability with the target of increasing tourist visits after the COVID-19 pandemic using strengths, weaknesses, opportunities, and threats (SWOT) analysis. SWOT analysis uses systematic thinking and comprehensive diagnosis to prioritize solutions by considering heterogeneous stakeholders and their diverse perceptions (Joshi et al., 2018). By using SWOT analysis, we can develop appropriate ecotourism marketing strategies by considering internal and external factors. A single SWOT-TOWS-based planning tool is widely applied in planning processes in various scientific disciplines but is not sufficient for decision-making (Sahani, 2021). To overcome this problem, the Quantitative Strategic Planning Matrix (QSPM) approach was adopted for further analysis to find the best priority strategy in ecotourism planning. The QSPM method follows three steps in the decision-making process such as: i) constructing a model; ii) comparing criteria, alternatives, and weight calculations; and iii) priority synthesis (Papapostolou et al., 2020).

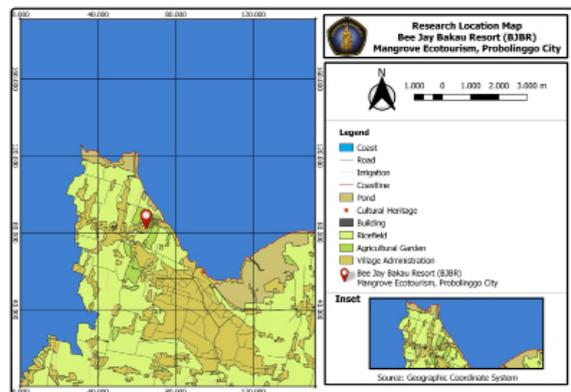
Materials and methods

Research location and time

This research was carried out from July to August 2023 and conducted in two mangrove conservation ecotourism areas, namely, Bee Jay Bakau Resort

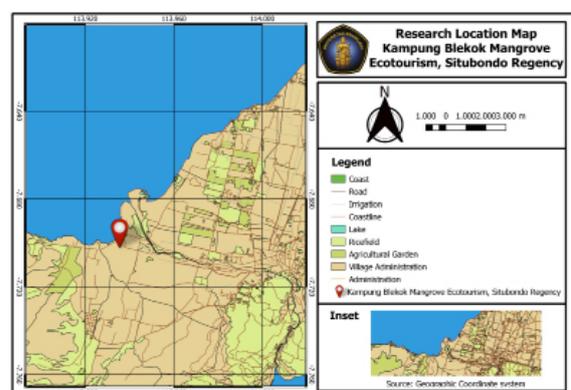
(BJBR) which is located in Mangunharjo Village, Mayangan District, Probolinggo City, East Java (Figure 1) and Kampung Blekok which is located in Klatakan Village, Kendit District, Regency. Situbondo, East Java (Figure 2). Bee Jay Bakau Resort (BJBR) is located on the coast of Mayangan Fishing Port, north of the Probolinggo City square. Before it was built as a tourist spot, the coastal area was mangrove forest land that was not well maintained and full of rubbish. This mangrove forest area is the final disposal site for the Banger River, so the condition is a turbid and unhealthy environment even though it is located in a strategic area. The idea arose to create the Bee Jay Bakau Resort (BJBR) tourist attraction based on the strategic conditions of the area.

The second location is Kampung Blekok which is a new tourist attraction developed in Klatakan Village, Kendit District, Situbondo Regency. This tourism was developed through an ecotourism concept based on community-based tourism (CBT). This is because the mangrove conservation area covering an area of approximately 6 hectares is a place where Blekok birds with various species live.



Source: Dataprocessed byauthors in ArcGIS

Figure 1: Beejay Bakau Resort (BJBR) Ecotourism Research Site.



Source: Dataprocessed byauthors in ArcGIS

Figure 2: Kampung Blekok Ecotourism Research Site.

Research method

This research is descriptive research with a qualitative and quantitative approach that objectively describes the actual state of the research object and is analyzed qualitatively and quantitatively using SWOT analysis to formulate ecotourism digital marketing development strategies and QSPM to determine the priority strategies used. So, the results obtained are very reliable, can be applied practically, and increase the possibility of success of the planned strategy (Bui et al., 2020).

Expert-based assessment is a highly recommended approach in research worldwide (Paliogiannis et al., 2019; Müller et al., 2020). Therefore, interviews with experienced experts and scholars in the tourism industry to project development strategy models have broad implications (Reichstein and Härtling, 2018) in determining evaluation criteria and suitability for the issues raised. The way to get research respondents is to use a purposive sampling technique, with the criteria that respondents are directly involved or have a deep understanding of ecotourism at Bee Jay Bakau Resort and Kampung Blekok, especially its marketing.

Data collection

Data was collected through a survey method using a questionnaire instrument and semi-structured interviews. Additionally, observation and documentation were carried out to gather data related to ecotourism marketing strategy. The interviewees consisted of ecotourism managers, ecotourism marketing employees, ecotourism visitors, local communities, the Kampung Blekok Tourism Awareness Group (POKDARWIS), and Situbondo Regency Environmental Service (DLH) employees. This data aims to answer research objectives on factors that can influence the sustainability of mangrove ecotourism in BJBR and Kampung Blekok, especially from a marketing perspective. The data collected is supported by literature studies such as books, articles, and other relevant information.

Data analysis

The development of a strategy or organization can be formulated after taking into account a combination of internal and external factors. Both factors must be considered in the SWOT analysis. SWOT analysis is the development of relationships or interactions between internal elements, namely strengths and weaknesses against external elements, namely opportunities and threats. The following are

the steps that must be taken in a SWOT analysis according to Salim and Siswanto (2019):

1. Identifying variables related to ecotourism marketing strategies development;
2. Classify internal and external variables;
3. Determine the weight of each variable;
4. Determine the scale or rating of the variables;
5. Determine the value or score of each SWOT aspect;
6. Calculating strength posture and competitive posture;
7. Describe the strategic position in the SWOT quadrant; and
8. Determine ecotourism marketing strategies development.

Factors are assigned coefficients between 0 and 1, indicating their significance in measuring strengths, opportunities, weaknesses, and threats. This coefficient represents the importance of a factor, whether it is an internal strength/weakness or an external opportunity/threat. Each factor is rated on a scale of 1 to 4, with 1 being a basic weakness, 2 being a minor weakness, 3 being a strength, and 4 being a greater strength/opportunity/threat. The final score for each factor is determined by multiplying its weight by its rating. If the value is greater than 1.5, it implies that the weaknesses outweigh the strengths; if the value is less than 1.5, it indicates that the strengths outweigh the weaknesses (Salim and Siswanto, 2019; Mallick et al., 2020).

The Quantitative Strategic Planning Matrix (QPM) is an analytical tool used to compare alternative actions. QSPM is widely used to simplify decision-making or problem-solving processes. Most efforts select the best strategy using input from other management techniques and easy components. This analysis is introduced to identify several marketing strategies needed to increase tourist visits which are listed below with several effective and quantitative measurements. The summation of the total attractiveness score (STAS) is carried out to determine the relative attractiveness of each key factor and related individual strategies (Mallick et al., 2020).

The QSPM stages are divided into three stages to make the most objective decisions using as many facts as possible (Figure 3). The first step in the overall strategic management analysis is identifying key strategic factors. This can be done using IFAS and EFAS. The IFAS Matrix is

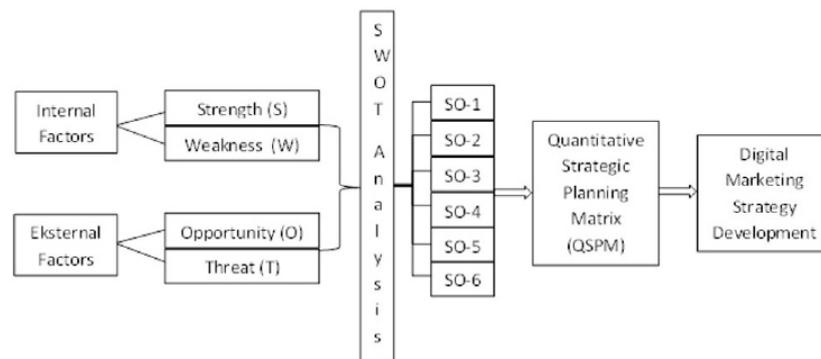


Figure 3. Stages of SWOT-QSPM analysis for digital marketing strategy development: mangrove ecotourism

Source: Authors

Figure 3: Stages of SWOT-QSPM analysis for digital marketing strategy development: mangrove ecotourism

a strategic management tool for auditing or evaluating key strengths and weaknesses in functional areas of a business. The EFAS matrix method is a strategic management tool often used to assess, visualize, and prioritize the opportunities and threats facing businesses today. The IFAS and EFAS matrices are strategy formulation tools that can be used to evaluate how a company is performing in relation to identified internal strengths and weaknesses. After identifying and analyzing key strategic factors as input to QSPM, the most attractive strategy can be formulated. This can be done using strategic management tools in stage 2 which in this research uses SWOT analysis. The strategic management method at stage 1 is carried out to determine the main strategic factors. Based on the results of the analysis in stage 2, it is used to formulate possible strategies. Next, in stage 3, through comparison of alternative QSPM strategies, the one that best suits the objectives of this research is selected. Stage 2 provides the information needed by researchers to prepare a QSPM conceptually, QSPM in stage 3 determines the relative attractiveness of the various strategies that have been created based on the extent to which external and internal key success factors are utilized or improved. The relative attractiveness of each strategy is calculated by determining the cumulative impact of each external and internal critical success factor (Ghorbani et al., 2015).

Results and discussion

Internal Factors Analysis Strategy (IFAS)

Regarding strengths and weaknesses, 7 strength factors and 7 weakness factors were identified

for the internal factor analysis strategy (IFAS). The weight allocated to the BJBR strength factor is between 0.03 - 0.16 and the rating ranges between 3 and 4. The BJBR weakness factor has a rating between 1 - 3 and the allocated weight is between 0.03 - 0.10. Where the BJBR ecotourism ticket price factor has the highest score with a value of 0.48 on strengths and the lack of promotional updates via social media has the lowest score on BJBR's weaknesses with a value of 0.03. The final IFAS BJBR identification score was 2.22 for strengths and 0.82 for weaknesses (Table 1). So, the value of BJBR's internal factors shows that strengths are superior to weaknesses.

The weight allocated to the strength factor of Kampung Blekok is between 0.04 - 0.15 and the rating ranges between 3 and 4. The weakness factor of Kampung Blekok has a rating between 1 - 4 and the allocated weight is between 0.02 - 0.11. Where the Kampung Blekok ecotourism ticket price factor has the highest score with a value of 0.6 on strengths and non-routine promotion via TV and print media has the lowest score on the weaknesses of Kampung Blekok with a value of 0.02. The final IFAS identification score for Kampung Blekok was 1.89 for strengths and 1.54 for weaknesses (Table 1). So, the value of Kampung Blekok's internal factors shows that strengths are still superior to weaknesses.

Bee Jay Bakau Resort				Kampung Blekok		
Internal Factors	Weight	Rating	Score	Weight	Rating	Score
Strength			2,22			1,89
- The variety of tourist and educational objects at the BeeJay Bakau Resort/Blekok Village ecotourism	0.09	4	0.36	0.07	4	0.28
- There are per-season promos as part of the content on social media	0.09	4	0.36	0.06	3	0.18
- The service of the tour crew at the BeeJay Bakau Resort/ Blekok Village ecotourism is carried out in a friendly manner	0.03	3	0.09	0.04	4	0.16
- Ecotourism BeeJay Bakau Resort/Kampung Blekok provides event and gathering venues for visitors	0.07	3	0.21	0.07	3	0.21
- The managers and employees are committed to promoting ecotourism at BeeJay Bakau Resort/Blekok Village (online and offline)	0.09	4	0.36	0.06	3	0.18
- BeeJay Bakau Resort/Kampung Blekok Ecotourism has wide-reaching promotional media in the form of Instagram, Facebook, YouTube, & Website	0.09	4	0.36	0.07	4	0.28
- BeeJay Bakau Resort/Blekok Village ecotourism ticket prices are relatively affordable	0.16	3	0.48	0.15	4	0.60
Weakness			0.82			1.54
- Less intensive promotions carried out	0.02	1	0.02	0.07	3	0.21
- Customer surveys still use traditional methods	0.02	1	0.02	0.04	2	0.08
- Don't have a professional marketing team yet	0.07	2	0.14	0.11	4	0.44
- Lack of promotional updates via social media	0.03	1	0.03	0.08	3	0.24
- Promotion via TV and print media is not routine (incidental)	0.05	2	0.10	0.02	1	0.02
- Limited funding to support marketing activities	0.07	3	0.21	0.07	4	0.28
- The use of information technology and social media has not been optimal to promote ecotourism at BeeJay Bakau Resort/ Blekok Village	0.10	3	0.30	0.09	3	0.27

Source: Author computation, 2023

Table 1: Internal Factors Analysis Strategy (IFAS) on BJBR and Kampung Blekok Ecotourism.

External Factors Analysis Strategy (EFAS)

There are 7 factors related to opportunities and 7 factors identified as threats in the external factor analysis strategy (EFAS). Regarding the opportunities for BJBR and Kampung Blekok both weight 0.07 - 0.13 with a rating of between 3 and 4. The back-to-nature tourism trend is the influence of the opportunity with the highest score (0.52) as an opportunity for BJBR and Kampung Blekok which can be used to develop marketing strategies. Meanwhile, the BJBR threat weights 0.02 and 0.09 with a rating of between 1 - 4. This is different from Kampung Blekok where the threat weight is between 0.02 - 0.08 with a rating of between 1 - 3. The emergence of ecotourism competitors who have objects A more innovative and attractive tourist attraction is a threat that does not affect the ecotourism of BJBR and Kampung Blekok with the lowest score (0.03) (Table 2).

The final EFAS BJBR identification score is 2.44 for opportunities and 0.84 for threats, while 2.73 is the final score for Kampung Blekok's opportunities and threats with a score of 0.68. So, the value of the external factors of BJBR and Kampung Blekok shows that the influence of opportunities is higher than the influence of threats.

Bee Jay Bakau Resort				Kampung Blekok		
External Factors	Bobot	Rating	Skor	Bobot	Rating	Skor
Opportunity			2.44			2.73
- There is digital marketing technology in the 5.0 era that can support ecotourism promotion activities	0.1	4	0.4	0.07	3	0.21
- The availability of social media for massive and cheap dissemination of ecotourism information	0.1	4	0.4	0.1	4	0.4
- There is a back-to-nature tourism trend	0.13	4	0.52	0.13	4	0.52
- here are accommodation facilities available around the Bee Jay Bakau Resort/Kampung Blekok ecotourism location	0.09	3	0.27	0.1	4	0.4
- Availability of facilities for promotion through broadcast media (TV, radio)	0.08	3	0.24	0.1	4	0.4
- Availability of facilities for promotion through print media	0.07	3	0.21	0.1	4	0.4
- Easy internet access to search for and share information related to ecotourism in real-time	0.1	4	0.4	0.1	4	0.4
Threat			0.84			0.68
- The marketing technology developed by competing ecotourists is superior	0.03	2	0.06	0.02	2	0.04
- The emergence of ecotourism competitors who have more innovative and attractive tourist attractions	0.03	1	0.03	0.03	1	0.03
- In short, the length of stay or the length of stay of tourists in the area around the Bee Jay Bakau Resort/Kampung Blekok ecotourism area	0.03	2	0.06	0.03	2	0.06
- Minimal investment in supporting activities in the tourism sector at Bee Jay Bakau Resort/Kampung Blekok	0.02	2	0.04	0.02	2	0.04
- There are few ecotourism visitors on days other than weekends	0.07	4	0.28	0.05	3	0.15
- There is a tendency for tourists to turn to other more popular tourist attractions	0.09	3	0.27	0.08	3	0.24
- Varying people's understanding of the importance of ecotourism	0.05	2	0.1	0.06	2	0.12

Source: Author computation, 2023

Table 2. External Factor Analysis Strategy (EFAS) on BJBR and Kampung Blekok Ecotourism.

Development of Ecotourism Marketing Strategy

SWOT analysis is used effectively after selecting and evaluating the most important internal and external factors for developing a mangrove ecotourism marketing strategy. To analyze SWOT, it is necessary to determine strength posture and competitive posture first. The SWOT model analysis is shown by the SO, ST, WO, and WT pairwise matrices which determine the validation of the SWOT model for marketing strategies in the research area (Table 3). The results of the SWOT analysis show that the strength the weaknesses and the influence of opportunities for BJBR and Kampung Blekok is also greater than the threats, so it can be concluded that the position of the mangrove ecotourism marketing strategy of BJBR and Kampung Blekok is in quadrant I, where in this position the strategy is appropriate. used is the S-O strategy, namely using current

strengths to take advantage of existing opportunities. Specifically, you can use the SWOT analysis calculations in Table 3 to see the SWOT coordinates of each ecotourism where the BJBR coordinates are at points $x = 1.4$ and $y = 1.6$ while Kampung Blekok is at coordinates $x = 0.35$ and $y = 2.05$.

This condition is a very favorable situation where this position has positive strengths and opportunities. So, the strategy implemented is to support aggressive policies (growth-oriented strategy). This indicates a very strong and potential strategy. Therefore, researchers use a SWOT model based on strategic planning that utilizes existing strengths and opportunities, namely by creating a strength-opportunity (SO) strategy:

SO-1: Upgrading ecotourism digital promotional media to follow 5.0 technology which continues

IFAS				EFAS			
BJBR		Kampung Blekok		BJBR		Kampung Blekok	
Categories	Total Score	Categories	Total Score	Categories	Total Score	Categories	Total Score
Strength (S)	2.22	Strength (S)	1.89	Opportunity (O)	2.44	Opportunity (O)	2.73
Weakness (W)	0.82	Weakness (W)	1.54	Threat (T)	0.84	Threat (T)	0.68
Total (S-W)	1.4		0.35	Total (O-T)	1.6		2.05

Source: Author computation, 2023

Table 3: SWOT Analysis of Marketing Strategy on BJBR and Kampung Blekok.

to develop and current trends. The continuous introduction of technological evolution, especially new trends such as the Internet of Things, into the daily lives of tourists has broken down barriers such as geographical or time boundaries. Digital marketing allows marketers to measure the results of their actions accurately (even in real time). This facilitates any changes to energy promotional materials or consumer targeting to optimize communications or advertising (Dimitrios et al., 2023).

SO-2: Optimize the use of information technology and social media as promotional media, especially the frequency of promotions. Digital marketing allows travelers to engage with destinations and local communities. Social media applications such as Facebook, YouTube, Twitter, Instagram, Snapchat, LinkedIn, Telegram, and WhatsApp Business are often used as digital marketing interactions to encourage consumers to research and plan their travel destinations (Toral et al., 2018; Stylidis, 2022).

SO-3: Conduct many comparative studies with other ecotourists to learn from each other regarding digital marketing. The challenge for ecotourism marketing regarding digital marketing, is staffing the digital marketing department with the right professionals, as the staff must know how to manage digital communication and advertising channels, and will be systematically informed about the new possibilities constantly offered by technology (Ahmed et al., 2017). By conducting many comparative studies with other ecotourists who have implemented digital marketing, there will be many things that can be learned from each other and applied to the digital marketing of each ecotourism that perhaps have not been implemented so far and have the potential to increase the level of tourist visits without having to spend a large budget. This comparative study activity can be carried out offline or online to reduce costs, such as joint IG live, podcast content and the like. Apart from comparative studies, this activity can also be used as a form of promotion

and establishing cooperation between ecotourists.

SO-4: Highlight the strengths and uniqueness of each ecotourism as interesting marketing content. Using digital marketing with relevant and interesting content to promote a destination through high-quality images, videos and blog posts can influence potential tourists to choose a destination over others (Toral et al., 2018; Kim and Kim, 2020).

SO-5: Establish and strengthen cooperation with local ecotourism, surrounding communities, and local government agencies or institutions in creating new programs such as education and tourism packages. Nickerson et al. (2016) linked sustainable tourist behavior to other important attributes for destination marketers, revealing that sustainable tourists spend more money, stay longer, and contribute to the tourist destination's triple bottom line.

SO-6: Utilize other electronic media (TV, radio and print media) in promoting ecotourism. Promoting a positive image of a destination through social media and other channels can help create positive perceptions among tourists (Fu and Timothy, 2021) and therefore reflect the level of individual feelings (positive or negative) towards a behavior of interest (Armutcu et al., 2023).

Quantitative Strategic Planning Matrix (QSPM)

The QSPM strategy is formulated based on Strength and Opportunity (SO) and arranged using the SWOT matrix method. It is calculated by adding up the total attractiveness scores in each category (by column) of the QSPM (Table 4). The calculated STAS score shows which score is the most attractive considering all external and internal factors. Where the Attractiveness Score (AS) and Total Attractiveness Scores (TAS) in QSPM consist of how attractive each factor is in relation to each alternative strategy. The range of attractive scores (AS) includes 1 = not interesting, 2 = not interesting, 3 = quite interesting, and 4 = interesting.

Factors	Bobot	Strategy											
		SO 1		SO 2		SO 3		SO 4		SO 5		SO 6	
		AS	TAS										
S1	0.09	4	0.36	3	0.27	3	0.27	4	0.36	4	0.36	3	0.27
S2	0.09	3	0.27	3	0.27	4	0.36	4	0.36	4	0.36	3	0.27
S3	0.03	4	0.12	4	0.12	4	0.12	4	0.12	4	0.12	3	0.09
S4	0.07	4	0.28	3	0.21	3	0.21	4	0.28	3	0.21	3	0.21
S5	0.09	3	0.27	4	0.36	4	0.36	4	0.36	3	0.27	3	0.27
S6	0.09	3	0.27	4	0.36	3	0.27	4	0.36	4	0.36	3	0.27
S7	0.16	4	0.64	4	0.64	3	0.48	4	0.64	3	0.48	4	0.64
W1	0.02	3	0.06	3	0.06	4	0.08	3	0.06	4	0.08	3	0.06
W2	0.02	3	0.06	3	0.06	4	0.08	3	0.06	3	0.06	3	0.06
W3	0.07	3	0.21	3	0.21	4	0.28	4	0.28	4	0.28	3	0.21
W4	0.03	3	0.09	4	0.12	4	0.12	3	0.09	4	0.12	3	0.09
W5	0.05	4	0.2	4	0.2	4	0.2	4	0.2	4	0.2	3	0.15
W6	0.07	4	0.28	4	0.28	3	0.21	3	0.21	3	0.21	3	0.21
W7	0.1	3	0.3	3	0.3	3	0.3	3	0.3	3	0.3	3	0.3
O1	0.1	4	0.4	4	0.4	3	0.3	3	0.3	3	0.3	4	0.4
O2	0.1	3	0.3	4	0.4	3	0.3	3	0.3	3	0.3	3	0.3
O3	0.13	4	0.52	3	0.39	4	0.52	4	0.52	3	0.39	3	0.39
O4	0.09	3	0.27	3	0.27	4	0.36	4	0.36	3	0.27	3	0.27
O5	0.08	4	0.32	3	0.24	3	0.24	3	0.24	4	0.32	4	0.32
O6	0.07	4	0.28	3	0.21	3	0.21	3	0.21	4	0.28	4	0.28
O7	0.1	3	0.3	3	0.3	3	0.3	4	0.4	4	0.4	3	0.3
T1	0.03	3	0.09	3	0.09	3	0.09	4	0.12	4	0.12	4	0.12
T2	0.03	4	0.12	3	0.09	3	0.09	4	0.12	4	0.12	4	0.12
T3	0.03	4	0.12	4	0.12	3	0.09	4	0.12	4	0.12	4	0.12
T4	0.02	4	0.08	4	0.08	3	0.06	3	0.06	3	0.06	3	0.06
T5	0.07	3	0.21	4	0.28	3	0.21	3	0.21	3	0.21	3	0.21
T6	0.09	3	0.27	3	0.27	3	0.27	4	0.36	3	0.27	3	0.27
T7	0.05	3	0.15	3	0.15	3	0.15	3	0.15	3	0.15	3	0.15
Priority index		6.84		6.75		6.53		7.15		6.72		6.41	

Note: Description: S1 (1st Strength), S2 (2nd Strength), S3 (3rd Strength), S4 (4th Strength), S5 (5th Strength), S6 (6th Strength), S7 (7th Strength), W1 (1st Weakness), W2 (2nd Weakness), W3 (3rd Weakness), W4 (4th Weakness), W5 (5th Weakness), W6 (6th Weakness), W7 (7th Weakness), O1 (1st Opportunity), O2 (2nd Opportunity), O3 (3rd Opportunity), O4 (4th Opportunity), O5 (4th Opportunity -5), O6 (6th Opportunity), O7 (7th Opportunity), T1 (1st Threat), T2 (2nd Threat), T3 (3rd Threat), T4 (4th Threat), T5 (5th Threat), T6 (6th Threat), T7 (7th Threat), SO1(1st Strength-Opportunity), SO2 (2nd Strength-Opportunity), SO3 (Strength- 3rd Opportunity), SO4 (4th Strength-Opportunity), SO5 (5th Strength-Opportunity), SO6 (6th Strength-Opportunity).

Source: Author compilation, 2023

Table 4: Quantitative Strategic Planning Matrix (QSPM) for Digital Marketing Strategy Development on BJBR and Kampung Blekok.

The BJBR and Kampung Blekok mangrove ecotourism marketing strategies development are classified according to their priorities and strategic weights in the SWOT matrix and attractiveness scores in the QSPM approach. The strategy with the highest appeal is highlighting the strengths and uniqueness of each ecotourism as one of the attractive marketing content with a score of 7.15, followed by upgrading ecotourism digital promotional media following technology 5.0 which continues to develop with a total attraction value of 6.84 and in third place. The top position is occupied by the strategy of optimizing the use

of information technology and social media as promotional media, especially promotional frequency (6.75). Even though all of these strategies look real, the SO-4, SO-1, and SO-2 strategies which obtained the highest total attractiveness score could be the best strategy for developing a mangrove ecotourism marketing strategy to increase the number of tourist visits after the COVID-19 pandemic. In addition, the SO-5, SO-3, and SO-6 strategies are interesting but require more feasibility to achieve sustainability goals in the field of mangrove ecotourism marketing strategies development in the future. In other

words, SO-4, SO-1, and SO-2 strategies can be implemented as soon as possible as short-term marketing strategies and using SO-5, SO-3, and SO-6 strategies as long-term marketing strategies that can be implemented after seeing the results of developments in the main strategies that must be carried out first.

While the QSPM method offers a systematic approach to prioritizing strategies by evaluating attractiveness scores for each factor, it has certain limitations that must be acknowledged. First, the method is highly dependent on the subjectivity of the attractiveness scores (AS) and the Total Attractiveness Scores (TAS), which may vary based on the evaluator's judgment or bias. The weighting of factors is also subjective and may not always reflect their true relative importance in real-world scenarios. Additionally, the QSPM method does not account for the dynamic and evolving nature of external environments or unforeseen changes in market conditions, which could influence the actual success of a given strategy. For example, external threats such as sudden changes in tourism trends or technological disruptions could alter the feasibility and attractiveness of the strategies identified in this study. Furthermore, the QSPM does not fully consider the practical challenges and resource constraints that may affect the implementation of the identified strategies, particularly for smaller or less-resourced ecotourism businesses.

Therefore, while the strategies identified in this analysis, especially the SO-4, SO-1, and SO-2 strategies show promise, it is important to recognize that their actual effectiveness may depend on various uncontrollable factors. To mitigate these limitations, it is recommended that future studies incorporate more.

Discussion

This study aims to design a relevant digital marketing strategy for mangrove ecotourism in the post-COVID-19 era, considering the unique empirical situation of each ecotourism site. The findings highlight a significant downturn in visitor numbers at coastal ecotourism sites like BJBR and Kampung Blekok, particularly during non-weekend days, as well as a decline in promotional activities, both online and offline. This disruption in visitation and marketing efforts underscores the challenges faced by these ecotourism destinations, many of which were already struggling with a lack of professionalism and inconsistent promotional strategies.

SWOT analysis of BJBR and Kampung Blekok reveals that these ecotourism destinations still possess considerable strengths, such as picturesque natural attractions, affordable ticket prices, community involvement in lodging, and the availability of social media platforms. However, these strengths are underutilized, and the primary strategic opportunity identified is the need to optimize the use of information technology and social media. Enhancing the frequency and quality of digital promotions, particularly through targeted social media campaigns, emerges as the most critical priority to revitalize tourism post-pandemic.

This study's findings are consistent with broader global trends in the tourism industry, particularly the growing importance of digital marketing in influencing travel decisions. Numerous global studies have shown that a significant portion of travel decisions is influenced by information found on digital platforms. Research by Magano and Cunha (2020); Islam (2021); de Amorim et al. (2022); Khan et al. (2022) emphasizes the critical role of online travel websites and social media in shaping traveler choices. The ease of access to information on platforms such as websites and social media is an essential factor that drives tourists to select particular destinations. For example, Lam et al. (2020) discuss the positive impact of online co-creation platforms on enhancing destination attractiveness and customer satisfaction, which directly supports the case for utilizing digital marketing strategies in ecotourism.

Moreover, Racherla and Friske (2012), highlight that easy-to-access content about tourist attractions plays a key role in tourists' decision-making process, facilitating the re-selection of destinations. This research supports the notion that digital presence is paramount in fostering repeat visits and brand loyalty. Our findings align with this perspective, reinforcing the importance of developing a digital marketing strategy that not only increases visibility but also engages travelers in interactive ways.

The integration of Information and Communication Technology (ICT) into tourism marketing has been recognized globally as a critical driver for post-pandemic recovery. By digitizing promotional activities, such as utilizing social media for targeted campaigns, ecotourism destinations can reach a broader audience more efficiently and cost-effectively. This shift to digital platforms enables the promotion of tourism products and services, facilitates the booking of travel

packages, and allows for the collection of valuable data on tourists' preferences and behaviors. Such digital transformations have been linked to improved engagement, as evidenced by studies from Yuniarta et al. (2023) and Sujono et al. (2023) which confirm that enhanced online interactions lead to higher customer acquisition and satisfaction, ultimately generating greater revenue for ecotourism operators.

In line with global best practices, the research by Armutcu et al. (2023) calls for developing an online content strategy that resonates with tourists' psychological needs, influences social media usage, and confirms their expectations. This comprehensive approach not only drives visitor satisfaction but also stimulates a higher intention to visit, which is particularly crucial for destinations recovering from the downturn caused by the COVID-19 pandemic.

The findings of this study suggest that optimizing digital marketing efforts, particularly through social media platforms, and integrating Information and Communication Technology (ICT) into operations can help BJBR and Kampung Blekok ecotourism destinations leverage global digital trends to enhance visitor engagement, facilitate recovery, and foster sustainable growth in the post-pandemic era. The significant potential for digital interactions to revitalize ecotourism underscores the broader implication that digital marketing strategies are no longer optional but essential for ensuring the sustainability of ecotourism worldwide.

Moreover, these findings are not only relevant to BJBR and Kampung Blekok but also align with broader global trends in ecotourism marketing. They highlight the growing importance of digital platforms and social media in driving tourism recovery, as destinations around the world increasingly rely on digital marketing strategies to engage a global audience. Research has shown that an active digital presence and online engagement are critical for destinations to remain competitive and attract international visitors (Magano and Cunha, 2020; Lam et al., 2020). The strategies proposed for these local ecotourism sites—particularly the emphasis on optimizing information technology and social media—reflect these global trends, emphasizing the necessity of embracing digital transformation in tourism marketing.

Additionally, the study reinforces the importance of sustainability in ecotourism marketing, a key

priority for ecotourism destinations worldwide. As travelers increasingly seek environmentally responsible experiences, effectively communicating sustainability efforts through digital channels becomes vital. By integrating both local and global trends, this study not only offers a roadmap for enhancing the marketing strategies of BJBR and Kampung Blekok but also contributes to the broader conversation on how digital marketing can help ecotourism destinations improve visibility, engage diverse audiences, and promote sustainable tourism practices. These findings provide valuable insights for ecotourism stakeholders globally, illustrating how digital marketing strategies can address local challenges while aligning with global tourism trends.

The identified trends, particularly the growing reliance on digital marketing and social media in ecotourism, also have important practical implications for strategic planning and marketing activities. Ecotourism managers can leverage these trends to design more targeted and cost-effective marketing campaigns, using digital platforms to reach a global audience and foster stronger customer engagement. By aligning their strategies with these digital trends, ecotourism destinations can not only enhance their competitiveness but also ensure long-term sustainability through increased visibility and stronger connections with potential tourists. This approach will be crucial for adapting to the evolving tourism landscape and securing the future growth of ecotourism in the digital era.

In addition to the findings on digital marketing trends, it is important to recognize the growing global interest in sustainable tourism and the need for climate change adaptation in ecotourism. As tourists increasingly prioritize environmental responsibility, there is a strong demand for ecotourism destinations to integrate sustainability into their offerings. This shift presents an opportunity for destinations like BJBR and Kampung Blekok to align their marketing strategies with sustainable tourism practices, such as promoting eco-friendly activities, supporting conservation efforts, and showcasing their commitment to climate adaptation.

The integration of sustainability into digital marketing strategies can not only attract a more conscientious traveler but also enhance the long-term viability of ecotourism destinations. As climate change increasingly affects coastal regions and ecosystems, ecotourism destinations must adapt to these changes by implementing

resilience measures and promoting them in their marketing. By focusing on sustainability and climate change adaptation in their marketing messages, these destinations can strengthen their brand and appeal to a global audience that values environmental stewardship.

Conclusion

This study provides valuable insights into the development of digital marketing strategies for mangrove ecotourism at BJBR and Kampung Blekok, with a focus on enhancing visitor numbers in the post-pandemic era. By applying the SWOT analysis, we identified that both ecotourism sites are positioned in quadrant I, which indicates a favorable situation for utilizing strengths to capitalize on available opportunities. The findings suggest that the most effective approach for developing digital marketing strategies is the application of aggressive and vertical integrity strategies, allowing these ecotourism sites to compete with other destinations. Among the six Strength-Opportunity (S-O) strategies identified, the highest priority is optimizing the use of information technology and social media as promotional media, particularly increasing the frequency of promotions.

These findings contribute to the existing body of knowledge by emphasizing the critical role of digital marketing in the recovery and growth of ecotourism, especially after the COVID-19 pandemic. The research highlights the importance of leveraging digital platforms, such as social media, to effectively engage potential tourists and increase brand visibility. Moreover, it

underscores the relevance of Information and Communication Technology (ICT) in creating dynamic, cost-effective marketing campaigns tailored to the needs of modern travelers.

Furthermore, this study aligns with global trends in the tourism sector, where digital marketing and social media have become key drivers of travel decisions (Magano & Cunha, 2020; Islam, 2021; de Amorim et al., 2022). It contributes to the literature on ecotourism by proposing actionable strategies for ecotourism destinations to enhance their competitive advantage and visitor engagement in the digital era. Practically, the study provides a roadmap for ecotourism managers to implement strategies that not only boost short-term tourist visits but also establish long-term sustainability in the marketing of mangrove ecotourism.

Overall, this research contributes to the understanding of digital marketing's impact on ecotourism, offering both theoretical insights and practical guidance for future marketing strategies. It suggests that, by effectively utilizing digital tools and focusing on strategic promotions, mangrove ecotourism can recover and thrive in an increasingly competitive and digitalized tourism market.

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References

- [1] Ahmed, E., Yaqoob, I., Hashem, I. A. T., Khan, S. F., Ahmed, A., Imran, M. and Vasilakos, A. V. (2017) "The role of big data analytics in Internet of Things", *Computer Networks*, Vol. 129, pp. 459-471. ISSN 1389/1286. DOI 10.1016/j.comnet.2017.06.013.
- [2] Armutcu, B., Tan, A. Amponsah, M., Parida, S. and Ramkissoon, H. (2023) "Tourist behaviour: The role of digital marketing and social media", *Acta Psychologica*, Vol. 240(June). E-ISSN 1873-6297. DOI 10.1016/j.actpsy.2023.104025
- [3] Bonye, S. Z., Yiridomoh, G. Y. and Dayour, F. (2021) "Do ecotourism sites enhance rural development in Ghana? Evidence from the Wechiau Community Hippo Sanctuary Project in the Upper West Region, Wa, Ghana", *Journal of Ecotourism*, Vol. 21, No. 2, pp. 121-146. E-ISSN 1747-7638. DOI 10.1080/14724049.2021.1922423.

- [4] Bruce, E., Shurong, Z., Ying, D., Yaqi, M., Amoah, J. and Egala, S. B. (2023) "The Effect of Digital Marketing Adoption on SMEs Sustainable Growth: Empirical Evidence from Ghana", *Sustainability*, Vol. 15, No. 6, p. 4760. ISSN 2071-1050. DOI 10.3390/su15064760.
- [5] Bui, T. D., Tsai, F. M., Tseng, M. L. and Ali, M. H. (2020) "Identifying sustainable solid waste management barriers in practice using the fuzzy Delphi method", *Resources, Conservation and Recycling*, Vol. 154, p. 104625. E-ISSN 1879-0658. DOI 10.1016/j.resconrec.2019.104625.
- [6] Dassucik, D., Rasyidi, A. H., Iqbal, M. A. and Agus, R. P. (2023) "Pengaruh atribut produk wisata dan word of mouth terhadap keputusan berkunjung pada objek wisata Kampung Blekok Desa Klatakan Situbondo", *Jurnal IKA PGSD (Ikatan Alumni PGSD) UNARS*, Vol. 13, No. 1, pp. 241–256. E-ISSN 2656-4459. DOI 10.36841/pgsdunars.v13i1.3143 . (In Indonesian).
- [7] de Amorim, L. A., Sousa, B. B., Dias, A. L. and Santos, V. R. (2022) "Exploring the outcomes of digital marketing on historic sites' visitor behaviour", *Journal of Cultural Heritage Management and Sustainable Development*, Vol. 14, No. 6, pp. 934-949. E-ISSN 2044-1274, ISSN 2044-1266. DOI 10.1108/JCHMSD-11-2021-0202.
- [8] Del P. Pablo-Romero, M. and Molina, J. A. (2013) "Tourism and economic growth: A review of empirical literature", *Tourism Management Perspectives*, Vol. 8, pp. 28-41. ISSN 2211-9736. DOI 10.1016/J.TMP.2013.05.006.
- [9] Dimitrios, B., Ioannis, R., Angelos, N. and Nikolaos, T. (2023) "Digital Marketing: The Case of Digital Marketing Strategies on Luxurious Hotels", *Procedia Computer Science*, Vol. 219, pp. 688-696. ISSN 1877-0509. DOI 10.1016/j.procs.2023.01.340.
- [10] Eddyono, F., Darusman, D., Sumarwan, U. and Sunarminto, F. (2021) "Optimization model: the innovation and future of e-ecotourism for sustainability", *Journal of Tourism Futures*, pp. 1-18. ISSN 2055-5911. DOI 10.1108/JTF-03-2021-0067.
- [11] Fattah, M., Utami, T. N. and Sofiati, D. (2020) "Tourist Visits Forecasting and Carrying Capacity of Bee Jay Bakau Resort Probolinggo", *Jurnal Analisis Kebijakan Kehutanan*, Vol. 17, No. 2, pp. 153-163. E-ISSN 2502-6267. DOI 10.20886/jakk.2020.17.2.151-161.
- [12] Fu, Y. and Timothy, D. J. (2021) "Social media constraints and destination images: The potential of barrier-free internet access for foreign tourists in an internet-restricted destination", *Tourism Management Perspectives*, Vol. 37, pp. 100771. ISSN 2211-9736. DOI 10.1016/j.tmp.2020.100771.
- [13] Ghorbani, A., Raufirad, H. and Jafarian, M. (2015) "Ecotourism sustainable development strategies using SWOT and QSPM model: A case study of Kaji Namakzar Wetland, South Khorasan Province, Iran", *Tourism Management Perspectives*, 16, pp. 290-297. ISSN 2211-9736. DOI 10.1016/j.tmp.2015.09.005.
- [14] Islam, Md. T. (2021) "Applications of Social Media in the Tourism Industry: A Review", *SEISENSE Journal of Management*, Vol. 4, No. 1, pp. 59-68. ISSN 2617-5770. DOI 10.33215/sjom.v4i1.556.
- [15] Joshi, O., Parajuli, R., Kharel, G., Poudyal, N. C. and Taylor, E. (2018) "Stakeholder opinions on scientific forest management policy implementation in Nepal", *PLOS ONE*, Vol. 13, No. 9, p. e0203106. ISSN 1932-6203. DOI 10.1371/journal.pone.0203106.
- [16] Khan, M. M., Siddique, M., Yasir, M., Qureshi, M. I., Khan, N. and Safdar, M. Z. (2022) "The Significance of Digital Marketing in Shaping Ecotourism Behaviour through Destination Image", *Sustainability*, Vol. 14, No. 12, p. 7395. E-ISSN 2071-1050. DOI 10.3390/su14127395.
- [17] Khomsah, N. R., Carolina, A. and Abrori, R. (2022) "Faktor Internal Organisasi Dan Pencegahan Fraud Pada Pengelolaan Wisata Mangrove Di Madura", *Ultimaccounting Jurnal Ilmu Akuntansi*, Vol. 14, No. 2, pp. 295-311. ISSN 2541-5476. DOI 10.31937/akuntansi.v14i2.2867.
- [18] Kim, M. and Kim, J. (2020) "Destination Authenticity as a Trigger of Tourists" Online Engagement on Social Media", *Journal of Travel Research*, Vol. 59, No. 7, pp. 1238–1252. E-ISSN 1552-6763. DOI 10.1177/0047287519878510.

- [19] Lam, J. M. S., Ismail, H. and Lee, S. (2020) "From desktop to destination: User-generated content platforms, co-created online experiences, destination image and satisfaction", *Journal of Destination Marketing and Management*, Vol.18, p. 100490. E-ISSN 2212-5752. DOI 10.1016/j.jdmm.2020.100490.
- [20] Lee, T. H. and Jan, F. H. (2019) "Can community-based tourism contribute to sustainable development? Evidence from residents' perceptions of the sustainability", *Tourism Management*, 70, pp. 368-380. ISSN 0261-5177. DOI 10.1016/j.tourman.2018.09.003.
- [21] Li, J., Wang, G., Wang, Z., Wang, W., Chen, H. and He, M. (2021) "Comparative study of the physiological and psychological effects of forest and urban auditory stimulus on humans", *International Journal of Geoheritage and Parks*, Vol. 9, No. 3, pp. 363-373. E-ISSN 2577-445X, ISSN 2577-4441. DOI 10.1016/j.ijgeop.2021.09.001.
- [22] Magano, J. and Cunha, M. N. (2020) "Digital marketing impact on tourism in Portugal: A quantitative study", *African Journal of Hospitality, Tourism and Leisure*, Vol. 9, No. 1, pp. 1-19. ISSN. 2223814X. [Online]. Available: https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_75_vol_9_1__2020_portugal.pdf [Accessed: Sept. 20, 2024].
- [23] Mallick, S. K., Rudra, S. and Samanta, R. (2020) "Sustainable ecotourism development using SWOT and QSPM approach: A study on Rameswaram, Tamil Nadu", *International Journal of Geoheritage and Parks*, Vol. 8, No. 3, pp. 185-193. E-ISSN 2577-445X, ISSN 2577-4441. DOI 10.1016/j.ijgeop.2020.06.001.
- [24] Mele, E., Filieri, R. and De Carlo, M. (2023) "Pictures of a crisis. Destination marketing organizations' Instagram communication before and during a global health crisis", *Journal of Business Research*, Vol. 163, p. 113931. ISSN 0148-2963. DOI 10.1016/j.jbusres.2023.113931.
- [25] Mkwizu, K. H. (2019) "Digital marketing and tourism: opportunities for Africa", *International Hospitality Review*, Vol. 34, No. 1, pp. 5-12. E-ISSN 2516-8142 . DOI 10.1108/ihr-09-2019-0015.
- [26] Müller, F., Bicking, S., Ahrendt, K., Bac, D. K., Blindow, I., Fürst, C., Haase, P., Kruse, M., Kruse, T., Ma, L., Perennes, M., Ruljevic, I., Schernewski, G., Schimming, C.-G., Schneiders, A., Schubert, H., Schumacher, J., Tappeiner, U., Wangai, P., Windhorst, W. and Zeleny, J. (2020) "Assessing ecosystem service potentials to evaluate terrestrial, coastal and marine ecosystem types in Northern Germany: An expert-based matrix approach", *Ecological Indicators*, Vol. 112, p. 106116. ISSN 1470-160X. DOI 10.1016/j.ecolind.2020.106116.
- [27] Nickerson, N. P., Jorgenson, J. and Boley, B. B. (2016) "Are sustainable tourists a higher spending market?", *Tourism Management*, Vol. 54, pp. 170-177. ISSN 0261-5177. DOI 10.1016/j.tourman.2015.11.009.
- [28] Paliogiannis, C., Koedam, N. and Cliquet, A. (2019) "The impact of the economic crisis on the implementation of the EU Nature Directives in Greece: An expert-based view", *Journal for Nature Conservation*, Vol. 48, pp. 36-46. ISSN 1617-1381. DOI 10.1016/j.jnc.2018.12.003.
- [29] Papapostolou, A., Karakosta, C., Apostolidis, G. and Doukas, H. (2020) "An AHP-SWOT-Fuzzy TOPSIS approach for achieving a cross-border RES cooperation", *Sustainability*, Vol. 12, No. 7, p. 2886. ISSN 2071-1050. DOI 10.3390/su12072886.
- [30] Racherla, P. and Friske, W. (2012) "Perceived 'usefulness' of online consumer reviews: An exploratory investigation across three services categories", *Electronic Commerce Research and Applications*, Vol. 11, No. 6, pp. 548-559. E-ISSN 1873-7846, ISSN 1567-4223. DOI 10.1016/j.elerap.2012.06.003.
- [31] Reichstein, C. and Härting, R.C. (2018) "Potentials of changing customer needs in a digital world - A conceptual model and recommendations for action in tourism", *Procedia Computer Science*, Vol. 126, pp. 1484-1494. E-ISSN 1877-0509. DOI 10.1016/j.procs.2018.08.120.
- [32] Sahani, N. (2021) "Application of hybrid SWOT-AHP-FuzzyAHP model for formulation and prioritization of ecotourism strategies in Western Himalaya, India", *International Journal of Geoheritage and Parks*, Vol. 9, No. 3, pp. 349-62. E-ISSN 2577-445X, ISSN 2577-4441. DOI 10.1016/j.ijgeop.2021.08.001.

- [33] Salim, M. A. and Siswanto, A. B. (2019) "Analisis SWOT Dengan Metode Kuesioner - Google Books", Pilar Nusantara, (November 2019), pp. 1-81. ISBN 9786237590101.
- [34] Stylidis, D. (2022) "Exploring Resident–Tourist Interaction and its Impact on Tourists' Destination Image", *Journal of Travel Research*, Vol. 61, No.1, pp. 186-201. E-ISSN 1552-6763, ISSN 0047-2875. DOI 10.1177/0047287520969861.
- [35] Sujono, S., Juliati, R., Pramuja, R. A. and Nurul, M. (2023) "Assessing the impact of digital marketing optimization on the self-sustainability of agrotourism in Sumbergedang Village", *Journal of Enterprise and Development*, Vol. 5, No. 2. E-ISSN 2685-8258, ISSN 2715-3118. DOI 10.20414/jed.v5iSpecial-Issue-2.8210.
- [36] Sutjiatmi, S. and Edy, S. (2018) "Strategi Komunikasi Pemasaran Ekowisata Hutan Mangrove Pandansari Brebes", *Jurnal Egaliter*, Vol. 2, No. 3, pp. 1-13.
- [37] Toral, S. L., Martínez-Torres, M. R. and Gonzalez-Rodriguez, M. R. (2018) "Identification of the Unique Attributes of Tourist Destinations from Online Reviews", *Journal of Travel Research*, Vol. 57, No. 7, pp. 908-919. E-ISSN 1552-6763, ISSN 0047-2875. DOI 10.1177/0047287517724918.
- [38] Utami, T. N., Fattah, M. and Intyas, C.A. (2022) "The System Dynamic of Mangrove Ecotourism of 'Kampung Blekok' Situbondo East Java Indonesia: Economic and Ecological Dimension", *Environmental Research, Engineering and Management*, Vol. 78, No. 2, pp. 58-72. ISSN 2029-2139. DOI 10.5755/j01.erem.78.2.30322.
- [39] Yuniarta, G. A., Purnamawati, I. G. A. and Suwena, K. R. (2023) "The Effect of Using Digital Marketing Platforms, Optimizing Potential Assets on the Inclusive and Sustainable Economy Improvement", *International Journal of Organizational Behavior and Policy*, Vol. 2, No. 1, pp. 3544. E-ISSN 2961-9548. DOI 10.9744/ijobp.2.1.35-44.