

Key Drivers Of Sustainable Tourism Destination Attractiveness

Pendorong Utama Daya Tarik Destinasi Pariwisata Berkelanjutan

Lefrand S. Pasuhuk¹, & Deske W. Mandagi^{2*}

Universitas Klabat, Indonesia^{1,2}

deskemandagi@unklab.ac.id¹

*Corresponding Author

ABSTRACT

The attractiveness of sustainable tourism destinations plays a crucial role in promoting responsible travel behaviors and supporting long-term destination development. This study aims to systematically identify and analyze the key determinants contributing to the attractiveness of sustainable tourism destinations. Employing a systematic literature review (SLR) methodology, this research analyzes peer-reviewed journal articles published between 2010 and 2024, retrieved from the Scopus database. Guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, a rigorous screening, data extraction, and synthesis process was conducted, resulting in a final sample of 126 relevant studies. The findings reveal six major factors influencing sustainable tourism destination attractiveness: tourist satisfaction, destination image and branding, crisis management, perceived quality and visitor experience, environmental and climate change concerns, and research, evaluation, and planning efforts. These insights offer practical implications for policymakers, tourism planners, and destination marketers seeking to enhance the competitiveness and sustainability of tourism destinations in a rapidly evolving global context.

Keywords: Sustainable Tourism, Destination Attractiveness, Systematic Literature Review, Tourist Satisfaction; Destination Branding

ABSTRAK

Daya tarik destinasi pariwisata berkelanjutan memainkan peran penting dalam mempromosikan perilaku perjalanan yang bertanggung jawab dan mendukung pengembangan destinasi jangka panjang. Penelitian ini bertujuan untuk mengidentifikasi dan menganalisis secara sistematis faktor-faktor penentu utama yang berkontribusi terhadap daya tarik destinasi pariwisata berkelanjutan. Dengan menggunakan metodologi tinjauan literatur sistematis (SLR), penelitian ini menganalisis artikel jurnal yang ditinjau oleh rekan sejawat yang diterbitkan antara tahun 2010 dan 2024, yang diambil dari basis data Scopus. Dipandu oleh kerangka kerja Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), penyaringan, ekstraksi data, dan proses sintesis yang ketat dilakukan, sehingga menghasilkan sampel akhir sebanyak 126 studi yang relevan. Temuan-temuan tersebut mengungkapkan enam faktor utama yang memengaruhi daya tarik destinasi pariwisata berkelanjutan: kepuasan wisatawan, citra dan pencitraan destinasi, manajemen krisis, kualitas yang dirasakan dan pengalaman pengunjung, masalah lingkungan dan perubahan iklim, serta penelitian, evaluasi, dan upaya perencanaan. Wawasan ini menawarkan implikasi praktis bagi para pembuat kebijakan, perencana pariwisata, dan pemasar destinasi yang ingin meningkatkan daya saing dan keberlanjutan destinasi pariwisata dalam konteks global yang berkembang pesat.

Kata Kunci: Pariwisata Berkelanjutan, Daya Tarik Destinasi, Tinjauan Literatur Sistematis, Kepuasan Wisatawan, Pencitraan Merek Destinasi.

1. Introduction

Tourism continues to be a major driver of global economic growth, cultural exchange, and community development. However, the traditional growth-focused model of tourism has raised critical concerns about its environmental, social, and cultural impacts (Tulbure & Eduard, 2024). The shift toward sustainable tourism highlights the need for strategies that balance economic prosperity with resource conservation and community well-being. As sustainable

tourism gains prominence, the attractiveness of destinations is no longer judged solely by economic factors but increasingly by their environmental stewardship, social inclusivity, and cultural authenticity (Guerra & Gonçalves, 2024; Javdan et al., 2023). Thus, understanding the key determinants that drive the attractiveness of sustainable tourism destinations has become a crucial focus for researchers, policymakers, and industry practitioners.

The urgency for this research is underscored by escalating global challenges such as climate change, resource depletion, and socio-economic inequalities. Climate change, in particular, poses existential threats to many tourism destinations, altering landscapes and exacerbating the vulnerabilities of mass tourism systems (Javdan et al., 2023). Concurrently, the COVID-19 pandemic has emphasized the need for resilience and sustainable management of tourism sectors (Satta et al., 2019). Despite increasing acknowledgment of sustainability principles, the tourism industry still faces obstacles in effectively integrating these into destination attractiveness strategies (Lima Santos et al., 2020). Moreover, investment opportunities linked to eco-innovation and sustainable practices present significant potential for long-term competitiveness (Guerra & Gonçalves, 2024; Satta et al., 2019). Socially, the call for greater community involvement, cultural preservation, and inclusivity, through accessible tourism initiatives, has intensified the urgency for rethinking destination attractiveness frameworks (Tulbure & Eduard, 2024; Ahmed & Riaz, 2024).

While prior studies have explored individual dimensions of tourism sustainability and destination marketing, there remains a notable gap in systematically consolidating the key determinants that uniquely shape the attractiveness of sustainable tourism destinations. Much of the existing literature is fragmented across environmental management, visitor satisfaction, branding, and crisis resilience studies, without a holistic synthesis (Javdan et al., 2023; Lima Santos et al., 2020; Mandagi et al., 2024). Therefore, the objective of this study is to systematically identify, categorize, and analyze the principal factors that influence the attractiveness of sustainable tourism destinations, through a comprehensive review of academic research published between 2010 and 2024.

This study makes several important contributions. It advances theoretical understanding by bridging environmental, social, and experiential aspects of destination attractiveness into a cohesive framework. Practically, it provides valuable insights for destination management organizations, policymakers, and tourism marketers aiming to enhance competitiveness while promoting sustainability principles. Additionally, the study supports broader efforts aligned with the United Nations Sustainable Development Goals (SDGs), particularly those related to sustainable communities, climate action, and responsible consumption and production (Tulbure & Eduard, 2024; Guerra & Gonçalves, 2024; Ahmed & Riaz, 2024).

2. Methodology

This study adopts a Systematic Literature Review (SLR) approach, a rigorous and increasingly prominent methodology for synthesizing research across diverse fields such as business, management, social sciences, and tourism (Rampen et al., 2023; Kowaas et al., 2023; Kainde et al., 2023; Mandagi et al., 2024; Mandagi & Tappy, 2023). The SLR method is designed to systematically identify, critically evaluate, and synthesize all relevant studies pertaining to a specific research domain, thereby facilitating a more comprehensive and nuanced understanding of the subject matter (Thomé et al., 2016).

To ensure the methodological rigor and transparency of the review process, this study employs the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. The PRISMA protocol outlines a detailed six-step procedure that guides the systematic identification, screening, eligibility assessment, and synthesis of pertinent literature, with a particular focus on addressing defined research questions (Višić, 2022; Maniar et al.,

2018). Figure 1 presents the stages of the SLR process implemented in this study, illustrating the structured and comprehensive strategy adopted to achieve the research objectives.

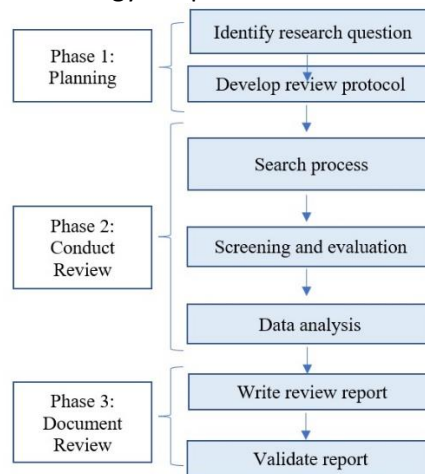


Figure 1. Steps in the SLR Process
(Thomé et al., 2016)

The first step in this study involved the formulation of a clear and focused research question (RQ) to guide the investigation. Particular attention was devoted to crafting a research question that aligns closely with the specific objectives of the chosen topic. Accordingly, the research question formulated for this study is: "What factors contribute to the attractiveness of a sustainable tourism destination?" This well-defined question aims to systematically explore the determinants influencing the appeal of sustainable tourism destinations, addressing a critical dimension of sustainable development in the contemporary global context.

Following the development of the research question, the second stage entailed the creation and refinement of a comprehensive review protocol. This protocol served as a detailed and structured blueprint, meticulously outlining the methods, procedures, and inclusion criteria that governed each phase of the systematic review process. Establishing a rigorous protocol was essential to ensure transparency, analytical rigor, and replicability across all stages of the study. It provided explicit guidelines for the conduct of the systematic literature review (SLR) and functioned as a safeguard against potential biases, ensuring that the review process was consistently documented and executed with the highest standards of precision. The implementation of such methodological rigor not only strengthens the credibility of the study's findings but also lays a robust foundation for subsequent research and scholarly inquiry in the field of sustainable tourism.

The third stage of the research involved conducting a comprehensive and systematic search for relevant literature aimed at identifying high-quality sources that directly addressed the research question. To this end, a strategic search using keywords such as "sustainable tourism destination," "sustainable development," and "ecotourism" was conducted within the Scopus database, widely recognized as a premier repository of peer-reviewed academic journals across multiple disciplines. Leveraging the extensive scope and depth of Scopus ensured a robust and interdisciplinary scholarly foundation, thereby enhancing the rigor and credibility of the review. This search process yielded a total of 6,382 relevant articles, each selected based on stringent criteria of relevance, methodological soundness, and substantive contribution to the understanding of the key determinants influencing sustainable tourism destination attractiveness.

Figure 2 illustrates the annual distribution of relevant articles related to sustainable tourism destinations from 2010 to 2024. The trend demonstrates a gradual increase in the number of publications between 2010 and 2017, with a moderate but steady growth during this

period. From 2018 onward, the number of publications exhibits a sharp upward trajectory, indicating a significant rise in scholarly attention to sustainable tourism topics. Notably, there is a marked acceleration after 2020, with the number of articles nearly doubling between 2022 and 2024. This surge may reflect heightened global awareness of sustainability issues, amplified by the impacts of the COVID-19 pandemic and the growing urgency of addressing climate change.

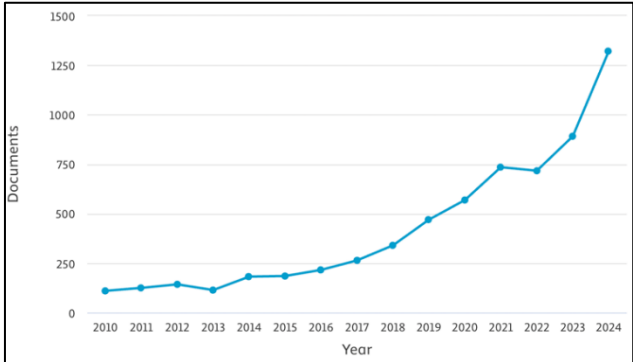


Figure 2. Documents by Year
Source: Scopus Database (2025)

The fourth stage of the study focused on the meticulous review and selection of articles to ensure they conformed to the predefined inclusion and exclusion criteria, which were essential for assessing the appropriateness and quality of the data gathered for the systematic literature review (SLR). Specific selection criteria, summarized in Table 1, were rigorously applied to identify studies that aligned with the research objectives. Eligible articles were required to be scholarly contributions published in reputable journals indexed in the Scopus database between 2010 and 2024, encompassing both quantitative and qualitative research designs, and written in English. The inclusion criteria emphasized selecting articles that addressed themes related to sustainable tourism destinations, thereby ensuring that the retrieved studies offered meaningful insights into the determinants of destination attractiveness. By systematically implementing these criteria, the study aimed to curate a comprehensive, relevant, and high-quality body of literature, ultimately enhancing the depth, reliability, and academic rigor of the review findings.

Table 1. Article Inclusion Criteria

Criteria	Description
Document type	Scientific articles from Journal
Source	Scopus Database
Time frame	2010-2024
Research design	Quantitative and Qualitative
Language	English
Keywords	Sustainable tourism destination
Subject area	Tourism; Business; Management & Social Science

A total of 6,382 documents were initially retrieved from the Scopus database. After excluding 1,486 documents unrelated to tourism, business management, and social science, 4,896 documents remained. These were then screened for relevance, removing non-journal literature such as book chapters, conference papers, reviews, books, editorials, and letters, leaving 1,289 articles. The next step involved excluding non-English articles, resulting in the removal of 1,827 non-English papers. This left 1,780 articles for further review. Full-texts were assessed for eligibility, focusing on both relevance and quality—especially research design and methodology, as these are critical to the reliability of systematic reviews (Maniar et al., 2018; Višić, 2022). In the end, 877 articles were deemed suitable for synthesis and analysis. Figure 3 illustrates the article selection and screening process.

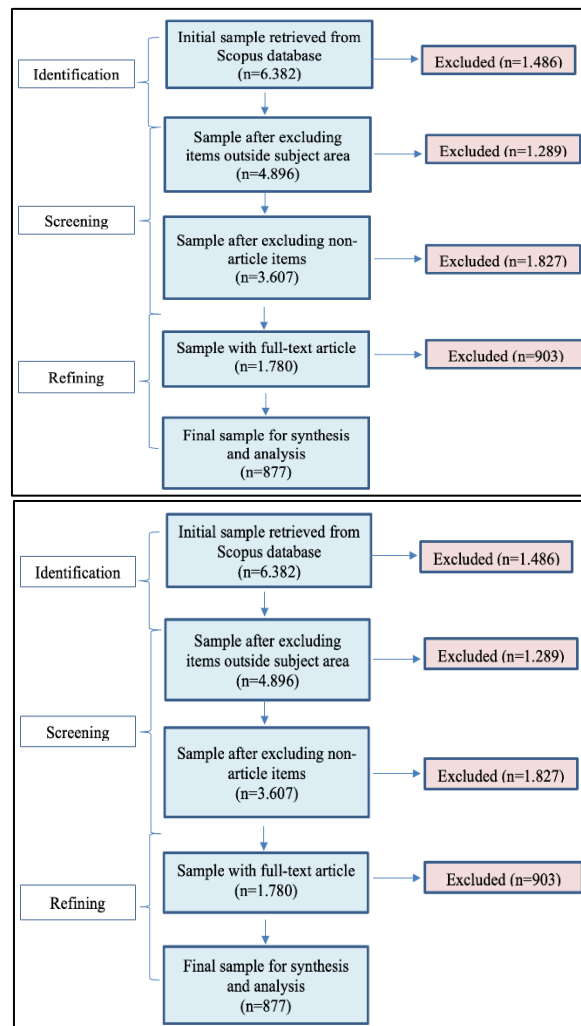


Figure 3. Sample Selection and Screening Process

Source: Author's elaboration

The final stage centers on the critical process of data analysis, which is essential for extracting meaningful insights from the carefully curated data. The primary goals at this stage are to present practical findings, and to identify trends and patterns within the dataset. This involves a thorough examination to fully understand the factors that make sustainable tourism destinations attractive. By analyzing the 877 articles selected through a rigorous screening process, this study ensures an in-depth exploration that significantly contributes to the broader body of knowledge in the field.

Table 2. Distribution of Articles Across Journals (Top 10)

No	Source Journal	Publisher	Number of Article
1	Sustainability (Switzerland)	MDPI	601
2	Journal of Sustainable Tourism	Taylor & Francis	276
3	Worldwide Hospitality and Tourism Themes	Emerald Publishing	79
4	Current Issues in Tourism	Taylor & Francis	75
5	African Journal of Hospitality, Tourism and Leisure	Independent	66
6	Tourism Management	Elsevier	55
7	Geojournal of Tourism and Geosites	University of Oradea	53
8	Tourism Planning and Development	Taylor & Francis	48

Figure 5 shows the network visualization generated by VOSviewer, where each node represents a significant keyword, and the connections between nodes illustrate their co-occurrence in the literature. Larger nodes such as "covid," "intention," "destination," "image," "satisfaction," and "quality" indicate the prominence of these topics in sustainable tourism research. The network is densely interconnected, reflecting the multifaceted nature of the field where factors like crisis management and destination branding are not isolated but closely interwoven with visitor experiences, quality of life, and environmental sustainability. Notably, clusters of keywords around "covid" and "pandemic" underscore the recent impact of global crises on tourism sustainability discussions.

Table 3. Key Determinants of Sustainable Tourism Destination

Key Determinants	Associated Keywords
Visitor Satisfaction	intention, quality, relationship, responsible behavior
Destination Image and Branding	destination image, place attachment, cultural heritage
Crisis Management	covid, pandemic, crisis
Quality of Life and Experience	quality, life, satisfaction
Environmental Concerns	climate change, sustainable development
Research and Planning	research, review, evaluation, planning

Table 3 summarizes the key determinants of sustainable tourism destination attractiveness, based on the most frequently occurring keywords that correspond directly to the identified factors. For instance, intention, quality, relationship, and responsible behavior are closely associated with Visitor Satisfaction; destination image and place attachment align with Destination Image and Branding; and covid, pandemic, and crisis clearly relate to Crisis Management. Similarly, Quality of Life and Experience is reflected through keywords such as life and satisfaction, while Environmental Concerns are represented by terms like climate change and sustainable development. Moreover, the presence of research, review, evaluation, and planning highlights the significance of Research and Planning efforts in advancing sustainable tourism. This interconnected understanding emphasizes the need for a holistic approach to enhancing the attractiveness of sustainable tourism destinations. The subsequent sections provide a comprehensive discussion of each determinant and its role in shaping destination attractiveness.

Tourist Satisfaction

Satisfaction with previous travel experiences strongly influences future travel intentions toward a sustainable tourism destination. Satisfaction with previous travel experiences plays a pivotal role in shaping future travel intentions, particularly in the context of sustainable tourism destinations. Sustainability perceptions are closely linked to travel behavior, with perceived sustainability acting as a key driver of overall satisfaction and exerting an indirect influence on loyalty-related behavioral intentions (Conti et al., 2023; Rasoolimanesh et al., 2025). The perceived socio-cultural and technological sustainability of a destination further reinforces tourist satisfaction and significantly increases the likelihood of revisit intentions (Rasoolimanesh et al., 2025). Crucially, travel satisfaction itself not only impacts destination satisfaction but has an even stronger direct and indirect influence on the intention to revisit, underlining its vital role in promoting sustainable tourism (Acharya et al., 2023). Additionally, previous travel experiences, particularly the degree of satisfaction and the frequency of past visits, substantially heighten tourists' willingness to return, demonstrating that positive past experiences are instrumental in building sustainable travel behaviors (Lampreia et al., 2024).

Sustainable tourism initiatives further enhance this relationship by strengthening tourists' perceptions of sustainability, which in turn fortifies destination loyalty. By leveraging tourists' feedback and targeting communication strategies, destinations can promote more personalized experiences that align with sustainability values, thereby influencing future travel decisions (Conti et al., 2023). Moreover, socio-cultural and technological sustainability not only improves immediate tourist satisfaction but also fosters longer-term loyalty by supporting positive perceptions of the destination's commitment to sustainable development (Rasoolimanesh et al., 2025). Access to clear information about sustainability initiatives also encourages travelers, particularly those attracted to natural environments, to engage in sustainable behaviors and prioritize sustainability in their future travel decisions (Lampreia et al., 2024).

Psychological and behavioral dimensions of travel satisfaction further reinforce the influence of past experiences on future travel intentions. Emotional factors such as mood directly affect travel satisfaction, while personality traits have both direct and indirect effects, suggesting that personal psychological states contribute significantly to how travelers evaluate their experiences (Gao et al., 2017). Moreover, satisfaction functions as both a pull and push factor in travel mode choice; satisfied travelers are more likely to remain loyal to the same transport modes or services, while dissatisfaction prompts exploration of alternatives (Guan et al., 2024). High satisfaction with public transportation, for instance, not only affects immediate travel decisions but also forms habitual patterns that persist into later life stages (De Vos et al., 2022), emphasizing the long-term impact of positive travel experiences on sustainable behaviors.

Emerging trends also highlight how young travelers' sustainable behaviors and emotional connections to destinations influence their willingness to invest in sustainable tourism. A strong attachment to nature and awareness of tourism's role in sustainability are significant drivers behind Gen Z travelers' future travel decisions (de Araújo et al., 2025). Furthermore, emotional states critically shape both push and pull motivations for travel, demonstrating that emotionally fulfilling experiences significantly affect future travel intentions, especially towards destinations that embody sustainable values (Madeira et al., 2025).

Destination Image and Branding

Destination image and branding play crucial roles in enhancing the attractiveness of sustainable tourism destinations. Destination image significantly influences tourists' decision-making processes and loyalty intentions (Mandagi et al., 2021; Walean et al., 2023). Events such as sporting events and festivals can diversify and enhance a destination's image, thereby promoting sustainable tourism development (Xu et al., 2022; Mandagi & Aseng, 2021). Moreover, tourists' perceptions of a sustainable destination image are shaped by their sociodemographic, cultural, and behavioral characteristics, emphasizing the importance of effective segmentation and positioning strategies by destination management organizations (Almeida-Santana & Moreno-Gil, 2019).

Destination branding reinforces these dynamics, with eco-tourism branding and other initiatives playing a vital role in improving overall brand equity by enhancing destination image, services, and visitor experiences (Alam et al., 2022; Pongoh & Mandagi, 2025). Effective branding requires continuous strategic planning and decision-making, leveraging tourism products, marketing strategies, and sustainable practices to attract visitors (Garanti et al., 2024). Branding also enables destinations to create a distinct identity, helping them differentiate themselves from competitors and thus attracting more visitors (Shoukat et al., 2023).

Sustainable tourism practices are increasingly tied to branding efforts. Sustainable destination branding emphasizes not only economic and social dimensions but also environmental responsibility, making it a critical consideration for destination planning and development (Garanti et al., 2024). Stakeholder engagement further strengthens destination branding efforts, as stakeholder perceptions of the destination image significantly impact branding success by involving socio-environmental, infrastructural, natural, and cultural resources (Shoukat et al., 2023; Mandagi & Tappy, 2023).

In today's digital environment, social media and digital marketing play critical roles in shaping the image of sustainable tourism destinations. Influencers on platforms such as Instagram are powerful in affecting perceptions, though their influence varies across regions and cultural contexts (Palazzo et al., 2021; Sijabat et al., 2022; Waworuntu et al., 2022). Furthermore, consistency and interactivity in digital integrated marketing communication efforts significantly enhance destination brand equity, influencing dimensions such as destination awareness, image, perceived quality, and loyalty (Qi et al., 2024; Mandagi et al., 2024).

Empirical evidence highlights key strategies for strengthening destination image and branding. Diversifying event types in a destination's event portfolio can maximize marketing impacts and tourism gains, contributing to a more resilient and sustainable destination image (Hazel Xu et al., 2022). Sustainable place branding has been shown to positively influence destination image, trust, value, and loyalty, which translates into favorable visitor outcomes such as an increased intention to revisit (Garanti et al., 2024). Sustainable destination image also affects resident satisfaction and encourages pro-sustainable tourism behaviors, with demographic factors like gender and age playing notable roles (Šerić et al., 2024).

The perception of sustainable destination image is influenced by a combination of primary and secondary destination images, visitor motivations, cultural background, and sociodemographic characteristics (Hazel Xu et al., 2022). Sustainability branding based on clustering tourism destinations considers factors such as environmental footprint, tourism dependency, and local prosperity, incorporating social and psychological carrying capacity (Almeida-Santana & Moreno-Gil, 2019). Effective segmentation highlights the importance of cultural and natural attributes, seasonality, accommodation typologies, and tourist profiles in shaping the sustainable destination image (Almeida-Santana & Moreno-Gil, 2019). Green destination brand equity is also found to encourage environmentally responsible behavior through awareness, image, perceived quality, and loyalty, with perceived destination trust acting as a mediator and green perceived value as a moderator (Alam et al., 2022).

Branding is vital for attracting visitors, requiring continuous strategic planning and decision-making to adapt to changing market needs (Garanti et al., 2024). Sustainable place branding not only builds a stronger destination image but also fosters trust, perceived value, and loyalty, resulting in more favorable visitor behavior, such as positive word-of-mouth and increased revisit intentions (Garanti et al., 2024). Destination brand equity significantly influences sustainable tourism, affecting tourists' behavior and aligning with the broader sustainability objectives of the tourism industry (Garanti et al., 2024).

Psychological factors also play a critical role in destination image formation. The cognitive dimension, especially psychological aspects, heavily influences the general image of rural tourism destinations (Shoukat et al., 2023). Furthermore, models integrating identification with local and global consumer cultures as moderators highlight the psychological dimensions impacting brand perception and purchase behaviors (Palazzo et al., 2021). Community interaction mediates the relationship between psychological factors

and tourism development, shaping tourist behavior and decision-making (Palazzo et al., 2021).

Measuring destination attractiveness relies heavily on well-established scales used by academics and practitioners to assess brand image, thereby enhancing competitiveness in a dynamic environment (Qi et al., 2024). Key criteria such as transparent communication, environmental sustainability, and stakeholder collaboration are essential for effective destination branding, directly shaping consumer perceptions and promoting green tourism (Šerić et al., 2024).

Crisis Management

Crisis resilience, particularly in the aftermath of COVID-19, has emerged as a critical determinant for building sustainable tourism destinations. Destination Management Organizations (DMOs) play an essential role in managing crises and promoting sustainable tourism. Their proactive efforts during crisis scenarios can lead to improved organizational practices and stronger destination communication, which are vital for long-term sustainability (Jin, 2022). Furthermore, post-crisis periods often witness an increased demand for responsible tourism, and DMOs are pivotal in positioning destinations to meet this growing expectation (Jin, 2022).

Crises can profoundly alter tourist behavior and perceptions. Effective crisis management strategies can mitigate these negative impacts and help maintain, or even enhance, the attractiveness of destinations (Hajibaba et al., 2015). Tourists' perceptions of a destination's crisis preparedness and responsiveness significantly influence its competitiveness, with this relationship being moderated by tourists' willingness to assume risk and their personal alignment with the destination's values (Chew & Jahari, 2014).

The importance of both proactive and reactive crisis management approaches cannot be overstated. Proactive strategies, including risk assessment, mitigation, and the continuous development of crisis indicators, are crucial for maintaining the attractiveness of destinations over time (Fall & Massey, 2005; Speakman & Sharpley, 2012). Simultaneously, reactive management practices, such as immediate response protocols and effective recovery plans, play an equally important role in sustaining tourism appeal during and after crises (Ritchie, 2008; Santana, 2004).

Governance and collaborative strategies are also fundamental to building crisis resilience. Effective governance frameworks that incorporate collaborative planning, community empowerment, and adaptive governance enhance resilience and promote sustainable tourism development (Becken & Hughey, 2013). Cooperative actions and active stakeholder engagement are crucial in both the immediate crisis response and the longer-term recovery phase, ensuring that destinations can rebound effectively and continue to attract tourists (Santana, 2004; Ghaderi et al., 2015).

The resilience of a tourism destination, defined by its ability to resist and recover from crises, is a key determinant of its long-term attractiveness. Addressing both the temporal and spatial dimensions of crises is essential, as it enables destinations to manage the duration and geographical extent of disruptions effectively (Biggs et al., 2012). Furthermore, incorporating innovative elements into tourism business models, such as professional crisis guidance, robust stakeholder collaboration, and comprehensive risk management strategies, can help small-scale tourism operators sustain their products and maintain competitiveness even in challenging environments (Prayag, 2020).

Perceived Quality and Experience

The sensory, affective, behavioral, and intellectual aspects of tourist experiences play a crucial role in shaping perceptions of a destination's sustainability. These multifaceted

experiences influence not only the economic and cultural perceptions of a destination but also its sustainable attributes, thereby affecting the overall trustworthiness perceived by tourists (Torres-Moraga et al., 2021). The quality of these experiences, particularly elements such as product and service quality, environmental standards, and perceived value, significantly impacts tourists' loyalty and their intentions to revisit a destination. As such, maintaining high standards across these dimensions is vital for sustainable destination management (Moon & Han, 2019).

Perceived sustainability, encompassing economic, socio-cultural, and environmental dimensions, emerges as a key determinant of tourists' perceived value and satisfaction. This multidimensional perception appears consistent across various destinations, underscoring the universal importance of sustainability in enhancing destination competitiveness (Iniesta-Bonillo et al., 2016; Poluan et al., 2022). Furthermore, socio-cultural and technological aspects of sustainability directly influence tourist satisfaction and the intention to revisit (Walean et al., 2024). Satisfaction acts as a mediating factor between perceived sustainability and revisit intentions, highlighting the necessity for destinations to prioritize sustainable practices to foster positive tourist experiences (Rasoolimanesh et al., 2025).

Environmental quality, particularly perceptions of air quality, is a significant factor influencing destination selection, especially for nature-based tourism. Pro-environmental behaviors, visitor age, and origin are found to moderate how tourists evaluate environmental conditions, indicating that maintaining high environmental quality is critical for enhancing a destination's attractiveness (Eusébio et al., 2022). This suggests that environmental management should be an integral part of sustainable tourism strategies.

The attractiveness of a destination is shaped by the balance between supply-and-demand indicators, specifically the availability of attractions and their perceived importance. Properly managing this balance is essential for effective destination planning, marketing, and resource allocation strategies (Moon & Han, 2019). In addition, unique characteristics such as historical significance, urban appeal, natural scenery, and cultural heritage significantly contribute to a destination's competitiveness. Understanding and promoting these unique attributes help foster sustainable tourism development (Moon & Han, 2019).

Residents play a pivotal role in the sustainable development of tourism destinations. Their perceptions, behaviors, and active participation directly influence tourists' feedback and the long-term attractiveness of a destination. Engaging local communities not only enhances the tourist experience but also strengthens the social sustainability of tourism practices (Torres-Moraga et al., 2021).

For destination management organizations and stakeholders, effective strategies should center on improving the quality of tourism services, maintaining rigorous environmental standards, and leveraging unique local attributes to enhance overall destination attractiveness (Rasoolimanesh et al., 2025; Moon & Han, 2019). Additionally, insights gathered from tourist evaluations can inform marketing strategies and infrastructure development, ensuring that resource allocation aligns with visitor expectations and promotes a superior tourism experience (Moon & Han, 2019).

Environmental and Climate Change Concerns

Environmental and climate change concerns significantly influence the attractiveness of tourism destinations. These factors affect both the supply and demand sides of tourism, ultimately shaping the sustainability and competitiveness of destinations. On the supply side, climate change poses serious threats to tourism infrastructure and natural attractions. Rising temperatures, shifting precipitation patterns, and an increase in extreme weather events can damage essential tourism assets, particularly in coastal regions vulnerable to sea-level rise and flooding (Tanrisever, Pamukçu, & Baydeniz, 2024). Additionally, the availability and quality of recreational activities are likely to be altered, affecting the overall

attractiveness of destinations (Tanrisever et al., 2024; Yadav, 2025). Climate change also contributes to the degradation of ecosystems such as coral reefs and forests, which diminishes the natural appeal and biodiversity of many tourist destinations (Yadav, 2025).

On the demand side, visitor comfort and health are directly affected by changing climatic conditions. Increased heat stress and the greater frequency of extreme weather events can discourage tourists from visiting certain areas (Tanrisever et al., 2024; Yadav, 2025). Climate change also impacts the seasonality of tourism, shifting the timing and volume of tourist arrivals and thereby influencing local economies reliant on tourism (Tanrisever et al., 2024). Furthermore, tourists' perceptions of safety, influenced by climate-related risks, play a crucial role in destination choice (Mandagi & Sondakh, 2022; Rondonuwu et al., 2023). Destinations perceived as unsafe due to environmental threats often experience a decline in tourist numbers (Yadav, 2025; Flyen, Flyen, & Hegnes, 2023).

In response to these challenges, adaptation and mitigation strategies are critical. Destinations can diversify their tourism offerings and invest in green infrastructure to enhance resilience against climate impacts (Tanrisever et al., 2024; Mohd Shariff, 2022). Conservation of ecosystems through sustainable management practices further supports the natural resilience of tourism hotspots (Tanrisever et al., 2024; Yadav, 2025). Community-based adaptation strategies, which involve local populations in planning and implementing adaptation measures, are crucial to ensuring the effectiveness and relevance of climate actions (Tanrisever et al., 2024; Saxena, Gupta, Priyalakshmi, & Ferdaus, 2024). Additionally, strong policy support at both national and international levels is essential, requiring collaboration among governments, tourism operators, and local communities to foster sustainable tourism development (Tanrisever et al., 2024; Saxena et al., 2024; Flyen et al., 2023; Mandagi & Centeno, 2024).

Tourists' perceptions and behaviors are also vital components in addressing climate change impacts on tourism. Raising awareness and providing education about sustainable tourism practices can positively influence tourists' choices and behaviors, encouraging reduced carbon footprints during travel (Flyen et al., 2023; Eusébio et al., 2022; Tappy & Mandagi, 2023). Tourists generally demonstrate high adaptive capacity, allowing them to modify their travel plans based on climate conditions. This flexibility can result in shifts in demand, with certain destinations gaining popularity while others lose attractiveness (Flyen et al., 2023).

Research, Evaluation, and Planning

Ongoing research and continuous monitoring are essential to ensure that tourism growth does not lead to negative consequences. Sustainable tourism requires the active participation of all stakeholders to achieve its goals and maintain long-term success (Talukder et al., 2024). An adaptive co-management approach is particularly effective, allowing stakeholders to share responsibilities, collaborate, and learn together, which strengthens sustainable tourism management practices (Hermawan & Hutagalung, 2024). Furthermore, indicator-based monitoring, which incorporates both quantitative and qualitative assessments, provides valuable insights into the drivers and barriers to sustainable destination management (Torres-Delgado et al., 2023).

Stakeholder participation plays a crucial role in the sustainable management of tourism destinations. Adaptive management emphasizes collaborative and experiential learning, integrating diverse knowledge systems to support informed decision-making and flexible adjustments (Hermawan & Hutagalung, 2024; Galuppo et al., 2020). Engaging multiple stakeholders, including local communities, tourism operators, and tourists, helps co-produce more sustainable and responsible tourism experiences (Galuppo et al., 2020).

Ongoing research has increasingly highlighted sustainability as a fundamental success factor for tourism destinations, with an expanding focus on environmental concerns (Galuppo et al., 2020). Research addressing economic, environmental, and socio-cultural dimensions demonstrates their importance in influencing tourists' experiences, purchasing behaviors, and loyalty toward destinations (Galuppo et al., 2020; Tumober et al., 2024). Additionally, ongoing studies contribute valuable insights into the complex dynamics of destination popularity and offer practical tools for assessing sustainability (Talukder et al., 2024; Hermawan & Hutagalung, 2024).

Despite its importance, monitoring sustainable tourism faces significant challenges that affect destination attractiveness. Effective sustainability efforts require extensive cooperation among tourism businesses, destinations, and governmental authorities to address a broad range of challenges while maintaining competitiveness (Scuttari et al., 2023). One major obstacle is the lack of consensus about what constitutes environmentally friendly tourist behavior, complicating monitoring efforts (Scuttari et al., 2023). Furthermore, limited human and technical resources often hinder the adoption of long-term, sustainable planning measures within tourism destinations (Amloy et al., 2024).

Strategic planning is another essential element for ensuring the long-term sustainability and attractiveness of tourism destinations. Carefully planned sustainable development helps manage the negative impacts associated with uncontrolled tourism growth (Scuttari et al., 2023). Moreover, integrating sustainable tourism planning with destination competitiveness strategies, including engaging stakeholders from less market-oriented sectors, can foster more inclusive and resilient tourism economies (Scuttari et al., 2023). Sustainable tourism development, when used as a strategic tool, requires comprehensive planning and management that balances diverse interests and addresses the concerns of all stakeholders (Scuttari et al., 2023).

4. Conclusions

This study highlights the complex and multifaceted determinants that contribute to the attractiveness of sustainable tourism destinations. Central factors include visitor satisfaction, destination image and branding, crisis management, quality of life and experience, environmental concerns, and ongoing research and planning. Destinations that prioritize high-quality visitor experiences, foster strong visitor relationships, and encourage responsible tourist behavior are more likely to enhance visitor satisfaction and loyalty.

Destination image and effective branding also play crucial roles. Destinations that build strong place attachment through the preservation and promotion of cultural heritage are better positioned to sustain long-term competitiveness. The ability to manage crises—such as the COVID-19 pandemic and other disruptions—is another essential factor. Destinations that demonstrate resilience, effective communication, and proactive crisis management maintain traveler confidence and attractiveness even during challenging times.

Ensuring a high quality of life for both residents and visitors, by offering satisfying experiences that align with local values, directly influences destination appeal. Moreover, addressing environmental concerns—particularly those related to climate change and sustainable development—is vital for maintaining destination viability and reputation. Integrating environmental sustainability into tourism strategies ensures the protection of natural resources and strengthens the destination's long-term appeal.

Ongoing research, evaluation, and strategic planning are equally critical. Continuous monitoring and adaptive management practices allow destinations to respond to changing conditions, visitor needs, and sustainability challenges effectively. These practices support informed decision-making and enhance overall destination resilience.

Despite these important findings, the study acknowledges certain limitations. The determinants identified may not capture all aspects influencing sustainable tourism and can vary across different regional and cultural contexts, affecting the generalizability of the conclusions. Moreover, the interdisciplinary integration of tourism management, environmental science, and marketing perspectives may sometimes simplify complex interactions among the factors. The reliance on existing literature also means that some recent developments or emerging trends might not be fully addressed.

For destination managers, policymakers, and tourism stakeholders, these insights offer a strategic foundation for enhancing the attractiveness of sustainable tourism destinations. Investments should focus on improving visitor satisfaction, preserving cultural heritage, promoting environmental sustainability, and strengthening crisis management capabilities. Strategic branding initiatives should highlight cultural identity, quality experiences, and responsible tourism practices. Moreover, building a robust system for research, review, and planning will be essential for long-term destination success.

Future research should aim to develop a comprehensive framework that integrates these determinants, with a focus on evolving trends such as climate resilience, visitor behavior post-pandemics, and technological innovations in sustainable tourism. By addressing these key factors, stakeholders can significantly enhance the competitiveness and sustainability of their destinations, offering meaningful, resilient, and responsible tourism experiences to global travelers.

References

- Acharya, S., Mekker, M., & De Vos, J. (2023). Linking travel behavior and tourism literature: Investigating the impacts of travel satisfaction on destination satisfaction and revisit intention. *Transportation Research Interdisciplinary Perspectives*, 17, 100745.
- Ahmed, H., & Riaz, H. (2024). The potential of accessible tourism for sustainable development of local communities in northern Pakistan. *Journal of Entrepreneurship, Management and Innovation*, 20(3), 104-125.
- Alam, S. H., Ahmed, R. R., Hashem, E., Rami, A., Salleh, N. Z. M., Vasa, L., ... & Abrham, J. (2022). Destination environmental branding and sustainable eco-conscious consumer. *Transformations in Business & Economics*, 21(2).
- Almeida-Santana, A., & Moreno-Gil, S. (2019). Perceived sustainable destination image: Implications for marketing strategies in Europe. *Sustainability*, 11(22), 6466.
- Amloy, A., Wonglangka, W., Ounchanum, P., Ruangwittthayanusorn, S., Siriphon, A., & Oranratmanee, R. (2024). Agroecology, tourism, and community adaptability under UNESCO biosphere reserve: A case study of smallholders in northern Thailand. *Sustainable Development*, 32(5), 4428-4439.
- Conti, S., Dias, Á., & Pereira, L. (2023). Perceived city sustainability and tourist behavioural intentions. *Smart Cities*, 6(2), 692-708.
- de Araújo, A. F., Andrés-Marques, I., & López Moreno, L. (2025). No Planet-B Attitudes: The Main Driver of Gen Z Travelers' Willingness to Pay for Sustainable Tourism Destinations. *Sustainability*, 17(3), 847.
- De Vos, J., Waygood, E. O. D., Letarte, L., & Cao, M. (2022). Do frequent satisfying trips by public transport impact its intended use in later life?. *Transportation*, 49(4), 1245-1263.
- Eusébio, C., Carneiro, M. J., Rodrigues, V., Robaina, M., Madaleno, M., Gama, C., ... & Monteiro, A. (2022). Factors influencing the relevance of air quality in the attractiveness of a tourism destination: Differences between nature-based and urban destinations. *Tourism Management Perspectives*, 44, 101045.
- Flyen, A. C., Flyen, C., & Hegnes, A. W. (2023). Exploring vulnerability indicators: tourist impact on cultural heritage sites in High Arctic Svalbard. *Heritage*, 6(12), 7706-7726.

- Galuppo, L., Anselmi, P., & De Paoli, I. (2020). The challenge of generating sustainable value: narratives about sustainability in the Italian tourism sector. *Frontiers in Psychology*, 11, 577612.
- Gao, Y., Rasouli, S., Timmermans, H., & Wang, Y. (2017). Effects of traveller's mood and personality on ratings of satisfaction with daily trip stages. *Travel behaviour and society*, 7, 1-11.
- Garanti, Z., Ilkhanizadeh, S., & Liasidou, S. (2024). Sustainable Place Branding and Visitors' Responses: A Systematic Literature Review. *Sustainability*, 16(8), 3312.
- Guan, X., Israel, F., Heinen, E., & Ettema, D. (2024). Satisfaction-induced travel: Do satisfying trips trigger more shared micro-mobility use?. *Transportation research part D: transport and environment*, 130, 104185.
- Guerra, R. J. D. C., & Gonçalves, E. C. C. (2024). Co-creation of sustainable tourism and hospitality experiences: education and organizations in search of new business models. *Sustainability*, 16(1), 321.
- Hazel Xu, Y., Wong, I. A., & Tan, X. (2022). Events as destination image maker: The role of event type and implications for event portfolio development. *Event Management*, 26(2), 207-222.
- Hermawan, D., & Hutagalung, S. S. (2024). Sustainable Tourism Development: A Model of Adaptive Destination Management in Lampung Province, Indonesia. *International Journal of Sustainable Development & Planning*, 19(9).
- Inaray, A. C. P., Soewignyo, F., Sumanti, E. R., & Mandagi, D. W. (2024). Exploring the nexus between service quality, patient satisfaction, and recommendation intentions in faith-based hospital settings. *EKUITAS (Jurnal Ekonomi dan Keuangan)*, 8(3), 398-417.
- Iniesta-Bonillo, M. A., Sánchez-Fernández, R., & Jiménez-Castillo, D. (2016). Sustainability, value, and satisfaction: Model testing and cross-validation in tourist destinations. *Journal of Business Research*, 69(11), 5002-5007.
- Javdan, M., Ghalehtemouri, K. J., Ghasemi, M., & Riazi, A. (2023). A novel framework for social life cycle assessment to achieve sustainable cultural tourism destinations. *Turyzm/tourism*, 33(2), 7-18.
- Kainde, S. J., & Mandagi, D. (2023). A systematic review of servant leadership outcomes in education context. *EDUKASIA: Jurnal Pendidikan dan Pembelajaran*, 4(2), 2563-2574.
- Kowaas, R., Syamsia, J. C., & Mandagi, D. W. (2023). The antecedents of an effective city branding: A comprehensive systematic review. *Jurnal Ekonomi*, 12(04), 2178-2186.
- Lampraia, F., Almeida, H., & Cesário, M. (2024). Past behaviour intentions, present normative beliefs, and future customer loyalty. *International Journal of Tourism Research*, 26(4), e2716.
- Lima Santos, L., Cardoso, L., Araújo-Vila, N., & Fraiz-Brea, J. A. (2020). Sustainability perceptions in tourism and hospitality: A mixed-method bibliometric approach. *Sustainability*, 12(21), 8852.
- Madeira, A., Rodrigues, R., Lopes, S., & Palrão, T. (2025). Exploring Positive and Negative Emotions Through Motivational Factors: Before, During, and After the Pandemic Crisis with a Sustainability Perspective. *Sustainability*, 17(5), 2246.
- Mandagi, D. W., & Aseng, A. C. (2021). Millennials and Gen Z's perception of social media marketing effectiveness on the festival's branding: The mediating effect of brand gestalt. *Asia-Pacific Social Science Review*, 21(3), 9.
- Mandagi, D. W., & Centeno, D. (2024). Destination brand gestalt: Dimensionalizing co-created tourism destination branding. *International Journal of Tourism Cities*.
- Mandagi, D. W., & Sondakh, D. K. (2022). Exploring the multi-dimensionality of tourism destination brand story. *African Journal of Hospitality, Tourism and Leisure*, 11(6), 2128-2142.

- Mandagi, D. W., & Tappy, Y. P. (2023). Determinants of Health Tourism Destination Attractiveness: A Comprehensive Systematic Review. *Jurnal Studi Perhotelan dan Pariwisata*, 2(2), 57-69.
- Mandagi, D. W., & Tappy, Y. P. (2023). Determinants of Health Tourism Destination Attractiveness: A Comprehensive Systematic Review. *Jurnal Studi Perhotelan dan Pariwisata*, 2(2), 57-69.
- Mandagi, D. W., Centeno, D. D., & Indrajit (2021). Brand gestalt scale development and validation: A takeoff from tourism destination branding. *Journal of Destination Marketing & Management*, 19, 100539.
- Mandagi, D. W., Centeno, D. D., & Indrajit. (2022). Destination brand gestalt and its effects on brand attachment and brand loyalty. *Philippine Management Review*, 29(1), 1-24.
- Mandagi, D. W., Indrajit, I., & Wulyatiningsih, T. (2024). Navigating digital horizons: A systematic review of social media's role in destination branding. *Journal of Enterprise and Development (JED)*, 6(2), 373-389.
- Mandagi, D. W., Pasuhuk, L. S., & Kainde, S. J. (2024). The Combined Effect of Brand Gestalt, Brand Awareness, and Brand Image on Ecotourism WOM Intention. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 5(3), 161-175.
- Mandagi, D. W., Soewignyo, T., Kelejan, D. F., & Walone, D. C. (2024). From a hidden gem to a tourist spot: Examining brand gestalt, tourist attitude, satisfaction and loyalty in Bitung city. *International Journal of Tourism Cities*.
- Mohd Shariff, N. (2022). Adaptation strategies for impacts of climate change on sustainable tourism in Malaysia. *GeoJournal of Tourism & Geosites*, 45.
- Moon, H., & Han, H. (2019). Tourist experience quality and loyalty to an island destination: The moderating impact of destination image. *Journal of Travel & Tourism Marketing*, 36(1), 43-59.
- Palazzo, M., Vollero, A., Vitale, P., & Siano, A. (2021). Urban and rural destinations on Instagram: Exploring the influencers' role in sustainable tourism. *Land use policy*, 100, 104915.
- Poluan, M. S., Pasuhuk, L. S., & Mandagi, D. W. (2022). The role of social media marketing in local government institution to enhance public attitude and satisfaction. *Jurnal Ekonomi*, 11(03), 1268-1279.
- Pongoh, H. M., & Mandagi, D. W. (2025). Linking destination brand gestalt and brand equity: insights from Bali. *Anatolia*, 1-15.
- Qi, M., Abdullah, Z., & Rahman, S. N. A. (2024). Navigating the Digital Landscape: Evaluating the Impacts of Digital IMC on Building and Maintaining Destination Brand Equity. *Sustainability*, 16(20), 8914.
- Rampen, D. C., Pangemanan, A. S., & Mandagi, D. W. (2023). The X-factors behind Gen Z employee performance: A systematic review. *Jurnal Mantik*, 7(2), 668-680.
- Rasoolimanesh, S. M., Chee, S. Y., & Ari Ragavan, N. (2025). Tourists' perceptions of the sustainability of destination, satisfaction, and revisit intention. *Tourism Recreation Research*, 50(1), 106-125.
- Rasoolimanesh, S. M., Chee, S. Y., & Ari Ragavan, N. (2025). Tourists' perceptions of the sustainability of destination, satisfaction, and revisit intention. *Tourism Recreation Research*, 50(1), 106-125.
- Rondonuwu, B. F., & Mandagi, D. W. (2023). Brand gestalt as a key determinant of tourist satisfaction and loyalty: Empirical study of super-priority destination Likupang. *Jurnal Ekonomi*, 12(02), 452-464.
- Satta, G., Spinelli, R., & Parola, F. (2019). Is tourism going green? A literature review on green innovation for sustainable tourism. *Tourism Analysis*, 24(3), 265-280.

- Saxena, S. K., Gupta, V., Priyalakshmi, W., & Ferdaus, M. (2024). Impact of Climate Change on Himalayan Tourism Destinations. In *Mountain Tourism and Ecological Impacts: Himalayan Region and Beyond* (pp. 106-114). IGI Global.
- Scuttari, A., Windegger, F., Wallnöfer, V., & Pechlaner, H. (2023). Bridging the science-policy gap in sustainable tourism: evidence from a multiple case study analysis of UNWTO INSTO sustainable tourism observatories. *Journal of Sustainable Tourism*, 1-25.
- Šerić, M., Patrizi, M., Ceccotti, F., & Vernuccio, M. (2024). Resident perspectives unveiled: The role of a sustainable destination image in shaping pro-sustainable responses. *Journal of Retailing and Consumer Services*, 81, 103985.
- Shoukat, M. H., Shah, S. A., Ali, R., & Ramkissoon, H. (2023). Mapping stakeholder role in building destination image and destination brand: Mediating role of stakeholder brand engagement. *Tourism Analysis*, 28(1), 29-46.
- Sijabat, L., Rantung, D. I., & Mandagi, D. W. (2022). The role of social media influencers in shaping customer brand engagement and brand perception. *Jurnal Manajemen Bisnis*, 9(2), 280-288.
- Talukder, M. B., Khan, M. R., & Kumar, S. (2024). Socioeconomic Gaps and Foster Inclusive Growth: Sustainable Tourism Initiatives. In *Building Community Resiliency and Sustainability With Tourism Development* (pp. 56-82). IGI Global.
- Tanrisever, C., Pamukçu, H., & Baydeniz, E. (2024). Climate change in tourism: Understanding the impacts and opportunities for sustainability. In *Future tourism trends volume 1: Tourism in the changing world* (pp. 33-45). Emerald Publishing Limited.
- Tappy, Y. P., & Mandagi, D. W. (2023). Evaluating the Brand Gestalt of Emerging Health Tourism Destinations. *Jurnal Studi Perhotelan dan Pariwisata (JSPP)*, 2(2), 71-85.
- Torres-Delgado, A., López Palomeque, F., Elorrieta Sanz, B., & Font Urgell, X. (2023). Monitoring sustainable management in local tourist destinations: performance, drivers and barriers. *Journal of sustainable tourism*, 31(7), 1672-1693.
- Torres-Moraga, E. I., Alonso-Dos-Santos, M., Arboleda, D. Q., & Carvajal-Trujillo, E. (2021). The role of experience and trustworthiness on perception sustainable touristic destinations. *Journal of Hospitality and Tourism Management*, 49, 471-480.
- Tulbure, I., & Eduard, E. M. (2024). Opportunities and challenges in achieving sustainable tourism on regional level. *International Multidisciplinary Scientific GeoConference: SGEM, 2024(5.1)*, 165-172.
- Tumober, N. C., Langelo, C. G., Rantung, D. I., & Mandagi, D. W. (2024). Brand harmony: Exploring how destination brand gestalt influences tourist attitudes, satisfaction, and loyalty. *Jurnal Ekonomi*, 13(02), 404-421.
- Walean, R. H., Pongoh, H., & Mandagi, D. (2024). Integrating brand gestalt and customer loyalty in telecommunication sector: The mediating role of customer satisfaction. *International Review of Management and Marketing*, 14(6), 409-423.
- Walean, R. H., Wullur, L., & Mandagi, D. W. (2023). Constructing a destination gestalt model: brand gestalt, brand attitude, and revisit intention. *Asia-Pacific Social Science Review*, 23(1), 9.
- Waworuntu, E. C., Mandagi, D. W., & Pangemanan, A. S. (2022). 'I See It, I Want It, I Buy It': The Role of Social Media Marketing in Shaping Brand Image and Gen Z's Intention to Purchase Local Product. *Society*, 10(2), 351-369.
- Yadav, S. J. (2025). Double Jeopardy: Unveiling the Synergistic Impacts of Climate Change and Tourism on Biodiversity Loss. In *Harnessing Biodiversity Tourism for Regenerative Conservation Management* (pp. 463-482). IGI Global Scientific Publishing.