

The Role of Storytelling in Improving the Image of Ecotourism Destinations: Exploratory Studies on Millennials and Gen Z in Malaysian Crabs

Elfitra Desy Surya, Sri Rahayu, Rashdan Bin Rashid, Muhammad Faishal Annas

Abstract

The shift in tourism trends towards a more sustainable and authentic experience places Ecotourism as a crucial sector. In the context of digital marketing, Storytelling is believed to have great potential to shape the image of destinations emotionally and cognitively. The study focused on Millennial and Gen Z audiences as the main segment of travelers who demand authenticity and have a strong attachment to social media. This study aims to explore in depth the role of Storytelling (through the dimensions of Authenticity, Emotional Engagement, and Message Clarity) in influencing their perception of the Image of Sustainable Ecotourism in Ketam, Malaysia. This research uses an exploratory qualitative approach. Data was collected through *In-Depth Interviews* with Millennial and Gen Z representatives who have visited or consumed Crab Ecotourism content, as well as content analysis of destination digital promotional materials. Key indicators analyzed include Factual Authenticity of stories, levels of Emotional Engagement generated, and Message Clarity regarding sustainability values. Effective storytelling, which combines Factual Authenticity with the ability to evoke Emotional Engagement, serves as a key mechanism to improve the image of Sustainable Ecotourism among Millennials and Gen Z. Crab Ecotourism Destinations need to integrate local economic narratives and clarify the role of tourists (CTAs) in the story, so that the Image of Sustainable Ecotourism can be formed holistically (*Triple Bottom Line*).

Keywords: Storytelling, Authenticity Storytelling, Emotional Engagement, Mess Clarity, Sustainability Ecotourism Image

Elfitra Desy Surya¹

¹Master of Management, Universitas Pembangunan Panca Budi, Indonesia
e-mail: elfitradesy@dosen.pancabudi.ac.id¹

²Sri Rahayu, ³Rashdan Bin Rashid, ⁴Muhammad Faishal Annas

^{2,4}Master of Management, Universitas Pembangunan Panca Budi, Indonesia

³Master of Management, Politeknik Tuanku Syed Sirajuddin, Malaysia
e-mail: srirahayu@dosen.pancabudi.ac.id², rashdanrashid@ptss.edu.my³, faishalannas10@gmail.com⁴

2nd International Conference on Islamic Community Studies (ICICS)

Theme: The Role Of Storytelling In Improving The Image Of Ecotourism Destinations

Introduction

The global tourism industry has undergone a significant shift from mass tourism to a more responsible and sustainable form of tourism, in which ecotourism plays a crucial role (Suriyankietkaew et al., 2025). Ecotourism is defined as responsible travel to natural areas that preserve the environment, sustainability the well-being of local residents, and involve interpretation and education (Samper-Mendívil et al., 2025, 2025; Shuvo & Ahmed, 2025; Wadei et al., 2025). In the context of global destination competition, building a strong and positive destination image is key to attracting tourists. A good image not only promises an interesting experience, but also instills conservation and cultural values (Chen, 2025; Rodríguez-Pose & More, 2024; Ruiz-Ballesteros & González-Portillo, 2024).

In the digital era, conventional marketing methods are considered less effective, especially in conveying the authentic values and deep philosophies of an ecotourism destination (Nikjoo et al., 2025, 2025; Rocca & Zielinski, 2022). Storytelling has emerged as a powerful marketing communication strategy. Storytelling allows destinations to create emotionally charged narratives, build personal connections, and instill sustainable values in potential travelers. In ecotourism, storytelling can be used to tell the story, uniqueness of flora and fauna, conservation efforts, and local wisdom of the community, which directly contributes to the formation of a unique and authentic image. Previous research has shown that storytelling in tourism is effective in creating emotional attachment and increasing tourist satisfaction (for example, Madyawati, 2016; Nugraha, 2024).

Ecotourism has become one of the important sustainable development approaches in the global tourism industry (Laesser, 2023). In Malaysia, the concept of ecotourism is gaining attention because of its potential to combine environmental conservation with the economic improvement of local communities (Surya & Suwarno, 2023). One of the areas that has great potential in the development of ecotourism is Pulau Ketam, a small island located off the coast of Selangor (Qiu, 2023). This island is known for its unique fishing community, wooden houses on the water, and a mangrove forest ecosystem that is still quite well preserved (Surya et al., 2018). However, despite having a distinctive ecotourism appeal, tourism development (Aunchistha, 2025; Bang et al., 2025; Cáceres-Feria et al., 2021; Dao et al., 2025).

However, despite having a distinctive ecotourism appeal, tourism development on Pulau Ketam faces various challenges (Cruwys et al., 2025; Maria Laura Di Domenico Djebali, 2025; Samekin et al., 2025; Shi, 2025; Suriyankietkaew et al., 2025). One of the main problems is the lack of environmentally friendly infrastructure as well as public and tourists' awareness of the importance of nature conservation. In addition, the lack of integrated planning between local governments, local communities, and tourism industry players is also an obstacle in the development of sustainable ecotourism (Cruz-Milán & Castillo-Ortiz, 2023).

Uncontrolled tourism activities risk having negative impacts on the environment, such as water pollution, mangrove forest damage, and disturbance of wildlife habitats (Rambu Atahau et al., 2020). On the other hand, many local communities still depend on the traditional fisheries sector, so there is a need to make efforts to make ecotourism an alternative source of income without damaging the balance of the ecosystem (Greig et al., 2026; Hoover & Krupka, 2025; Kelleher & Murphy, 2025; Loustau, 2025; Worley & Smith, 2026, 2026).

Therefore, it is important to study more deeply the potential, challenges, and strategies for ecotourism development on Ketam Island in order to provide long-term benefits both for the environment and the welfare of the local community. This study is expected to be the basis for formulating policies and concrete steps in the management of sustainable ecotourism in the region.

However, the problems of ecotourism in Pulau Ketam, Malaysia include (1) Lack of environmentally friendly infrastructure. Although Pulau Ketam has great potential to be developed as an ecotourism destination, supporting facilities and infrastructure such as waste management, environmentally friendly transportation systems, and sustainable public facilities

are still minimal. This can reduce the comfort of tourists and negatively impact the local environment. (2) Environmental Degradation Due to Tourism Activities The increasing number of tourist visits that are not accompanied by environmental awareness causes marine pollution, destruction of mangrove forests, and disruption of coastal ecosystems. Activities such as careless waste disposal, the use of motorized boats that are not environmentally friendly, and development without environmental studies worsen the island's natural conditions (Vitasurya, 2016).

The Millennial (Generation Y) and Generation Z age groups currently dominate the global population and tourism market. This generation is known as *digital natives* who are highly connected to social media and tend to seek authentic, meaningful, and sustainable experiences. They are heavily influenced by narrative and visual content on digital platforms. Therefore, ecotourism marketing strategies must be adjusted to reach and interact effectively with these two generations, where the use of strong narratives (storytelling) is fundamental. An in-depth understanding of how Millennials and Gen Z respond to ecotourism *storytelling* will greatly determine the success of efforts to improve the image of the destination (Mulyadi et al., 2024; Muzambiq et al., 2023; Pakpahan et al., 2023; Pijet-Migoñ & Migoñ, 2022, 2022; Pintossi et al., 2023; Purwoko et al., 2023; Serrat, 2008; Sinamo et al., 2021; Siregar et al., 2022; Widodo, 2021).

This study chose to focus on Ketam, Malaysia as the location of the exploratory study. Malaysia, as a country rich in ecotourism potential, has locations with unique culture and nature. By specializing in Crabs, research can explore specifically how their natural wealth and local culture can be processed into compelling narratives. This exploratory study aims to identify the types of storytelling that most resonate with the preferences of Millennials and Gen Z and how the mechanism of telling these stories (through digital media or *on-site*) contributes to improving the image of Crab Ecotourism (Amin et al., 2012; De Canio, 2023; Fadilah & Huda, 2024; Farina KhanKashif, n.d.; Grigorieva, 2022; Khuadthong et al., 2025; Patrick StraßerChristoph, Till J. Bugaj, Michael Köhl, 2022; Perea et al., 2025; Valencia-Arias et al., 2025; M. S. Zakaria & Yusof, 2024).

Although the role of *storytelling* and destination imagery has been widely researched in general, there are still gaps in the literature, in particular: Exploratory studies that specifically explore the types and elements of *storytelling* that are most effective for ecotourism. An in-depth understanding of how Millennials and Gen Z's responses and perceptions of *ecotourism storytelling* specifically affect the formation of destination imagery. Application and relevance of *storytelling* in the context of ecotourism in specific locations such as Ketam, Malaysia for the formulation of targeted promotion strategies. Therefore, this research is important to bridge the gap and make a practical contribution in formulating innovative and narrative-based ecotourism marketing strategies, especially to attract young tourists.

Literature Review

The Role Of Storytelling

The article "*Solving the mystery of storytelling in destination marketing: A systematic review*" (Journal of Hospitality and Tourism Management, June 2024) concludes that storytelling in destination marketing is still developing, does not yet have a solid theoretical foundation, and is dominated by a qualitative approach (Roy et al., 2023). Important elements of storytelling such as story content, narrator, modalities, and distribution channels must be integrated and involve various stakeholders.

The study "*The Tourist as Storyteller*" (2024) highlights that tourists are not only recipients of messages, but also narrative creators (*co-creation*). Aspects such as social media narratives, personal introspection, traveler behavior, and satisfaction are the main focuses (Wongsansukcharoen, 2022). Storytelling is described as an important tool in creating customer engagement and satisfaction. The research "*Exploring Social Media Storytelling to*

promote Tourist Destinations: A case study of thematic villages in Malang City" (IJOSSH, November 2024) explores the use of digital storytelling on social media to shape destination branding locally and thematically (Andhiyani Rahmasari Putri & Ari Susanti, 2022; Saragih & Surya, Elfitra Desy, B, 2021; Surya et al., 2022, 2023; Surya, Ginting, et al., 2018; Surya, Rini, et al., 2018).

Storytelling is fundamentally the art of conveying a narrative that includes a series of real or fictional events, involving characters, plots, conflicts, and messages (Rose, 2016). In a broader context, storytelling is an ancient way for humans to share knowledge, values, and experiences (Serrat, 2017). In the discipline of marketing communication, Storytelling is defined as Storytelling Marketing, which is a marketing technique that develops and communicates *brand* or product messages through narratives that are arranged emotionally and uniquely (Ngalup, 2024). The goal is beyond just promotion, but rather to Build Emotional Bonds: Touching stories can trigger oxytocin release, create empathy, and strengthen the relationship between brand and audience (Zak, 2015, in Ngalup, 2024). Creates Differentiation: A unique narrative helps brands stand out and is more memorable compared to conventional advertising (Kaufman, in JPBI, 2024). Conveying Core Values: Storytelling is effective for communicating the deep origins, values, or philosophies of an entity (Aisyah & Rachmadi, 2022; Barbieri, 2010; Basnet & Auliya, 2022; Fanelli & Romagnoli, 2020; Management, 2005; Muji et al., 2022; Rahayu, 2022; Shen & Cottrell, 2008).

Elements of Effective Storytelling A strong story must contain key narrative elements (Frye, 1957; Hoda & Zulfikar, 2022; Insan Wisata, 2023), which includes: Characters (Characters): Who lives the story? In tourism, the character can be tourists, locals, or even the destination itself. Setting: Where the story takes place, This is very crucial in tourism because the setting is the tourist destination. Plot: The sequence of events that occurs (Mesra, B, Sri Wahyuni et al., 2020). Conflict: A challenge or tension that makes the story interesting and triggers emotions. Resolution: How conflicts are resolved, which often contain a moral message or valuable lesson.

Storytelling has a very strategic role in tourism because destinations basically sell *experiences* and *meanings*, not just physical products (Wahyuni et al., 2020). Destination Image is the totality of beliefs, ideas, and impressions that individuals have about a place (Crompton, 1979). A positive image greatly determines the decision to visit and revisit. Creation of Emotional Connections: Storytelling allows destinations to create emotionally evocative narratives, which have been shown to positively and significantly affect *Tourist Satisfaction* and ultimately trigger Interest in Returning Visits (Alvianna & Alviandra, 2024). Strengthen *Destination Brands*: Consistent and authentic stories help build a strong brand identity, differentiate destinations from competitors, and make destinations more memorable (Candi, 2024). Cultural and Historical Values: In tourism promotion, *storytelling* effectively elevates local cultural values, legends, and history, making them more alive and meaningful for potential tourists (Kemenparekraf, 2021).

Ecotourism is a type of tourism that really needs *storytelling* because it has a dual mission: recreation as well as education and conservation. Raising Conservation Awareness: Stories can be used to educate tourists about the importance of environmental conservation, the uniqueness of ecosystems, and the positive/negative impacts of human activities. Exploring Unique Values: Storytelling is an effective method to explore and introduce the unique values of an ecotourism destination, such as the stories behind flora and fauna, or conservation efforts carried out by local communities (Nugraha, 2024). Meaningful Experiences: For ecotourism travelers looking for an authentic and immersive experience, *storytelling* can transform a visit from a mere sight to an experience that carries meaning and motivates behavior change.

The implementation of *storytelling* must consider the platform and the characteristics of the target audience, especially the Millennial Generation and Gen Z. Millennials and Gen Z are *digital natives* who consume information and narratives through social media (Instagram,

TikTok, YouTube). Digital *storytelling content* must be visually and narratively appealing, concise, interactive, and *relatable* (Uhamka, 2025). The younger generation tends to be skeptical of traditional promotions and value stories that are authentic, transparent, and come from real experiences or *peer-to-peer (Word of Mouth)*. *Successful storytelling* for this segment often uses a short video format, immersive *visual experiences*, and *voice-over* narration or monologues that feel personal (Miryam & Antonio, 2022). Overall, *storytelling* serves as an emotional and cognitive bridge that connects the narrative of the destination with the perception of tourists, which will ultimately shape and enhance the image of ecotourism in the eyes of young audiences (Liu et al., 2022).

Authenticity Storytelling

The concept of authenticity was first introduced academically in tourism by (Saif Furqan Abdullah & Artanti, 2021), who argued that modern travelers seek "authentic experiences" as an escape from the routine and alienation of industrial society. Authenticity has become an important element, especially in cultural tourism and ecotourism, as it reflects the true values, traditions, and authenticity of a place (Wongsansukcharoen, 2022).

Authenticity in tourism is generally divided into two main views: Object-Related Authenticity This refers to the physical and historical authenticity of an object or place. Genuine/Historical Authenticity: Historical authenticity, unchanged physical structure, and culture that is passed down from generation to generation (Mesra, 2018) Constructive Authenticity: Tourists' perception of authenticity is formed based on their context and understanding, regardless of absolute physical authenticity. Existential Authenticity This refers to the personal and subjective experiences that tourists feel. This authenticity is achieved when individuals feel "*being true to oneself*" or deeply connected to meaningful experiences (Aslan, 2023; Mavani et al., 2025; Sun et al., 2024; Tama & Voon, 2014; Z. Zakaria & Mohd, 2023). In the context of marketing, modern travelers (especially Millennials and Gen Z) are increasingly looking for authentic experiences (Fahmi M. R., 2023), making authenticity a key attraction (Hamdan et al., 2024).

Authenticity Storytelling is the use of narrative to communicate the authenticity of destinations (both objective and existential) in an honest, transparent, and trustworthy way (Nugraha, 2024). In the age of social media, audiences can easily distinguish sincere promotions from artificial ones. Inauthentic storytelling can damage the credibility of the destination (Mahrinasari et al., 2024; Melović et al., 2020; Papadopoulou et al., 2023; Rao et al., 2024; Saleh Al-Omoush et al., 2021). Authenticity in storytelling is realized when destinations choose to tell true stories, conservation struggles, or the daily lives of local communities (Nugraha, 2024). It's much more powerful than a narrative that focuses only on superficial physical beauty.

Authenticity is enhanced when the storyteller is a person who is directly involved or has a deep connection to the destination, such as locals, ecosystem keepers, or founders of ecotourism initiatives. Story authenticity has a vital role to play in shaping and reinforcing the image of a destination: Authentic stories make promotions feel more honest, which directly increases travelers' confidence in the projected image. True stories about local challenges and values are able to create a deeper emotional attachment, resulting in a much more memorable experience than just an ordinary tourist activity (Nugraha, 2024; ResearchGate, 2025). It is this effective experience that triggers Satisfaction and Interest in Returning (Alvianna & Alviandra, 2024).

In the midst of the homogeneity of tourism products, narrative authenticity is a powerful source of differentiation. For example, telling a local legend in the Suroboyoan dialect in Surabaya can provide a personal and authentic touch that sets it apart from other destinations (Academic Media Journal, 2024). In ecotourism, the authenticity dimension becomes more critical as it deals not only with culture, but also with the integrity of nature (Bitsani & Kavoura,

2014; Falana et al., 2024; Hu et al., 2024; Inkinen et al., 2024; Ma et al., 2021; Maziliauske, 2024; Raddats et al., 2024; Reynolds et al., 2024; Santiago et al., 2024; Wu & Yang, 2023). Authentic storytelling in ecotourism must be honest about the conditions the environment, ongoing conservation efforts, and the challenges faced. This includes acknowledging environmental impacts, not just showcasing the beauty of nature.

Authentic stories should highlight the real role of local communities (e.g., the Crab community) in management and preservation. This reflects the principles of ecotourism that support local well-being and prevent "overcommercialization" that can deprive cultural authenticity (Triatma Mulya, 2024). Authenticity of storytelling in ecotourism serves to communicate a dual goal: *pleasure* and *purpose* (conservation purpose/education). When the story feels authentic, the message of conservation is more receptive and motivates tourists to contribute to sustainability.

Emotional Engagement

Emotional Engagement refers to a psychological and affective state in which individuals feel connected or have a strong emotional response to an object, brand, or in this context, a narrative (story). This goes beyond just cognitive attention; It involves feelings, empathy, and self-identification. According to Hollebeek et al. (2014), emotional engagement is an important component of overall *customer engagement*, characterized by the level of positive emotions experienced by consumers when interacting with a brand or content.

The concept of emotional involvement in narrative is supported by several psychological and communication theories. Popularized by Green and Brock (2000), NTT explains that when a person is "stuck" or "carried away" into the world of stories, their attention, mental image, and emotions are focused entirely on the narrative. This transport occurs when the story is presented with strong details and emotions, causing the reader/viewer to temporarily forget their own reality and experience the events in the story as if they were part of it. The higher the narrative transport, the more likely it is that the individual will be influenced by the messages and values contained in the story.

Neuroeconomic research (e.g., Zak, 2015) has found that effective and conflict-laden narratives/empathy can trigger the release of oxytocin in the brain. Oxytocin, often called the "love hormone" or "bonding hormone," has a crucial role: Oxytocin makes the audience more concerned about the characters and values in the story. Increased empathy and emotional bonding have been shown to increase the desire to help, collaborate, or, in marketing, buy a product or visit a told destination.

In the context of tourism, storytelling aims to sell experiences and dreams, where emotional engagement becomes a bridge between the narrative of the destination and the motivation of the traveler. Successful emotional engagement through storytelling produces *Destination Emotional Attachment*, which is a positive and deep emotional bond between tourists and a place (Yuksel, 2010). This bond is driven by the story of: Struggle and Hope: The story of local communities fighting to preserve culture or the environment. A narrative that evokes a sense of amazement (*awe*) and admiration for the beauty of the ecosystem. A story that focuses on the transformative experiences of other characters (tourists or residents) in the destination.

Emotional engagement has a strong and positive correlation with the following marketing outcomes: **Affective Image Enhancement:** Emotional engagement contributes to the affective (feeling) aspect of the destination's image, making the place perceived as a fun, warm, and inspiring destination. **Increased Tourist Satisfaction:** Travelers who feel emotionally connected to the story of the destination tend to have a higher level of satisfaction, as their experiences feel more meaningful (Alvianna & Alviandra, 2024). **Encourage Revisit Intention:** Deep emotional attachment is a strong predictor of loyalty and intention to return, as the destination has left an emotional footprint that is hard to forget.

Message Clarity

Message Clarity is the extent to which the message conveyed can be received, understood, and interpreted accurately by the target audience, according to the communicator's intent (Aaker et al., 2017). In the context of storytelling, the clarity of the message ensures that *the moral of the story* (the core message) or the value to be promoted (e.g., the value of ecotourism conservation) is not lost in the midst of a complex storyline.

Effective communication must strike a balance between providing compelling details (which are necessary for authenticity and emotional engagement) and maintaining the clarity of the message's core. Messages that are too dense, use jargon that the audience is unfamiliar with, or have too much focus (multi-theme) tend to reduce clarity and memorability.

In narrative, the clarity of the message is determined by several factors related to the structure and delivery of the story. An effective story in marketing should have one clear primary goal (e.g., "Crabs are an ecotourism destination that supports local fishers"). All elements of character, conflict, and visual narrative must be directed in support of this single goal (Kotler & Keller, 2016). If the story tries to sell the beauty of nature, culture, and culinary at the same time without a clear hierarchy, the core message will be blurred.

Messages must be delivered consistently across multiple platforms and media. Stories about Crab ecotourism on Instagram must be in line with the narrative presented by the tour guide on site. Narrative inconsistencies create confusion and damage the credibility of the destination, thus reducing the clarity of the message. Clarity is often achieved through simplicity. Audiences, especially Millennials and Gen Z who consume content quickly on social media, find it easier to digest stories that are concise, get to the point, and use relatable language. Relevance ensures the message is important to the audience, so they are motivated to understand and remember it.

Message clarity has a direct and measurable impact on promotion success, especially in ecotourism that has an in-depth educational mission: Increasing Understanding of Ecotourism Values: Ecotourism is based on three pillars (economic, environmental, and social). If the story is clearly told, tourists will understand the responsibility that comes with their visit, not just looking around. This clarity turns tourists into conscious participants. Encourage Call-to-Action: Clear messages will make it easier to motivate actions, such as interest in visiting, intent to buy local products, or a desire to share a story. For example, a clear story about the dangers of plastic waste in Crab will encourage tourists not to throw garbage carelessly.

Formation of a Strong Cognitive Image The image of the destination has a cognitive component (knowledge). A clear message ensures that the key elements of the destination (e.g., mangrove forests, Gen Z uniqueness, authentic fishing villages) are well-structured in the minds of potential tourists, thus reinforcing the cognitive aspects of the Crab Ecotourism image.

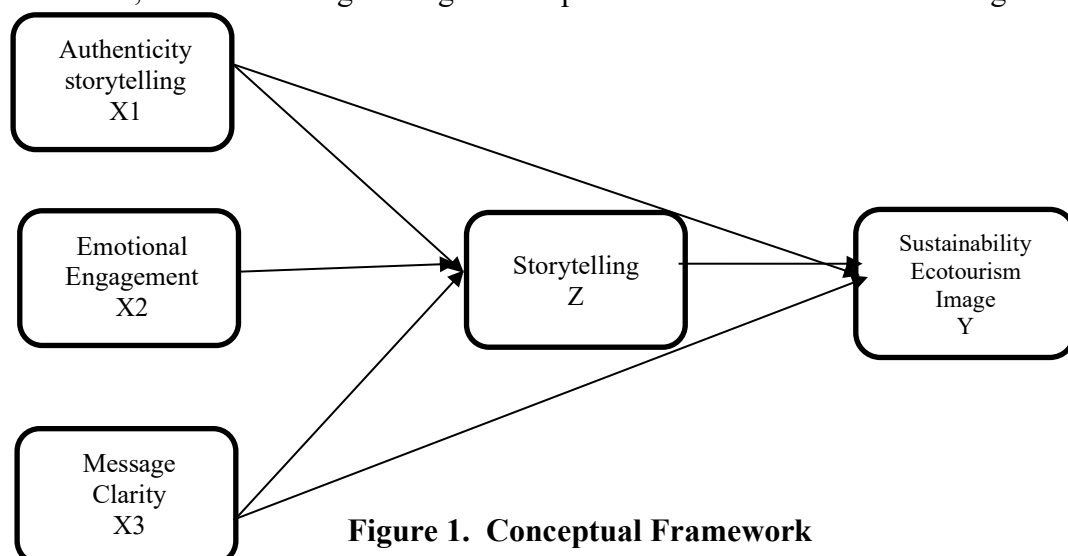


Figure 1. Conceptual Framework

Research Methodology

Research Approach

This study uses a quantitative approach with an associative study design, because the main goal is to understand in depth how the role of storytelling and visualization affects the formation of the image of ecotourism destinations among the millennial and Gen Z generations. Types and Design of Research Case study designs were selected to gain a rich understanding of storytelling practices and visual utilization in the context of specific ecotourism destinations.

The Data Analytics approach will be collected through in-depth interviews with millennial and Gen Z travelers, destination managers, and local content creators. Participatory observations were also carried out on promotional materials, social media, and tourism activities in the field. Content analysis is used to examine visual content (photos, videos, illustrations) and destination promotional narratives. Data analysis is carried out using thematic analysis techniques to find patterns, themes, and meanings that emerge from the data. Research Subjects Millennial Tourists (born 1981–1996) and Gen Z (born 1997–2012) who have visited or have an interest in Crab Island. Ecotourism destination managers and local stakeholders. Content creators who produce digital promotional materials related to Crab Island.

Research Location And Context

The research was carried out on Ketam Island, Malaysia, which is known as an ecotourism destination with local cultural potential and unique mangrove ecosystems. This location was chosen because it has a strong visual appeal and a potential cultural narrative to build the image of the destination.

Population And Sample

The research population is Millennial (born 1981–1996) and Gen Z (born 1997–2012) individuals who have visited Pulau Ketam in the last 24 months *or* plan to visit in the next 6 months, Consuming narrative/visual content about Pulau Ketam (Instagram, TikTok, YouTube, blogs, destination websites) as many as 300 tourists. Then by using the slovin formula, a research sample of 171 tourists was obtained.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{300}{1 + 300(0,05)^2}$$

$$n = 171 \text{ tourist}$$

Data Collection Techniques

Data Collection Techniques In-depth interviews to explore perceptions and experiences. Focus Group Discussion (FGD) with millennial and Gen Z groups to understand collective dynamics. Documentation is in the form of social media analysis, brochures, and the official website of the destination. Direct observation at the destination to see the real form of storytelling and visual application. Data Validity and Validity Use triangulation of sources and methods to compare data from interviews, observations, and content analysis. Member checks are carried out by asking for confirmation from respondents on the results of the researcher's interpretation.

Results

Research Results

Table 1 shows that of all respondents, 65 (65%) were male and 35 (35%) were female. By age, respondents 16-25 (5%) were aged 26-35, (10%) were aged 36-45 (35%) and between 37-45 (25). And > 45 (5%) Based on their recent education, respondents had a Bachelor's degree (40%) had a high school diploma (15%) had a graduate degree (20%) had a diploma (25%). Based on respondents' income, >respondents earn between IDR 13,000,000 (5%), earn between IDR 9,000,000-12,000,000 (35%), earn between 4,000,000-8,000,000 (40%), earn between 1,000,000-3,000,000 (20%).

Table 1. Characteristics of respondents

Characteristics	Options	Respond	
		N	%
Gender	Male	65	65
	Female	35	35
Age (years)	16-25	5	5
	26-35	10	10
	36-45	35	35
	37-45	25	25
	>45	5	5
Education	Diploma Degree	25	25
	Postgraduate's Degree	40	40
	Bachelor's Degree	20	20
	High School Degree	15	15
Income	> IDR 13,000,000	5	5
	> IDR 9,000,000 up to 12,000,000	35	35
	> IDR 4,000,000 up to 8,000,000	40	40
	IDR 1,000,000 up to 3,000,000	20	20

The first evaluation is to assess the loading factor. This evaluation aims to determine the relationship between indicators and latent variables. The value of the loading factor must have a value of $(\lambda) > 0.7$. The model is recalculated if the loading value $(\lambda) < 0.7$, and if the loading factor value (λ) is 0.7, then the variable indicator is considered valid. Indicators with high loading factors greatly contribute to explaining latent variables. If the value of the loading factor for the variance inflation factor.

Table 2. Loading factors, CR, AVE, and CA

Indicator	Loading Factor	Composite Reliability	AVE	Cronbach's Alpha
The Role of Storytelling		0,924	0,775	0,902
Emotional Bonding	0,816			
Memorability	0,733			
Encouraging Self-Identification	0,773			
Authenticity storytelling		0,932	0,744	0,923
Factual Authenticity	0,840			
Narrative Authenticity	0,843			

Existential Authenticity	0,825			
Procedural Authenticit	0,846			
Emotional Engagement		0,944	0,760	0,934
Empathy	0,831			
Effective Reaction	0,834			
Personal Bonding	0,832			
Message Clarity		0,976	0,766	0,914
Cognitive Narrative Focus Ease of Remembering Messages	0,718 0,743 0,756			
Sustainability Ecotourism Image		0,945	0,745	0,921
Environmental Conservation	0,865			
Waste Management	0,834			
Conservation Education	0,834			

(VIF) less than 5, there is no multicollinearity between indicators. Further, the AVE value for the checked variable was above the minimum value of 0.5. The results are shown in Table 2. There are three criteria for assessing convergent validity: (1) all loading factor > 0.60, (2) composite reliability (CR) must be greater than 0.70, and (3) the mean of extracted variance (AVE) must > 0.50. In addition, all Cronbach's Alpha (CA) values must be greater than 0.70 to indicate good measurement reliability. The discriminant validity of all constructs is also sufficient because the square root of the AVE of each construct (diagonal entry of each column) is greater than its correlation with other constructs (Prebensen & Xie, 2017).

Discriminant validity refers to the degree to which the construct differs of a particular model. There are several tests of discriminant validity, such as the Fornell- Larcker Criterion, cross-loading, and the Heterotrait-Monotrait Ratio (HTMT). This study uses HTMT because all HTMT ratios are less than the maximum value and maximum limit of 0.93, which proves that HTMT is the superior method in assessing discriminant validity (Su et al., 2020). Therefore, this study uses HTMT analysis to assess discriminant validity, as summarized in Table 3.

Table 3. Discriminant validity

Variable	TRS	AUS	EEG	MCY	SEI
The Role of Storytelling	0,864				
Authenticity storytelling	0,852	0,853			
Emotional Engagement	0,834	0,844	0,833		
Message Clarity	0,823	0,835	0,829	0,823	
Sustainability Ecotourism Image	0,813	0,832	0,812	0,814	0,811

Table 4 shows the hypothesis testing. This study found that the Role of Storytelling had a positive impact on the Destination Image ($\beta = 0.864$, $p < 0.000$). Visuals significantly affected the Destination Image ($\beta = 0.852$, $p < 0.000$). Satisfaction had a positive impact on Destination Image ($\beta = 0.834$, $p < 0.001$). Satisfaction mediated the relationship between Storytelling Role, Visual and Destination Image $\beta = 0.823$, $p < 0.000$).

Table 4. Direct and mediated influence on the variables

Hypotesis	B	p-value	Decision
<i>H1</i> :Authenticity storytelling has a positive and significant effect on storytelling Millennials and gen Z in Malaysian Crab	0,632	0,000	Accepted
<i>H2</i> :Emotional Engagement has a positive and significant influence on Millennial and Gen Z storytelling in Ketam Malaysia	0,571	0,000	Accepted
<i>H3</i> :Message Clarity has a positive and significant influence on Millennial and Gen Z storytelling in Malaysian Crabs	0,166	0,001	Accepted
<i>H4</i> :The Role of Storytelling has a positive and significant influence on Millennial and Gen Z Sustainability Ecotourism Image in Malaysian Crabs	0,473	0,000	Accepted
<i>H5</i> :Authenticity storytelling has a positive and significant influence on Millennial and Gen Z Sustainability Ecotourism Image in Malaysian Crabs	0,434	0,000	Accepted
<i>H6</i> :Emotional Engagement has a positive and significant effect on the Sustainability Ecotourism Image of Millennials and Gen Z in Crab Malaysia	0,432	0,000	Accepted
<i>H7</i> :Message Clarity has a positive and significant impact on Millennial and Gen Z Sustainability Ecotourism Image in Malaysian Crabs	0,342	0,000	Accepted
<i>H8</i> :Authenticity storytelling has a positive and significant influence on the Sustainability Ecotourism Image of Millennials and Gen Z in Ketam Malaysia through storytelling	0,346	0,000	Accepted
<i>H9</i> :Emotional Engagement has a positive and significant influence on the Sustainability Ecotourism Image of Millennials and Gen Z in Crabs Malaysia through storytelling	0,346	0,000	Accepted
<i>H10</i> :Message Clarity has a positive and significant impact on Millennial and Gen Z Sustainability Ecotourism Image in Malaysian Crabs through storytelling	0,341	0,000	Accepted

Dicussion

This section presents the results of the initial exploration of Crab (location, attraction, and existing promotional strategies). Briefly describe the main attractions of the Crab (e.g., mangrove forests, fishing villages, local culture) and the sustainability issues faced (e.g., marine litter or socioeconomic challenges). Contextualize these findings with the need for strong *Storytelling*. Identify narrative potential (relatable assets) and narrative challenges (problems that need to be addressed).

Present exploratory findings regarding media preferences and travel motivations of Millennials and Gen Z (e.g., they are looking for *unique and aesthetic experiences* for social media, and demand authenticity). These findings confirm that *Storytelling* strategies should be digital-based and emphasize sustainability values that are relevant to this generation.

This section presents the results of measuring (or exploring) the quality of Storytelling that already exists in Ketam, using predetermined indicators (Authenticity, Emotional Engagement, and Message Clarity). The findings show (for example) that Factual Authenticity

(e.g., the story of an old fisherman) is highly rated by respondents, but Narrative Authenticity (transparency about environmental issues) is still poorly presented.

Millennials/Gen Z highly value storytellers who are native locals (high on the *Narrator Authenticity* indicator), as this increases trust and existential authenticity. High authenticity through stories (e.g., about conservation struggles) helps overcome Gen Z's skepticism of *overly polished* promotions. The discussion should relate these findings to MacCannell's theory of authenticity: Audiences seek existential authenticity through stories told by authentic sources.

Most respondents reported significant levels of Emotional Attachment to stories that focused on local wildlife or conservation impacts (high on the *Empathy and Sympathy* indicator). Stories that focus only on the beauty of nature have a lower emotional appeal. The use of dramatic visuals and conflict-focused narratives (e.g., *rescued mangroves*) is particularly effective in triggering *Narrative Transportation*.

These findings support the *Narrative Transportation Theory* (Green & Brock): When emotional stories are optimized, they increase personal attachment and a sense of *destination memorability*. Emotions (triggered by stories) serve as powerful drivers in shaping images, not just cognitive information. The message about environmental conservation is considered very clear, especially when the story is presented in a concise short video format. However, the message regarding local economic support is considered less clear (low on the *Clarity indicator*). Young audiences love the unity of the theme; the message should be directly related to ecotourism and its positive impact. Clarity of message is critical to the effectiveness of ecotourism. The lack of clarity on the economic dimension shows that there is a *gap* in the communication of TBL (Triple Bottom Line) values, where the environmental side dominates the narrative more than the social and economic side.

The Influence of Storytelling on Environmental Image It was found that the Role of Storytelling significantly affects the audience's perception of Environmental Conservation and Crab Conservation Education. An authentic narrative of conservation efforts directly increases the perception that Crab is a *destination that is responsible* for the environment. This shows that *storytelling* is an effective tool for communicating *destination conservation actions*, turning them into *perceptions* (positive images).

The Influence of Storytelling on Socio-Cultural Imagery There is a strong correlation between Emotional Engagement (especially sympathy for the community) and increased perceptions of Local Engagement & Participation and Respect for Local Culture. When stories make Millennials/Gen Z care about local characters, they perceive the destination as *a place that is fair and respectful* of its people. This strengthens the social pillar of the Sustainable Ecotourism Image.

The Influence of Storytelling on Economic Image Message Clarity regarding *Call-to-Action* (CTA) to support local products has a positive but weak relationship with the perception of Local Product Support. Although *Storytelling* is able to create bonds, its effect on the economic dimension is lower. This indicates that the story alone is not enough; *storytelling* must be accompanied by clear ease of access and transactions to support the local economy (requires integration of Storytelling with Accessibility/Amenity).

Conclusion

This section presents the results of the initial exploration of Crab (location, attraction, and existing promotional strategies). Briefly describe the main attractions of the Crab (e.g., mangrove forests, fishing villages, local culture) and the sustainability issues faced (e.g., marine litter or socioeconomic challenges). Contextualize these findings with the need for strong *Storytelling*. Identify narrative potential (relatable assets) and narrative challenges (problems that need to be addressed). Present exploratory findings regarding media preferences and travel motivations of Millennials and Gen Z (e.g., they are looking for *unique and aesthetic experiences* for social media, and demand authenticity). These findings confirm that

Storytelling strategies should be digital-based and emphasize sustainability values that are relevant to this generation.

This section presents the results of measuring (or exploring) the quality of *Storytelling* that already exists in Ketam, using predetermined indicators (Authenticity, Emotional Engagement, and Message Clarity). The findings show (for example) that Factual Authenticity (e.g., the story of an old fisherman) is highly rated by respondents, but Narrative Authenticity (transparency about environmental issues) is still poorly presented.

Millennials/Gen Z highly value storytellers who are native locals (high on the *Narrator Authenticity* indicator), as this increases trust and existential authenticity. High authenticity through stories (e.g., about conservation struggles) helps overcome Gen Z's skepticism of *overly polished* promotions. The discussion should relate these findings to MacCannell's theory of authenticity: Audiences seek existential authenticity through stories told by authentic sources.

Most respondents reported significant levels of Emotional Attachment to stories that focused on local wildlife or conservation impacts (high on the *Empathy and Sympathy* indicator). Stories that focus only on the beauty of nature have a lower emotional appeal. The use of dramatic visuals and conflict-focused narratives (e.g., *rescued mangroves*) is particularly effective in triggering *Narrative Transportation*.

These findings support the *Narrative Transportation Theory* (Green & Brock): When emotional stories are optimized, they increase personal attachment and a sense of *destination memorability*. Emotions (triggered by stories) serve as powerful drivers in shaping images, not just cognitive information. The message about environmental conservation is considered very clear, especially when the story is presented in a concise short video format. However, the message regarding local economic support is considered less clear (low on the *Clarity indicator*). Young audiences love the unity of the theme; the message should be directly related to ecotourism and its positive impact. Clarity of message is critical to the effectiveness of ecotourism. The lack of clarity on the economic dimension shows that there is a *gap* in the communication of TBL (Triple Bottom Line) values, where the environmental side dominates the narrative more than the social and economic side.

The Influence of Storytelling on Environmental Image It was found that the Role of *Storytelling* significantly affects the audience's perception of Environmental Conservation and Crab Conservation Education. An authentic narrative of conservation efforts directly increases the perception that Crab is a *destination that is responsible* for the environment. This shows that *storytelling* is an effective tool for communicating *destination conservation actions*, turning them into *perceptions* (positive images).

The Influence of Storytelling on Socio-Cultural Imagery There is a strong correlation between Emotional Engagement (especially sympathy for the community) and increased perceptions of Local Engagement & Participation and Respect for Local Culture. When stories make Millennials/Gen Z care about local characters, they perceive the destination as *a place that is fair and respectful* of its people. This strengthens the social pillar of the Sustainable Ecotourism Image.

The Influence of Storytelling on Economic Image Message Clarity regarding *Call-to-Action* (CTA) to support local products has a positive but weak relationship with the perception of Local Product Support. Although *Storytelling* is able to create bonds, its effect on the economic dimension is lower. This indicates that the story alone is not enough; *storytelling* must be accompanied by ease of access and clear transactions to support the local economy (requires integration of storytelling with Accessibility/Amenities).

Overall, these exploratory findings show that *Storytelling* plays a crucial and multidimensional role in shaping the image of Sustainable Ecotourism in the eyes of Millennials and Gen Z.

1. Authentic and Emotional *Storytelling* is a prerequisite for forming a Credible Ecotourism Image (Environmental and Social).

2. The effectiveness of Storytelling depends on Message Clarity in communicating all the pillars of sustainability (TBL).
3. For Ketam, Malaysia, a focused Digital Storytelling Strategy is needed that highlights authentic stories from local communities, sparks emotional engagement through environmental challenges, and provides a message of the community.

References

- [1] Aisyah, S., & Rachmadi, K. R. (2022). Digitalisasi Pemasaran Melalui Sosial Media Marketing Pada Pelaku Umkm Guna Peningkatan Pendapatan. *RESWARA: Jurnal Pengabdian Kepada Masyarakat*, 3(2), 442–448. <https://doi.org/10.46576/rjpkm.v3i2.1866>
- [2] Amin, L., Mahadi, Z., Ibrahim, R., Yaacob, M., & Nasir, Z. (2012). The Effectiveness of the ‘Environment & Health’ Course in Increasing Students’ Awareness & Knowledge on Environmental Health Issues. *Procedia - Social and Behavioral Sciences*, 59(1998), 77–84. <https://doi.org/10.1016/j.sbspro.2012.09.248>
- [3] Andhiyani Rahmasari Putri, & Ari Susanti. (2022). Pengaruh E-Commerce, Sosial Media, Dan Kepercayaan Konsumen Terhadap Minat Beli Pada Aplikasi Belanja Shopee. *JRMSI - Jurnal Riset Manajemen Sains Indonesia*, 13(01), 20–33. <https://doi.org/10.21009/jrmsi.013.1.02>
- [4] Aslan, H. (2023). The influence of halal awareness, halal certificate, subjective norms, perceived behavioral control, attitude and trust on purchase intention of culinary products among Muslim costumers in Turkey. *Internasional Journal of Gastronomi and Food Science*.
- [5] Aunchistha, P. U. D. B. A. (2025). Resilience and reinvention: knowledge management strategies for community-based tourism in Post-Pandemic Thailand. *Sustainable Futures*, 9(December 2024). <https://doi.org/10.1016/j.sftr.2025.100772>
- [6] Bang, C., Ho, X. L., Nguyen, Q. Van, Nguyen, Q. Van, & Bang, C. (2025). *Journal Pre-proof*.
- [7] Barbieri, C. (2010). An importance-performance analysis of the motivations behind agritourism and other farm enterprise developments in Canada. *Journal of Rural and Community Development*, February, 1–16. <http://www.jrcd.ca/include/getdoc.php?id=831&article=396&mod>
- [8] Basnet, S. D., & Auliya, A. (2022). Strategi Pemasaran Digital Melalui Media Sosial Dalam Penyelenggaraan Event Inacraft 2022. *Journal of Tourism and Economic*, 5(1), 18–31. <https://doi.org/10.36594/jtec.v5i1.137>
- [9] Bitsani, E., & Kavoura, A. (2014). Host Perceptions of Rural Tour Marketing to Sustainable Tourism in Central Eastern Europe. The Case Study of Istria, Croatia. *Procedia - Social and Behavioral Sciences*, 148, 362–369. <https://doi.org/10.1016/j.sbspro.2014.07.054>
- [10] Cáceres-Feria, R., Hernández-Ramírez, M., & Ruiz-Ballesteros, E. (2021). “Depopulation, community-based tourism, and community resilience in southwest Spain.” *Journal of Rural Studies*, 88(September), 108–116. <https://doi.org/10.1016/j.jrurstud.2021.10.008>
- [11] Chen, H. S. (2025). Sustainable tourism and ecological challenges in Taiwan’s southwest coast national scenic area: An ecological footprint and carrying capacity assessment. *Environmental and Sustainability Indicators*, 27(August). <https://doi.org/10.1016/j.indic.2025.100863>
- [12] Cruwys, T., Haslam, S. A., Steffens, N. K., Haslam, C., & Reicher, S. D. (2025). Nothing is so impactful as good theory: Evidence for the impact of the social identity approach to health on policy and practice. *Social Science and Medicine*, 379(December 2024). <https://doi.org/10.1016/j.socscimed.2025.118164>

- [13] Dao, K. T., Nguyen, D. D., Van Nguyen, D., Nguyen, D. N., & Pham, H. T. L. (2025). Survey data on perceived sustainability and revisit intention of tourists to community-based tourism. *Data in Brief*, 61. <https://doi.org/10.1016/j.dib.2025.111773>
- [14] De Canio, F. (2023). Consumer willingness to pay more for pro-environmental packages: The moderating role of familiarity. *Journal of Environmental Management*, 339(March). <https://doi.org/10.1016/j.jenvman.2023.117828>
- [15] Fadilah, N. L., & Huda, M. (2024). Pengaruh Storytelling Marketing dan Citra Destinasi terhadap Minat Berkunjung Kembali dengan Tourist Satisfaction sebagai Variabel Intervening pada Pengunjung Tanaria Park. *AKADEMIK: Jurnal Mahasiswa Humanis*, 4(3), 1136–1147. <https://doi.org/10.37481/jmh.v4i3.1053>
- [16] Falana, W. O., Aspara, J., & Frösén, J. (2024). The impact of Janus fit brand extensions on perceived brand innovativeness. *Journal of Business Research*, 179(June 2023). <https://doi.org/10.1016/j.jbusres.2024.114674>
- [17] Fanelli, R. M., & Romagnoli, L. (2020). Customer satisfaction with farmhouse facilities and its implications for the promotion of agritourism resources in Italian municipalities. *Sustainability (Switzerland)*, 12(5). <https://doi.org/10.3390/su12051749>
- [18] Farina KhanKashif, O. G. A. W. (n.d.). *Moderating role of digital media on environmental awareness and environmental beliefs to shape farmers' behavioral intentions towards sustainable agricultural land conservation practices*.
- [19] Greig, S. M., Hippel, C. Von, & Okimoto, T. (2026). *Journal of Experimental Social Psychology How diversity and disadvantage frames shape employee reactions to affirmative action : Social identity threat , stereotype threat , and fairness perceptions*. 122(July 2024).
- [20] Grigorieva, A. (2022). International Architecture News. In *Проект Байкал* (Vol. 2, Issue 71). <https://doi.org/10.51461/projectbaikal.71.1931>
- [21] Hamdan, M. N., Abdul Jalil, R., Ramli, M. A., Ramli, N., Ibrahim, M. N. A., Ab Rahman, M. F., Abdullah Thaidi, H. 'Azeemi, & Abd Rahman, N. N. H. (2024). A review of the discussions on cultivated meat from the Islamic perspective. *Heliyon*, 10(7). <https://doi.org/10.1016/j.heliyon.2024.e28491>
- [22] Hoover, H., & Krupka, E. (2025). Different norms of sexual activity and consent seeking among college students: Social identity and statistical discrimination. *Journal of Economic Behavior and Organization*, 235(January 2024). <https://doi.org/10.1016/j.jebo.2025.107028>
- [23] Hu, F., Tang, T. L.-P., Chen, Y., & Li, Y. (2024). Sustainable tourism in China: Visualization of low-carbon transitions at three tourist attractions across three occasions. *Socio-Economic Planning Sciences*, 93(March), 101883. <https://doi.org/10.1016/j.seps.2024.101883>
- [24] Inkinen, T., Heikkonen, M., Makkonen, T., & Rautiainen, S. (2024). Multilayered spatial categories in tourism marketing and branding. *Journal of Destination Marketing and Management*, 31(August 2023). <https://doi.org/10.1016/j.jdmm.2024.100867>
- [25] Kelleher, S., & Murphy, M. (2025). Variations in suicidality across multiple social identities in asexual people: An intersectionality analysis. *Journal of Affective Disorders Reports*, 21(April). <https://doi.org/10.1016/j.jadr.2025.100921>
- [26] Khuadthong, B., Imjai, N., Yordudom, T., Armandsiri, M., & Aujiapongpan, S. (2025). Shaping sustainable tourism behavior among elderly tourists: Roles of low carbon literacy and social-environmental awareness. *Sustainable Futures*, 10(July). <https://doi.org/10.1016/j.sftr.2025.101026>
- [27] Liu, Z., Han, S., Li, C., Gupta, S., & Sivarajah, U. (2022). Leveraging customer engagement to improve the operational efficiency of social commerce start-ups. *Journal of Business Research*, 140, 572–582. <https://doi.org/10.1016/j.jbusres.2021.11.024>
- [28] Loustau, T. P. F. (2025). Social identity complexity mitigates outgroup derogation in

- moral judgment. *Journal of Experimental Social Psychology*.
- [29] Ma, W., de Jong, M., Hoppe, T., & de Bruijne, M. (2021). From city promotion via city marketing to city branding: Examining urban strategies in 23 Chinese cities. *Cities*, 116(May). <https://doi.org/10.1016/j.cities.2021.103269>
 - [30] Mahrinasari, M. S., Bangsawan, S., & Sabri, M. F. (2024). Local wisdom and Government's role in strengthening the sustainable competitive advantage of creative industries. *Heliyon*, 10(10). <https://doi.org/10.1016/j.heliyon.2024.e31133>
 - [31] Management, B. (2005). Cover sheet. *Journal of Product & Brand Management*, 14(4), 258–259.
 - [32] MariaLaura Di DomenicoDjebali, M. N. K. S. Z. (2025). How diversity and disadvantage frames shape employee reactions to affirmative action: Social identity threat, stereotype threat, and fairness perceptions. *International Journal of Entrepreneurial Behavior & Research*, 31(9).
 - [33] Mavani, N. R., Ismail, M. A., Rahman, N. A., & Jarinah Mohd Ali. (2025). Fuzzy logic-based barcode scanning system for food products halal identification. *Food Control*, 168.
 - [34] Maziliauske, E. (2024). Innovation for sustainability through co-creation by small and medium-sized tourism enterprises (SMEs): Socio-cultural sustainability benefits to rural destinations. *Tourism Management Perspectives*, 50(January 2023). <https://doi.org/10.1016/j.tmp.2023.101201>
 - [35] Melović, B., Jocović, M., Dabić, M., Vulić, T. B., & Dudic, B. (2020). The impact of digital transformation and digital marketing on the brand promotion, positioning and electronic business in Montenegro. *Technology in Society*, 63(September). <https://doi.org/10.1016/j.techsoc.2020.101425>
 - [36] Mesra, B, Sri Wahyuni, S. B., Pembangunan, U., Budi, P., Sains, F. S., Pembangunan, U., & Budi, P. (2020). Optimalisasi aplikasi media sosial dalam mendukung promosi wisata geol Desa Pematang Serai. *Jurdimas Royal*, 3(2), 129–134.
 - [37] Mesra, B. (2018). Factors that influencing households income and its contribution on family income in hamparan perak subdistrict, deli serdang regency, North Sumatera-Indonesia. *International Journal of Civil Engineering and Technology*, 9(10), 461–469.
 - [38] Miryam, N., & Antonio, F. (2022). the Effect of Social Media Content on Customer Engagement and Its Impact on Customer Intention. *Jurnal Manajemen Pemasaran*, 16(2), 115–125. <https://doi.org/10.9744/pemasaran.16.2.115-125>
 - [39] Muji, T., Noviriyani, P., Terapan, F. I., Telkom, U., Yusiana, R., Terapan, F. I., Telkom, U., Engagement, C., & Sosial, M. (2022). Analisis Customer Engagement Pada Media Sosial Instagram Pada Riyani The Label Tahun 2022 Customer Engagement Analysis On Social Media Instagram On Riyani The Label In 2022. 8(5), 327–338.
 - [40] Mulyadi, B., Sirojuzilam, S., Lubis, S., & Purwoko, A. (2024). the Role of Caldera Geopark in Tourism Development of Lake Toba Super Priority Destinations, Indonesia. *Geojournal of Tourism and Geosites*, 55(3), 1426–1437. <https://doi.org/10.30892/gtg.55342-1314>
 - [41] Muzambiq, S., Nst, Z. P., , G., & Sabrina, R. (2023). Geotourism as a 16-Geosite Empowerment Strategy—For Tourism Sustainability in Toba Caldera Geopark. *Journal of Geographic Information System*, 15(02), 294–307. <https://doi.org/10.4236/jgis.2023.152015>
 - [42] Nikjoo, A., Seyfi, S., & Saarinen, J. (2025). Annals of Tourism Research Empirical Insights Promoting gender inclusivity through community-based tourism. *Annals of Tourism Research Empirical Insights*, 6(1), 100181. <https://doi.org/10.1016/j.annale.2025.100181>
 - [43] Pakpahan, E. F., Handayani, M., Mendes, E., & Mustika, A. (2023). Danau Toba Sebagai Unesco Global Geopark Dalam Perspektif Hukum Lingkungan. *Al-Adl : Jurnal Hukum*, 15(1), 70. <https://doi.org/10.31602/al-adl.v15i1.7490>

- [44] Papadopoulou, C., Vardarsuyu, M., & Oghazi, P. (2023). Examining the relationships between brand authenticity, perceived value, and brand forgiveness: The role of cross-cultural happiness. *Journal of Business Research*, 167(July). <https://doi.org/10.1016/j.jbusres.2023.114154>
- [45] Patrick StraßerChristoph, Till J. Bugaj, Michael Kühl, S. J. K. N. (2022). Environmental issues hidden in medical education: What are the effects on students' environmental awareness and knowledge?Umweltthemen versteckt in der medizinischen Ausbildung: Auswirkungen auf Umweltbewusstsein und Umweltwissen von Studierenden? *Zeitschrift Für Evidenz, Fortbildung Und Qualität Im Gesundheitswesen*.
- [46] Perea, H. R., Piedrahita, A. R., & Alzate, Ó. E. T. (2025). Models of environmental awareness: exploring their nature and role in environmental education – a systematic review. *Heliyon*, 11(13). <https://doi.org/10.1016/j.heliyon.2025.e43679>
- [47] Pijet-Migoñ, E., & Migoñ, P. (2022). Geoheritage and Cultural Heritage—A Review of Recurrent and Interlinked Themes. *Geosciences (Switzerland)*, 12(2). <https://doi.org/10.3390/geosciences12020098>
- [48] Pintossi, N., Ikiz Kaya, D., & Pereira Roders, A. (2023). Cultural heritage adaptive reuse in Salerno: Challenges and solutions. *City, Culture and Society*, 33(March). <https://doi.org/10.1016/j.ccs.2023.100505>
- [49] Purwoko, A., Zaitunah, A., Samsura, D. A. A., Sibarani, R., Muda, I., & Faustina, C. (2023). Assessing the Development Potential, Feasibility and Visitor Assessment in the Sipinsur Geosite Natural Tourism Area, Toba Caldera Global Geopark, Indonesia. *Geojournal of Tourism and Geosites*, 49(3), 1075–1086. <https://doi.org/10.30892/gtg.49323-1107>
- [50] Raddats, C., Roper, S., & Ashman, R. (2024). The role of services in creating brand loyalty for B2B manufacturers. *Journal of Business Research*, 174(August 2022). <https://doi.org/10.1016/j.jbusres.2024.114506>
- [51] Rahayu, I. (2022). *Lokal Kampung Nopia-Mino Di Desa Wisata*.
- [52] Rao, Y., Xie, J., & Xu, X. (2024). Facilitating “migrant-local” tacit knowledge transfer in rural tourism development: A longitudinal case study. *Tourism Management*, 100(378). <https://doi.org/10.1016/j.tourman.2023.104836>
- [53] Reynolds, L., Peattie, K., Koenig-Lewis, N., & Doering, H. (2024). There's a time and place: Navigating omni-temporality in the place branding process. *Journal of Business Research*, 170(November 2022). <https://doi.org/10.1016/j.jbusres.2023.114308>
- [54] Rocca, L. H. D., & Zielinski, S. (2022). Community-based tourism, social capital, and governance of post-conflict rural tourism destinations: the case of Minca, Sierra Nevada de Santa Marta, Colombia. *Tourism Management Perspectives*, 43(January). <https://doi.org/10.1016/j.tmp.2022.100985>
- [55] Rodríguez-Pose, A. T. K. c, & More, S. (2024). NoLocal empowerment through economic restructuring in Brazil: the case of the greater ABC region Title. *Geoforum*.
- [56] Ruiz-Ballesteros, E., & González-Portillo, A. (2024). Limiting rural tourism: Local agency and community-based tourism in Andalusia (Spain). *Tourism Management*, 104(November 2023). <https://doi.org/10.1016/j.tourman.2024.104938>
- [57] Saif Furqan Abdullah, M., & Artanti, Y. (2021). The Effect of Situational Factor, Visual Merchandising, and Electronic Word of Mouth on Impulsive Buying Behavior on Video on Demand Services Current The Covid-19 Pandemic Crisis. *Journal of Business and Behavioural Entrepreneurship*, 5(1), 78–91. <https://doi.org/10.21009/jobbe.005.1.05>
- [58] Saleh Al-Omoush, K., Orero-Blat, M., & Ribeiro-Soriano, D. (2021). The role of sense of community in harnessing the wisdom of crowds and creating collaborative knowledge during the COVID-19 pandemic. *Journal of Business Research*, 132(November 2020), 765–774. <https://doi.org/10.1016/j.jbusres.2020.10.056>
- [59] Samekin, A., Bolatov, A., & Kotzur, P. F. (2025). What shapes the social perception of

- immigrant groups in Kazakhstan? The role of ethnic- and language-based identities and underlying threat and benefit perceptions. *International Journal of Intercultural Relations*, 109(May). <https://doi.org/10.1016/j.ijintrel.2025.102274>
- [60] Samper-Mendivil, M., Aramendia-Muneta, M. E., & Alarcón-López, R. (2025). Assessing sustainability in rural tourism: insights from accommodation managers and residents in Navarre. *Journal of Rural Studies*, 120(August). <https://doi.org/10.1016/j.jrurstud.2025.103866>
- [61] Santiago, K., Yanes, A., & Mercado-Caruso, N. (2024). Analyzing Correlations in Sustainable Tourism Perception: Statistical Insights from Diverse Caribbean Colombian Tourist Sites. *Procedia Computer Science*, 231, 490–495. <https://doi.org/10.1016/j.procs.2023.12.239>
- [62] Saragih, M. G., & Surya, Elfitra Desy, B, M. (2021). Kajian Dasar Pariwisata. In *Researchgate.Net* (Issue September).
- [63] Serrat, O. (2008). *Storytelling. October*.
- [64] Shen, F., & Cottrell, S. P. (2008). A sustainable tourism framework for monitoring residents' satisfaction with agritourism in Chongdugou Village, China. *International Journal of Tourism Policy*, 1(4), 368–375. <https://doi.org/10.1504/IJTP.2008.019277>
- [65] Shi, D. (2025). Advocacy fit and social identity in corporate social advocacy: A multigroup analysis of public responses. *Public Relations Review*.
- [66] Shuvo, M. I. M., & Ahmed, T. (2025). Sustainable clicks: exploring Gen Z's e-commerce engagement and value perceptions for sustainable tourism. *Sustainable Futures*, 10(August). <https://doi.org/10.1016/j.sftr.2025.101147>
- [67] Sinamo, F. L., Lubis, B. N. A., Barus, T. A. E., & Sembiring, S. J. (2021). The Revitalization of Batu Parsidangan Batak Toba Folklore Into Teaching Materials in English Subject for Junior High School. *Linguistic, English Education and Art (LEEA) Journal*, 4(2), 233–239. <https://doi.org/10.31539/leea.v4i2.1824>
- [68] Siregar, R. A., Nasution, I., & Pardi, P. (2022). Local Wisdom of the Parsidangan Stone Legend At Huta Siallagan Samosir: a Literary Tourism Perspective. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 6(1), 177–188. <https://doi.org/10.30743/ll.v6i1.5249>
- [69] Sun, H., Dai, Y. Y., Jeon, S. S., Lee, R., Wang, H., Shi, X., Sun, L., & Wang, Y. (2024). The impact of brand authenticity on brand attachment, brand loyalty, willingness to pay more, and forgiveness - For Chinese consumers of Korean cosmetic brands -. *Heliyon*, 10(16). <https://doi.org/10.1016/j.heliyon.2024.e36030>
- [70] Suriyankietkaew, S., Kittayaruangroj, K., Thinthan, S., & Lumlongrut, S. (2025). Creative Tourism as a Driver for Sustainable Development: A Model for Advancing SDGs through Community-Based Tourism and Environmental Stewardship. *Environmental and Sustainability Indicators*, 27(March), 100828. <https://doi.org/10.1016/j.indic.2025.100828>
- [71] Surya, E. D., Felani, K. F., Tasril, V., & Andriani, A. (2023). *Analysis of Tourist Attractions , Amenities and Accessibility to Tourist Visit Decisions Mediated by Digitalization Promotion*. 01(02), 58–67.
- [72] Surya, E. D., Ginting, P., Rini, E. S., & Absah, Y. (2018). The analysis of Halal tourism products and brand image destination on tourists' repeated visits via trust in West Sumatera Province. *International Journal of Civil Engineering and Technology*, 9(8), 1206–1220.
- [73] Surya, E. D., Rini, E. S., & Setiawan, N. (2018). *The Effect of Halal Destination Image and Visitors Satisfaction on Tourist Loyalty (Object In Bukit Tinggi City Of West Sumatera)*. 46(Ebic 2017), 558–564. <https://doi.org/10.2991/ebic-17.2018.88>
- [74] Surya, E. D., Saragih, M. G., & Siregar, N. (2022). Analysis of the Effect of Tourism Objects and Tourism Infrastructure on the Satisfaction of Muslim Tourists Visiting Halal-

- Based Tourist Destinations in the Lake Toba Tourism Area. *1st Virtual Workshop on Writing Scientific Article for International Publication Indexed SCOPUS*, 540–545. <https://doi.org/10.2478/9788366675827-094>
- [75] Tama, H. A., & Voon, B. H. (2014). Components of Customer Emotional Experience with Halal Food Establishments. *Procedia - Social and Behavioral Sciences*, 121(September 2012), 272–280. <https://doi.org/10.1016/j.sbspro.2014.01.1128>
- [76] Valencia-Arias, D. A., Martinez-Tavera, C. R., Areiza-Padilla, J. A., Barajas-Portas, K., Veas-González, I., & Manzi-Puertas, M. A. (2025). The power of centennials and their environmental awareness: Willingness to pay a premium price on the internet for sustainable fashion products. *Cleaner Waste Systems*, 10(September 2024). <https://doi.org/10.1016/j.clwas.2025.100221>
- [77] Wadei, B., Owusu-Addo, E., Bonuedi, I., Yeboah, T., Tetteh, R. O., Antoh, E. F., & Mensah-Odum, N. (2025). Groundnut processing and women's economic empowerment: Insights from a qualitative analysis. *Social Sciences and Humanities Open*, 12(April). <https://doi.org/10.1016/j.ssaho.2025.101631>
- [78] Wahyuni, S., B, M., Lubis, A., & Batubara, S. (2020). Penjualan Online Ikan Asin sebagai salah satu Usaha Meningkatkan Pendapatan Masyarakat Nelayan Bagan Deli. *ETHOS (Jurnal Penelitian Dan Pengabdian)*, 8(1), 5214. <https://doi.org/10.29313/ethos.v8i1.5214>
- [79] Widodo, S. (2021). *The effect of product quality , service quality and prices on consumer satisfaction of molivia cafe (case study on consumers of molivia cafe , jalan h . m . Joni , teladan timur , medan city). 11(2).*
- [80] Wongsansukcharoen, J. (2022). Effect of community relationship management, relationship marketing orientation, customer engagement, and brand trust on brand loyalty: The case of a commercial bank in Thailand. *Journal of Retailing and Consumer Services*, 64(October 2021). <https://doi.org/10.1016/j.jretconser.2021.102826>
- [81] Worley, J. T., & Smith, A. L. (2026). *Psychology of Sport & Exercise Positive peer relationships , social identity , and adaptive sport motivation in youth athletes. 82(April 2025).*
- [82] Wu, J., & Yang, T. (2023). Service attributes for sustainable rural tourism from online comments: Tourist satisfaction perspective. *Journal of Destination Marketing and Management*, 30(2). <https://doi.org/10.1016/j.jdmm.2023.100822>
- [83] Zakaria, M. S., & Yusof, Z. B. (2024). Mangrove Ecotourism and Conservation Centre at Pulau Ketam, Klang, Selangor. *Design Ideals Journal*, 6(1), 1–11. <https://www.researchgate.net/publication/382365256>
- [84] Zakaria, Z., & Mohd, N. Z. (2023). Chapter 2 - Halal food product innovation according to Shariah law. *Innovation of Food Product in Halal Suply Chan World Wide.*