Economics, Business, Accounting & Society Review
Volume 5, Nomor 1, p. 99 - 117
ISSN 2810-0115

Memorable Tourism Experiences: Bridging the Experience Economy and Spatial Hotspot Analysis

Rikhard Titing Christopher Bolang[1*], Novi Theresia Kiak[1], Apriana Horiana Julia Fanggidae[2], Alexander Leonidas Kangkan[3]

[1]*Department of Development Economic, Faculty of Economic and Business, Nusa Cendana University, Kupang, Indonesia*
[2]*Department of Management, Faculty of Economic and Business, Nusa Cendana University, Kupang, Indonesia*
[3]*Department of Aquatic Resources Management, Faculty of Marine Animal Husbandry and Fisheries, Nusa Cendana University, Kupang, Indonesia*
[*]*Corresponding author: Rikhard Titing Christopher Bolang*
Corresponding email: rikhard.bolang@staf.undana.ac.id

ARTICLE INFO
Article history:
Received 20 December 2026
Revised 15 January 2026
Accepted 08 February 2026
Available Online 16 February 2026

Keywords:
Rapid Appraisal for Tourism Competitiveness
Multidimensional Scaling
Spatial
Clustering

Cite as:
Bolang, R. T. C., Kiak, N. T., Fanggidae, A. H. J., & Kangkan, A. L. (2026). Memorable Tourism Experiences: Bridging the Experience Economy and Spatial Hotspot Analysis. Economics, Business, Accounting & Society Review, 5(1), 99–117. https://doi.org/10.55980/ebasr.v5i1.412

ABSTRACT
This study develops an integrated framework for sustainable tourism competitiveness by combining Memorable Tourism Experience (MTE), RAPTOURISM, explainable machine learning, and spatial analysis. Using survey data from coastal destinations in Kupang City and Kupang Regency, sustainability performance is evaluated through Multidimensional Scaling (MDS) and tested using Monte Carlo simulation. The goodness-of-fit results indicate strong model reliability, with stress values below 0.20 and R^2 exceeding 0.90 across most dimensions. Monte Carlo differences remain minimal, confirming the robustness of the sustainability index. Random Forest analysis identifies Meaningfulness, Eudaimonic Well-Being (EWB), and Involvement as the most influential attributes. Partial Dependence Plot (PDP) reveals non-linear threshold effects, showing that improvements in EWB significantly increase sustainability only when accompanied by high tourist involvement. Spatial hotspot–coldspot analysis using Getis–Ord Gi* demonstrates clear geographical clustering, with eastern coastal destinations forming experience hotspots, while several western areas persist as coldspots. These findings emphasize the need for place-based, experience-driven tourism policies to enhance long-term sustainability.

1. Introduction

Competitiveness is an important indicator for the sustainability of a tourist destination. The competitiveness of a tourist destination is closely related to the ability of the tourist destination to deliver goods and services better than other tourist destinations in the tourism experience that is considered important by tourists (Komšic & Dorčić, 2016). According to Garín-Muñoz & Moral

(2017), Chuamuangphan et al. (2025), and Díaz & Espino-Rodríguez (2016) a key factor in the success of a tourist destination is the ability to compete with other tourist destinations. This makes it necessary for any tourist destination to be assessed to reflect the greatest value of the tourism competitiveness mechanism (Rasoolimanesh, Chee, et al., 2025). The assessment of the competitiveness of tourist destinations will help policymakers to develop competitive strategies based on the strengths and weaknesses of the tourist destination (Kovačević et al., 2018; Muhammad et al., 2018). Numerous studies on tourism competitiveness valuation have been conducted (Mira et al., 2016); (Purwaningsih et al., 2020). However, the dominant approach in tourism assessment has largely emphasized the supply-side perspective (S. Li et al., 2019), focusing on policies (Stratigea & Katsoni, 2015), regulations, and strategic interventions formulated by governments or policymakers (Yanes et al., 2019). Such an approach, while important, tends to overlook the critical role of tourists as active evaluators of destination performance. Consequently, there is a growing need to shift the analytical lens toward the demand-side perspective, which captures tourists' perceptions, experiences, and evaluations of tourism destinations (McKercher & Denizci Guillet, 2011); (Eusébio & Vieira, 2013). Tourist perceptions are widely recognized as a key determinant of destination sustainability and long-term competitiveness, particularly in an increasingly competitive tourism market. There is limited understanding of how these experiental attributes collectively contribute to a destination's sustainability index (Breiby et al., 2020; Walker & Moscardo, 2014), and whether their effects are uniform across different geographical settings. This Study addresses these gaps by integrating MTE into a multidimensional sustainability assessment and incorporating spatial analysis to reveal hidden patterns.

Recent regional tourism statistics support the relevance of this perspective. Data from the Kupang City Government indicate an increase in domestic and international tourist arrivals of approximately 2–3% by the end of 2023. Meanwhile, data from the Central Statistics Agency Central Statistics Agency (BPS) (2024) show that tourist visits to attractions in Kupang Regency grew by 8.92% in 2023, while Rote Ndao Regency experienced a substantial increase of 34.36% in tourist arrivals in 2022. These trends suggest not only growing tourism demand but also spatially uneven patterns of tourism concentration, which warrant further spatial investigation.

Previous studies on tourism sustainability have commonly relied on tourism competitiveness frameworks and rapid appraisal techniques using multidimensional scaling (MDS) (Kim et al., 2012). However, the application of Machine Learning (ML) methods in developing sustainable tourism models remains limited, particularly when combined with spatial analytical approaches (Das et al., 2025); (Xu et al., 2020). To address this gap, the present study aims to formulate a sustainable tourism development model through a quantitative comparative analysis of tourist destinations in Kupang City and Kupang Regency.

This study applies the Rap–Tourism Destination Competitiveness (Rap-TDC) framework by integrating Multidimensional Scaling (MDS) and Monte Carlo simulation to assess tourism sustainability. The resulting indices are further analyzed using Random Forest feature importance to identify key experiential attributes influencing destination competitiveness (Dunne et al., 2023). To enhance analytical depth, spatial hotspot–coldspot analysis is incorporated to examine the geographical clustering (Van der Zee et al., 2020); (Fu et al., 2024) of tourism experiences and competitiveness levels.

The integration of Rap-TDC, machine learning, and spatial analysis allows the study to identify not only which attributes are most influential, but also where competitive strengths and weaknesses are spatially concentrated. This integrative framework represents the main novelty of the research, offering a more comprehensive and policy-relevant model for sustainable tourism development, particularly for emerging destinations in eastern Indonesia.

2. Methods

The research approach used in this study is a quantitative comparative approach. Quantitative comparative analysis is a method that uses statistical techniques and numerical data to compare two or more datasets, identifying patterns, trends, and relationships. It helps determine consistency

across data to validate hypotheses. Common approaches include regression analysis, data mining, and time-series analysis (Perry, 2019). This comparative quantitative research was conducted to analyze the differences between dimensions of memorable tourism, classify destination typologies and identify spatial concentration patterns to support evidence-based policy strategies through differentiation of the research objects used.

Study Area

This research was conducted at coastal tourist destinations in two regencies and cities in East Nusa Tenggara Province. The coastal tourist destinations were selected as research objects based on purposive sampling, which was based on existing rating standards given by tourists as reviews provided through ratings on Google Reviews. These ratings are used as an initial indicator of public perception of the quality of tourist experiences, thus representing the popularity and satisfaction of the tourist destination. The beaches in the Kupang City area include, Lasiana Beach (Google, 2025), Nunbaun Dela Beach (Google, 2025), Namosain Beach (Google, 2025), Batu Nona Beach (Google, 2025). The beaches of Kupang Regency in the Semau area includes Uiasa Beach (Google, 2025), Otan Beach (Google, 2025), Uinian Beach (Google, 2025), Liman Beach (Google, 2025), and beaches in Kupang Regency apart from Semau Island Baliana Beach, Tablolong Beach.

Data Collection

The data used in this study were sourced from a primary study conducted on research respondents using a sampling method. The number of respondents studied was 300 people distributed across ten coastal tourist destinations in Kupang City and Kupang Regency. Secondary data was also used in this study to increase the accuracy of coordinates and boundaries in the spatial analysis of the area.

This study operationalizes several experiential attributes and psychological constructs, including hedonism, local culture, meaningfulness, refreshment, Involvement, Knowledge, eudaimonic well-being, Digital Technology, Availability Heuristic, Framing Effect and memorable tourism experience, which were measured using validated indicators adapted to the coastal context, as presented in Table below.

Table 1 Research Variabel and Items

Variables and Item		Sources
Hedonism	Always remember this place more than another beach This place is already on my regular holiday schedule In many aspects, my recent beach trip felt almost ideal. I'm really glad I had a new experience at this beach	(Malone et al., 2014); (Luo et al., 2021)
Novelty	Ideal vacation is one that brings exciting and challenging experiences The destination I visited stood out distinctly from any other place I've ever been Trying something entirely new made the trip unforgettable I found unexpected moments that made my visit to this beach memorable	(Skavronskaya, Moyle, & Scott, 2020; Skavronskaya, Moyle, Scott, et al., 2020)
Local Culture	Local culture made my beach experience more authentic I tasted unique local coastal cuisine while visiting this beach Interacting with locals gave me a new perspective on coastal life Local culture enriched my tourism experience	(Duxbury et al., 2025; Trisoko et al., 2024)
Refreshment	I felt more relaxed after visiting this beach I felt recharged physically and mentally. The natural atmosphere made me feel calm and peaceful Allowed me to unwind from the pressures of daily routines.	(Dahanayake et al., 2023); (Sthapit et al., 2025)
Meaningfullnes	I felt I did something meaningful at this beach I felt a sense of purpose during my time at this beach I discovered something about myself during my visit to this beach	(Kazakov & Oyner, 2021); (Huang et al., 2024)
Involvement	I visited this beach I had long dreamed of.	

	I enjoyed the activity I truly wanted to do at this beach The beach's main activity piqued my interest I planned my own trip instead of joining a packaged tour.	(Dai et al., 2025; Q. Li et al., 2023)
Knowledge	I learned many things throughout this beach visit The trip taught me new skills I enjoyed learning about new customs and cultural practices This trip taught me about the beach ecosystem	(Cooper, 2015; Yiu & Law, 2014)
Eudaimonic well-being (EWB)	Like living my routine, but enjoyable I found new purpose after this trip This travel experience felt like a memorable achievement	(Stoner, 2024); (Ryff, 2013)
Digital Technology	Convenient access to travel details, maps, and dining tips Smart travel suggestions and plans	(Adeola & Evans, 2019; Gössling, 2021)
Availability Heuristic	I visited because of social media exposure Chosen based on recommendations Reminded me of a place I'd been	(Liu et al., 2025; Rasoolimanesh, Scott, et al., 2025)
Framing Effect	The way this destination was presented influenced me Prefer positive over risk-based descriptions	(Wilk et al., 2025; Zhao & Zhao, 2025)

Analysis Method

The analytical tools used in this study is the Rapid Appraisal for Tourism Destination Competitiveness (Rap-TDC) analysis. Rap-Tourism Destination Competitiveness (Rap-TDC) is a development of the Rapid Appraisal For Fisheries And Marine (Rap-Fish) analysis developed by (Pitcher et al., 2013) to conduct assessments in the field of fisheries management. The analysis stages using Rap-Tourism Destination Competitiveness (Rap-TDC) are Multidimensional Scaling (MDS) analysis, followed by Monte Carlo Simulation analysis.

The assessment attributes of Memorable Tourism Experience are adopted from (Kim et al., 2012). The assessment attributes of Memorable Tourism Experience are: hedonism, refreshment, novelty, social interaction and culture, knowledge, involvement, and meaningfulness. Each attribute is measured through several indicators to determine the competitiveness score of each memorable tourism experience attribute. The assessment score using Rap-TDC ranges from 0 – 100% (Pitcher et al., 2013). The assessment is then categorized based on the references suggested by Hidayanto et al., (2009) for Tourism Competitiveness Index Categories and Batubara et al., (2017) for Sustainability Index Categories.

Table 2 Tourism Competitiveness Index Categories and Status

Index	**Category**	**Category**
0,00-25,00	Bad (not competitive)	Bad (not sustainable)
25,01-50,00	Lacking (not having enough competitiveness)	Less (less sustainable)
50,01-75,00	Sufficient (sufficiently competitive)	Sufficient (sufficiently sustainable)
75,01-100,00	Good (has competitiveness)	Good (sustainable)

Source: (Hidayanto et al., 2009); (Batubara et al., 2017); (Kangkan et al., 2024)

Monte Carlo Simulation analysis is used in this study to estimate the effect of errors in the analysis process at a 5% error rate (Gonzalez et al., 2018; Koehler et al., 2009). The results of the analysis are expressed in the form of a Monte Carlo index value, which is then compared with the MDS analysis score. If the difference between the MDS analysis score and the Monte Carlo index value is less than 5%, it can be stated that the MDS calculation results are stable and have a small error, making them suitable for assessing the competitiveness of tourist destinations based on the memorable tourism experience provided to tourists (Nandini et al., 2017).

The next analysis is the analysis using Random Forest Feature Importance. This analysis uses the Feature Importance formula (FI_j) of feature X_j in Random Forest calculated as,

$$FI_j = \frac{1}{T}\sum_{t=1}^{T}\sum_{s\in S_{t,v=s_j}} \Delta I(s)$$

Where, T is The number of trees in a Random Jungle means the number of decisions (splits) in the algorithm that are influenced by factors of sustainable tourism. S_t is all nodes in the t tree, s is a nodes in a decision tree, v is feature used for split on node s, and $\Delta I(s)$ is the Impurity reduction (e.g. using Gini Impurity or Mean Squared Error) after splitting at node s means measuring how much a factor reduces the uncertainty in predicting the sustainability index of a tourism. The Impurity Reduction $\Delta I(s)$ in the regression is calculated using the following formula.

$$\Delta I(s) = I_{before} - (w_{left}.I_{left} + w_{right}.I_{right})$$

Where, I_{before} is Impurity before split, $w_{left}.I_{left}$ is Impurity before split, $w_{left}.I_{left}$ is Impurity after split to left & right and $w_{right}.I_{right}$ is Sample proportion to left & right. This formula is used to measure whether the variables or indicators used play a significant role in classifying a tourism destination as sustainable or unsustainable. The sustainable tourism development model will be developed through analysis of the calculations above to ensure that the model created or recommended aligns with the key factors at issue.

Spatial hotspot–coldspot patterns of tourism experience attributes are identified using the Getis–Ord $Gi^{\backslash *}$ statistic. This method evaluates each destination within the spatial context of its neighboring locations, enabling the detection of localized clustering of high and low tourism experience values. The $Gi^{\backslash *}$ statistic produces standardized z-scores that indicate whether a destination forms part of a hotspot (high–high cluster) or a coldspot (low–low cluster), with the magnitude of the z-score reflecting clustering intensity. The Getis–Ord statistic is defined as:

$$Gi^{\backslash *} = \frac{\sum_{j=1}^{n} w_{ij}\, x_j - \bar{X}\sum_{j=1}^{n} w_{ij}}{S\sqrt{\frac{n\sum_{j=1}^{n} w_{ij}^2 - (\sum_{j=1}^{n} w_{ij})^2}{n-1}}}$$

where x_j represents the RAPTOURISM-based sustainability index of tourism experience attributes, w_{ij} denotes spatial weights, and n is the total number of destinations. A binary distance-based weight matrix is applied to represent spatial proximity among coastal destinations.
To identify emerging spatial patterns, a threshold of $|\ GiZ\ | \geq 1.0$ is employed. Destinations with $GiZ \geq 1.0$ are classified as emerging hotspots, while those with $GiZ \leq -1.0$ are classified as emerging coldspots. Values between −1.0 and 1.0 are considered not significant. This threshold is used to capture early-stage spatial clustering that is substantively meaningful for tourism development, particularly in emerging destinations. By integrating spatial hotspot analysis with Random Forest and Partial Dependence Plot results, this study identifies not only which attributes matter and how they interact, but also where experiential strengths and weaknesses are spatially concentrated.

3. Results

Descriptive Statistics and Respondent Profile

This section presents the descriptive statistics of the respondents to provide an overview of their socio-demographic characteristics. Understanding the respondent profile is essential to contextualize the empirical findings, as individual attributes such as gender, age, education, occupation, income level, and visit status may influence perceptions, preferences, and tourism experiences. The descriptive analysis helps illustrate the composition of the sample and ensures that subsequent analytical results are interpreted within an appropriate demographic and socio-economic framework.

Table 3 Respondent Profile

Variable	Category	Total	Percentage (%)
Gender	Woman	157	51,82
	Man	146	48,18
Country of origin	Indonesia	303	100
Ocupation	Student	115	37,95
	Businessman	47	15,51
	State Apparatus	30	9,90
	Private sector	62	20,46
	Other	33	10,89
Average Monthly Income (USD)	<89,00	138	45,54
	89,00 - 296,00	127	41,91
	296,00 -592,00	37	12,21
	>592,00	1	0,33
Education	Senior High School	186	61,39
	Elementary School	5	1,65
	Junior High School	4	1,32
	College	108	35,64
Visit Status	Traveler	265	87,46
	Local Community	30	9,9
	Businessmen	8	2,64
Age	17-25	162	53,47
	26-35	71	23,43
	36-45	52	17,16
	46-55	16	5,28
	>55	2	0,66

The respondent profile indicates a relatively balanced gender distribution, with female visitors (51.82%) slightly outnumbering males (48.18%), and all respondents being domestic tourists from Indonesia. The age composition is dominated by young visitors, with the majority aged 17–25 years and a substantial share aged 26–35 years, suggesting that the destinations primarily attract youth and young adults.

Socio-economically, most respondents are students and private-sector employees with low to middle monthly incomes (below USD 296,00) Educational levels are relatively high, as most visitors have completed senior high school or tertiary education, indicating sufficient capacity to engage with informative and experience-based tourism offerings. Travel purposes are largely leisure-oriented, while visits by local residents and business travelers remain limited. Overall, the findings suggest that the destinations mainly cater to young, educated, and price-sensitive domestic tourists, underscoring the need for affordable, participatory, and knowledge-enriched tourism experiences.

Dimenssion Attribut

The goodness-of-fit assessment is conducted to verify whether the multidimensional scaling (MDS) configuration of RAPTOURISM sufficiently represents the underlying structure of tourism sustainability attributes, ensuring the robustness of subsequent interpretation and policy analysis.

Tabel 4 Goodness of Fit Multidimensional RAPTOURISM

Dimension	Baliana		Batunona		Lasiana		Liman		Namosain	
	Stress (S)	R-Square	Stress (S)	R-Square	Stress (S)	R-Square	Stress (S)	R-Square	Stress (S)	R-Square
Hedonism	0,435	0,604	0,059	0,938	0,070	0,933	0,068	0,943	0,026	0,830
Novelty	0,240	0,840	0,207	0,874	0,241	0,854	0,242	0,845	0,206	0,901
Local Culture	0,215	0,871	0,191	0,893	0,233	0,861	0,213	0,862	0,163	0,946
Refreshment	0,179	0,908	0,190	0,883	0,185	0,911	0,140	0,962	0,225	0,898
Meaningfullnes	0,074	0,988	0,144	0,945	0,116	0,964	0,087	0,976	0,137	0,937
Involvement	0,112	0,973	0,196	0,905	0,243	0,844	0,127	0,964	0,194	0,920
Knowledge	0,190	0,892	0,165	0,935	0,243	0,848	0,199	0,907	0,145	0,959

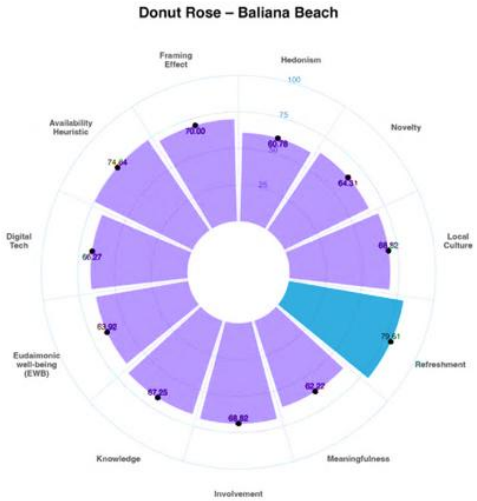
Eudaimonic well-being (EWB)	0,121	0,964	0,116	0,965	0,201	0,881	0,189	0,876	0,184	0,885
Digital Technology	0,337	0,760	0,253	0,868	0,263	0,851	0,339	0,754	0,285	0,844
Availability Heuristic	0,184	0,892	0,229	0,806	0,197	0,868	0,103	0,970	0,157	0,931
Framing Effect	0,229	0,881	0,302	0,786	0,278	0,825	0,322	0,760	0,337	0,760

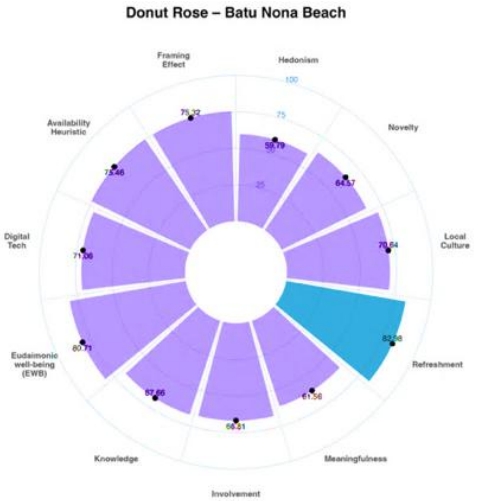
Dimension	**Nun Baun Dela**		**Otan**		**Tablolong**		**Uiasa**		**Uinian**	
	Stress (S)	R-Square	Stress (S)	R-Square	Stress (S)	R-Square	Stress (S)	R-Square	Stress (S)	R-Square
Hedonism	0,104	0,907	0,003	0,939	0,097	0,887	0,000	1,000	0,000	1,000
Novelty	0,220	0,889	0,088	0,988	0,248	0,828	0,000	1,000	0,000	1,000
Local Culture	0,161	0,941	0,151	0,941	0,198	0,893	0,000	1,000	0,000	1,000
Refreshment	0,204	0,883	0,125	0,967	0,147	0,941	0,000	1,000	0,000	1,000
Meaningfullnes	0,133	0,956	0,050	0,991	0,133	0,954	0,000	1,000	0,000	1,000
Involvement	0,307	0,759	0,111	0,969	0,186	0,917	0,000	1,000	0,000	1,000
Knowledge	0,143	0,940	0,081	0,986	0,205	0,984	0,000	1,000	0,000	1,000
Eudaimonic well-being (EWB)	0,171	0,913	0,047	0,995	0,116	0,964	0,000	1,000	0,000	1,000
Digital Technology	0,243	0,868	0,029	0,998	0,257	0,853	0,131	0,997	0,207	1,000
Availability Heuristic	0,136	0,944	0,023	0,998	0,129	0,945	0,000	1,000	0,000	1,000
Framing Effect	0,169	0,939	0,297	0,828	0,191	0,913	0,000	1,000	0,207	1,000

Notes: Stress < 0.20 & $R^2 \geq 0.90$ = good fit; < 0.10 = excellent
(Euclidean distance, k = 1 if the dimension consists of 2 attributes, k = 2 if the dimension consists of more than 2 attributes)

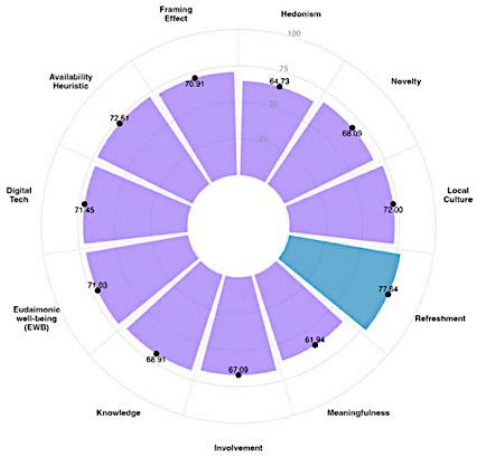
The results of the goodness of fit analysis using the Multidimensional Scaling (MDS) approach within the RAPTOURISM framework indicate that the developed model has an adequate level of feasibility. In general, almost all dimensions of the analysis yielded Stress (S) values <0.20 and R-Square (R^2) >0.90, which, according to the criteria (Kruskal & Wish, 1978); (Cox & Cox, 2008) based on Rapfish techniques from (Pitcher & Preikshot, 2001); (Pitcher et al., 2013), can be categorized as good fit. In fact, several dimensions showed Stress <0.10 with R^2 >0.95, which falls into the excellent fit category, indicating a stable and representative data structure.

Overall, the analysis results confirm that the RAPTOURISM MDS model is valid for assessing tourism sustainability attributes based on tourist perceptions. The Knowledge and EWB dimensions performed most consistently and strongly, confirming the relevance of the reflective and well-being dimensions in developing sustainable destinations. In contrast, the Hedonism and Framing Effect dimensions tend to be more varied, indicating the need for a more careful approach to destination management so that perceptual biases can be minimized and tourism experiences can be directed towards a more meaningful and sustainable direction.





Donut Rose – Lasiana Beach



Donut Rose – Liman Beach

Donut Rose – Namosain Beach

Donut Rose – Nunbaun Dela Beach

Donut Rose – Otan Beach

Donut Rose – Tablolong Beach

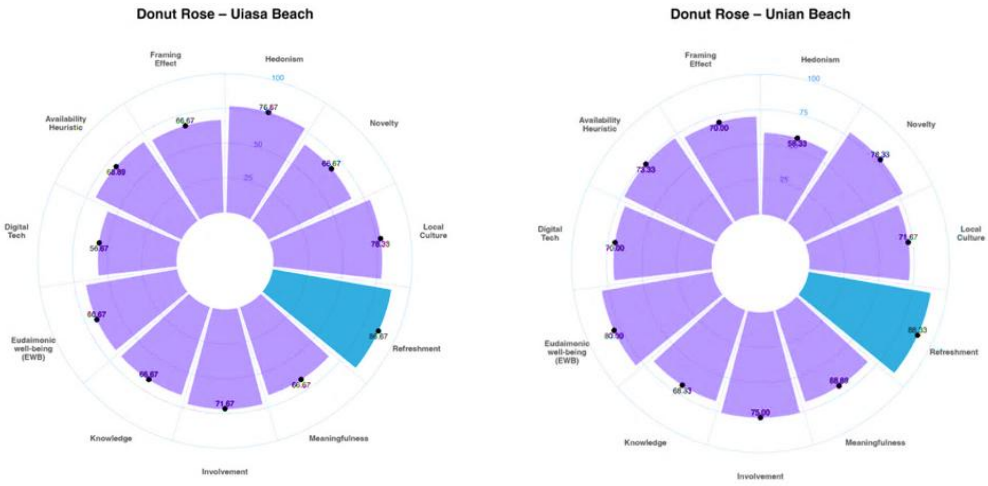


Figure 1. Donut Rose Diagram of Tourism experience Attributes

The RAPTOURISM diagram indicates that tourism attribute values across the ten beach destinations range from 58.33 to 88.33. Based on the tourism competitiveness classification by Hidayanto et al., (2009), all destinations fall within the sufficient (50.01–75.00) to good (75.01–100.00) categories, indicating generally adequate to strong competitiveness, with several beaches classified as superior destinations.

Ui'asa, Unian, Otan, Batu Nona, and Namosain beaches are categorized as good, with scores exceeding 75 in key attributes such as Refreshment (Unian 88.33; Batu Nona 82.98), Involvement (Otan 80.83), and Eudaimonic well-being (Unian 80.00). These destinations demonstrate high competitiveness and can serve as drivers of regional tourism development. In contrast, Baliana, Lasiana, Liman, Tablolong, and Nunbaun Dela fall into the sufficient category, with average scores between 60 and 74, suggesting that while competitiveness is established, certain attributes require strengthening, such as Meaningfulness at Liman (53.14) and Hedonism at Baliana (60.78).

When aligned with the tourism sustainability framework of (Batubara et al., (2017), these results indicate that competitiveness must be balanced with ecological, socio-cultural, and economic dimensions. Destinations classified as good show strong potential for high sustainability if environmental management and community empowerment are maintained, whereas sufficient destinations require targeted policy intervention, digital innovation, and enhanced cultural narratives to improve sustainability outcomes. Overall, the integration of competitiveness and sustainability assessments suggests that most beaches are on a positive development trajectory, though attribute-specific strengthening is necessary to elevate moderately competitive destinations toward higher sustainability performance.

Robustness RAPTOURISM using Monte Carlo

Monte Carlo simulation was employed as a robustness check (Kostić et al., 2017) to validate the stability of the RAPTOURISM ordination results and to ensure that the sustainability indices remain consistent under stochastic variation in attribute scoring (Alemam et al., 2018). A robustness test using Monte Carlo simulation was used to evaluate the stability of the Sustainability Index (SI) results obtained from the Multi-Dimensional Scaling (MDS) analysis.

Table 5 Monte Carlo Simulation

Baliana Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	60,78	64,31	68,82	79,61	62,22	68,82	67,25	63,92	66,27	74,64	70,00
Monte Carlo	60,66	64,18	68,85	79,72	61,63	68,74	67,78	63,61	65,48	74,57	69,97
Difference	-0,12	-0,13	0,03	0,11	-0,59	-0,08	0,53	-0,31	-0,79	-0,07	-0,03

Batu Nona Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	59,79	64,57	70,64	82,98	61,56	66,81	67,66	80,71	71,06	75,46	75,32
Monte Carlo	59,81	63,75	70,61	83,08	61,09	66,75	68,11	81,11	71,22	76,06	75,28
Difference	0,02	-0,82	-0,03	0,10	-0,47	-0,06	0,45	0,40	0,16	0,60	-0,04

Lasiana Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	64,73	68,09	72,00	77,64	61,94	67,09	68,91	71,03	71,45	72,61	70,91
Monte Carlo	64,90	67,95	72,01	77,56	61,50	67,13	68,97	71,17	71,62	72,97	70,88
Difference	0,17	-0,14	0,01	-0,08	-0,44	0,04	0,06	0,14	0,17	0,36	-0,03

Liman Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	60,74	60,74	67,35	69,12	53,14	61,18	63,97	62,75	55,29	67,45	59,41
Monte Carlo	60,79	60,46	67,33	69,12	53,04	61,33	64,16	62,99	54,49	67,69	59,41
Difference	0,05	-0,28	-0,02	0,00	-0,10	0,15	0,19	0,24	-0,80	0,24	0,00

Namosain Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	65,56	71,39	70,56	75,00	51,11	65,28	71,11	73,78	67,22	74,44	73,33
Monte Carlo	65,50	71,91	70,56	74,88	51,81	65,46	71,15	71,47	67,15	74,58	73,32
Difference	-0,06	0,52	0,00	-0,12	0,70	0,18	0,04	-2,31	-0,07	0,14	-0,01

Nun Baun Dela Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	65,56	65,00	66,00	79,22	63,70	70,33	68,67	73,78	76,89	80,59	67,33
Monte Carlo	65,66	64,76	66,01	79,24	63,74	69,96	68,98	73,49	76,93	80,58	67,34
Difference	0,10	-0,24	0,01	0,02	0,04	-0,37	0,31	-0,29	0,04	-0,01	0,01

Otan Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	77,08	75,00	78,33	80,42	73,33	80,83	73,75	74,44	75,83	76,67	72,50
Monte Carlo	76,84	74,79	78,34	80,58	72,12	80,96	73,25	74,43	75,64	75,57	72,55
Difference	-0,24	-0,21	0,01	0,16	-1,21	0,13	-0,50	-0,01	-0,19	-1,10	0,05

Tablolong Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	62,86	67,14	68,00	76,71	66,86	68,71	63,29	74,10	70,00	69,14	68,29
Monte Carlo	62,78	66,93	67,99	76,75	66,29	68,73	63,18	73,95	70,03	69,80	68,27
Difference	-0,08	-0,21	-0,01	0,04	-0,57	0,02	-0,11	-0,15	0,03	0,66	-0,02

Ui'asa Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	76,67	66,67	78,33	86,67	66,67	71,67	66,67	66,67	56,67	68,89	66,67
Monte Carlo	76,83	69,68	78,32	86,45	69,31	71,66	65,71	67,60	58,11	68,07	66,74
Difference	0,16	3,01	-0,01	-0,22	2,64	-0,01	-0,96	0,93	1,44	-0,82	0,07

Unian Beach											
	Hedonism	**Novelty**	**Local Culture**	**Refreshment**	**Meaningfulness**	**Involvement**	**Knowledge**	**EWB**	**Digital Tech**	**Avail_Heu**	**Framing Effect**
MDS	58,33	78,33	71,67	88,33	68,89	75,00	68,33	80,00	70,00	73,33	70,00
Monte Carlo	58,40	76,83	71,66	88,01	66,83	74,24	68,95	79,48	68,97	72,31	69,96
Difference	0,07	-1,50	-0,01	-0,32	-2,06	-0,76	0,62	-0,52	-1,03	-1,02	-0,04

The simulation results show that the difference between the MDS and Monte Carlo SI values is relatively small, generally less than 3 points, indicating that the MDS model has high stability and reliability against stochastic variations in the data. This strengthens the validity of the results as a basis for decision-making in sustainable tourism planning.

Random Forest Features Importances

Feature importance analysis is conducted using the Random Forest algorithm to identify the relative contribution of each tourism experience attribute to variations in the Sustainability Index (Zhao, 2024). This approach enables the ranking of explanatory variables based on their predictive influence, allowing the identification of key attributes that play a dominant role in shaping tourism competitiveness.

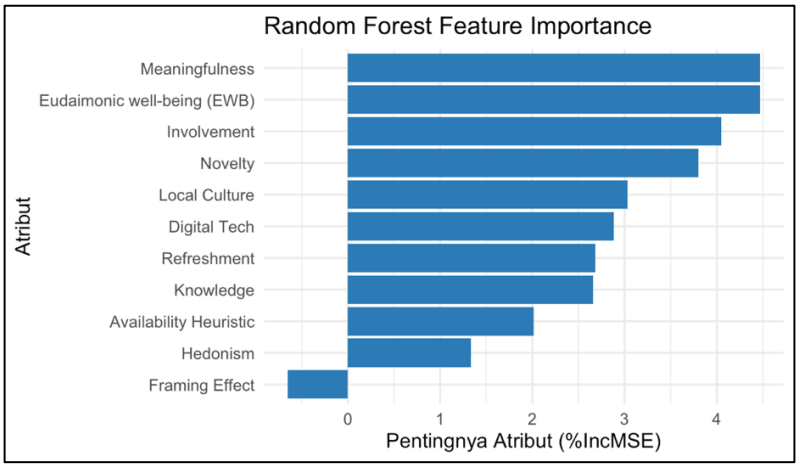
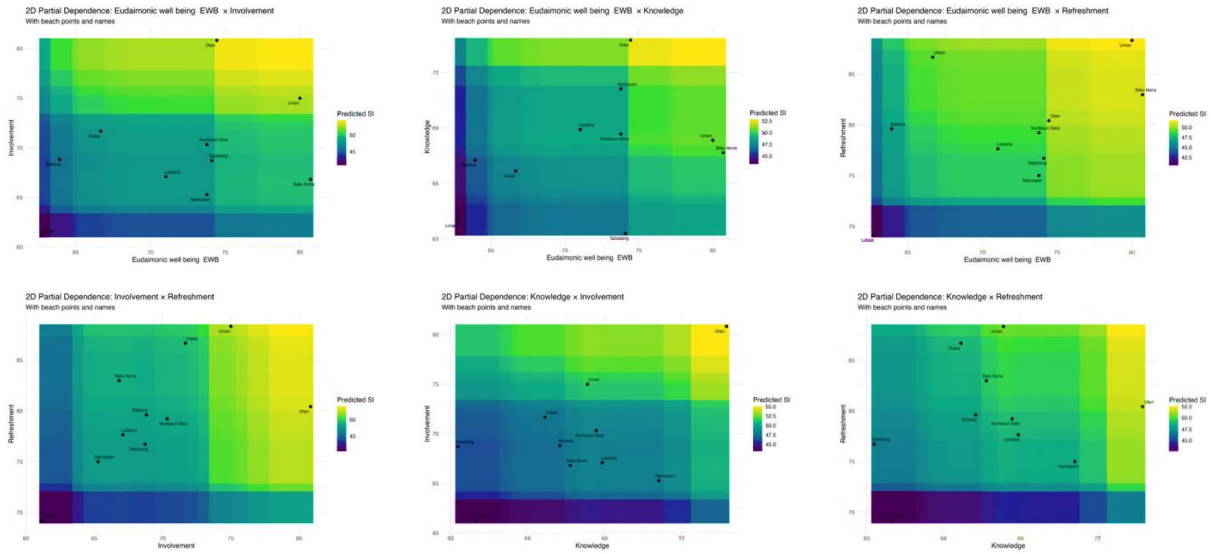


Figure 2. Feature Importance Result

The Random Forest results indicate that tourism experience attributes contribute differently to variations in the Sustainability Index. Meaningfulness emerges as the most influential factor, followed by Eudaimonic well-being (EWB) and Involvement, highlighting the importance of meaningful, well-being–oriented, and participatory experiences in shaping destination sustainability. Attributes such as Novelty, Local Culture, and Digital Technology show moderate influence, while Knowledge, Availability Heuristic, Hedonism, and Framing Effect contribute relatively less. Overall, the findings suggest a shift from pleasure-based tourism toward a transformational approach centered on intrinsic value, emotional engagement, and visitor well-being. Based on these results, Partial Dependence Plot (PDP) analysis is subsequently applied to further examine non-linear effects among key attributes.

Partial Dependence Plot (PDP)

Partial Dependence Plot (PDP) is used to examine the marginal influence of each tourism experience attribute on the predicted sustainability index (Arici & Köseoglu, 2025), allowing for interpretation of non-linear and interaction-driven effects embedded in the Random Forest model.



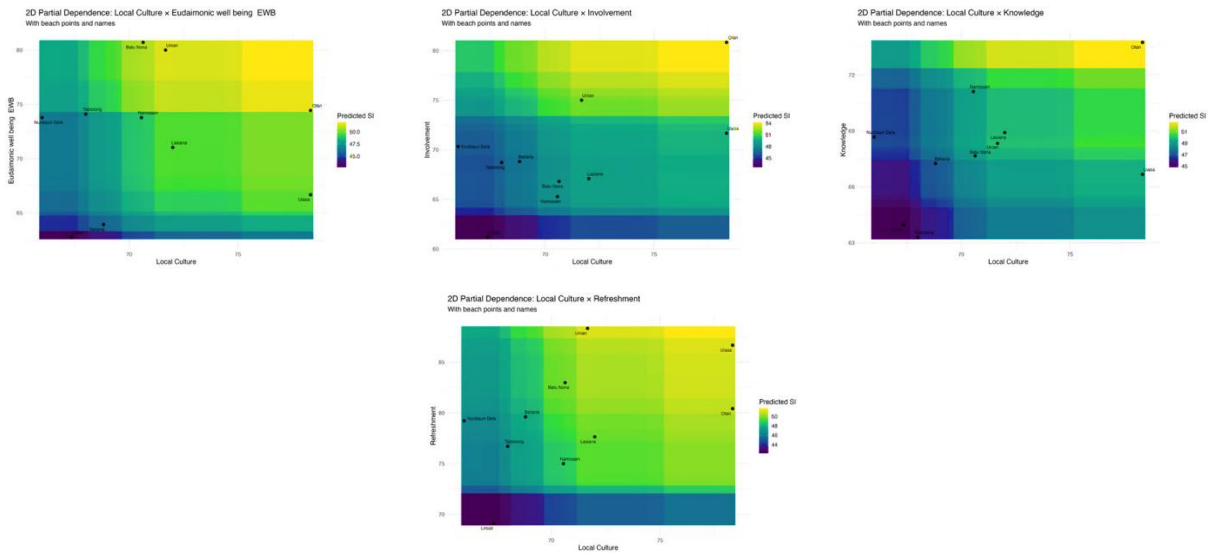
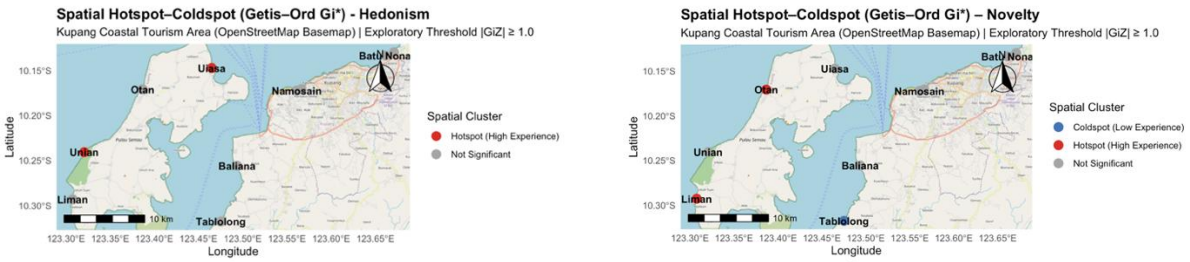


Figure 3. 2D Partial Dependence Heatmap

The Partial Dependence Plot (PDP) shows that Eudaimonic well-being (EWB) and Involvement are the primary drivers of the Sustainability Index, operating in a complementary manner. Increases in EWB significantly improve sustainability only when supported by high involvement. Knowledge and Local Culture act as reinforcing factors, while Refreshment functions as an accelerator once strong experiential foundations are established. Empirically, Otan and Unian emerge as benchmark destinations, while several others require strengthened involvement and experiential curation, with Liman representing the lowest priority. Overall, the results indicate that tourism competitiveness is most effectively enhanced through a tiered strategy focusing first on EWB and involvement, followed by knowledge and cultural reinforcement.

Spatial Hotspot Analysis

Spatial hotspot analysis is conducted to identify the geographical clustering of tourism experience attributes across destinations (Yuan et al., 2025); (Sánchez-Martín et al., 2019). This approach enables the detection of statistically significant concentrations of high-value (hotspots) and low-value (coldspots) areas, thereby revealing spatial heterogeneity in tourism sustainability performance. By integrating spatial statistics with experiential indicators, this analysis provides insights into location-specific strengths and weaknesses and supports the formulation of targeted (Upadhyay & Vyas, 2025), place-based tourism development policies.



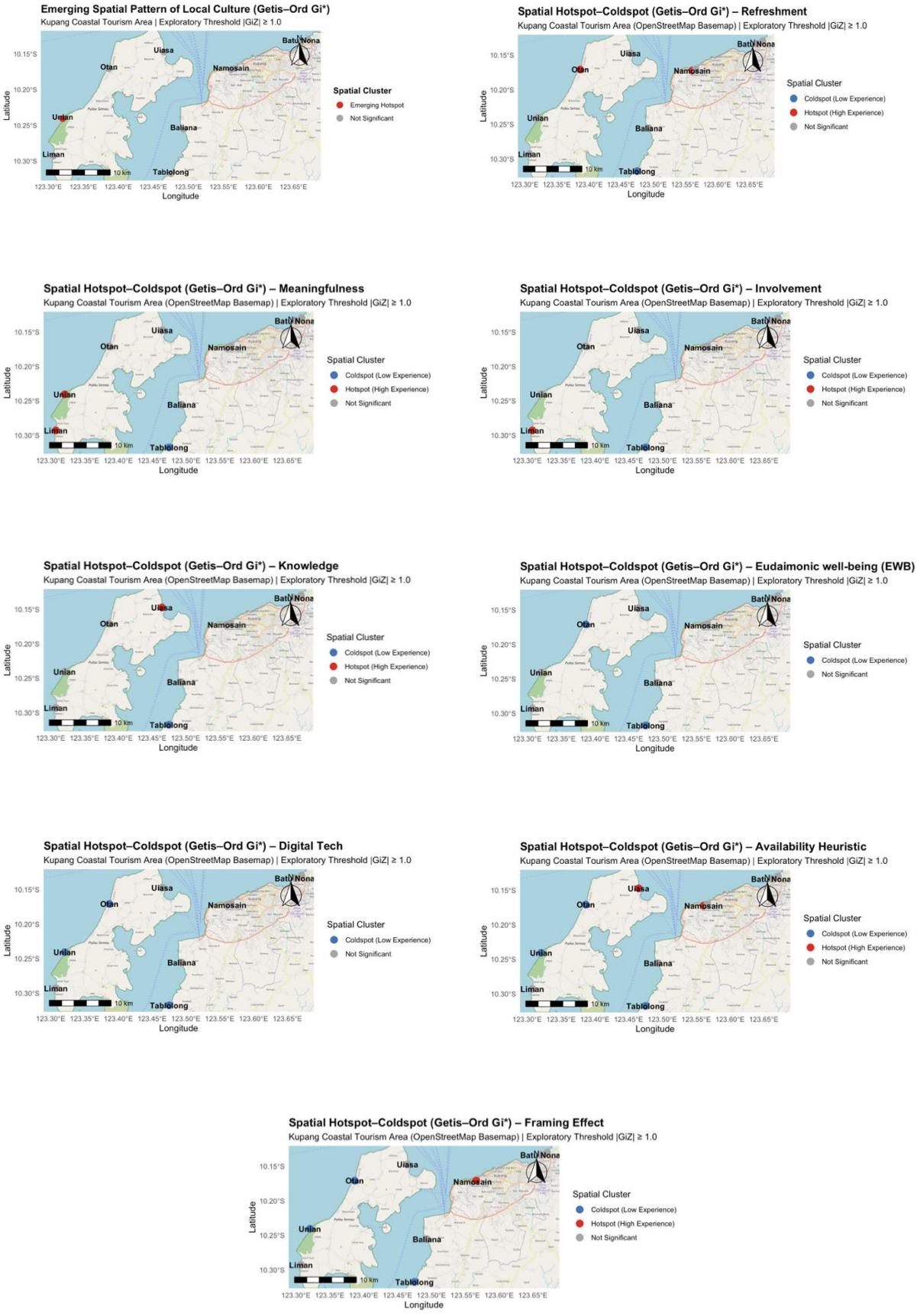


Figure 4. Spatial Hotspot–Coldspot Analysis using Getis–Ord Gi*

The Getis–Ord Gi* analysis reveals that memorable tourism experiences along the Kupang coastal area are spatially uneven and strongly clustered, indicating that experiential sustainability is territorially structured rather than randomly distributed. Hedonic and refreshment-based experiences are concentrated in the eastern coastal zone, particularly around Batu Nona Beach, reflecting the influence of urban accessibility and service concentration in shaping short-stay, pleasure-oriented tourism. In contrast, western coastal destinations such as Liman and Uinian consistently emerge as coldspots across attributes including novelty, meaningfulness, and eudaimonic well-being, indicating limited experiential diversification and weaker transformative capacity.

The spatial pattern further shows that involvement-based experiences (Q. Li et al., 2023) are centered around Otan Beach, reinforcing its role as an activity-driven destination, while Ui'asa Beach emerges as a hotspot for knowledge, local culture, and availability heuristic, highlighting the importance of cognitive learning, cultural symbolism, and digital representation. Overall, the results demonstrate clear experiential polarization between urban-coastal, engagement-oriented, and peripheral destinations (Dai et al., 2025). These findings support the Experience Economy and Memorable Tourism Experience frameworks, emphasizing that sustainable tourism requires deliberate experiential design, narrative development, and digital (Jokom et al., 2025) mediation rather than reliance on natural assets alone (Prebensen, 2026). Consequently, tourism development in NTT should adopt spatially differentiated, experience-centered strategies to reduce inequality and strengthen long-term sustainability.

4. Discussion

The tourism sector in East Nusa Tenggara (NTT) is experiencing a strong post-pandemic recovery, according to a publication from the Tourism and Creative Economy Agency, Which recorded only 658,270 visits in 2021 and increased to 1.84 million in 2025 (Disparekraf, 2026). However, the relatively low room occupancy rate (ROR) for star-rated hotels in December 2025 reached 45.76 percent, up 13.02 percent year-on-year (Central Statistics Agency (BPS), 2026). This indicates a structural gap between tourism volume and experience economy absorption. This condition suggests that increasing visitor numbers alone is insufficient to strengthen regional tourism performance, and that competitiveness increasingly depends on the depth, quality, and spatial distribution of tourism experiences.

The integration of RAPTOURISM outcomes, Partial Dependence Plot (PDP), and Getis–Ord Gi* spatial analysis provides important insight into this imbalance. The results demonstrate that tourism experiences along the Kupang coastal system are spatially clustered rather than evenly distributed, producing clear experiential polarization. Certain destinations emerge as hotspots driven by hedonic and restorative experiences that support short-stay visitation, while others function as experiential anchors through stronger involvement, knowledge, and cultural engagement. Conversely, several destinations persist as coldspots due to limited narrative development, weak digital mediation, and low opportunities for reflective interaction, which restrict their capacity to generate transformative tourism experiences.

Overall, the findings confirm that NTT's tourism challenge lies not in demand deficiency but in experiential conversion inefficiency. Sustainable tourism competitiveness is achieved when cognitive, emotional, cultural, and participatory elements are spatially aligned within destination systems. These results underscore the importance of shifting from uniform tourism promotion toward place-based and experience-centered governance, enabling destinations to transform tourism growth into longer stays, higher occupancy, and more resilient local development.

5. Conclusion

This study shows that tourism development in East Nusa Tenggara (NTT) is constrained not by limited demand, but by weak experiential conversion. Despite rising tourist arrivals, low accommodation performance indicates insufficient transformation of visits into economic and experiential value. Integrating RAPTOURISM, Partial Dependence Plot (PDP), and Getis–Ord Gi*

analysis, the results identify Meaningfulness, Eudaimonic Well-Being, and Involvement as the main drivers of sustainability, operating through non-linear and spatially uneven patterns. Overall, the findings emphasize that sustainable tourism competitiveness depends on experience quality and spatial alignment rather than visitor volume alone, highlighting the importance of place-based and experience-centered tourism governance in NTT.

6. Acknowledgments

The authors would like to express their sincere gratitude to Nusa Cendana University, particularly the Institute for Research and Community Service (LP2M), for funding this study through the Research Assignment Agreement for the Competitive Research Program of the 2025 Fiscal Year (Contract Number: 47/UN15.22/PL/2025). The authors also extend their appreciation to the Government of Kupang Regency and the Government of Kupang City, as well as to all field assistants and enumerators who provided valuable support during the data collection process.

7. References

Adeola, O., & Evans, O. (2019). Digital tourism: mobile phones, internet and tourism in Africa. *Tourism Recreation Research*, *44*(2), 190–202.

Alemam, A., Cheng, X., & Li, S. (2018). Treating design uncertainty in the application of Eco-indicator 99 with Monte Carlo simulation and fuzzy intervals. *International Journal of Sustainable Engineering*, *11*(2), 110–121.

Arici, H. E., & Köseoglu, M. A. (2025). What are the most influential drivers of tourism destination competitiveness? *Journal of Destination Marketing & Management*, *36*, 100990.

Batubara, S. C., Maarif, M. S., & Irianto, H. E. (2017). Model Manajemen Rantai Pasok Industri Perikanan Tangkap Berkelanjutan Di Propinsi Maluku (The Ideal Model of Supply Chain Management of Sustainability Industrial Capture fisheries in Maluku Province). *Marine Fisheries: Journal of Marine Fisheries Technology and Management*, *8*(2), 137–148.

BPS, K. K. (2024). *Jumlah Perjalanan Wisatawan Nusantara Berdasarkan Bulan dan Asal Dari Kabupaten Kupang - Tabel Statistik - Badan Pusat Statistik Kabupaten Kupang*.

Breiby, M. A., Duedahl, E., Øian, H., & Ericsson, B. (2020). Exploring sustainable experiences in tourism. *Scandinavian Journal of Hospitality and Tourism*, *20*(4), 335–351.

Chuamuangphan, N., Khetjenkarn, S., Soontorn, J., Imdee, P., Inthurit, D., & Lee, C. K. (2025). Dvaravati Heritage Tourism: Examining the Interplay Between Destination Image, Memorable Tourism Experiences, and Tourist Revisit Intentions. *Geojournal of Tourism and Geosites*, *59*(2), 674–683. https://doi.org/10.30892/gtg.59214-1446

Cooper, C. (2015). Managing tourism knowledge. *Tourism Recreation Research*, *40*(1), 107–119.

Cox, M. A. A., & Cox, T. F. (2008). Multidimensional scaling. In *Handbook of data visualization* (pp. 315–347). Springer.

Dahanayake, S., Wanninayake, B., & Ranasinghe, R. (2023). Memorable experience studies in wellness tourism: systematic review & bibliometric analysis. *International Journal of Spa and Wellness*, *6*(1), 28–53.

Dai, Y.-D., Yeh, S.-S., Chiang, T.-Y., Chiang, T.-E., & Huan, T.-C. (2025). Nexus of Campers' Experiences: Family Support and Product Involvement Influence Place Dependence, Mediated by Serious Leisure and Co-Production. *Leisure Sciences*, 1–19.

Das, P., Mandal, S., Nedungadi, P., & Raman, R. (2025). Unveiling sustainable tourism themes with machine learning based topic modeling. *Discover Sustainability*, *6*(1), 280.

Díaz, M. R., & Espino-Rodríguez, T. F. (2016). Determining the sustainability factors and performance of a tourism destination from the stakeholders' perspective. *Sustainability (Switzerland)*, *8*(9). https://doi.org/10.3390/su8090951

Dunne, R., Reguant, R., Ramarao-Milne, P., Szul, P., Sng, L. M. F., Lundberg, M., Twine, N. A., & Bauer, D. C. (2023). Thresholding Gini variable importance with a single-trained random forest: An empirical Bayes approach. *Computational and Structural Biotechnology Journal*, *21*, 4354–4360. https://doi.org/10.1016/J.CSBJ.2023.08.033

Duxbury, N., De Castro, T. V., & Silva, S. (2025). Culture–tourism entanglements: moving from

grassroots practices to regenerative cultural policies in smaller communities. *International Journal of Cultural Policy*, *31*(4), 497–516.

Eusébio, C., & Vieira, A. L. (2013). Destination attributes' evaluation, satisfaction and behavioural intentions: A structural modelling approach. *International Journal of Tourism Research*, *15*(1), 66–80.

Fu, Y., Cai, Z., & Fang, C. (2024). Hotspot identification and causal analysis of Chinese rural tourism at different spatial and temporal scales based on tourism big data. *Sustainability*, *16*(3), 1165.

Garín-Muñoz, T., & Moral, M. J. (2017). Determinants of satisfaction with an urban tourism destination: The case of Barcelona. *Journal of Reviews on Global Economics*, *6*(December 2013), 113–128. https://doi.org/10.6000/1929-7092.2017.06.10

Gonzalez, O., O'Rourke, H. P., Wurpts, I. C., & Grimm, K. J. (2018). Analyzing Monte Carlo simulation studies with classification and regression trees. *Structural Equation Modeling: A Multidisciplinary Journal*, *25*(3), 403–413.

Google. (n.d.-a). *Lasiana Beach - Google Maps*.

Google. (n.d.-b). *Liman Beach - Google Maps*.

Google. (n.d.-c). *Nun Baun Dela - Google Maps*.

Google. (n.d.-d). *Pantai Batu Nona - Google Maps*.

Google. (n.d.-e). *Pantai Namosain - Google Maps*.

Google. (n.d.-f). *Pantai Otan - Google Maps*.

Google. (n.d.-g). *Pantai Uiasa - Google Maps*.

Google. (n.d.-h). *Uinian Beach - Google Maps*.

Gössling, S. (2021). Tourism, technology and ICT: a critical review of affordances and concessions. *Journal of Sustainable Tourism*, *29*(5), 733–750.

Hidayanto, M., Supiandi, S., Yahya, S., Ekonomi, L. A.-J. A., & 2009, U. (2009). Analisis Keberlanjutan Perkebunan Kakao Rakyat di Kawasan Perbatasan Pulau Sebatik, Kabupaten Nunukan, Provinsi Kalimantan Timur. *Academia.EduM Hidayanto, S Supiandi, S Yahya, LI AmienJurnal Agro Ekonomi, 2009•academia.Edu*.

Huang, X., Wang, P., & Wu, L. (2024). Well-being through transformation: An integrative framework of transformative tourism experiences and hedonic versus eudaimonic well-being. *Journal of Travel Research*, *63*(4), 974–994.

Jokom, R., Semuel, H., & Wijaya, S. (2025). Sustainable tourism experiences: the role of digital technology and government support in creating tourists' memorable experiences. *Cogent Business & Management*, *12*(1), 2482026.

Kangkan, A. L., Boikh, L. I., Kiak, N. T., & Bolang, R. T. C. (2024). The potential of pelagic fish resources in the waters of Sulamu District, Kupang Regency, Indonesia. *Aquaculture, Aquarium, Conservation & Legislation*, *17*(2), 563–570.

Kazakov, S., & Oyner, O. (2021). Wellness tourism: a perspective article. *Tourism Review*, *76*(1), 58–63.

Kim, J.-H., Ritchie, J. R. B., & McCormick, B. (2012). Development of a scale to measure memorable tourism experiences. *Journal of Travel Research*, *51*(1), 12–25.

Koehler, E., Brown, E., & Haneuse, S. J.-P. (2009). On the assessment of Monte Carlo error in simulation-based statistical analyses. *The American Statistician*, *63*(2), 155–162.

Komšic, J., & Dorčić, J. (2016). Tourism Destination Competitiveness and Online Reputation: Conceptualization and Literature Framework Analysis*. *Tourism & Hospitality Industry 2016, Congress Proceedings*, 144–157.

Kostić, S., Vasović, N., & Marinković, B. (2017). Robust optimization of concrete strength estimation using response surface methodology and Monte Carlo simulation. *Engineering Optimization*, *49*(5), 864–877.

Kovačević, N. D., Kovačević, L., Stankov, U., Dragićević, V., & Miletić, A. (2018). Applying destination competitiveness model to strategic tourism development of small destinations: The case of South Banat district. *Journal of Destination Marketing & Management*, *8*, 114–

124.

Kruskal, J. B., & Wish, M. (1978). *Multidimensional scaling* (Issue 11). Sage.

Li, Q., Li, X., Chen, W., Su, X., & Yu, R. (2023). Involvement, place attachment, and environmentally responsible behaviour connected with geographical indication products. *Tourism Geographies*, *25*(1), 44–71.

Li, S., Liu, A., & Song, H. (2019). Does tourism support supply-side structural reform in China? *Tourism Management*, *71*, 305–314.

Liu, B., Moyle, B., Kralj, A., & Thomas, N. (2025). Psychology of the tourist experience: a synthesis of behavioural and cognitive theoretical approaches. *Current Issues in Tourism*, 1–19.

Luo, J. M., Lam, C. F., & Wang, H. (2021). Exploring the relationship between hedonism, tourist experience, and revisit intention in entertainment destination. *SAGE Open*, *11*(4), 21582440211050390.

Malone, S., McCabe, S., & Smith, A. P. (2014). The role of hedonism in ethical tourism. *Annals of Tourism Research*, *44*, 241–254.

McKercher, B., & Denizci Guillet, B. (2011). Are tourists or markets destination loyal? *Journal of Travel Research*, *50*(2), 121–132.

Mira, M. R., Moura, A., & Breda, Z. (2016). Destination competitiveness and competitiveness indicators: Illustration of the Portuguese reality. *Tékhne*, *14*(2), 90–103.

Muhammad, A., Aisjah, S., & Rofiq, A. (2018). Penilaian Memorable Tourism Experience Sebagai Faktor Penentu Daya Saing Destinasi Wisata Dengan Menggunakan Pendekatan Rapid Appraisal (RAP). *Mix: Jurnal Ilmiah Manajemen*, *8*(2), 272. https://doi.org/10.22441/mix.2018.v8i2.006

Nandini, R., Kusumandari, A., Gunawan, T., & Sadono, R. (2017). Multidimensional scaling approach to evaluate the level of community forestry sustainability in Babak Watershed, Lombok Island, West Nusa Tenggara. *Forum Geografi*, *31*(1), 28–42. https://doi.org/10.23917/forgeo.v31i1.3371

Perry, R. (2019). *Comparative analysis of nations: Quantitative Approaches*. Routledge.

Pitcher, T. J., Lam, M. E., Ainsworth, C., Martindale, A., Nakamura, K., Perry, R. I., & Ward, T. (2013). Improvements to Rapfish: A rapid evaluation technique for fisheries integrating ecological and human dimensionsa. *Journal of Fish Biology*, *83*(4), 865–889. https://doi.org/10.1111/JFB.12122

Pitcher, T. J., & Preikshot, D. (2001). RAPFISH: a rapid appraisal technique to evaluate the sustainability status of fisheries. *Fisheries Research*, *49*(3), 255–270.

Prebensen, N. K. (2026). Conceptualising Sustainable Tourism: The interplay of digital technologies and emotional dynamics. In *Services, Experiences, and Sustainability* (pp. 67–80). Routledge.

Province, B.-S. I. N. T. T. (2026). *The Room Occupancy Rate (ROR) for Star-Rated Hotels in December 2025 Reached 45.76 Percent, Up 13.02 Percent (y-on-y)*. Badan Pusat Statistik Provinsi Nusa Tenggara Timur.

Purwaningsih, R., Annisa, H. N., Susanty, A., & Puspitaningrum, D. D. (2020). Assessment of tourism destination sustainability status using rap-tourism case of natural based tourism. *AIP Conference Proceedings*, *2217*(1).

Rasoolimanesh, S. M., Chee, S. Y., & Ari Ragavan, N. (2025). Tourists' perceptions of the sustainability of destination, satisfaction, and revisit intention. *Tourism Recreation Research*, *50*(1), 106–125.

Rasoolimanesh, S. M., Scott, N., & Woosnam, K. M. (2025). Behavioural theories in tourism: current practices, challenges, and a future agenda. In *Current Issues in Tourism* (pp. 1–4). Taylor & Francis.

Ryff, C. D. (2013). *Eudaimonic well-being and health: Mapping consequences of self-realization.*

Sánchez-Martín, J.-M., Rengifo-Gallego, J.-I., & Blas-Morato, R. (2019). Hot spot analysis versus cluster and outlier analysis: An enquiry into the grouping of rural accommodation in Extremadura (Spain). *ISPRS International Journal of Geo-Information*, *8*(4), 176.

Skavronskaya, L., Moyle, B., & Scott, N. (2020). The experience of novelty and the novelty of

experience. *Frontiers in Psychology*, *11*, 322.

Skavronskaya, L., Moyle, B., Scott, N., & Kralj, A. (2020). The psychology of novelty in memorable tourism experiences. *Current Issues in Tourism*, *23*(21), 2683–2698.

Sthapit, E., Ji, C., Li, M., Garrod, B., Ibrahim, B., & Björk, P. (2025). Memorable wellness tourism experiences: antecedents that lead to enjoyable outcomes. *International Journal of Spa and Wellness*, 1–27.

Stoner, R. (2024). *Leader Self-Awareness: Impact of Self Awareness and Emotional Regulation on Eudemonic Well-Being*. The Chicago School of Professional Psychology.

Stratigea, A., & Katsoni, V. (2015). A strategic policy scenario analysis framework for the sustainable tourist development of peripheral small island areas–the case of Lefkada-Greece Island. *European Journal of Futures Research*, *3*(1), 5.

Timur, D. P. dan E. K. P. N. T. (2026). *Performa Pariwisata Nusa Tenggara Timur Tahun 2025 (Infografis Kunjungan Wisatawan Tahun 2025)*. Disparekraf Provinsi Nusa Tenggara Timur.

Trisoko, R. G., Yanti, R., & Andita, R. P. (2024). The power of local culture in regional tourism capital development. *Indonesian Tourism Journal*, *1*(3), 172–185.

Upadhyay, A., & Vyas, A. (2025). Leveraging Geospatial Insights for Enhancing Tourism Planning: A Locational Perspective on India's Tourism Schemes. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, *10*, 695–700.

Van der Zee, E., Bertocchi, D., & Vanneste, D. (2020). Distribution of tourists within urban heritage destinations: a hot spot/cold spot analysis of TripAdvisor data as support for destination management. *Current Issues in Tourism*, *23*(2), 175–196.

Walker, K., & Moscardo, G. (2014). Encouraging sustainability beyond the tourist experience: ecotourism, interpretation and values. *Journal of Sustainable Tourism*, *22*(8), 1175–1196.

Wilk, V., Morgan, A., Willson, G., & Sibson, R. (2025). Framing theory insights: the co-existence of frame coupling and frame mirroring in social media and online news about a disaster-affected destination. *Tourism Recreation Research*, *50*(6), 1333–1351.

Xu, F., Nash, N., & Whitmarsh, L. (2020). Big data or small data? A methodological review of sustainable tourism. *Journal of Sustainable Tourism*, *28*(2), 144–163.

Yanes, A., Zielinski, S., Diaz Cano, M., & Kim, S. (2019). Community-based tourism in developing countries: A framework for policy evaluation. *Sustainability*, *11*(9), 2506.

Yiu, M., & Law, R. (2014). Review and application of knowledge management and knowledge sharing in tourism. *Asia Pacific Journal of Tourism Research*, *19*(7), 737–759.

Yuan, Y., Park, S., Xu, Y., & Koh, S.-Y. (2025). Exploring hot spots at tourism destination by flow-based density clustering method. *Information Technology & Tourism*, 1–25.

Zhao, Y. (2024). Assessment of environmental pollution in rural tourism based on random forest algorithm. *International Journal of Sustainable Development*, *27*(3), 311–324.

Zhao, Y., & Zhao, X. (2025). Psychological power and goal framing effects on travel intention. *Asia Pacific Journal of Tourism Research*, *30*(12), 1557–1576.