E-ISSN : 2549-3280 P-ISSN : 2549-5933
INTEGRATED JOURNAL OF BUSINESS AND ECONOMICS
Email: ijbe.feubb@gmail.com
http://ojs.ijbe-research.com/index.php/IJBE/index

PROMOTING SUSTAINABLE MARINE ECOTOURISM: THE ROLE OF E-WOM, ENVIRONMENTAL ATTITUDE, AND UTAUT MODEL IN SUPPORTING BLUE ECONOMY IN INDONESIA

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Abstract

This research aims to analyse the effect of social influence, effort expectancy, performance expectancy, facilitating conditions, and environmental attitude on marine ecotourism behavior, with e-WOM intention and marine ecotourism intention as mediating variables. A quantitative approach was employed using validity test, reliability test, and path analysis based on data collected from 248 tourist respondents who had visited marine ecotourism destinations. The study proposed nine hypotheses, of which two were rejected. The findings indicate that most exogenous constructs significantly affect marine ecotourism behavior, either directly or indirectly. E-WOM intention was recognized as a significant intermediary, linking views on usefulness, ease of use, and environmental attitudes to sustainable actions. Furthermore, the inclination to participate in marine ecotourism is crucial in linking the effects of different factors to actual behavior. These findings highlight the significance of digital communication and personal intention in fostering environmentally conscious tourism practices. This study provides theoretical insights into creating models for sustainable tourist behavior and offers practical advice for destination managers and policymakers to advance sustainable marine ecotourism in Indonesia.

Article Info
- ***Received*** *: 17th August 2025*
- ***Revised*** *: 15th January 2026*
- ***Published*** *: 18th February 2026*
- ***Pages*** *: 20-46*
- ***DOI*** *:* http://dx.doi.org/10.33019/ijbe.v10i1.1317
- ***JEL*** *:* L83, Z31
- ***Keywords*** *: Marine Ecotourism Behavior, Environmental Attitude, E-WOM Intention, Behavioral Intention, UTAUT Model*

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1. Introduction

Indonesia, known as the world's largest archipelagic nation, boasts an extensive marine territory teeming with diverse ecosystems and plentiful natural resources. This unique geographic and ecological advantage presents significant opportunities for the country to advance a blue economy, a plan focused on the sustainable use of ocean resources to enhance economic development and elevate the quality of life for communities, and ensure environmental conservation (Nugroho et al., 2021). The Indonesian government has been actively promoting this paradigm to optimize the use of coastal and marine resources without compromising ecological sustainability (Marwa et al., 2024; Sari et al., 2024). One of the key sectors within the blue economy is marine ecotourism, which emphasizes conservation, community engagement, and environmental education. This approach not only generates economic benefits but also fosters public awareness regarding the importance of environmental protection (Mustika et al., 2023). To support the growth of this sector, the government has implemented various policies, such as expanding marine protected areas and promoting sustainable fisheries, which are aligned with efforts to improve the welfare of coastal communities (Wijaya et al., 2022).

Research has shown that several factors influence tourists' behavior and intention in the context of marine ecotourism. According to Chang et al. (2022), tourists' views on effort expectancy, social influence, performance expectancy, and environmental attitude significantly influence their intentions and actions regarding marine ecotourism. Achieving success in developing marine ecotourism requires a thorough comprehension of the factors that drive active participation and involvement of local communities in sustainable tourism efforts. The Unified Theory of Acceptance and Use of Technology (UTAUT) model, as outlined by Venkatesh et al. (2021), highlights key elements that affect intention and behavior: social impact, effort expectations, performance expectations, facilitating conditions, and environmental attitudes. Furthermore, ecological attitudes are critical in shaping pro-environmental behavior, including decisions to engage in ecotourism activities (Ren et al., 2021). In particular, ecological values especially those centered on biospheric and altruistic concerns significantly influence consumption patterns within marine ecotourism (Gao et al., 2023). Moreover, moral beliefs and pro-environmental behaviors contribute to tourists' engagement and willingness to promote marine ecotourism through electronic word of mouth (e-WOM) (Fakfare et al., 2024; Jayasekara et al., 2024).

In today's digital era, digital reviews (e-WOM), the electronic dissemination of information from one individual to another, has become a crucial factor that significantly influences individuals' perceptions and decision-making processes in choosing marine ecotourism destinations. Through various digital platforms, tourists can share experiences, provide recommendations, and raise public awareness about sustainable tourism practices (Reyes-Menendez et al., 2020). According to the UTAUT model, these digital interactions enhance social influence, enhance environmental awareness, and promote responsible travel behavior. Gaining insight into how e-WOM and personal intentions in marine tourism convert into real

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actions can aid in crafting more effective digital communication strategies to promote responsible tourism behavior. (Khan et al., 2022).

Despite Indonesia's abundant marine resources and the government's various initiatives to support the blue economy, the adoption of sustainable marine ecotourism practices still faces significant challenges. Limited community engagement, inadequate infrastructure, and low public awareness regarding the importance of environmental conservation remain key obstacles (Yaja et al., 2023). Additionally, the reasons behind people's choices to engage in marine ecotourism are not completely understood. (Santoso et al., 2023). To tackle these issues, additional research is required to explore the impact of social influence, effort expectations, performance expectations, facilitating conditions, and environmental attitudes on individuals' intentions to engage in e-WOM and participate in marine ecotourism. Furthermore, it is essential to understand how these intentions eventually lead to actual tourism behavior, specifically in the context of marine ecotourism. A deeper understanding of these relationships can enable stakeholders to design more targeted and effective programs to promote sustainable marine ecotourism, contributing to the well-being of coastal communities and the preservation of marine ecosystems (Yulianto et al., 2024).

2. Literature Review

Unified Theory of Acceptance and Use of Technology (UTAUT)

In 2003, Venkatesh and colleagues developed the UTAUT model, which serves as a comprehensive framework by integrating insights from various existing models of technology acceptance and usage. This foundational model draws heavily from established theories such as the Innovation Diffusion Theory (IDT), Theory of Planned Behavior (TPB), Technology of Acceptance Model (TAM), and the Theory Reasoned Action (TRA). The framework plays a crucial role by identifying the four primary factors that affect a person's intention and actual behavior when it comes to adopting technology (Bommer et al., 2022; Suryawardana et al., 2024). These key components include social influence, performance expectancy, facilitating conditions, and effort expectancy. Performance expectancy pertains to the perceived advantages of a technology in improving task performance, whereas effort expectancy deals with how easy the technology is perceived to be. Social influence refers to the effect that people close to an individual, like friends or family, have on their decision to embrace a technology. Facilitating conditions involve the perceived availability of sufficient technical support and resources offered by an organization. As noted by Venkatesh et al. (2003), these concepts are recognized for shaping individuals' intentions to use technology, which subsequently impacts the actual use of that technology. This influence can be direct, where a factor directly impacts intention or behavior, or indirect, where another factor mediates the effect.

Marine Ecotourism

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As highlighted by Utami et al. (2020), marine ecotourism serves two primary objectives: promoting the conservation of natural resources by educating the public about the importance of marine protected areas, and supporting sustainable development in these regions by emphasizing ecological protection for both local communities and visitors. Fundamentally, Marine ecotourism offers travelers the chance to engage with marine ecological environments, enhancing their appreciation and comprehension of marine ecosystems (Zhu et al., 2020). Marine ecotourism significantly enhances the value of tourism offerings, broadens the domestic market, and creates a substantial economic ripple effect at the regional level (Nurhayati & Purnomo, 2017). Marine ecotourism serves two important functions: it generates foreign exchange revenue and acts as a vital tool for sustainable natural resource conservation (Nurhayati et al., 2019). This type of tourism is expanding swiftly, with growth evident in both its scale and total worth (Cater, 2003).

Performance Expectancy, e-WOM Intention, and Marine Ecotourism Intention

Performance expectancy is fundamental in analyzing consumer behavior, particularly in digital and bold environments. Essentially, Performance expectancy refers to a person's belief that a system or service will be advantageous to them, which means enhancing their performance, increasing efficiency, boosting productivity, or saving time (Rahman & Sloan, 2017). This concept is critical because consumer contentment with a service or technology largely hinges on initial assumptions about its performance (Diep et al., 2016; Choi et al., 2011). The extent to which users fulfill or exceed their expectations significantly influences their readiness to adopt or continue utilizing a service or technology. Studies by Gupta and Dogra (2017), Loureiro et al. (2018), and Rahman and Sloan (2017) have all highlighted the significant effect of performance expectancy on tourists' acceptance of e-travel platforms and their online travel purchases. Furthermore, given that consumers highly value informal recommendations, such as word-of-mouth (WOM) promotion (Jung & Seock, 2017; Brown et al., 2005), and that online reviews represent an important form of e-WOM (Park & Lee, 2008; Astuti & Hariyawan, 2021), positive performance expectancy can result in satisfied customers who, in turn, generate favorable e-WOM. This can significantly influence the decisions of prospective consumers. Recent research by Boro et al. (2024) confirms that performance expectancy significantly impacts e-WOM.

Lee and Jan (2018) define ecotourism as encompassing tourist behavior, social culture, and environmental interactions that benefit the local economy while fostering meaningful learning experiences. These learning opportunities are a primary motivator for ecotourism, particularly among tourists who immerse themselves in destinations to observe nature, wildlife, and local culture. For example, visiting marine ecotourism locations for whale watching provides tourists with an understanding of marine ecology and local customs. This is consistent with the analysis of Chang et al. (2022), who emphasize that trips to marine ecotourism destinations present chances for tourists to learn about marine ecological conservation, thereby enhancing their willingness to participate in such activities. Performance expectancy is a key factor influencing tourists' intentions toward ecotourism, especially marine ecotourism. Gupta and Dogra (2017) describe performance expectancy as encompassing dimensions such as ease of use, usefulness, time-saving, and productivity. The study by Chang et al. (2022) demonstrates that performance expectancy significantly

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influences marine ecotourism intention. When tourists anticipate that the ecotourism experience will be beneficial, convenient, and offer rich educational value, their intention to participate increases accordingly.

H_{1a}: Performance expectancy influences e-WOM intention
H_{1b}: Performance expectancy influences marine ecotourism intention

Effort Expectancy, e-WOM Intention, and Marine Ecotourism Intention
Effort expectancy plays a vital role in comprehending how people embrace and utilize new technologies, especially in the travel sector. Effort expectancy essentially pertains to users' perceptions of how easy it is to use new technologies (Boro et al., 2024). Both TAM and UTAUT highlight effort expectancy as a key factor that affects individuals' readiness to adopt new technologies (Sharma et al., 2021). Studies consistently show that travelers are more likely adoption of technology when it is perceived as user-friendly, especially for making travel-related decisions (Chao, 2019; Jan et al., 2025; Sharma et al., 2021; Zhang et al., 2021). In the hospitality and tourism sector, ensuring ease of use is vital for fostering positive e-WOM promotion (Khan et al., 2024).

At the same time, transportation is crucial in tourism, linking travelers with their destinations (Tóth & Dávid, 2010). This function is closely linked to accessibility, which measures how easily tourists can reach a destination and significantly influences their decision to visit (Morris et al., 1979), particularly in specialized locations such as marine ecotourism sites (Chang et al., 2022). Lower travel costs and shorter travel durations have consistently increased demand for recreational tourism (Tóth & Dávid, 2010). In fact, Chang et al. (2022) found that when marine ecotourism sites are more accessible, tourists are more likely to express interest in visiting them. This is supported by research results, which show a significant influence of effort expectancy on tourists' travel intentions (Zhang et al., 2021). The less effort and difficulty tourists anticipate in reaching marine ecotourism destinations, the more likely they are to engage in travel.

H_{2a}: Effort expectancy influences e-WOM intention
H_{2b}: Effort expectancy influences marine ecotourism intention

Social Influence, e-WOM Intention, dan Marine Ecotourism Intention
The impact of social influence plays a vital role in determining whether a person decides to adopt a new system or technology. It frequently encourages positive e-WOM, especially within the hospitality and tourism sectors. This concept of social influence is complex and consists of three main elements: subjective norms, image, and social factors (Venkatesh et al., 2003). As proposed by Ma & Huo (2023), a more specific definition states that social influence is how a person views the level of pressure or expectations from significant groups around them to use a particular system. Furthermore, a study by Boro et al. (2024) strengthens this finding by showing that social influence significantly impacts the spread of electronic information (e-WOM). This finding suggests that when others endorse a service or product, especially when it aligns with values such as sustainability, individuals will adopt and engage in positive e-WOM.

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The impact of social influence is significant in determining how individuals intend to behave, which are reflected in their decisions to adopt a new technology or participate in certain activities such as marine ecotourism. When individuals experience anxiety regarding the use of technology, they often seek out others' experiences to gain reassurance (Ali et al., 2024). Various research efforts have repeatedly demonstrated a strong link between social influence and the intention to undertake particular actions (Ali et al., 2024; Gupta et al., 2018; Pan & Gao, 2021). Moreover, sharing unique travel experiences, particularly in the realm of ecotourism, social media can satisfy the fundamental human desire to achieve social recognition from others (Griskevicius & Kenrick, 2013). According to Chang et al. (2022), individuals who are greatly affected by social influences are more likely to have a strong desire to participate in marine ecotourism.

H_{3a}: Social influence influences e-WOM intention
H_{3b}: Social influence influences marine ecotourism intention

Facilitating Conditions, e-WOM Intention, and Marine Ecotourism Intention

Facilitating conditions encompass the presence of the necessary sources and expertise compulsory to utilize the system efficiently (Ali et al., 2024; Venkatesh et al., 2012). As outlined in the UTAUT framework, the surrounding environment can encourage or hinder adopting and using new technologies (Boro et al., 2024). These conditions represent objective factors that simplify achieving specific behavioral outcomes within particular contexts (Loo et al., 2009). This includes access to adequate facilities, equipment, or support to make it easier for an individual to adopt or maintain an action or habit (Siddik et al., 2014). For instance, in marine ecotourism, the government has actively introduced marine ecological protection policies and ecotourism initiatives to establish favorable facilitating conditions (Chang et al., 2022). Beyond practical resources, facilitating conditions also contribute to individuals' perceived psychological control, which is shaped by their cultural, social, and technological backgrounds and may influence their willingness to adopt certain behaviors (Mullan et al., 2017). As a result, when people recognize that the required support and resources are easily accessible, it enhances their intention to engage in activities such as marine ecotourism. It encourages them to share positive e-WOM regarding their experiences.

H_{4a}: Facilitating conditions influences e-WOM intention
H_{4b}: Facilitating conditions influences marine ecotourism intention

Environmental Attitude, e-WOM Intention, and Marine Ecotourism Intention

Environmental attitude is a trait that individuals develop over time, prompting them to consistently show concern for environmental matters and ultimately engage in environmentally protective behaviors (Widegren, 1998). This attitude encompasses environmental values and beliefs (Widegren, 1998). More broadly, environmental attitudes reflect a person's psychological views and responses, including beliefs and feelings like agreement or disagreement with issues and environmental conditions (Chang et al., 2022). Positive attitudes clearly affect behavioral intentions. Research conducted by Ibnou-Laaroussi et al. (2020) on sustainable tourism in Cyprus found that tourists' perceptions have

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a huge impact on their intents and engagement in eco-friendly tourism.. The same research discovered that this desire had a favorable impact on ecologically responsible travel behavior (Ibnou-Laaroussi et al., 2020). Furthermore, research by Huy et al. (2022) demonstrated that tourists' green attitudes directly and positively influence their green electronic word-of-mouth. Consistent with these findings, prior studies have consistently shown that pro-environmental attitudes significantly affect ecotourism engagement (Fang et al., 2018). Chang et al. (2022) specifically discovered that one's attitude towards the environment affects their intention to engage in marine ecotourism. Consequently, having a strong environmental attitude is likely to result in a greater desire to participate in marine ecotourism and an increased chance of sharing positive electronic word-of-mouth about these experiences.

H_{5a}: Environmental Attitude influences e-WOM intention
H_{5b}: Environmental Attitude influences marine ecotourism intention

e-WOM intention and Marine Ecotourism Behavior
e-WOM significantly impacts travel intentions and decision-making (Gosal et al., 2020). This is because travel-related e-WOM shared on social networking sites (SNS) leverages existing social relationships (Luo & Zhong, 2015). Information disseminated through these networks is often more influential than other decision-making factors, as social media generally shapes consumer choices (Cheung et al., 2014). Word-of-mouth (WOM) provides valuable information that helps promote products or services (Lien & Cao, 2014), directly influencing user behavior. Earlier studies have also indicated that individuals who promote a goods or services through positive WOM are more likely to use it themselves. (Farzin et al., 2020). This is further supported by findings indicating that a positive mood can motivate consumers to adopt technology, affecting their readiness to participate in WOM and actual use (Lien et al., 2018). Therefore, a firm intention to engage in e-WOM regarding marine ecotourism will likely translate directly into actual participation in marine ecotourism activities.

H_6: E-WOM intention influences marine ecotourism behavior

Marine Ecotourism Intention and Marine Ecotourism Behavior
Behavioral intention is regarded as a highly reliable indicator of how an individual will act (Tangeland et al., 2013). The research results show that tourists' decisions to travel are significantly influenced by psychological factors, such as personal motivation and perception, as well as social factors, such as the influence of reference groups or prevailing norms (Gu et al., 2017) and their mental states, which can significantly affect future travel behavior (Jang & Namkung, 2009). Specifically in tourism, previous studies have consistently demonstrated that tourists' intentions strongly influence their actual behavior (Xie & Luo, 2021). This implies that when tourists possess a strong intention for marine ecotourism, they are highly likely to take action that involves participating in marine ecotourism. Chang et al. (2022) further support this by demonstrating that tourists' intentions regarding marine ecotourism have a direct impact on their actual behavior in this area. Moreover, the concept of environmental behavior proposed by Hines et al. (1987) identifies intention as a crucial element in promoting actions that benefit the environment, a concept that is also emphasized by TPB (Ajzen, 1991) and subsequent studies (Lai & Nepal, 2006).

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Additional research has shown that intentions related to environmental protection effectively predict observed behaviors (Chen & Thung, 2014; Cheng & Wu, 2015). A strong intention to engage in marine ecotourism, often rooted in environmental attitudes, is thus a key indicator of actual participation in such activities.

H_7: Marine ecotourism intention influences marine ecotourism behavior

e-WOM Intention as Mediator

e-WOM messages refer to the ways people engage with online reviews or information about a product, company, or service (Lee & Youn, 2009). Social media users often encounter a large volume of e-WOM, and research consistently indicates that this type of information influences consumers' buying choices (Leong et al., 2022). The perceived value of e-WOM messages is vital, as it enhances behavioral intention through the mediating effect of e-WOM adoption (Sardar et al., 2021). e-WOM significantly impacts tourists' decisions and preferences regarding travel destinations (Jalilvand et al., 2013). Research conducted by Adam et al. (2023) indicates that e-WOM acts as a link between how tourists perceive a destination and their desire to return. Additionally, a study by Boro et al. (2024) corroborates the intermediary function of e-WOM in the connection between intention to visit a destination and social influence, as well as between the intention to visit and facilitating conditions. As a result, variables such as social influence, performance expectancy, facilitating conditions, effort expectancy, and strong environmental attitudes collectively promote positive e-WOM intentions, which in turn directly encourage actual marine ecotourism activities.

H_8: Effort expectancy, social influence, performance expectancy, environmental attitude, and facilitating conditions influence marine ecotourism behavior mediated by e-WOM intention

Marine Ecotourism Intention as Mediator

Behavioral intention mediates between attitude and behavior, indicating that attitudes influence intentions, which drive actions (Ajzen, 1991). In the realm of environmental issues, intention serves as a crucial intermediary factor. For example, the attitude–intention–behavior model proposed by Lee (2011) highlights that environmental intention acts as a bridge between environmental attitude and behavior. Furthermore, research conducted by Lee and Jan (2018) demonstrated that the intention to participate in ecotourism is a vital mediator, linking attitude toward environment, subjective norms, and perceived behavioral control to actual ecotourism behavior. This underscores the significance of people's intention to engage in ecotourism as a key connection between various influencing factors and real behavior. According to Teeroovengadum (2019), a strong environmental identity in tourists can shape their attitudes, thereby increasing their intention to partake in ecotourism activities and ultimately leading to genuine ecotourism behavior. When conditions are conducive, elements such as effort expectancy, social influence, performance expectancy, and environmental attitude collectively nurture a strong intention towards marine ecotourism. This intention then acts as a direct motivator for individuals to engage in actual marine ecotourism activities.

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H_9: Facilitating conditions, social influence, performance expectancy, effort expectancy, and environmental attitude have an influence on marine ecotourism behavior mediated by marine ecotourism intention

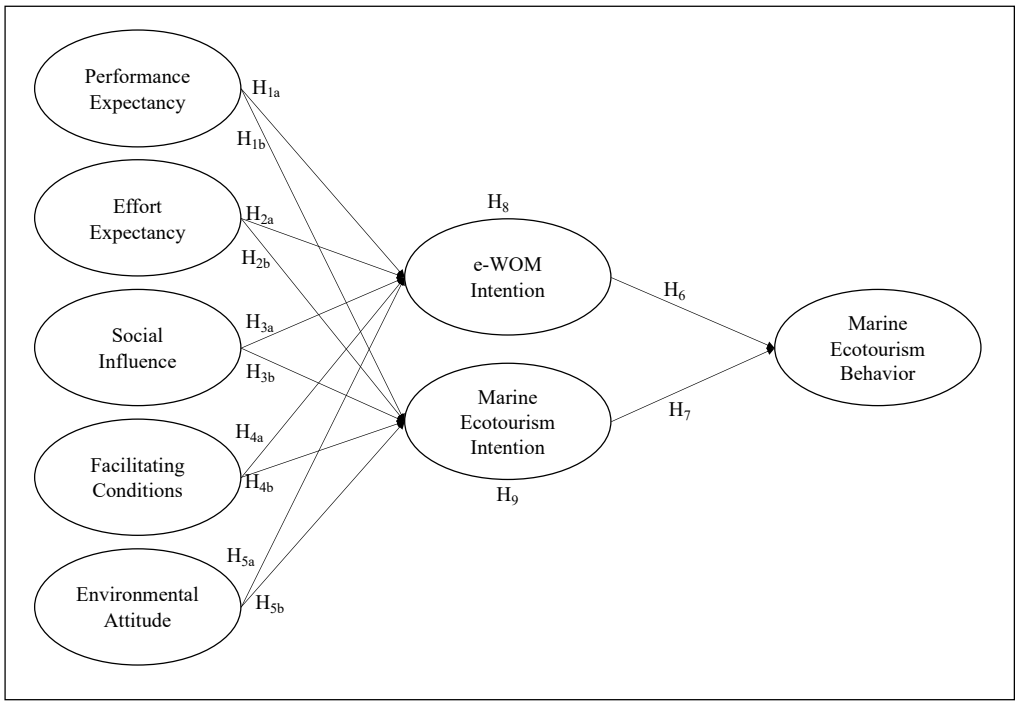

Figure 1. Research Model

3. Research Methods

This study utilized primary data that collected directly from participants. The data gathering process involved a questionnaire featuring closed-ended questions. The individuals who filled out the questionnaire were tourists who had previously visited marine ecotourism sites. Consequently, a purposive sampling method was employed, choosing participants according to criteria that match the objectives of the study. In total, 248 individuals participated, meeting the minimum sample size required for SEM analysis, as suggested by Zhang, Wu, and Buhalis (2018). Path analysis was employed to explore the connections among constructs using the statistical software SmartPLS 4.

Prior to conducting the structural model assessment, face validity was evaluated using the expert judgment method. In this stage, the developed questionnaire was reviewed and assessed by experts to ensure that the instrument's content was easily understood and free from perceptual bias. Subsequently, convergent validity and construct reliability were evaluated by the outer model (Hair et al., 2022). Convergent validity was proven when the average variance extracted (AVE) for each construct was more than 0.50, signifying that the indicators explained over 50% of the variance in their respective constructs. Construct reliability was evaluated through Cronbach's Alpha and Composite Reliability (CR), both of

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which produced values exceeding 0.70 for all constructs, demonstrating strong internal consistency. Additionally, the outer loading values of all indicators exceeded 0.50, demonstrating that each indicator significantly represented the construct it was intended to measure.

4. Results

This research examines how effort expectancy, facilitating conditions, performance expectancy, social influence, and environmental attitude impact marine ecotourism behavior, with e-WOM intention and marine ecotourism intention serving as mediators. To accomplish this goal, the study employs several analytical steps, including demographic analysis, validity and reliability assessments, and hypothesis testing. Demographic analysis is used to determine the respondents' characteristics. Assessments of reliability test and validity test are performed to determine the accuracy and dependability of the measurement instruments used. Hypothesis testing is undertaken to assess whether the proposed hypotheses are validated.

The first descriptive analysis is to portray the respondents' characteristics. In this study, 248 tourists took part. Table 1 below displays the findings from the analysis of the respondents' characteristics:

Table 1. Demographics of Respondents

Respondents' Characteristics		Frequency	Percentage
Gender	Man	134	54.03
	Woman	114	45.97
Age	18 - 22 years old (y.o.)	38	15.32
	23 - 27 y.o.	62	25.00
	28 - 32 y.o.	74	29.84
	33 - 37 y.o.	46	18.55
	≥ 38 y.o.	28	11.29
Latest Education	Highschool	68	27.42
	Bachelor	106	42.74
	Master	54	21.77
	Doctor	20	8.06
Monthly Income	< IDR 3.000.000	44	17.74
	IDR 3 - 5.000.000	58	23.39
	IDR 5 - 10.000.000	76	30.65
	IDR 10 - 20.000.000	48	19.35
	> IDR 20.000.000	22	8.87
Budget Allocation for Travel (per year)	≤ IDR 1.000.000	28	11.29
	IDR 1.999.999 – IDR 5.999.999	74	29.84
	IDR 6.000.000 – IDR 10.999.999	88	35.48
	IDR 11.000.000 – IDR 20.999.999	42	16.94

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	≥ IDR 21.000.000	16	6.45

Table 1 displays the demographic information of the 248 participants involved in this study on marine ecotourism. Most respondents were male (54.03%) and aged between 28–32 years (29.84%). Most respondents held a bachelor's degree (42.74%), reflecting a relatively high level of educational attainment. Regarding monthly income, the largest group earned between IDR 5–10 million (30.65%), while in terms of annual tourism budget allocation, most respondents allocated between IDR 6,000,000–10,999,999 (35.48%). These figures suggest that the respondents possess relatively strong financial and educational capacities, which may influence their perceptions and participation in marine ecotourism activities.

Additionally, as shown in Figure 2, the analysis performed using SmartPLS 4 indicated that all the indicators for the latent constructs had outer loading values greater than 0.70, signifying strong indicator reliability. The indicators PE3 (0.957), EE2 (0.911), and EA3 (0.947) exhibited the highest outer loadings, suggesting that these items are highly indicative of the constructs of Effort Expectancy, Performance Expectancy, and Environmental Attitude, respectively. No indicators required elimination, as all loading values surpassed the minimum threshold for significant contribution to their respective constructs.

Furthermore, all constructs' AVE values were exceeding 0.50, indicating acceptable convergent validity. For instance, the Facilitating Conditions construct achieved an AVE of 0.806, signifying that it greater than 80% of the variance in the indicators FC1, FC2, and FC3. In a similar vein, Environmental Attitude (AVE = 0.762) and Marine Ecotourism Intention (AVE = 0.775) also demonstrated strong convergent validity. As a result, both the reliability of the indicators and the convergent validity confirm that the measurement model is suitable for further analysis.

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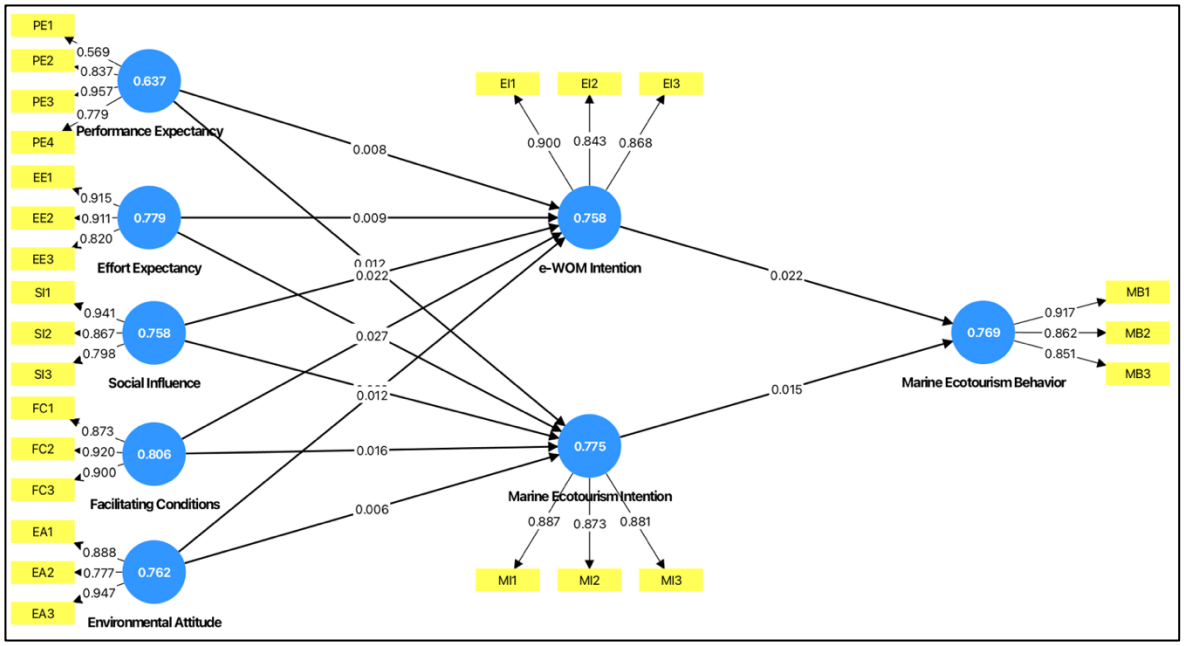

Figure 2. SmartPLS 4 Statistical Test Output

Following the computations conducted with SmartPLS 4, Table 2 illustrates that all constructs have Cronbach's Alpha values above 0.70, indicating robust internal consistency. The highest Cronbach's Alpha was observed for the Facilitating Conditions construct (0.882), while the lowest but still reliable was found for e-WOM Intention (0.840). These results demonstrate that the indicators comprising each construct are strongly correlated with one another and can consistently measure the same conceptual variable within the studied population.

Moreover, all constructs meet the Composite Reliability (CR) criterion of≥ 0.70, confirming the model's strong convergent reliability. CR provides a more exact measure of construct reliability than Cronbach's Alpha by considering the individual contributions of the indicators. Facilitating Conditions had the highest CR value at 0.926, reflecting a strong level of consistency in its measurements. All CR values exceeded the recommended minimum threshold, demonstrating that the measurement model is robust and appropriate for analyzing the relationships between latent variables.

Table 2. Validity and Reliability Test Results

Measurement Indicator	Outer Loadings ≥ 0.50	Cronbach's Alpha ≥ 0.70	Composite Reliability ≥ 0.70	AVE ≥ 0.50
Performance Expectancy (Lee & Jan, 2018)				
I feel that marine ecotourism can enhance my travel experience.	0.569	0.901	0.872	0.637

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Measurement Indicator	Outer Loadings ≥ 0.50	Cronbach's Alpha ≥ 0.70	Composite Reliability ≥ 0.70	AVE ≥ 0.50
I believe that marine ecotourism provides educational benefits about the marine environment.	0.837			
I feel that marine ecotourism activities help preserve marine ecosystems.	0.957			
Marine ecotourism increases my awareness of the importance of the marine environment.	0.779			
Effort Expectancy (Stepniak & Rosik, 2013)				
Information about marine ecotourism is easy for me to understand.	0.915			
I find it easy to access marine ecotourism locations.	0.911	0.867	0.914	0.779
I find it easy to participate in marine ecotourism activities.	0.820			
Social Influence (Beall et al, 2021)				
I was motivated to promote marine ecotourism on social media.	0.941			
The information I gained from social media influenced my decision to participate.	0.867	0.855	0.903	0.758
I saw positive support from people for marine ecotourism.	0.798			
Facilitating Conditions (Hsiao et al, 2021; Lee et al, 2020)				
The marine ecotourism site I visited is equipped with adequate facilities	0.873			
I perceive that there is supporting infrastructure in place	0.920	0.882	0.926	0.806
There is technological support that assists me in engaging in environmentally friendly tourism	0.900			
Environmental Attitude (Dunlap et al, 2000)				
I am committed to preserving the marine environment.	0.888			
I support environmentally friendly tourism activities.	0.777	0.884	0.905	0.762
I believe it is important to raise public awareness of marine environmental issues.	0.947			
e-WOM Intention (Cheung & Lee, 2012; Pham & Khanh, 2021)				
I intend to provide recommendations about marine ecotourism online.	0.900			
I plan to write positive reviews on digital platforms.	0.843	0.840	0.904	0.758
I am willing to share my personal experiences about marine ecotourism on social media.	0.868			
Marine Ecotourism Intention (Beall et al, 2021; Ajzen, 1991; Lee, 2007)				
I plan to participate in marine ecotourism activities in the future.	0.887	0.859	0.912	0.775
I have a strong desire to visit marine ecotourism locations.	0.873			

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Measurement Indicator	Outer Loadings ≥ 0.50	Cronbach's Alpha ≥ 0.70	Composite Reliability ≥ 0.70	AVE ≥ 0.50
I intend to support sustainable marine ecotourism programs.	0.881			
Marine Ecotourism Behavior (Lee & Jan, 2018; Lee, 2007)				
I do not harm the marine environment during tourism activities.	0.917			
I show respect for the local culture surrounding the marine ecotourism site.	0.862	0.855	0.909	0.769
I strive to consume tourism-related products responsibly during marine ecotourism activities.	0.851			

The hypothesis testing results are presented in Figure 2 and Table 3, indicating that Performance Expectancy significantly affects e-WOM Intention (p-value = 0.000). The implication is that when tourists have high expectations that marine ecotourism will enrich their travel experiences, they are more likely to recommend it online. This observation is consistent with earlier studies by Loureiro, Cavallero, and Miranda (2018) and Boro et al. (2024), which indicated that the perceived direct advantages of tourism experiences are a significant motivator for people to share information via digital platforms.

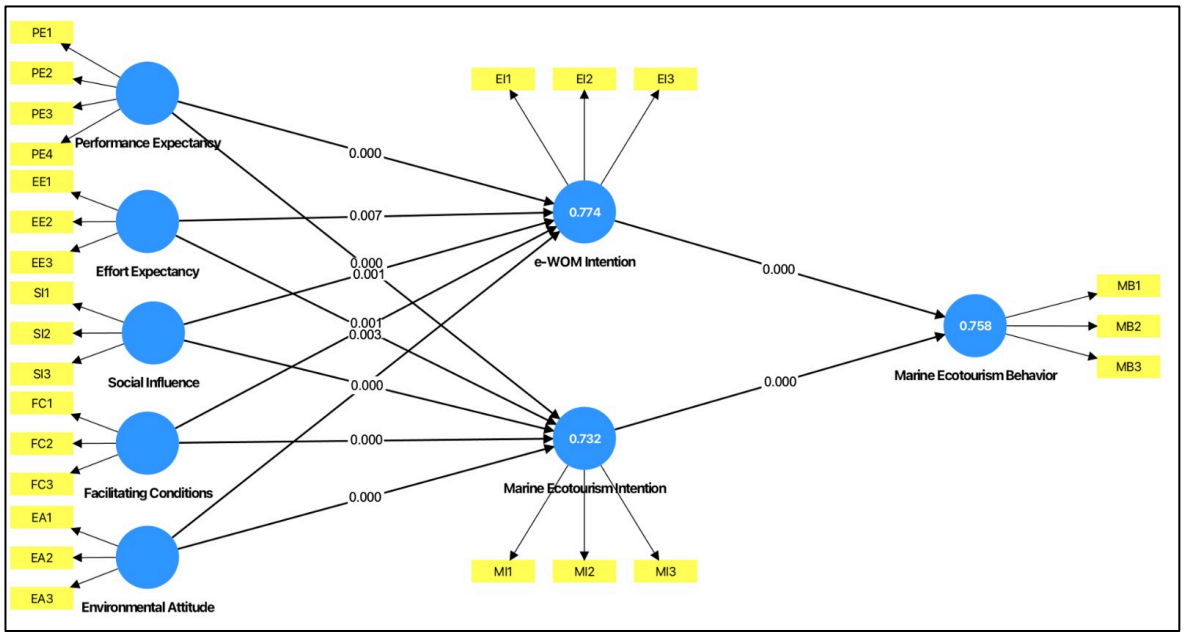

Figure 3. SmartPLS 4 Hypothesis Testing Output

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Performance Expectancy also significantly affects Marine Ecotourism Intention (p-value = 0.000). The more tourists believe in the educational benefits and enriching experiences offered by marine ecotourism, the more likely they are to engage in it. This finding is consistent with the UTAUT, which indicates that performance expectancy plays a crucial role in predicting behavioral intention. (Venkatesh et al., 2003; Rathore, 2015; Jan et al., 2025).

A significant effect was also found between Effort Expectancy and e-WOM Intention (p-value = 0.007), suggesting that the ease of understanding and accessing information related to marine ecotourism encourages tourists to share their experiences digitally. The results align with the studies by Alam et al. (2024) and Chauhan et al. (2024), which emphasized the importance of perceived ease in technology adoption and information sharing based on user experience. Furthermore, Effort Expectancy had a substantial influence on intention to engage in marine ecotourism (p-value = 0.001). Tourists are more inclined to participate in marine ecotourism activities when they believe the information and technologies involved are simple to use. Beall et al. (2021) support this finding, demonstrating that perceived simplicity of use has a significant impact on adoption behavior in conservation tourism.

The significant correlation between Social Influence and e-WOM Intention (p-value = 0.001) indicates that encouragement from one's social network, including friends, family, and media, plays a vital role in shaping online sharing behavior (Hodaed, Abd, & Hodaed, 2022). Tourists are more likely to promote marine ecotourism when they perceive the activity as being socially endorsed. This aligns with the concept of subjective norms in the Theory of Planned Behavior (Ajzen, 1991). Social Influence is also crucial in determining Marine Ecotourism Intention (p-value = 0.000), as recommendations from others, particularly on social media, influence tourists' decisions to participate in ecotourism. In the tourism sector, the effects of word-of-mouth and social encouragement are key factors in the desire to explore new experiences, as emphasized in the study by Beall et al. (2021).

Table 3. Hypothesis Test Results

Path Analysis	Pvalues	Remark	Hypothesis	Result
Performance Expectancy → e-WOM Intention	0.000	Significant	H_{1a}	Accepted
Performance Expectancy → Marine Ecotourism Intention	0.000	Significant	H_{1b}	Accepted
Effort Expectancy → e-WOM Intention	0.007	Significant	H_{2a}	Accepted
Effort Expectancy → Marine Ecotourism Intention	0.001	Significant	H_{2b}	Accepted
Social Influence → e-WOM Intention	0.001	Significant	H_{3a}	Accepted

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Path Analysis	Pvalues	Remark	Hypothesis	Result
Social Influence → Marine Ecotourism Intention	0.000	Significant	H_{3b}	Accepted
Facilitating Conditions → e-WOM Intention	0.003	Significant	H_{4a}	Accepted
Facilitating Conditions → Marine Ecotourism Intention	0.000	Significant	H_{4b}	Accepted
Environmental Attitude → e-WOM Intention	0.000	Significant	H_{5a}	Accepted
Environmental Attitude → Marine Ecotourism Intention	0.000	Significant	H_{5b}	Accepted
e-WOM Intention → Marine Ecotourism Behavior	0.000	Significant	H_6	Accepted
Marine Ecotourism Intention → Marine Ecotourism Behavior	0.000	Significant	H_7	Accepted
Performance Expectancy → e-WOM Intention → Marine Ecotourism Behavior	0.008	Significant	H_8	Rejected
Effort Expectancy → e-WOM Intention → Marine Ecotourism Behavior	0.002	Significant		
Social Influence → e-WOM Intention → Marine Ecotourism Behavior	0.000	Significant		
Facilitating Conditions → e-WOM Intention → Marine Ecotourism Behavior	0.202	Non-Significant		
Environmental Attitude → e-WOM Intention → Marine Ecotourism Behavior	0.000	Significant		
Performance Expectancy → Marine Ecotourism Intention → Marine Ecotourism Behavior	0.215	Non-Significant	H_9	Rejected
Effort Expectancy → Marine Ecotourism Intention → Marine Ecotourism Behavior	0.043	Significant		
Social Influence → Marine Ecotourism Intention → Marine Ecotourism Behavior	0.000	Significant		
Facilitating Conditions → Marine Ecotourism Intention → Marine Ecotourism Behavior	0.210	Non-Significant		
Environmental Attitude → Marine Ecotourism Intention → Marine Ecotourism Behavior	0.035	Significant		

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The findings also show that Facilitating Conditions significantly impact e-WOM intention (p-value = 0.003). The availability of facilities such as internet connectivity, supportive technologies, and user-friendly digital media enhances tourists' willingness to share their experiences online (Ramadhan et al., 2022). A study by Ali et al. (2024) also confirmed that the presence of technological infrastructure influences the intention to engage in digital communication in the context of sustainable tourism. Furthermore, Facilitating Conditions such as accessibility, transportation, and technology significantly influenced Marine Ecotourism Intention (p-value = 0.000). The better the infrastructure and support facilities, the greater the comfort and interest of tourists in choosing marine ecotourism. This finding is supported by Gupta, Dogra, and George (2018), who emphasized that facilitating conditions are crucial in sustainable tourism systems.

Environmental Attitude also demonstrated a significant relationship to engage in e-WOM (p-value = 0.000). Tourists committed to environmental conservation tend to act as positive information agents for marine ecotourism. Studies by Dunlap et al. (2000) and Kembau (2020) revealed that pro-environmental attitudes not only drive conservation behaviors but also encourage supportive communication activities. Environmental Attitude also significantly affected Marine Ecotourism Intention (p-value = 0.000). When tourists exhibit high concern for marine ecosystems, they are more likely to support conservation-oriented tourism activities. These findings reinforce prior research suggesting that pro-environmental values ultimately lead to pro-environmental behavioral intentions (Chang, Liao, & Huang, 2022).

Furthermore, e-WOM Intention significantly influences Marine Ecotourism Behavior (p-value = 0.000). Tourists who actively recommend or share their experiences are more likely to engage in responsible on-site behaviors. This indicates digital intentions reflect tangible involvement in sustainable tourism practices (Cheung & Lee, 2012). Additionally, Marine Ecotourism Intention was shown to affect Marine Ecotourism Behavior (p-value = 0.000) significantly. A strong intention to participate actively is reflected in actual behaviors such as avoiding environmental damage, respecting local cultures, and engaging in mindful consumption during travel (Jayasekara, Rajapaksa, & Gunawardena, 2024). These findings are consistent with the intention-behavior model of Ajzen's (1991) theory, which holds that intention is the immediate cause of actual behavior.

Mediating Effect by e-WOM Intention

The study's findings show that performance expectancy has a substantial influence on marine ecotourism behavior, with e-WOM Intention serving as a mediator (p = 0.008). This is consistent with the research by Lee and Jan (2018), which found that tourists' perceptions of the benefits of tourism experiences can encourage them to share these experiences online, thus fostering environmentally responsible behavior. Tourists who perceive marine ecotourism as enhancing their experiences are more likely to disseminate this information on digital platforms, potentially affecting ecotourism-related behaviors.

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In a similar vein, Effort Expectancy was shown to have a notable mediating impact via e-WOM Intention ($p = 0.002$). The simplicity of obtaining information and engaging in marine ecotourism activities motivates tourists to share their experiences, thereby reinforcing their dedication to sustainable tourism practices. This finding is in accordance with the UTAUT model (Venkatesh et al., 2003), which asserts that the ease of using a system or service boosts user intention and behavior.

Additionally, the influence of social factors on e-WOM intention and marine ecotourism behavior was significant ($p = 0.000$). This suggests that social support can prompt intentions to share information online, which may then lead to actual behaviors. These findings are in line with Ajzen's (1991) TPB which proposes that subjective norms can shape intentions and lead to specific actions when combined with personal motivation or a perceived sense of control.

In contrast, Facilitating Conditions did not demonstrate a significant mediating effect through e-WOM Intention ($p = 0.202$). This suggests that although infrastructure and supporting technologies are available, they do not automatically encourage sustainable behavior through the e-WOM pathway. This reinforces the findings of Hsiao et al. (2021), who noted that physical and technological facilities require interaction with internal factors to generate actual behavioral outcomes.

On the other hand, Environmental Attitude had a significant impact on Marine Ecotourism Behavior via e-WOM Intention ($p = 0.000$). Tourists who hold a favorable view of the environment are more likely to disseminate information online and engage in actions that reflect their conservation principles. This result aligns with the findings of Dunlap et al. (2000), who highlighted a strong link between ecological attitudes and environmentally friendly behaviors.

Mediating Effect by Marine Ecotourism Intention

The test results also indicate that not all exogenous variables influence Marine Ecotourism Behavior through the mediation of Marine Ecotourism Intention. Performance Expectancy does not exhibit a significant effect ($p = 0.215$), suggesting that although tourists may recognize the benefits of marine ecotourism, this belief alone is insufficient to generate intention and translate into actual behavior. This finding reflects the presence of an "intention-behavior gap" as discussed by Sheeran and Webb (2016).

Conversely, Effort Expectancy has a notable impact on Marine Ecotourism Intention ($p = 0.043$), highlighting the importance of perceived ease in influencing both intention and behavior. Likewise, Environmental Attitude is significant ($p = 0.035$), suggesting that environmental values and concerns encourage the intention to engage in marine ecotourism, which translates into actual participation. These results are consistent with Stern (2000) research, which underscores the effect of environmental values on pro-environmental actions.

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Moreover, the Social Influence test reveals statistical significance (p = 0.000). At the same time, Facilitating Conditions show no significant effect in this mediation pathway (p = 0.210), indicating that the mere availability of infrastructure or external support does not guarantee sustainable tourism behavior unless internal motivation is strengthened (Lee & Jan, 2018).

5. Conclusion and Suggestion

The research determines that key elements such as effort expectancy, performance expectancy, facilitating conditions, social influence, and environmental attitude significantly impact tourists' intentions and actions in the realm of marine ecotourism in Indonesia. The key findings indicate that both e-WOM intention and marine ecotourism intention effectively mediate the influence of exogenous constructs on marine ecotourism behavior. In other words, the greater the expectation of benefits, ease of use, social support, facility availability, and environmental concern, the higher the likelihood that tourists will intend to share information and participate responsibly in marine ecotourism activities. Specifically, e-WOM intention has proven to be a significant intermediary linking variables such as effort expectancy, performance expectancy, and environmental attitude to marine ecotourism behavior. Meanwhile, marine ecotourism intention is essential in transmitting the effects of effort expectancy and environmental attitude to actual behavior. However, not all mediation pathways show consistent results; for instance, facilitating conditions do not significantly mediate through e-WOM intention. This highlights that internal intentions and attitudes exert a stronger influence than mere availability of facilities in shaping sustainable tourism behavior.

These results contribute empirical insights to developing the UTAUT within the sustainable tourism context and emphasize the strategic importance of digital communication (e-WOM) in promoting pro-environmental behavioral transformation. Furthermore, the successful integration of environmental attitude into the model reinforces pro-environmental behavior theories. It underscores their relevance in supporting the blue economy initiatives currently being promoted by the Indonesian government.

Drawing from the research results, a number of strategic suggestions are put forward for stakeholders. First, marine ecotourism destination managers and policymakers should design digital-based educational campaigns that not only highlight the benefits of tourism but also encourage tourists to share their positive experiences via social media. Activating e-WOM can enhance the reach of organic promotion and strengthen the destination's image as a sustainable location. Second, tourism managers and local governments must improve accessibility and ease of participation in marine ecotourism by providing supportive technology and eco-friendly infrastructure. These efforts should be synergized with environmental awareness programs, such as training sessions or incentives for tourists and local communities. Third, a participatory approach to marine ecotourism management must be strengthened by considering social norms and community values. Collaboration with local leaders, MSME actors, and conservation groups can be pivotal in amplifying social influence that fosters collective behavioral change. Finally, future study has to examine additional

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factors such as cultural values, risk perception, and prior travel experiences as moderating variables. Follow-up studies may also benefit from expanding the geographical scope and employing longitudinal approaches to more comprehensively capture the dynamics of tourist behavioral change over time.

6. Acknowledgement

The researcher expresses heartfelt appreciation to the Ministry of Higher Education, Science, and Technology of the Republic of Indonesia for granting research funding for the year 2025, as outlined in contract number 126/C3/DT.05.00/PL/2025 dated May 28, 2025.

References

1. Adam, M., Ibrahim, M., Putra, T. R. I., & Yunus, M. (2023). The effect of e-WOM model mediation of marketing mix and destination image on tourist revisit intention. *International Journal of Data & Network Science*, *7*(1), 265-274.
2. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
3. Alam, S. S., Masukujjaman, M., Mohamed Makhbul, Z. K., Helmi Ali, M., Ahmad, I., & Al Mamun, A. (2024). Experience, trust, eWOM engagement and usage intention of ai enabled services in hospitality and tourism industry: Moderating mediating analysis. *Journal of Quality Assurance in Hospitality & Tourism*, *25*(6), 1635-1663.
4. Ali, M. B., Tuhin, R., Alim, M. A., Rokonuzzaman, M., Rahman, S. M., & Nuruzzaman, M. (2024). Acceptance and use of ICT in tourism: the modified UTAUT model. *Journal of Tourism Futures*, *10*(2), 334-349.
5. Astuti, B. A., & Hariyawan, A. (2021). Perspectives of social capital and self-determination on e-WOM at millennial generation in Yogyakarta. *Integrated Journal of Business and Economics*, *5*(1), 399475.
6. Beall, A. T., et al. (2021). Social influence and sustainability behavior: A meta-analysis. *Journal of Environmental Psychology*, 76, 101631.
7. Bommer, W. H., Rana, S., & Milevoj, E. (2022). A meta-analysis of eWallet adoption using the UTAUT model. *International Journal of Bank Marketing*, *40*(4), 791-819.
8. Boro, K., Goswami, C., Kumar, N., Sharma, S., & Das, S. (2024). Tourist Decision to Visit a Destination through eWOM Information: An UTAUT Approach Study

This work is licensed under a Creative Commons Attribution 4.0 International License

in Indian Context. *Journal of Tourism, Hospitality & Culinary Arts*, 16(3), 155-176

9. Brown, T. J., Barry, T. E., Dacin, P. A., & Gunst, R. F. (2005). Spreading the word: Investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context. *Journal of the academy of marketing science*, *33*(2), 123-138.
10. Chang, C. N., Liao, T. H., & Huang, H. C. (2022). Investigating the acceptance of marine ecotourism after the COVID-19 pandemic in Taiwan. *Sustainability*, *14*(10), 6116.
11. Chao, C. M. (2019). Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model. *Frontiers in psychology*, *10*, 1652.
12. Chauhan, J. S., Sharma, A., Sharma, A., Ahalawat, K., & Chauhan, V. (2024). AI in Wellness Tourism: A Catalyst for Enhancing e-WOM and Shaping Consumer Dynamics. In *2024 International Conference on Emerging Technologies and Innovation for Sustainability (EmergIN)*, 466-472
13. Chen, M. F., & Tung, P. J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International journal of hospitality management*, *36*, 221-230.
14. Cheng, T. M., & Wu, H. C. (2015). How do environmental knowledge, environmental sensitivity, and place attachment affect environmentally responsible behavior? An integrated approach for sustainable island tourism. *Journal of Sustainable tourism*, *23*(4), 557-576.
15. Cheung, C. M., & Lee, M. K. (2012). What drives consumers to spread electronic word of mouth in online consumer-opinion platforms. *Decision Support Systems*, 53(1), 218–225.
16. Cheung, C. M., Xiao, B. S., & Liu, I. L. (2014). Do actions speak louder than voices? The signaling role of social information cues in influencing consumer purchase decisions. *Decision support systems*, *65*, 50-58.
17. Choi, H., Kim, Y., & Kim, J. (2011). Driving factors of post adoption behavior in mobile data services. *Journal of Business Research*, *64*(11), 1212-1217.
18. Diep, N. A., Cocquyt, C., Zhu, C., & Vanwing, T. (2016). Predicting adult learners' online participation: Effects of altruism, performance expectancy, and social capital. *Computers & Education*, *101*, 84-101.
19. Dunlap, R. E., et al. (2000). Measuring endorsement of the new ecological paradigm: A revised NEP scale. *Journal of Social Issues*, 56(3), 425–442.
20. Fakfare, P., Manosuthi, N., Lee, J. S., Han, H., Jarumaneerat, T., & Kim, J. J. (2024). Marine tourism and environmental preservation: determinants of tourists'

This work is licensed under a Creative Commons Attribution 4.0 International License

ecofriendly behavior and promotion through word-of-mouth. *Asia Pacific Journal of Tourism Research*, *29*(7), 769-789.
21. Fang, W. T., Lien, C. Y., Huang, Y. W., Han, G., Shyu, G. S., Chou, J. Y., & Ng, E. (2018). Environmental literacy on ecotourism: A study on student knowledge, attitude, and behavioral intentions in China and Taiwan. *Sustainability*, *10*(6), 1886.
22. Farzin, M., Vazifehdust, H., & Hamdi, K. (2020). Projective techniques for understanding cyber-market mavenism in social network sites. *Revista Brasileira de Gestão de Negócios*, *22*(03), 729-749.
23. Gao, Q., Li, Z., & Sun, M. (2023). Study on the influence path of public participation in marine ecotourism under the perspective of conspicuous consumption-Analysis of fsQCA based on VBN theory. *Marine Pollution Bulletin*, *194*, 115279.
24. Gosal, J., Andajani, E., & Rahayu, S. (2020, January). The effect of e-WOM on travel intention, travel decision, city image, and attitude to visit a tourism city. In *17th International Symposium on Management (INSYMA 2020)* (pp. 261-265). Atlantis Press.
25. Griskevicius, V., & Kenrick, D. T. (2013). Fundamental motives: How evolutionary needs influence consumer behavior. *Journal of Consumer Psychology*, *23*(3), 372-386.
26. Gu, Y., Deakin, E., & Long, Y. (2017). The effects of driving restrictions on travel behavior evidence from Beijing. *Journal of Urban Economics*, *102*, 106-122.
27. Gupta, A., & Dogra, N. (2017). Tourist adoption of mapping apps: A UTAUT2 perspective of smart travellers. *Tourism and hospitality management*, *23*(2), 145-161.
28. Gupta, A., Dogra, N., & George, B. (2018). What determines tourist adoption of smartphone apps? An analysis based on the UTAUT-2 framework. *Journal of Hospitality and Tourism Technology*, *9*(1), 50-64.
29. Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2022). *Multivariate data analysis: A global perspective (Vol. 7)*. Cengage Learning.
30. Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1987). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *The Journal of environmental education*, *18*(2), 1-8.
31. Hodaed, D., Abd, N., & Hodaed, L. (2022). Influencing of e-word-of-mouth mediation in relationships between social influence, price value and habit and intention to visit in Saudi Arabia. *Humanities*, *10*(2), 186-197.
32. Hsiao, C. H., Lee, Y. H., & Lin, J. S. (2021). Infrastructure readiness and sustainable tourism: A structural equation model. *Sustainability*, 13(1), 345.

This work is licensed under a Creative Commons Attribution 4.0 International License

33. Huy, L. V., Phan, Q. P. T., Phan, H. L., Pham, N. T., & Nguyen, N. (2022). Improving tourists' green electronic word-of-mouth: A mediation and moderation analysis. *Asia Pacific Journal of Tourism Research*, *27*(5), 547-561.
34. Ibnou-Laaroussi, S., Rjoub, H., & Wong, W. K. (2020). Sustainability of green tourism among international tourists and its influence on the achievement of green environment: Evidence from North Cyprus. *Sustainability*, *12*(14), 5698.
35. Jalilvand, M. R., Ebrahimi, A., & Samiei, N. (2013). Electronic word of mouth effects on tourists' attitudes toward Islamic destinations and travel intention: An empirical study in Iran. *Procedia-Social and Behavioral Sciences*, *81*, 484-489.
36. Jan, A., Khan, M., Ajmal, M. M., & Patwary, A. K. (2025). From traditional advertising to digital marketing: exploring electronic word of mouth through a theoretical lens in the hospitality and tourism industry. *Global Knowledge, Memory and Communication*, *74*(5/6), 1973-1999.
37. Jang, S. S., & Namkung, Y. (2009). Perceived quality, emotions, and behavioral intentions: Application of an extended Mehrabian–Russell model to restaurants. *Journal of Business research*, *62*(4), 451-460.
38. Jayasekara, K. D. D. S., Rajapaksa, D., & Gunawardena, U. P. (2024). Impacts of environmental knowledge, motives, and behavior on ecotourism. *Sustainability*, *16*(11), 4724.
39. Jung, N. Y., & Seock, Y. K. (2017). Effect of service recovery on customers' perceived justice, satisfaction, and word-of-mouth intentions on online shopping websites. *Journal of Retailing and Consumer Services*, *37*, 23-30.
40. Kembau, A. S. (2020). The effect of consumer interaction on social media (e-WOM) towards desire to visit Tomohon city. In *First International Conference on Applied Science and Technology (iCAST 2018)*, 170-174
41. Khan, M., Ajmal, M. M., Jan, A., Rahman, H. U., & Zahid, M. (2024). Identification of novel antecedents towards generating positive electronic word of mouth: evidence from the hospitality and tourism industry. *Global Knowledge, Memory and Communication*.
42. Khan, M. M., Siddique, M., Yasir, M., Qureshi, M. I., Khan, N., & Safdar, M. Z. (2022). The significance of digital marketing in shaping ecotourism behaviour through destination image. *Sustainability*, *14*(12), 7395.
43. Lai, P. H., & Nepal, S. K. (2006). Local perspectives of ecotourism development in Tawushan Nature Reserve, Taiwan. *Tourism Management*, *27*(6), 1117-1129.
44. Lee, K. (2011). The role of media exposure, social exposure and biospheric value orientation in the environmental attitude-intention-behavior model in adolescents. *Journal of environmental psychology*, *31*(4), 301-308.

This work is licensed under a Creative Commons Attribution 4.0 International License

45. Lee, C.-K., & Jan, F.-H. (2018). The influence of adventure tourists' value on satisfaction and revisit intention: The moderating effects of risk perception. *Journal of Travel & Tourism Marketing*, 35(4), 437–451.
46. Lee, T. H., & Jan, F. H. (2018). Ecotourism behavior of nature-based tourists: An integrative framework. *Journal of Travel Research*, *57*(6), 792-810.
47. Lee, T. H., & Jan, F. H. (2018). Development and validation of the ecotourism behavior scale. *International Journal of Tourism Research*, *20*(2), 191-203.
48. Lee, M., & Youn, S. (2009). Electronic word of mouth (eWOM) How eWOM platforms influence consumer product judgement. *International journal of advertising*, *28*(3), 473-499.
49. Leong, C. M., Loi, A. M. W., & Woon, S. (2022). The influence of social media eWOM information on purchase intention. *Journal of Marketing Analytics*, *10*(2), 145.
50. Lien, C. H., & Cao, Y. (2014). Examining WeChat users' motivations, trust, attitudes, and positive word-of-mouth: Evidence from China. *Computers in human behavior*, *41*, 104-111.
51. Lien, C. H., Wu, J. J., Hsu, M. K., & Wang, S. W. (2018). Positive moods and word-of-mouth in the banking industry: a moderated mediation model of perceived value and relational benefits. *International Journal of Bank Marketing*, *36*(4), 764-783.
52. Loo, W. H., Yeow, P. H., & Chong, S. C. (2009). User acceptance of Malaysian government multipurpose smartcard applications. *Government Information Quarterly*, *26*(2), 358-367.
53. Loureiro, S. M., Cavallero, L., & Miranda, F. J. (2018). Fashion brands on retail websites: Customer performance expectancy and e-word-of-mouth. *Journal of Retailing and Consumer Services*, *41*, 131-141.
54. Luo, Q., & Zhong, D. (2015). Using social network analysis to explain communication characteristics of travel-related electronic word-of-mouth on social networking sites. *Tourism management*, *46*, 274-282.
55. Ma, X., & Huo, Y. (2023). Are users willing to embrace ChatGPT? Exploring the factors on the acceptance of chatbots from the perspective of AIDUA framework. *Technology in Society*, *75*, 102362.
56. Marwa, T., Bashir, A., Andaiyani, S., & Cahyadi, A. (2024). Determinants of the Blue Economy Growth in the Era of Sustainability: A Case Study of Indonesia. *Economies*, *12*(11).
57. Morris, J. M., Dumble, P. L., & Wigan, M. R. (1979). Accessibility indicators for transport planning. *Transportation Research Part A: General*, *13*(2), 91-109.

This work is licensed under a Creative Commons Attribution 4.0 International License

58. Mullan, J., Bradley, L., & Loane, S. (2017). Bank adoption of mobile banking: stakeholder perspective. *International Journal of Bank Marketing*, *35*(7), 1154-1174.
59. Mustika, P. L. K., Kusuma, W. D., & Hartono, D. (2023). Marine ecotourism and conservation in Indonesia: Challenges and opportunities. *Marine Policy, 147*, 105394.
60. Sari, N. P., Sari, U. T., Prastyanto, A. N., & Hadi, A. S. (2025). Towards Sustainable Ecotourism: Analyzing the Impact of Memorable Tourism Experiences and Tourist Satisfaction in Indonesia. *IJBE (Integrated Journal of Business and Economics)*, *9*(1), 19-37.
61. Suryawardana, E., Pitaloka, D. A. D., Soelistiyono, A., & Richadyanato, R. (2024). The Role of Functional and Emotional Value Co-Creation Within Sharing Economy Platforms on Repurchase Intention. *IJBE (Integrated Journal of Business and Economics)*, *8*(3), 290-310.
62. Nugroho, I., Sahide, M. A. K., & Supriatna, J. (2021). Blue economy and sustainable development in Indonesia: Policy and implementation. *Sustainability, 13*(5), 2659.
63. Nurhayati, A., Aisah, I., & Supriatna, A. K. (2019). Model Development of a synergistic sustainable marine ecotourism—a case study in Pangandaran region, west java province, Indonesia. *Sustainability*, *11*(12), 3418.
64. Nurhayati, A., & Purnomo, A.H. (2017). Developing the Marine and Fisheries Industry in Pangandaran using a Bioecoregion-Based Technopark Framework. *Journal of STI Policy and Management, 2*(1), 43–52.
65. Pan, M., & Gao, W. (2021). Determinants of the behavioral intention to use a mobile nursing application by nurses in China. *BMC health services research*, *21*, 1-11.
66. Park, D. H., & Lee, J. (2008). eWOM overload and its effect on consumer behavioral intention depending on consumer involvement. *Electronic commerce research and applications*, *7*(4), 386-398.
67. Rahman, M. M., & Sloan, T. (2017). User adoption of mobile commerce in Bangladesh: Integrating perceived risk, perceived cost and personal awareness with TAM. *The International Technology Management Review*, *6*(3), 103-124.
68. Ramadhan, A., Hidayanto, A. N., Evik, C. S., Rizkiandini, N., Rahimullah, N. A., Muthiah, R. H., ... & Phusavat, K. (2022). Factors affecting the continuation to use and e-WOM intention of online library resources by university students: A study in Indonesia. *The Journal of Academic Librarianship*, *48*(6), 102592.
69. Rathore, S. (Ed.). (2015). *Capturing, analyzing, and managing word-of-mouth in the digital marketplace*. IGI Global.

This work is licensed under a Creative Commons Attribution 4.0 International License

70. Reyes-Menendez, A., Correia, M. B., Matos, N., & Adap, C. (2020). Understanding online consumer behavior and eWOM strategies for sustainable business management in the tourism industry. *Sustainability*, *12*(21), 8972.
71. Santoso, R., Wibowo, A., & Permatasari, L. (2023). Understanding the determinants of marine ecotourism participation in Indonesia. *Tourism Economics, 29*(4), 723–740.
72. Sardar, A., Manzoor, A., Shaikh, K. A., & Ali, L. (2021). An empirical examination of the impact of eWom information on young consumers' online purchase intention: Mediating role of eWom information adoption. *Sage Open*, *11*(4), 21582440211052547.
73. Sharma, S., Singh, G., Pratt, S., & Narayan, J. (2021). Exploring consumer behavior to purchase travel online in Fiji and Solomon Islands? An extension of the UTAUT framework. *International Journal of Culture, Tourism and Hospitality Research*, *15*(2), 227-247.
74. Sheeran, P., & Webb, T. L. (2016). The intention–behavior gap. *Social and Personality Psychology Compass*, 10(9), 503–518.
75. Siddik, M. N. A., Sun, G., Yanjuan, C. U. I., & Kabiraj, S. (2014). Financial inclusion through mobile banking: a case of Bangladesh. *Journal of Applied finance and Banking*, *4*(6), 109.
76. Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56(3), 407–424.
77. Tangeland, T., Vennesland, B., & Nybakk, E. (2013). Second-home owners' intention to purchase nature-based tourism activity products–A Norwegian case study. *Tourism Management*, *36*, 364-376.
78. Teeroovengadum, V. (2019). Environmental identity and ecotourism behaviours: examination of the direct and indirect effects. *Tourism Review*, *74*(2), 280-292.
79. Tóth, G., & Dávid, L. (2010). Tourism and accessibility: An integrated approach. *Applied Geography*, *30*(4), 666-677.
80. Utami, N. W. F., Wirawan, I. G. P., Firn, J., Kepakisan, A. N. K., Kusdyana, I. P. G. A., Nicol, S., & Carwardine, J. (2020). Prioritizing management strategies to achieve multiple outcomes in a globally significant Indonesian protected area. *Conservation Science and Practice*, *2*(6), e157.
81. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
82. Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 157-178.
83. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2021). Unified theory of acceptance and use of technology: A decade of research. *MIS Quarterly, 45*(1), 123–147.

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84. Wiidegren, Ö. (1998). The new environmental paradigm and personal norms. *Environment and behavior*, *30*(1), 75-100.
85. Wijaya, H., Adnyana, I. M., & Suryana, K. (2022). Sustainable aquaculture and marine conservation policies in Indonesia. *Aquaculture Reports, 24*, 101234.
86. Xie, P. F., & Luo, J. (2021). Investigating visitor attitudes towards the reopening of a theme park: an application of the push-pull-mooring model. *Journal of Travel & Tourism Marketing*, *38*(8), 867-880.
87. Yaja, M., Kumar, A., & Swamy, G. A. (2023). Barriers to tourism participation: A case of first-generation local community service providers. *International Social Science Journal*, *73*(247), 103-119.
88. Yulianto, T., Ramadhani, A., & Setiawan, D. (2024). Strategies for promoting sustainable marine tourism in Indonesia: A policy perspective. *Journal of Marine and Island Cultures, 13*(1), 45–61.
89. Zhang, H., Wu, Y., & Buhalis, D. (2018). A model of perceived image, memorable tourism experiences and revisit intention. *Journal of destination marketing & management*, *8*, 326-336.
90. Zhu, W., Tang, J., & Tao, Y. (2020). The Development of Marine Ecotourism from the Perspective of Interests and Resource Development. *Journal of Coastal Research*, *112*(SI), 187-190.
91. Zhang, Y., Zhang, L., Wu, Y., Feng, L., Liu, B., Han, G., ... & Yu, T. (2021). Factors affecting students' flow experience of e-learning system in higher vocational education using UTAUT and structural equation modeling approaches. In *International Conference on Artificial Intelligence for Communications and Networks: Second EAI International Conference, AICON 2020, Virtual Event, December 19-20, 2020, Proceedings 2* (pp. 362-377). Cham: Springer International Publishing.

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