

JASTH

ojs.pnb.ac.id/index.php/JASTH

JOURNAL OF
APPLIED SCIENCES IN
TRAVEL
AND
HOSPITALITY

Editor

Editor-in-Chief:

Dr. Dra. Ni Gst Nym Suci Murni, M.Par (Politeknik Negeri Bali, Indonesia)

Editorial Boards:

Dr. Liu Dandan (Nanchang Normal University, China)

Dr. Kadek Ratih Dwi Oktarini (Nanyang Technological University, Singapore)

Liem Gai Sin Ph.D. (Assosiation of International Bussiness & Professional Management (AIBPM))

Dr. I Wayan Suardana, SST. Par., M.Par (Universitas Udayana, Indonesia)

Indah Utami Chaerunnisah, M.Hum. (Politeknik Negeri Bali, Indonesia)

Ni Putu Lianda Ayu Puspita, S.E., M.Tr.Par. (Politeknik Negeri Bali, Indonesia)

Muhamad Nova, M.Pd. (Politeknik Negeri Bali, Indonesia)

Kadek Nita Sumiari, S.S.T., M.Si (Politeknik Negeri Bali, Indonesia)

Reviewer

Anisah Deen (University of South Africa, Johannesburg, South Africa)

Prof. Nono Wibisono, SE, MSc., Ph.D (Politeknik Negeri Bandung, Indonesia)

Prof. Dwi Suhartanto, MCM, PhD. (Politeknik Negeri Bandung, Indonesia)

Prof. Dr. I Gede Mudana, M. Si. (Politeknik Negeri Bali, Indonesia)

Prof. Dr. I Made Darma Oka. S.ST.Par. S.Sos.M.Par. (Politeknik Negeri Bali, Indonesia)

Muhammad Arfin Muhammad Salim, Ph.D. CHE (Politeknik Pariwisata Makassar, Indonesia)

Buntu Marannu Eppang, SS, MODT, Ph.D, CE (Politeknik Pariwisata Makassar, Indonesia)

Gde Indra Bhaskara, MSc., PhD. (Universitas Udayana, Indonesia)

Dr. Derinta Entas, S.E., M.M (Politeknik Sahid, Indonesia)

Dr. Ni Made Ary Widiastini, SST.Par., M.Par (Universitas Pendidikan Ganesha, Indonesia)

Dr. I Ketut Budarma, M.Par., MMTHRL. (Politeknik Negeri Bali, Indonesia)

Dr. Drs. Dewa Made Suria Antara, M.Par. (Politeknik Negeri Bali, Indonesia)

Dr. Ni Nyoman Sri Astuti, SST. Par., M. Par (Politeknik Negeri Bali, Indonesia)

Dr. Made Satria Pramanda Putra, S.H., S.E., M.M. (Politeknik Negeri Bali, Indonesia)

ACKNOWLEDGMENT

We express our gratitude to Almighty God, for the publication of JASTH Journal, Vol. 9 No. 1, 2026. The articles published in this edition were written by writers from Taylor's University (Malaysia), Politeknik Pariwisata Makassar (Indonesia), Universitas Hasanuddin (Indonesia), Institut Bisnis dan Informatika (IBI) Kosgoro 1957 (Indonesia), Politeknik Negeri Banjarmasin (Indonesia), Universitas Nasional (Indonesia), Universitas Semarang (Indonesia), Asa Indonesia University, (Indonesia), Politeknik Pariwisata Bali (Indonesia), Politeknik Internasional Bali (Indonesia), Triatma Mulya University Bali (Indonesia), Universitas Dhyana Pura (Indonesia), Universitas Triatma Mulya (Indonesia) and Udayana University (Indonesia). All themes published are about applied science of tourism with the following titles: Digital Heritage Interpretation for Sustainable Tourism in the Subak Cultural Landscape of Bali; Digital Pathways to MICE Competitiveness in Bali: Social-Media Affordances, Omnichannel Integration, and Destination Image; Beyond Sustainability: Assessing the Regenerative Margins and Community Participation Gaps in Serangan Tourism; Mapping Tourist Attractions and Analyzing Travel Patterns in Jembrana Regency, Bali, Indonesia; Qualified Ingredients: Professionalism in Chefs' Culinary Ingredient Selection; Integrated Marketing Communication, Brand Equity, and Perceived Value in Shaping Tourist Loyalty: Evidence from Nusa Penida Tourism, Increasing Employee Loyalty through Career Development and Engagement: The Mediating Role of Job Satisfaction in Five- Star Hotels in Greater Jakarta; and The Role of Tour Guides in Enhancing Revisit Intentions of Couple Tourists to Bali.

Finally, we would like to thank the external reviewers from University of Johannesburg (South Africa), Politeknik Negeri Bandung, Politeknik Pariwisata Makassar, Politeknik Sahid, Universitas Pendidikan Ganesha, Universitas Udayana, and also internal reviewers from Politeknik Negeri Bali, for their help and hard work in improving the articles published in this edition. We hope that the JASTH article can fulfill the repository of applied science and become a reference for writers and researchers in applied science of tourism.

Badung, March 30th 2026

Politeknik Negeri Bali
Editor in Chief,

Dr. Dra. Ni Gst Nym Suci Murni, M.Par

e-ISSN: 2622-8319

In Collaboration With:



DOAJ
DIRECTORY OF
OPEN ACCESS
JOURNALS

 **GARUDA**
GARBA RUJUKAN DIGITAL

 **sinta**
SINERJIS INOVASI TEKNOLOGI

 **Google**
scholar

INDEX  COPERNICUS
INTERNATIONAL

 **Crossref**



Table of Content

Dinar Sukma Pramesti, Dwi Novita Cahyaningtyas Permatasari, Ong Chuan Huat
Digital Heritage Interpretation for Sustainable Tourism in the Subak Cultural Landscape of Bali 1-10

Pondang Polikarpus Nainggolan, I Ketut Sutapa, I Nengah Subadra, Luh Komang Candra Dewi
Digital Pathways to MICE Competitiveness in Bali: Social-Media Affordances, Omnichannel Integration, and Destination Image 11-26

Dewa Ayu Diyah Sri Widari, Dewa Putu Oka Prasiasa
Beyond Sustainability: Assessing the Regenerative Margins and Community Participation Gaps in Serangan Tourism..... 27-40

Agus Muriawan Putra, Nyoman Ariana, Agung Suryawan Wiranatha, Putu Perdana Kusuma Wiguna, I Gusti Bagus Arya Yudiastina
Mapping Tourist Attractions and Analyzing Travel Patterns in Jembrana Regency, Bali, Indonesia41-60

Faisal Akbar Zaenal, Hamka Naping, Syamsu Rijal, Yahya
Qualified Ingredients: Professionalism in Chefs' Culinary Ingredient Selection61-72

Iswahyu Pranawukir, Rudy Haryanto, Dipa Teruna Awaludin, Rustaniah, Aprih Santoso
Integrated Marketing Communication, Brand Equity, and Perceived Value in Shaping Tourist Loyalty: Evidence from Nusa Penida Tourism 73-83

Soerjanto, Sulisty Haryono, Sulih Wahyudiono
Increasing Employee Loyalty through Career Development and Engagement: The Mediating Role of Job Satisfaction in Five-Star Hotels in Greater Jakarta 84-99

I Putu Koisuki Suriana, Lukia Zuraida, Ni Putu Evi Wijayanti
The Role of Tour Guides in Enhancing Revisit Intentions of Couple Tourists to Bali 100-116

Digital Heritage Interpretation for Sustainable Tourism in the Subak Cultural Landscape of Bali

Dinar Sukma Pramesti^{1*}, Dwi Novita Cahyaningtyas Permatasari², Ong Chuan Huat³

^{1,2} Politeknik Internasional Bali, Indonesia

³ Taylor's University, Malaysia

*Corresponding Author: dinar.pramesti@pib.ac.id

Abstract:

Tourism experiences in heritage landscapes are frequently dominated by visual appreciation, resulting in limited understanding of the cultural philosophies embedded within traditional management systems. Jatiluwih Village in Bali, internationally recognized for its terraced rice fields and the Subak irrigation system as a UNESCO World Cultural Heritage Site, faces similar challenges, where visitor engagement remains largely superficial. This study aims to develop and evaluate a digital-based heritage interpretation strategy that enhances cultural understanding and supports sustainable tourism. Using a Research and Development approach adapted from the Borg and Gall model, the study comprised preliminary research, prototype development, and limited field trials. Data were collected through surveys of one hundred and fifty tourists, semi-structured interviews, and focus group discussions with *pekaseh*, tour guides, and village tourism managers. Quantitative data were analyzed descriptively, while qualitative data were examined using thematic analysis. The results indicate that more than seventy per cent of visitors had limited prior knowledge of Subak, despite demonstrating a strong interest in digitally mediated learning. Interactive digital books integrated with Quick Response codes emerged as the most preferred interpretation medium, followed by educational videos, with the majority of respondents willing to access heritage information digitally on-site. Limited trials further demonstrate that the digital interpretation prototype enhanced visitor engagement, strengthened tour guides' interpretive capacity, and reduced narrative inconsistencies. This study contributes to heritage tourism literature by illustrating how digital interpretation can function as an effective edutourism mechanism, facilitating cultural transmission and reinforcing sustainable heritage management through collaborative stakeholder involvement.

Keywords: Digital Heritage Interpretation; Edutourism; Heritage Management; Subak Cultural Heritage; Sustainable Tourism.

History Article: Submitted 21 January 2026 | Revised 4 February 2026 | Accepted 13 February 2026

How to Cite: Pramesti, D. S., Permatasari, D. N. C., & Huat, O. C.. (2026). Digital heritage interpretation for sustainable tourism in the Subak cultural landscape of Bali. *Journal of Applied Sciences in Travel and Hospitality*, 9(1), 1-10.

Introduction

Jatiluwih Village, located in Tabanan Regency, Bali, is internationally recognized for its terraced rice fields and the traditional Subak irrigation system, which has been inscribed as a UNESCO World Cultural Heritage Site since 2012 (Widari, 2015). Beyond its visual appeal as an agricultural landscape, Subak represents a complex socio-cultural institution that has governed water management, agricultural practices, and spatial organization in Bali for centuries. Rooted in the Tri Hita Karana philosophy, Subak embodies principles of harmony between humans and God (Parahyangan), among humans (Pawongan), and between humans and nature (Palemahan) (Windia et al., 2005). Accordingly, Subak should be understood not merely as a technical irrigation system but as a living cultural heritage that reflects the foundational values sustaining Balinese agricultural life and environmental balance. This perspective is reinforced by recent studies highlighting Subak as an integrated ecological and cultural system (Ardana et al., 2024) and as part of Bali's long-standing water civilization rooted in sustainable built environments (Geria et al., 2023).

Despite its outstanding universal value, the long-term sustainability of Subak is increasingly under threat. Rapid tourism development and broader socio-economic transformations have accelerated agricultural land conversion, weakened traditional farming practices, and reduced farmer regeneration (Dwipradnyana, 2019; Sutawan, 2012). The growing shift in local livelihoods from agriculture to tourism has further intensified these pressures, as younger generations increasingly perceive farming as economically less attractive than tourism-related occupations (Windia, 2018). These dynamics raise critical concerns regarding the continuity of Subak, both as a functional irrigation system and as a socio-cultural institution embedded within Balinese heritage.

From a tourism perspective, existing studies suggest that visitor engagement with Jatiluwih remains largely superficial. Tourists tend to appreciate the rice terraces primarily as a scenic landscape, with limited understanding of the cultural philosophy and social system underpinning Subak. Utari et al. (2021) demonstrate that most visitors possess only minimal knowledge of Subak's cultural values and philosophical foundations. This condition poses a significant risk, as tourism experiences that prioritize visual consumption may reduce Subak to a passive aesthetic backdrop, detaching it from its cultural meaning and sustainability. In this context, heritage interpretation becomes a critical mechanism. As emphasized by Nowacki (2021), effective cultural heritage interpretation extends beyond information provision to communicate meanings and values that foster emotional and intellectual connections between visitors and heritage resources. Without adequate interpretation, tourism engagement remains detached from the cultural essence that sustains heritage systems such as Subak.

The integration of educational dimensions into tourism experiences, commonly referred to as edutourism, offers a strategic response to this limitation. Abrahams and Bama (2023) argue that edutourism enhances visitor engagement while simultaneously strengthening destinations' long-term strategic value. Research on eco-edutourism development also emphasizes the importance of combining environmental conservation, education, and community participation in tourism destinations (Susanto et al., 2021). In the context of Jatiluwih, edutourism is particularly relevant, as it has the potential to transform tourism from passive sightseeing into meaningful cultural learning processes. However, the effective implementation of edutourism in heritage destinations requires interpretation media capable of communicating complex cultural knowledge in accessible, engaging, and context-sensitive formats.

Recent scholarship highlights the strategic role of digital technologies in enhancing heritage interpretation and educational tourism. Drawing on the Technology Acceptance Model proposed by Davis (1989), user engagement with digital media is largely influenced by perceived usefulness and perceived ease of use. Digital tools, including interactive books, multimedia content, and mobile-based applications, enable flexible and interactive access to information, thereby deepening visitor involvement with cultural heritage. Empirical studies support this view. Hastuti et al. (2023) report that digitalization in tourism villages improves information accessibility and strengthens educational appeal, while Halim et al. (2023) identify digital transformation as a key component in smart village development. Similarly, Pramesti (2024) demonstrates the effectiveness of digital media such as educational videos and interactive books in supporting tourism promotion and cultural education, particularly among younger and technologically oriented audiences.

Despite the growing body of literature on digital tourism, heritage interpretation, and edutourism, a critical research gap remains. Existing studies predominantly examine digitalization in tourism villages from general, managerial, or promotional perspectives, while limited attention has been given to the systematic development of digital interpretation strategies specifically designed to convey the cultural philosophy and values embedded in heritage irrigation systems such as Subak. Moreover, few studies adopt a development-oriented approach that integrates local stakeholder perspectives and empirically evaluates the effectiveness of digital interpretation media in enhancing visitor understanding and supporting heritage sustainability.

Addressing this gap, the present study aims to develop a digital heritage interpretation strategy for Subak cultural heritage through the creation of an interactive digital book integrated with QR codes. This approach is designed to function as an interpretative, educational, and promotional medium for both tourists and local communities. Academically, the study contrib-

utes to the literature on edutourism, digital heritage interpretation, and technology acceptance by proposing an empirically grounded development model tailored to cultural irrigation heritage. Practically, the study supports Subak preservation efforts, strengthens local cultural identity, and enhances the positioning of Jatiluwih as a sustainable, education-oriented heritage tourism destination.

Methodology

Research Design and Study Area

This study employed a Research and Development (R&D) approach adapted from the simplified Borg and Gall (1983) model, comprising three sequential stages: preliminary research, product development, and limited trials. The R&D design was selected to address the dual objectives of the study, namely, to generate empirical insights into current heritage interpretation practices and to produce a tangible interpretative output in the form of an interactive digital book on Subak cultural heritage. The developed product was intended to function both as an educational medium for tourists and as a tool supporting cultural preservation and sustainable tourism development.

The research was conducted in Jatiluwih Village, Tabanan Regency, Bali, a tourism destination characterized by terraced rice fields and the traditional Subak irrigation system, which has been recognized as a UNESCO World Cultural Heritage Site since 2012. The site was purposively selected because it represents a living heritage system grounded in the Tri Hita Karana philosophy while simultaneously experiencing increasing pressures from tourism development and modernization. Data collection was carried out between 12 and 14 June 2025, coinciding with the peak tourist season, to ensure adequate visitor representation and to capture authentic post-visit perceptions relevant to heritage interpretation and educational tourism experiences.

Participants and Recruitment Procedures

The study involved two primary groups of participants: tourists and local stakeholders. Tourist respondents consisted of 150 visitors to Jatiluwih Village. Participants were recruited using accidental sampling, whereby tourists encountered at key locations within the site such as entrance gates, walking paths, and viewing areas were invited to participate voluntarily after completing their visit. Inclusion criteria required respondents to be at least 18 years of age and willing to provide informed consent. This sampling strategy was employed to capture a heterogeneous range of visitor profiles and immediate experiential responses related to Subak knowledge, information needs, and preferred interpretation media.

Local stakeholders were recruited using purposive sampling due to their direct involvement in Subak management, cultural preservation, and tourism activities. This group comprised *pekaseh* (Subak leaders), Subak farmers, tour guides, and village tourism managers. Stakeholders were identified in coordination with village authorities and Subak organizations to ensure that participants possessed relevant experiential and contextual knowledge. Data from this group were collected through semi-structured interviews and Focus Group Discussions (FGDs), enabling in-depth exploration of stakeholder perspectives on interpretation challenges, cultural sustainability, and digital media adoption.

Development of Research Questions

Research questions were developed through an iterative process grounded in both theoretical frameworks and empirical exploration. Initially, an extensive literature review was conducted on Subak cultural heritage, sustainable tourism, heritage interpretation, edutourism, and digitalization in tourism villages (Davis, 1989; Nowacki, 2021; Abrahams & Bama, 2023; Hastuti et al., 2023; Halim et al., 2023; Pramesti, 2024). This review facilitated the identification of conceptual gaps related to tourists' limited understanding of Subak philosophy and the lack of systematically designed digital interpretation media.

Subsequently, preliminary field observations, tourist surveys, interviews, and FGDs were undertaken to contextualize these theoretical insights within the specific conditions of Jatiluwih

Village. Insights from this preliminary stage informed the formulation of research questions focusing on:

1. tourists' knowledge, perceptions, and information needs regarding Subak cultural heritage;
2. stakeholder perspectives on challenges and opportunities in Subak interpretation and preservation; and
3. the effectiveness of digital interpretation media in enhancing educational tourism experiences and supporting cultural sustainability.
4. This process ensured that the research questions were theoretically informed, empirically grounded, and directly aligned with the study's development-oriented objectives.

Research Procedure

The research procedure followed three sequential stages adapted from Borg and Gall (1983):

1. Preliminary Research
This stage involved a literature review, tourist questionnaires, semi-structured interviews, and FGDs to identify existing interpretation gaps, assess visitor information needs, and establish content and design requirements for Subak educational media.
2. Product Development
Based on findings from the preliminary stage, an initial prototype of the interactive digital Subak book was developed. The content incorporated local narratives, photographs, illustrations, maps, and QR codes, and was designed in accordance with principles of heritage interpretation (Nowacki, 2021) and edutourism (Abrahams & Bama, 2023). Content validity was ensured through iterative consultation with local stakeholders and subject-matter experts.
3. Limited Trial
The draft digital book was distributed to selected *pekaseh*, tour guides, tourism managers, and tourists for evaluation. Feedback was collected regarding content clarity, cultural relevance, design quality, and usability. These criteria were used as evaluative indicators to refine and improve the digital product prior to broader dissemination.

Data Collection and Analysis

The study adopted a mixed-methods approach by integrating quantitative and qualitative data to enhance analytical robustness. Quantitative data were collected through structured tourist questionnaires and analyzed using descriptive statistics, including frequencies and percentages, to describe respondent characteristics, levels of Subak knowledge, and preferences for interpretation media.

Qualitative data were obtained through interviews, FGDs, and field documentation, including observational notes and photographs. These data were analyzed using thematic analysis, involving systematic coding, categorization, and interpretation of recurring patterns related to interpretation needs, cultural values, and digital media effectiveness.

Integration of quantitative and qualitative findings was conducted at the interpretation stage to triangulate results and formulate a comprehensive digital heritage interpretation strategy for Subak cultural heritage. This integrative analysis also enabled an evaluation of the developed digital book's effectiveness as an educational medium supporting cultural sustainability and heritage preservation.

Results and Discussions

Results

Tourist Profile and Visit Characteristics

An overview of respondents' demographic characteristics, visit experience, sources of information, levels of knowledge about Subak, and preferences for educational media is summarized in Table 1. The survey was conducted during the preliminary research stage between 12 and 14 June 2025 and involved 150 tourists visiting Jatiluwih Village.

As shown in Table 1, European visitors constituted the dominant segment, accounting for 64% of respondents. Domestic tourists represented 13.3%, followed by visitors from Asia (10%), the Americas (5.3%), Australia (4.7%), and Africa (2.7%). This distribution confirms the strong orientation of Jatiluwih toward international particularly European tourism markets, highlighting the need for interpretation media that are linguistically accessible and culturally explanatory for foreign visitors.

Table 1. Summary of Questionnaire Dissemination

Aspect	Category	Number (people)	Percentage (%)
Tourist Origin	Europe	96	64.0
	Domestic (Indonesia)	20	13.3
	Asia	15	10.0
	Americas	8	5.3
	Australia	7	4.7
	Africa	4	2.7
Gender	Male	78	52.0
	Female	72	48.0
Age	< 20 years	5	3.3
	20–30 years	42	28.0
	31–40 years	36	24.0
	41–50 years	38	25.3
	> 50 years	29	19.3
Occupation	Professional	101	67.3
	Entrepreneur	17	11.3
	Civil Servant (ASN)	12	8.0
	Student	6	4.0
	Other	14	9.3
Visit Experience	First time	137	91.3
	Have visited before	13	8.7
Visit Motivation	Rice-terrace scenery	95	63.3
	Culture and traditions	30	20.0
	Trekking	15	10.0
	Photography	10	6.7
Information Source	Internet & social media	72	48.0
	Tour guide	42	28.0
	Friends/relatives	21	14.0
	Other	15	10.0
Level of Knowledge about Subak	No knowledge at all	45	30.0
	Know a little	65	43.3
	Familiar	30	20.0
	Very familiar	10	6.7
Interest in Subak	History	102	68.0
	Tri Hita Karana philosophy	95	63.3
	Farmers' lives	85	56.7
	Rituals	80	53.3
	Irrigation process	78	52.0
	Modernization challenges	66	44.0
Preferred Educational Media	Digital book	90	60.0
	Educational video	70	46.7
	Mobile application	35	23.3
	AR/VR	25	16.7
	Virtual tour	15	10.0
Preferred Interactive Features	Photos & illustrations	115	76.7
	Video	95	63.3
	Interactive map	85	56.7
	Audio	50	33.3
	Quiz	40	26.7
Digital Access / Content Sharing	Willing to access via QR code	120	80.0
	Very likely to share	65	43.3

Likely to share	50	33.3
Will not share	35	23.4

Source: Authors' field survey, Jatiluwih, 2025

Gender distribution among respondents was relatively balanced, with males accounting for 52% and females for 48%. The age profile indicates that the majority of visitors were young to middle-aged adults. Visitors aged 20–30 years comprised 28% of the sample, followed by those aged 31–40 years (24%) and 41–50 years (25.3%). Respondents under 20 years old accounted for only 3.3%, while those over 50 years represented 19.3%. This composition suggests that most visitors belong to productive and digitally literate age groups, reinforcing the relevance of digital interpretation media.

In terms of occupation, professionals formed the largest group (67.3%), followed by entrepreneurs (11.3%), civil servants (8%), students (4%), and other occupations (9.3%). Notably, 91.3% of respondents were first-time visitors to Jatiluwih, indicating limited prior exposure to Subak-related information and underscoring the importance of on-site interpretation for initial visitor understanding.

Visitor Motivation and Information Sources

Survey results indicate that visual appreciation of the rice terraces remains the primary motivation for visiting Jatiluwih. As presented in Table 1, 63.3% of respondents cited scenic enjoyment as their main motivation, while cultural and traditional interest accounted for 20%. Other motivations included trekking (10%) and photography (6.7%). These findings suggest that although cultural interest exists, it remains secondary to landscape-based motivations, reinforcing concerns about the superficial consumption of heritage.

Prior to their visit, tourists relied predominantly on digital information channels. Internet and social media platforms were the main sources of information for 48% of respondents, followed by tour guides (28%), friends or relatives (14%), and other sources (10%). This pattern highlights the strategic importance of digital media in shaping visitor expectations and knowledge before arrival, as well as the potential role of digital interpretation tools in complementing or substituting direct guide-based explanations.

Knowledge and Interest in Subak Cultural Heritage

Despite Jatiluwih's UNESCO designation, tourists' prior knowledge of the Subak system was generally limited. As indicated in Table 1, 30% of respondents reported having no knowledge of Subak, while 43.3% stated that they knew very little. Only 20% indicated familiarity, and a mere 6.7% considered themselves very familiar with the system. Overall, more than 70% of visitors entered the destination with minimal understanding of Subak as a cultural and irrigation system.

In contrast to this limited knowledge, respondents expressed strong interest in learning about Subak. Interest in Subak history was reported by 68% of tourists, followed by the Tri Hita Karana philosophy (63.3%), farmers' livelihoods (56.7%), rituals (53.3%), irrigation processes (52%), and modernization-related challenges (44%). This discrepancy between low prior knowledge and high learning interest indicates a substantial interpretative gap and reveals significant potential for educational and edutourism-oriented interventions.

Preferences for Educational Media and Digital Features

Tourists demonstrated a clear preference for digital-based educational media. As summarized in Table 1, digital books were the most favored medium (60%), followed by educational videos (46.7%) and mobile applications (23.3%). More advanced technologies, such as augmented or virtual reality and virtual tours, attracted comparatively lower interest, suggesting that accessible and low-complexity digital formats are more appropriate for this visitor segment.

Regarding preferred digital features, photos and illustrations were selected by 76.7% of respondents, followed by videos (63.3%) and interactive maps (56.7%). Audio features and quizzes were less preferred. Importantly, 80% of respondents expressed willingness to access

educational content through QR codes. Furthermore, a substantial proportion indicated their likelihood of sharing digital content, with 43.3% reporting being very likely and 33.3% likely to do so. These findings suggest strong potential for digital interpretation tools to extend visitor engagement beyond the site through content sharing.

Focus Group Discussion Findings

Findings from the Focus Group Discussion involving tour guides, *pekaseh*, customary leaders, and tourism managers revealed several structural challenges in Subak interpretation. A key issue identified was the limited number of tour guides relative to visitor volume, resulting in many tourists receiving little or no explanation during their visit. Language barriers further exacerbated this issue, particularly given the predominance of European visitors and the limited foreign language proficiency among some guides.

Participants also highlighted inconsistencies in the depth and accuracy of information delivered to tourists. Not all guides possessed comprehensive knowledge of Subak, including its philosophical foundations, irrigation mechanisms, rituals, and farmers' livelihoods. These inconsistencies were perceived as reducing the overall quality of visitor understanding and potentially misrepresenting Subak as a cultural system. Consequently, FGD participants collectively emphasized the need for standardized, accurate, and easily accessible digital educational materials to support both guides and independent visitors.

Product Development and Limited Trial Results

Based on the preliminary research findings, an interactive digital book on Subak cultural heritage was developed. The content covered Subak history, the Tri Hita Karana philosophy, irrigation processes, farmers' livelihoods, and challenges related to modernization. The digital book incorporated photographs, illustrations, and short videos accessed through QR codes and was structured in accordance with principles of heritage interpretation and edutourism.

During the limited trial stage, the digital book was distributed to *pekaseh*, tourism managers, tour guides, and selected tourists. Stakeholder feedback indicated that the digital book was perceived as a useful tool for supporting Subak preservation and assisting guides in delivering consistent explanations to visitors. Tourists reported that the digital book was easy to use and more engaging than verbal explanations alone. Suggestions for improvement primarily concerned the inclusion of additional contextual photographs illustrating farmers' daily activities. These inputs were incorporated into subsequent revisions of the digital product.

Discussions

The findings of this study reveal a critical disjunction between tourists' visual engagement with the Jatiluwih landscape and their understanding of Subak as a complex cultural and irrigation system. Although the majority of visitors belong to productive-age groups and are accustomed to digital technology, more than 70% of respondents reported minimal prior knowledge of Subak. At the same time, tourists expressed strong interest in interactive educational media, particularly digital books and videos. This pattern indicates that the challenge facing heritage tourism in Jatiluwih is not a lack of visitor interest but rather the absence of effective interpretation mechanisms capable of translating visual appreciation into cultural understanding.

From a heritage interpretation perspective, these findings empirically reinforce Nowacki's (2021) assertion that interpretation should move beyond factual information delivery toward the communication of meanings and values that are emotionally and intellectually engaging. The interactive digital book developed in this study operationalizes this principle by embedding Subak narratives, philosophical foundations, and everyday practices within an accessible digital format. The integration of QR codes enables a flexible, visitor-centered interpretation process that reduces dependence on tour guide availability and addresses the inconsistencies in narrative depth identified through the Focus Group Discussions. In doing so, the study supports and extends prior research emphasizing the growing role of digital interpretation tools in enhancing interpretive depth and visitor engagement in heritage tourism contexts (Moreno-Melgarejo et al., 2019).

Viewed through an edutourism lens, the results align with Abrahams and Bama's (2023) argument that tourism experiences enriched with educational elements enhance visitor engagement while strengthening destination sustainability. The digital book allows tourists to actively explore Subak history, the Tri Hita Karana philosophy, irrigation practices, and contemporary challenges, thereby transforming passive sightseeing into structured cultural learning. The incorporation of visual elements, illustrations, and interactive maps further facilitates experiential learning, which is central to edutourism practices (Sumarmi et al., 2020). Importantly, this study extends edutourism theory by demonstrating that digital interpretation media can simultaneously function as educational tools, experiential enhancers, and cultural mediation instruments within living cultural landscapes.

The findings also contribute to the Technology Acceptance Model (TAM) by providing empirical evidence from a heritage tourism context. Consistent with Davis (1989), tourists' strong preference for digital books and their willingness to access content via QR codes indicate high levels of perceived usefulness and perceived ease of use. The positive reception of the digital book suggests that digital interpretation media aligned with tourists' technological habits and information-seeking behaviors are more likely to be adopted. Moreover, feedback requesting multilingual content and richer visual materials highlights the importance of information quality and contextual relevance, supporting later extensions of TAM that emphasize content relevance as a critical determinant of technology acceptance (Kraja et al., 2025).

Beyond visitor experience, the Focus Group Discussion findings reveal broader structural challenges commonly faced by tourism villages, including limited guide capacity, language barriers, and fragmented knowledge transmission. In this respect, the study supports Polukhina et al. (2025), who argue that digitalization enables tourism villages to evolve into integrated digital ecosystems rather than remain solely physical destinations. The digital book developed in this research thus functions not only as an interpretive and educational medium but also as a cultural preservation instrument. By systematically documenting Subak knowledge, philosophies, and practices, the digital book contributes to intergenerational knowledge transfer and mitigates the risk of cultural erosion associated with occupational shifts and modernization pressures.

Theoretical Implications

This study makes three interrelated theoretical contributions. First, it advances heritage interpretation theory by demonstrating how digital media can operationalize interpretive principles within living cultural heritage systems, particularly in contexts where human interpretive resources are limited. Second, it enriches edutourism literature by empirically showing how interactive digital tools can transform heritage tourism from predominantly visual consumption into structured educational engagement. Third, it contributes to technology acceptance theory by validating core TAM constructs in a cultural heritage tourism setting and highlighting the central role of usability, content relevance, and contextual quality in shaping visitor acceptance of digital interpretation media.

Conclusions

This study confirms that tourists' limited comprehension of Subak's cultural values represents a critical challenge for heritage tourism management in Jatiluwih. While most visitors are primarily motivated by scenic appreciation, their understanding of the Tri Hita Karana philosophy and the cultural practices underlying the Subak irrigation system remains minimal. These findings, corroborated by Focus Group Discussions, further reveal structural constraints, including limited guide availability, language barriers, and inconsistencies in information delivery, which collectively weaken the effectiveness of conventional interpretation practices.

By employing a Research and Development approach encompassing preliminary research, product development, and limited trials, this study formulates a digital heritage interpretation strategy through the development of an interactive digital book integrated with QR code technology. The results demonstrate that this medium is accessible, engaging, and beneficial for both tourists and local stakeholders. Within a heritage interpretation framework, the digital

book effectively communicates cultural meanings at both emotional and intellectual levels. From an edutourism perspective, it enhances tourism experiences by embedding structured educational value into recreational activities. Furthermore, analysis grounded in the Technology Acceptance Model confirms that tourists' acceptance of the digital book is strongly influenced by perceived usefulness and perceived ease of use, indicating its suitability for contemporary, technology-oriented visitor segments.

Theoretical, Practical, and Policy Implications

Theoretically, this study advances the integration of heritage interpretation, edutourism, and technology acceptance theories by proposing an empirically grounded model of digital heritage interpretation tailored to living cultural landscapes. It demonstrates how digital media can operationalize interpretive principles while simultaneously supporting educational tourism objectives and technology adoption dynamics.

Practically, the interactive digital book provides a standardized and flexible interpretive tool that supports consistent knowledge delivery, assists tour guides, and enhances visitor learning experiences. As a digital archive of Subak knowledge, it also contributes to cultural preservation by facilitating intergenerational knowledge transmission and mitigating the risk of cultural erosion. From a policy perspective, the findings suggest that digital interpretation should be systematically incorporated into heritage tourism management strategies, particularly in destinations facing human resource limitations and linguistic diversity. Institutional support for digital interpretation initiatives can strengthen heritage sustainability while enhancing destination competitiveness.

Recommendations and Future Research

Several recommendations emerge from this study. First, the digital book should be disseminated through official destination platforms, social media channels, and partnerships with travel agencies to maximize accessibility and reach. Second, it should be institutionalized as a standardized interpretive reference for tour guides to ensure informational consistency and accuracy. Third, sustained involvement of local communities in content development is essential to preserve cultural authenticity and ensure contextual relevance.

This study acknowledges certain limitations. The use of accidental sampling may introduce sampling bias, and the limited trial phase involved a relatively small number of participants. In addition, the research focused primarily on digital books, while more advanced digital technologies such as mobile applications, augmented reality, and virtual reality were not examined in depth. Future research should therefore conduct longitudinal assessments to evaluate long-term impacts on tourists' knowledge, attitudes, and conservation-oriented behaviors, and further explore the integration of advanced digital technologies to support smart and sustainable heritage tourism governance.

Acknowledgements

The authors gratefully acknowledge that this research was funded by a research grant from the Ministry of Education, Culture, Research, and Technology (Kemendikristek) of the Republic of Indonesia.

References

- Abrahams, E., & Bama, H. K. N. (2023). Study Abroad Programmes As an Edutourism Segment for South African Universities. *Geojournal of Tourism and Geosites*, 51(January), 1775–1785. <https://doi.org/10.30892/gtg.514spl01-1173>
- Ardana, P. D. H., Suparwata, D. O., Sudrajat, A., Chatun, S., & Harsono, I. (2024). The Role of Bali's Traditional Subak Farming System in the Preservation of Natural and Cultural Resources. *West Science Nature and Technology*, 2(01), 31–38. <https://doi.org/10.58812/wsnt.v2i04.754>
- Borg, W. R., & Gall, M. D. (1983). *Educational Research: An Introduction* (4 ed.). Longman.

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319–339. <https://doi.org/10.2307/249008>
- Dwipradnyana, I. M. (2019). Tantangan Berat Regenerasi Petani Bali Dalam Mempertahankan Subak Sebagai Warisan Budaya Dunia. *Agrica*, 10(2), 75–82. <https://doi.org/10.37478/agr.v10i2.199>
- Geria, I. M., Sumardjo, N., Sutjahjo, S. H., Widiatmaka, N., & Kurniawan, R. (2019). Subak sebagai Benteng Konservasi Peradaban Bali. *Amerta*, 37(1), 39. <https://doi.org/10.24832/amt.v37i1.39-54>
- Halim, D. K., Pramesti, D. S., & Permatasari, D. N. C. (2023). E-administration for collaborative governance body of green tourism villages in realizing smart villages in Bali. *IOP Conference Series: Earth and Environmental Science*, 1263(1). <https://doi.org/10.1088/1755-1315/1263/1/012017>
- Hastuti, P. T., Shinta, J. A., Khamidayati, S., Pramayuda, K., & Kharisma, B. (2023). Strategi Pengembangan Digitalisasi Desa Wisata: Studi Kasus Desa Jatiluwuh, Kabupaten Tabanan Provinsi Bali. *Jurnal Ilmiah Cakrawarti*, 6(2). <https://doi.org/10.47532/jic.v6i2.841>
- Kraja, A., Goga, I., & Kapaj, A. (2025). The impact of smart tourism on improving business performance. *Edelweiss Applied Science and Technology*, 9(7), 2297–2310. <https://doi.org/10.55214/2576-8484.v9i7.9156>
- Moreno-Melgarejo, A., García-Valenzuela, L. J., Hilliard, I., & Pinto-Tortosa, A. J. (2019). Exploring Relations between Heritage Interpretation, Visitors Learning Experience and Tourist Satisfaction. *Czech Journal of Tourism*, 8(2), 103–118. <https://doi.org/10.2478/cjot-2019-0007>
- Nowacki, M. (2021). Heritage interpretation and sustainable development: A systematic literature review. *Sustainability (Switzerland)*, 13(8). <https://doi.org/10.3390/su13084383>
- Polukhina, A., Sheresheva, M., Napolskikh, D., & Lezhnin, V. (2025). Digital Solutions in Tourism as a Way to Boost Sustainable Development: Evidence from a Transition Economy. *Sustainability (Switzerland)*, 17(3). <https://doi.org/10.3390/su17030877>
- Pramesti, D. S. (2024). Pembuatan Video Produk Unggulan Desa Sebagai Media Promosi Desa Jatiluwih Di Kabupaten Tabanan, Bali. *Bina Cipta*, 3(1), 43–52. <https://doi.org/10.46837/binacipta.v3i1.49>
- Widari, D. A. D. S. (2015). Perkembangan Desa Wisata Jatiluwih Setelah Unesco Menetapkan Subaknya Sebagai Bagian Dari Warisan Budaya Dunia. *Jurnal Master Pariwisata (JUMPA)*, 2(1 Juli), 61–78. <https://doi.org/10.24843/jumpa.2015.v02.i01.p04>
- Sumarmi, Bachri, S., Irawan, L. Y., & Kurniawati, E. (2020). Cultural ecology of osing in development of Kemiren Tourist Village as international tourist attraction. *IOP Conference Series: Earth and Environmental Science*, 485(1), 1–10. <https://doi.org/10.1088/1755-1315/485/1/012017>
- Susanto, D., Nugroho, A., Wiyono, R., Hidayat, S., Vokasi, U., & Gadjah, M. (2021). Potensi Ekoeduwisata Pendukung Field Research Centre UGM di Kulonprogo. *Gorontalo: Journal of Forestry Research*, 4(1), 1–14.
- Sutawan, N. (2012). Eksistensi Subak di Bali: Mampukah Bertahan Menghadapi Berbagai Tantangan. *SOCA: Jurnal Sosial Ekonomi Pertanian*, 1(2), 1–10. <https://ojs.unud.ac.id/index.php/soca/article/view/3991/2981>
- Utari, N. M. A. D., Wijaya, N., & Sudana, I. P. (2021). Motivasi Dan Persepsi Wisatawan Nusantara Berkunjung Ke Jatiluwih, Tabanan. *Jurnal IPTA*, 9(2), 285. <https://doi.org/10.24843/ipta.2021.v09.i02.p06>
- Windia, W. (2018). Kebertahanan Subak di Era Globalisasi. *Jurnal Bali Membangun Bali*, 1(2), 125–144. <https://ejournal.baliprov.go.id/index.php/jbmb/article/view/27/23>
- Windia, W., Pusposutardjo, S., Sutawan, N., Sudira, P., & Arif, S. S. (2005). Sistem Irigasi Subak dengan Landasan Tri hita Karana (THK) Sebagai Teknologi Sepadan dalam Pertanian Beririgasi. *SOCA (Socio-Economic of Agriculture and Agribusiness)*, 5(3), 5(3). <https://ojs.unud.ac.id/index.php/soca/article/view/4095/3082>

Digital Pathways to MICE Competitiveness in Bali: Social-Media Affordances, Omnichannel Integration, and Destination Image

Pondang Polikarpus Nainggolan ^{1*}, I Ketut Sutapa ², I Nengah Subadra ³, Luh Komang Candra Dewi ⁴

^{1,2,3,4} Triatma Mulya University Bali, Indonesia

*Corresponding Author: polikarpus.nainggolan@triatmamulya.ac.id

Abstract: This study investigates how Social-Media Affordance Quality (SMAQ) and Omnichannel Integration Quality (OCIQ) shape Bali's MICE destination image (DI-MICE) and perceived MICE destination competitiveness (PMDC), and whether these effects differ between first-time and repeat international visitors. Data were collected through purposive intercept surveys at MICE-related hotels, venues, and attractions in Bali, targeting international visitors who had interacted with Bali's official MICE digital channels. A quantitative cross-sectional design was applied to 300 valid responses and analyzed using PLS-SEM (SmartPLS 4). The results show that SMAQ and OCIQ significantly enhance destination image and perceived competitiveness, with destination image acting as a key mediator. Multi-group analysis reveals that first-time visitors rely more strongly on social-media affordances, whereas repeat visitors respond more to seamless omnichannel integration. Once an image is formed, both groups evaluate competitiveness similarly. These findings position digital affordances and omnichannel integration as strategic signals of professional capability, offering practical guidance for MICE destination managers in Bali and comparable emerging destinations.

Keywords: Bali; Destination Competitiveness; MICE Destination Image; Omnichannel Integration; Social-Media Affordances; Visitor Experience.

History Article: Submitted 19 January 2026 | Revised 4 February 2026 | Accepted 23 February 2026

How to Cite: Nainggolan, P. P., Sutapa, I. K., Subadra, I. N., & Dewi, L. K. C.. (2026). Digital pathways to mice competitiveness in Bali: Social-media affordances, omnichannel integration, and destination image. *Journal of Applied Sciences in Travel and Hospitality*, 9(1), 11-26.

Introduction

Global meetings, incentives, conventions, and exhibitions (MICE) are rebounding fast and getting more digital (Romanova, 2025). Contemporary industry assessments approximate the valuation of the MICE sector for the years 2024–2025 to be in the range of USD 0.87–1.23 trillion. It is anticipated that there will be mid-to-high single-digit annual growth from 2030 to 2034, as corporate travel resumes and hybrid formats expand. For various destinations, this represents a substantial and increasingly technology-influenced demand reservoir (Grand View Research, 2025). Bali sits at the center of Indonesia's quality-tourism push and is a proven MICE stage (e.g., G20 presidency meetings in Nusa Dua, 2021–2022). It fields tier-one venues such as Bali Nusa Dua Convention Center (BNDCC) with 44 rooms and capacity up to ~10,000 delegates, and other large facilities across ITDC Nusa Dua (BNDCC, 2024). Post-pandemic recovery has been sharp: official statistics recorded 625,665 foreign arrivals in July 2024 (up 20.11% MoM) (BPS-Bali, 2024), with annual international arrivals topping 6.3 million in 2024 according to industry summaries (BPS-Statistics Bali, 2025).

Bali's tourism sector is undergoing reforms by policymakers to maintain quality and sustainability, consequently urging destination marketers to enhance their digital professionalism beyond traditional volume-focused strategies. Digital marketing has become the predominant arena, with global ad expenditure exceeding USD \$1 trillion, particularly flourishing in mobile and social media; platforms like TikTok and Instagram now influence travel itineraries and

crowd dynamics, presenting both opportunities and challenges for destinations, while MICE participants expect integrated, seamless experiences across multiple channels and professional assurances to mitigate event risks (Flynn & Fischer, 2024). Three research areas are thoroughly established yet rarely amalgamated within the scope of MICE destinations, especially regarding Bali. The affordances of social media influence destination image, with recent studies indicating that interactivity, social presence, and richness of format (from a technology-affordance perspective) significantly affect cognitive and affective perceptions of destination image and subsequent intentions, though this has primarily been explored within leisure markets rather than MICE sectors (Liu et al., 2024). Omnichannel integration quality (OCIQ) research indicates that superior integration and seamless cross-channel interactions enhance engagement, satisfaction, and loyalty; however, tourism applications tend to be more focused on specific venues or firms rather than encompassing broader destination-level perspectives, with emerging empirical studies in hospitality rarely connecting OCIQ to destination image or competitiveness (Gerea et al., 2021). Destination image significantly influences perceived competitiveness in the MICE sector, with recent studies focusing on integrated models linking Social-Media Affordance Quality and Omnichannel Integration to destination image and competitiveness, yet comprehensive multi-group analyses comparing first-time and repeat business travelers remain limited (Nazir et al., 2021). Segmentation theory posits that initial visitors prioritize mediated cues, whereas returning visitors assess their cumulative experiences and cross-channel consistency; however, PLS-MGA analyses of these dynamics in MICE destinations remain scarce (Schofield et al., 2020).

This research explores the integration of technology-affordance and omnichannel perspectives within a structural model of MICE competitiveness in Bali, while examining the heterogeneity between first-time and repeat visitors. Despite extensive research on social media marketing, omnichannel integration, and destination image in tourism, three key gaps remain. First, prior studies predominantly focus on leisure tourism, with limited empirical evidence in the MICE context, where risk, professionalism, and coordination are critical. Second, omnichannel integration has rarely been examined at the destination level, particularly in relation to destination image and competitiveness. Third, few studies compare how first-time and repeat MICE visitors differ in their digital cue processing using robust multi-group PLS-SEM techniques. Beyond the theoretical gaps, a practical gap is currently observable in Bali's MICE digital journey: stakeholders' digital touchpoints often operate as disconnected channels rather than an integrated system. Prospective event organizers and attendees may encounter inconsistent information across official social media, destination/venue websites, online travel/business listings, and direct messaging channels (e.g., email/WhatsApp), including differences in venue specifications, package inclusions, availability cues, and response standards. This fragmentation creates customer effort (repeated inquiries, duplicated data submission, unclear next steps) and can weaken perceptions of professional coordination, even when the destination's physical MICE infrastructure is strong. In high-stakes MICE decision-making where reliability, time efficiency, and risk reduction are critical, such digital inconsistency becomes a salient negative signal, potentially diluting MICE destination image and reducing perceived competitiveness. Therefore, examining how social-media affordance quality (SMAQ) and omnichannel integration quality (OCIQ) shape MICE destination image and competitiveness is not only theoretically relevant but also directly addresses an operational challenge currently faced in Bali's MICE market.

Accordingly, this study aims to: (1) examine the effects of Social-Media Affordance Quality (SMAQ) and Omnichannel Integration Quality (OCIQ) on MICE destination image and perceived competitiveness; (2) test the mediating role of destination image; and (3) analyze differences between first-time and repeat visitors using MICOM and PLS-MGA. This study contributes theoretically by integrating affordance theory with omnichannel customer experience at the destination level. Specifically, it explains how SMAQ and OCIQ can function as signals of professional competence in B2B/B2C MICE markets through their influence on destination image. In addition, the study advances competitiveness research by positioning destination image as a key mediating mechanism linking digital marketing quality to competitive perceptions. It also incorporates visitor experience variability to clarify whether image-based persuasion is more salient for first-time visitors, while integration quality may matter more for repeat attendees.

Methodologically, the study employs PLS-SEM with bootstrapping. Measurement invariance is assessed using MICOM, and group-wise structural path differences are tested via PLS-MGA, consistent with contemporary PLS procedures and SmartPLS guidelines. Practically, the findings offer actionable direction for Bali's Destination Management Organization and venue consortium. The results identify two strategic digital initiatives, SMAQ and OCIQ, that can be strengthened to enhance MICE destination image and perceived competitiveness among event organizers and attendees, aligning with Bali's ongoing MICE capacity development and quality-enhancement agenda.

The affordances of social media namely interactivity, navigability, and format richness significantly influence audience perceptions of destinations by enhancing social presence and parasocial interactions, thereby increasing the diagnostic and credibility of digital cues, as evidenced by recent research in Tourism Management which indicates a direct, positive impact on destination image formation, particularly relevant in the MICE sector where concerns of risk and professionalism are paramount (Liu et al., 2024). Extensive studies of user-generated reviews reveal that digital content significantly influences destination perception across diverse cultures and languages, thereby altering mental frameworks regarding a destination's viability and attractiveness for events (Wang et al., 2024). Comprehensive social media studies connect platform mechanisms to image, value, and behavioral objectives, thereby elucidating the relationship from affordances to image in tourism decision-making (Keelson et al., 2024). Platform-native formats exhibit "meme-affordance" effects that enhance travel intentions through the amplification of imitation and emotional resonance, serving as a cue-rich affordance mechanism (Yhee et al., 2024). An exemplary MICE representation significantly enhances perceived competitiveness, serving as the crucial connection between online impressions and evaluative judgments of a destination's competitive capacity (González-Rodríguez et al., 2023). Furthermore, research on destination alignment indicates that social and search-driven digital marketing significantly influences tourists' perceptions and competitive assessments of locations, supporting the anticipated relationship between affordances and competitiveness, mediated by imagery (Cooper et al., 2021). Empirical evaluations of destination competitiveness underscore the significance of digitalization and data-driven communication within extensive competitiveness frameworks, reinforcing the idea that superior social media interactions can enhance perceived competitiveness in B2B/B2C MICE sectors (Song, 2024). MICE-centric research delineates determinants of destination competitiveness such as accessibility and infrastructure, positing that the quality of professional signaling and information, facilitated by social media, significantly influences selection processes, thereby reinforcing the direct relationship between SMAQ and PMDC (Cooper et al., 2021).

Hence, subsequent hypotheses were proposed :

H1a: Social-Media Affordance Quality positively influences MICE Destination Image.

H1b: Social-Media Affordance Quality positively influences Perceived MICE Destination Competitiveness.

High-quality omnichannel integration characterized by cohesive coordination of digital and physical interactions enhances business tourists' perceptions of a MICE destination's image and competitiveness, as evidenced by empirical research indicating that tightly integrated channels yield greater customer engagement, satisfaction, and loyalty through a coherent brand experience (Lazaris et al., 2021; Rahman et al., 2025). Likewise, Liu et al. (2024) illustrate that enhanced quality of omnichannel integration markedly enhances cross-channel retention by diminishing friction in the customer journey and elevating perceived value. In the realm of tourism, Nasution et al. (2025) assert that omnichannel marketing significantly bolsters appealing inbound marketing and unforgettable experiences, subsequently strengthening the destination image and fostering loyalty towards Indonesian locales. When a convention city provides integrated digital resources and services, it fosters a positive MICE destination image among business event planners and delegates, which is crucial for resilience and attractiveness, as evidenced by a longitudinal study in Thailand revealing that a favorable destination image aids stakeholders in crisis recovery and in maintaining appeal for international events (Rittichainuwat et al., 2020). And also Sriraksa et al. (2021) delineate accessibility, MICE experience, accom-

modation, and supporting infrastructure as pivotal factors influencing MICE destination competitiveness, with high-quality omnichannel integration effectively facilitating the coordination of these elements, such as seamless connections between flights, venues, hotels, and city services. A hypothesis is proposed:

H2a: Omnichannel Integration Quality positively influences MICE Destination Image.

H2b: Omnichannel Integration Quality positively influences Perceived MICE Destination Competitiveness.

Empirical and conceptual work in tourism competitiveness consistently shows that a favorable destination image is a key antecedent of how competitive a destination is perceived to be, which supports the assumption that MICE destination image will positively influence perceived MICE destination competitiveness. Sin et al. (2021) demonstrate that tourists' evaluations of destination image have a significant positive effect on destination competitiveness in the Sibiu Heritage Trail case, arguing that a strong image helps destinations secure long-term profitability and market position. Therefore, Tse & Tung (2022) show that residents' behaviors shape destination image and, in turn, destination competitiveness, highlighting image as a strategic lever for destinations seeking to strengthen their competitive standing. In the specific MICE context, Rittichainuwat et al. (2020) find that Thailand's resilient MICE destination image, built on factors such as value for money, hospitality, and international-standard venues, underpins the country's ability to remain a competitive MICE hub during crises. Expanding this logic, González-Rodríguez et al. (2023) conceptualize tourist destination competitiveness as rooted in both comparative and competitive advantages, noting that attractiveness and reputational attributes captured in destination image are central to improving a destination's position in global rankings. A comprehensive review by Cronjé & du Plessis (2020) concludes that many of the most frequently cited determinants of destination competitiveness, such as perceived quality, uniqueness, and overall attractiveness, are essentially image-laden constructs, reinforcing the idea that managing destination image is critical for maintaining competitive advantage. More recently Ramos & Pinto (2024) show that gastronomic image, as a component of overall destination image, significantly enhances tourism competitiveness, arguing that destinations that communicate a distinctive, high-quality image gain a stronger competitive position in international markets. Taken together, these findings justify the hypothesis that a stronger, more positive MICE destination image will translate into higher perceived MICE destination competitiveness.

Thus, hypotheses were formulated:

H3: MICE Destination Image positively influences Perceived MICE Destination Competitiveness.

Recent studies indicate that social media affordances, such as interactivity and visibility, significantly influence the cognitive and affective perceptions of tourist destinations, ultimately affecting visitors' intentions and the competitive edge of these locations, as demonstrated by Liu et al. (2024) in the context of rural tourism in China, thus highlighting the importance of strategic utilization of social media in enhancing destination appeal. Omnichannel literature indicates that effective channel integration, characterized by information consistency, order process alignment, online-offline synchronization, and seamless channel switching, significantly enhances customer experience, engagement, and loyalty, thereby serving as a competitive advantage through improved customer acquisition and retention in competitive markets (Gerea et al., 2021). Empirically, Gao et al. (2021) demonstrate that channel integration quality enhances customer experience across various touchpoints and leads to favorable behavioral outcomes (e.g., repurchase intention) in the context of omnichannel retail. Quantitative analyses of omnichannel strategies indicate that mediation via customer experience and engagement is prevalent; Lazaris et al. (2021) demonstrated that enhanced omnichannel integration positively influences customer satisfaction and loyalty intentions, with satisfaction serving as a primary mediator between omnichannel intensity and loyalty outcomes. The MICE literature substantiates that destination competitiveness is crucial for attracting events and participants, thereby enhancing satisfaction. Yoon & Wang (2023) define MICE destination competitiveness as its capacity to

draw event attendees and enhance corporate performance via supply chain integration and stakeholder collaboration. And also Zazueta-Hernández & Velarde-Valdez (2024) examined the determinants of MICE competitiveness in Mazatlán, identifying demand and resources as pivotal factors. The interplay between social media affordances and omnichannel integration significantly influences the MICE destination experience/image, serving as precursors to shaping perceptions of competitiveness, with social media impacting destination image and behavior while omnichannel integration affects experience, engagement, and loyalty through mediation (Liu et al., 2024). The perceived competitiveness of MICE destinations is contingent upon market perceptions regarding their capability to effectively host events, suggesting that the MICE destination's image serves as a mediator linking SMAQ and OIQ to perceived competitiveness in hosting international conferences and exhibitions (Zazueta-Hernández & Velarde-Valdez, 2024).

A hypothesis is proposed :

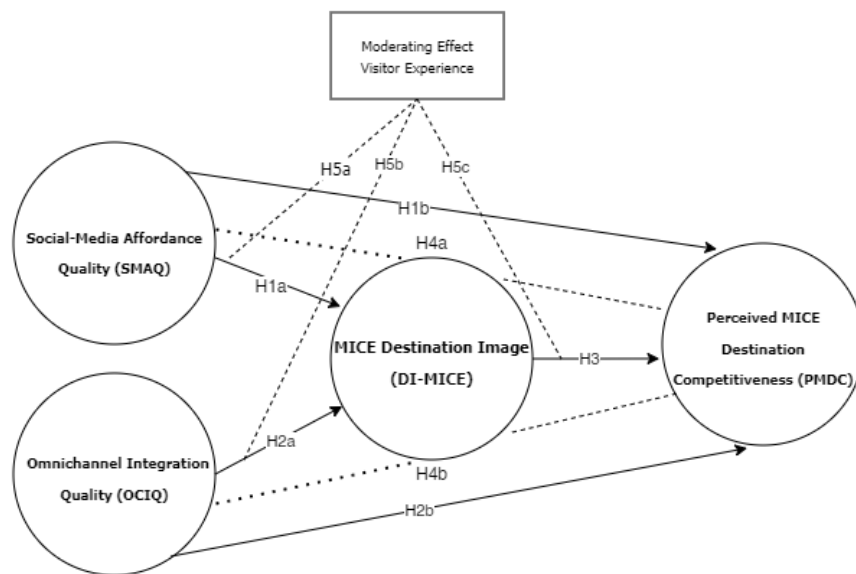
- H4a: MICE Destination mediates the relationship between Social-Media Affordance Quality and Perceived MICE Destination Competitiveness.
- H4b: MICE Destination mediates the relationship between Omnichannel Integration Quality and Perceived MICE Destination Competitiveness.

High social-media affordances (interactivity, navigability, format richness) enhance diagnostic and social presence, which strengthens destination image formation (Liu et al., 2024; Wang et al., 2023). Yet this effect should be stronger for first-time visitors, who rely more on mediated cues than on memory of prior trips; segmentation work documents systematic image differences by experience status (Schofield et al., 2020; Wang et al., 2023). Evidence from social-media information-quality studies also shows moderation by prior knowledge/experience in digital persuasion, implying that novices are more susceptible to high-affordance content (Wang et al., 2023). Event/participation contexts similarly show digital/program cues shaping image formation, again consistent with stronger impacts among less experienced visitors (Avloniti et al., 2025). Omnichannel integration quality (consistency and seamless handoffs across web–email, app–messaging–on-site) improves evaluations and experience quality (Buckley & Feldman, 2024). In services and hospitality, integrated channel attributes and “seamless journeys” raise perceived professionalism and reduce risk, which should map onto destination image in MICE (Alim et al., 2025). Because repeaters have richer episodic memories of a place, they weigh cross-channel consistency more heavily than first-timers when updating image; this aligns with experience-contingent processing in destination evaluations (Schofield et al., 2020). Contemporary competitiveness research treats destination image as a proximal antecedent of perceived destination competitiveness (demand-side) (González-Rodríguez et al., 2023; Song, 2024). As an image crystallizes professional capability and comparative advantages in the audience’s mind, stronger images yield higher competitiveness assessments—especially in risk-sensitive B2B/B2C MICE decisions (Ban et al., 2025; Litvinova-Kulikova et al., 2023). Because first-timers lack experiential baselines, they lean more on image signals when judging competitiveness; repeaters temper image with accumulated performance knowledge, implying a stronger DI-MICE to PMDC effect for first-timers (Lee & Kim, 2023; Schofield et al., 2020).

A hypothesis is proposed:

- H5a: Visitor experience moderates the effect of Social-Media Affordance Quality on MICE Destination Image.
- H5b: Visitor experience moderates the effect of Omnichannel Integration Quality on MICE Destination Image.
- H5c: Visitor experience moderates the effect of MICE Destination Image on Perceived MICE Destination Competitiveness.

This research formulates hypotheses based on theoretical and empirical insights, depicted in Figure 1.



(Source: Author's Data, 2025)

Figure 1. Conceptual framework

Methodology

We employed a quantitative, cross-sectional survey and estimated the model with PLS-SEM (SmartPLS 4) in line with the study followed established PLS-SEM procedures for tourism and hospitality research. The context was international visitors in Bali evaluating the island's MICE capability during their stay. The study employed a sample size of 300 respondents to ensure adequate statistical power and robust estimation in PLS-SEM, consistent with the recommendations (Hair et al., 2019). The measurement model included four reflective latent variables: Social-Media Affordance Quality (SMAQ), Omnichannel Integration Quality (OCIQ), MICE Destination Image (DI-MICE), and Perceived MICE Destination Competitiveness (PMDC)—operationalized by a total of 17 indicators (SMAQ = 4, OCIQ = 4, DI-MICE = 4, PMDC = 5). Following Hair et al. (2019), the minimum sample size in PLS-SEM should be evaluated based on (i) the maximum number of indicators used to measure a construct and (ii) the maximum number of structural paths directed at an endogenous construct. In this model, the largest indicator block is 5 indicators (PMDC), and the most complex endogenous construct (PMDC) has three incoming paths (from SMAQ, OCIQ, and DI-MICE). Therefore, even under conservative heuristics (e.g., the 10-times rule as a lower-bound check), the minimum required sample would be well below 300, and the chosen $n = 300$ provides a stronger basis for stable bootstrapping results and effect estimation. Moreover, because the analysis also compares first-time vs repeat visitors using MICOM and PLS-MGA, a larger sample is necessary to maintain reliable estimation in each subgroup; the balanced split (150/150) further supports measurement invariance testing and meaningful group-wise comparisons. Fieldwork followed the attachment's timetable (February–August 2025). Sampling was purposive intercept at hotels, venues, and attractions with a QR link, respondents were aged 18 years or older, stayed in Bali for at least one night, and confirmed prior interaction with Bali's official MICE digital channels (social media and web-site/app/WhatsApp), and consistent with the attachment's emphasis on recruiting tourists who directly interacted with the destination's digital marketing. The questionnaire operationalized four reflective constructs: Social-Media Affordance Quality (SMAQ), Omnichannel Integration Quality (OCIQ), MICE Destination Image (DI-MICE), and Perceived MICE Destination Competitiveness (PMDC)—each measured with five items on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) (Croasmun & Ostrom, 2011); a small expert pretest (~30) ensured clarity and reliability before the main run (Sekaran & Bougie, 2016).

All respondents provided informed consent before participation and were assured anonymity in line with ethical research standards. We screened for data quality (e.g., straight-

lining, extremely short completion, failed attention checks), and then followed the standard two-phase PLS workflow: first validating the measurement model (outer loadings, $CR \geq .70$, $AVE \geq .50$, $HTMT < .90$, and inner $VIF < 5$) and, second, testing the structural model using bias-corrected bootstrapping (5,000 resamples) with reports of β , confidence intervals, f^2 , and Q^2 (Hair et al., 2019). Mediation was assessed for SMAQ/OCIQ $\rightarrow$ DI-MICE $\rightarrow$ PMDC via bootstrapped indirect effects (with effect-size interpretation), and moderation by visitor experience was examined via MICOM (configural and compositional invariance; equality of means/variances) followed by PLS-MGA and permutation tests to compare paths across first-time versus repeater groups; directional hypotheses were evaluated one-tailed (Cheah et al., 2023). The mediation effect is analyzed using the statistical measure ν , derived from the mediation coefficient. According to Lachowicz et al. (2018) and Ogbeibu et al. (2022), a value of $\nu = 0.02$ indicates minimal mediation, 0.075 indicates moderate mediation, and 0.175 indicates strong mediation. Visitor experience was operationalized as a binary moderator, distinguishing first-time visitors (first visit to Bali) from repeat visitors (two or more prior visits), following destination image segmentation theory.

Results and Discussions

Results

Demographic Respondents

Table 1 indicates that the 300-responder sample is intentionally balanced by visit status (first-time vs repeater = 150/150), which strengthens the validity of the measurement invariance assessment (MICOM) and supports interpretable group-wise comparisons (PLS-MGA). This design reduces the risk that observed differences in structural paths are artifacts of unequal group sizes rather than genuine experience-based differences. The sample also provides a strong basis for evaluating digital-quality mechanisms because it is dominated by the working-age cohort (25–34 = 39.7%; 35–44 = 24.3%). Working-age travelers are typically frequent users of mobile and platform-based travel planning and are therefore more likely to engage with multiple digital touchpoints (social media discovery, website verification, messaging, booking interfaces, and on-site updates). This demographic profile increases the likelihood that respondents' assessments of SMAQ (interactivity, navigability, format richness) and OCIQ (cross-channel consistency and seamlessness) are grounded in actual usage rather than limited exposure. The geographic composition (Asia-Pacific = 55.7%, Europe = 20.0%, North America = 10.3%) also adds analytical value because respondents bring different digital habits and information-validation norms shaped by market and platform ecosystems. Such origin diversity introduces variance in how destination cues are interpreted, which is beneficial for testing whether SMAQ and OCIQ operate as broadly credible signals when forming DI-MICE and PMDC, rather than reflecting a single-region bias. Importantly, the travel-purpose distribution supports the study's MICE framing. While leisure/holiday remains dominant (72.3%), the presence of a substantive business/work segment (14.3%) increases the relevance of the competitiveness construct because business-oriented travelers typically evaluate destinations through a more instrumental lens (reliability, coordination efficiency, and time costs). This segment, therefore, strengthens the logic for testing OCIQ as a professionalism and readiness signal, while leisure travelers provide a complementary context where SMAQ-driven persuasion and image formation may be more salient. Length of stay further reinforces this relevance. Stays clustering at 4–7 nights (50.7%) are consistent with typical conference or event durations, while the 8+ nights segment (27.0%) suggests "bleisure" extensions where travelers engage with a broader set of destination services and information sources. Longer exposure increases the opportunity to experience cross-channel transitions (pre-trip information $\rightarrow$ booking $\rightarrow$ in-stay service/updates $\rightarrow$ post-stay sharing), which makes evaluations of omnichannel integration more meaningful. Accommodation patterns also support construct validity. The dominance of hotels/resorts (54.7%) aligns with Bali's MICE infrastructure because hotels are central nodes for meetings, venue coordination, concierge services, and event logistics. At the same time, villas/private rentals (30.0%) introduce behavioral variance in touchpoint usage (greater reliance on digital self-service and messaging rather than standardized hotel channels), which can enrich the meas-

urement of OCIQ and reduce the risk that results are driven only by one accommodation ecosystem. Finally, the sample's high education level (79.3% diploma/bachelor or postgraduate) is a methodological advantage for this topic. Evaluating SMAQ and OCIQ requires respondents to compare information across channels, detect consistency/inconsistency, and judge credibility and completeness. Higher educational attainment supports the assumption that respondents can provide reliable, discriminating judgments about digital touchpoints, thereby strengthening the interpretability of the paths from SMAQ/OCIQ to DI-MICE and PMDC. Overall, these demographic characteristics provide both relevance (MICE-related purpose, stay duration, hotel-based infrastructure) and heterogeneity (origin, accommodation, and experience status), which enhances the study's ability to test the proposed digital pathways and to meaningfully interpret differences between first-time and repeat visitors.

Table 1. Demographic profile of respondents (n = 300)

Variable	Category	n	%
Gender	Male	171	57.0
	Female	129	43.0
Age (years)	18–24	42	14.0
	25–34	119	39.7
	35–44	73	24.3
	45–54	42	14.0
	55+	24	8.0
Region of Residence	Asia–Pacific	167	55.7
	Europe	60	20.0
	North America	31	10.3
	Latin America	17	5.7
	Middle East & Africa	25	8.3
Visit Status to Bali	First-time visitor	150	50.0
	Repeat visitor	150	50.0
Primary Trip Purpose	Leisure / Holiday	217	72.3
	Business / Work	43	14.3
	VFR	27	9.0
	Wellness / Other	13	4.3
Length of Stay in Bali	≤ 3 nights	67	22.3
	4–7 nights	152	50.7
	8+ nights	81	27.0
Accommodation Used	Hotel / Resort	164	54.7
	Villa / Private Rental	90	30.0
	Guesthouse / Homestay	36	12.0
	Other (eco-lodge, hostel, etc.)	10	3.3
Education Level	High school or below	62	20.7
	Diploma / Bachelor's	171	57.0
	Postgraduate (Master / PhD)	67	22.3

(Source: Author's Data, 2025)

Reliability and Validity

The constructs delineated in Table 2 exhibit robust psychometric characteristics, thereby substantiating the reliability and validity of the measurement model. All latent variables demonstrate elevated internal consistency, as indicated by Cronbach's alpha and composite reliability (CR) values that surpass the established benchmarks of 0.70 and 0.80, respectively, signifying stable and trustworthy measurement across the items. Furthermore, each construct attains an Average Variance Extracted (AVE) exceeding 0.50, thereby affirming sufficient convergent validity and implying that the indicators accurately encapsulate their respective underlying constructs. The consistently elevated factor loadings (spanning from 0.768 to 0.867) further corroborate that individual indicators make substantial contributions to the constructs they are designed to assess. Collectively, these findings validate that the measurement model satisfies the requisite criteria for reliability and validity, thus providing a formidable foundation for subsequent analysis of the structural model.

Table 2. The constructs of the model

Variable/Indicator	Loading	Alpha	CR	AVE
Social-Media Affordance Quality (SMAQ)		0.853	0.901	0.694
Bali's official MICE posts feel interactive (I can easily comment, DM, or get a response).	0.811			
The content is easy to navigate (clear menus/links/hashtags to detailed venue info).	0.841			
The rich media formats (video/360/live) help me evaluate venues and logistics	0.862			
From posts, I can reach the right contact/RFP quickly when I need specifics.	0.816			
Omnichannel Integration Quality (OCIQ)		0.839	0.892	0.674
Information is consistent across website, email, WhatsApp, and the event app	0.853			
I can seamlessly switch channels without repeating my details (e.g., RFP → follow-up)	0.817			
Pre-event to on-site handoffs are smooth (registration, wayfinding, updates)	0.794			
Updates are synchronized in real time across all official channels.	0.818			
MICE Destination Image (DI-MICE)		0.835	0.890	0.670
Bali appears professionally capable of hosting large-scale events	0.768			
Bali's MICE ecosystem looks innovative and tech-ready	0.810			
It seems easy and reliable to organize MICE in Bali	0.831			
Bali communicates sustainable, responsible event practices	0.863			
Perceived MICE Destination Competitiveness (PMDC)		0.879	0.892	0.675
Compared with rivals, Bali is a top choice for meetings and conventions	0.867			
Bali offers superior support services for planners and delegates	0.817			
Bali provides high value for money for MICE	0.809			
Bali meets international standards for MICE infrastructure and operations	0.839			
I would recommend Bali over competing destinations for future events	0.771			

(Source: Author's Data, 2025)

Discriminant Validity

Table 3. Discriminant validity measures the differentiation of constructs

Variables	DI-MICE	OCIQ	PMDC	SMAQ
Fornell-Larcker				
DI-MICE	0.819			
OCIQ	0.716	0.821		
PMDC	0.662	0.661	0.821	
SMAQ	0.697	0.699	0.643	0.833
Heterotrait–Monotrait				
DI-MICE				
OCIQ	0.851			
PMDC	0.763	0.760		
SMAQ	0.822	0.824	0.734	

(Source: Data Analysis SmartPLS4, 2025)

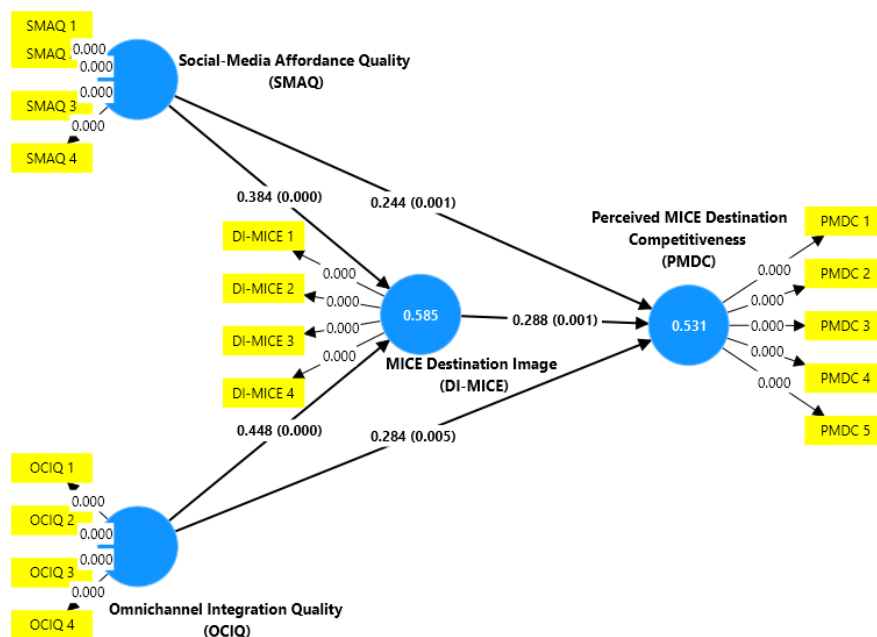
Table 3 shows that the Fornell–Larcker results confirm that each construct demonstrates adequate discriminant validity, as the square root of the AVE for every variable (0.819–0.833) is higher than its correlations with other constructs. This indicates that DI-MICE, OCIQ, PMDC, and SMAQ are conceptually distinct and capture unique dimensions of the model. Complementing this, the Heterotrait–Monotrait ratios (HTMT = 0.734–0.851) all fall below the recommended threshold of 0.90, further supporting the differentiation among constructs. Together, these findings demonstrate that the model's variables do not overlap excessively and measure clearly distinguishable theoretical concepts, thereby satisfying the criteria for discriminant validity.

Structured Framework and Hypothetical

Table 4. Structured framework and hypothetical outcomes

Hypothesis	β	t-value	p-value	97.5% confidence path interval		VIF	f ² /Upsilon V	R ²	Q ²	Report?
				Upper	Lower					
Direct Effect										
SMAQ -> DI-MICE	0.384	4.788	0.000	0.215	0.530	1.958	0.183			Yes
SMAQ -> PMDC	0.244	3.265	0.001	0.093	0.391	2.315	0.055	0.585	0.578	Yes
OCIQ -> DI-MICE	0.448	5.463	0.000	0.298	0.617	1.958	0.249			Yes
OCIQ -> PMDC	0.284	2.827	0.005	0.089	0.481	2.445	0.071	0.531	0.484	Yes
DI-MICE -> PMDC	0.288	3.432	0.001	0.123	0.450	2.429	0.074			Yes
Indirect Effect										
SMAQ -> DI-MICE -> PMDC	0.129	2.860	0.004	0.041	0.199		0.012			Yes
OCIQ -> DI-MICE -> PMDC	0.111	2.700	0.007	0.052	0.229		0.017			Yes

(Source: Analyzed by SmartPLS4, 2025)



(Source: Data Analysis SmartPLS4, 2025)

Figure 2. Results of structural equation models' evaluations

Table 4 and Figure 2 illustrate that the structural model results indicate that all proposed hypotheses (H1a–H4b) are supported, with strong statistical evidence. H1a is supported, showing that Social-Media Affordance Quality positively influences MICE Destination Image ($\beta = 0.384$, $t = 4.788$, $p < 0.000$), with a 97.5% confidence interval ranging from 0.215 to 0.530, VIF = 1.958, and a moderate effect size ($f^2 = 0.183$). H1b is also supported, as Social-Media Affordance Quality significantly predicts Perceived MICE Destination Competitiveness ($\beta = 0.244$, $t = 3.265$, $p = 0.001$), with a confidence interval of 0.093 to 0.391, VIF = 2.315, and a small but meaningful effect ($f^2 = 0.055$). H2a is supported, demonstrating that Omnichannel Integration Quality has a strong positive effect on MICE Destination Image ($\beta = 0.448$, $t = 5.463$, $p < 0.000$), with a confidence interval from 0.298 to 0.617, VIF = 1.958, and a substantial effect size ($f^2 = 0.249$). H2b is supported as well, indicating that Omnichannel Integration Quality significantly enhances Perceived Competitiveness ($\beta = 0.284$, $t = 2.827$, $p = 0.005$), with a confidence interval of 0.089 to 0.481, VIF = 2.445, and a small effect size ($f^2 = 0.071$). Additionally, H3 is supported since MICE Destination Image significantly predicts Perceived Competitiveness ($\beta = 0.288$, $t = 3.432$, $p = 0.001$), with a confidence interval ranging from 0.123 to 0.450, VIF = 2.429, and a small effect contribution ($f^2 = 0.074$). The mediation results further confirm the model: H4a is supported, revealing that Social-Media Affordance Quality indirectly influences Perceived Competitiveness through Destination Image ($\beta = 0.129$, $t = 2.860$, $p = 0.004$), with a confidence interval of 0.041 to 0.199 and an indirect effect size of $f^2 = 0.012$. Finally, H4b is supported, indicating that Omnichannel Integration Quality also exerts a significant indirect effect through Destination Image ($\beta = 0.111$, $t = 2.700$, $p = 0.007$), with a confidence interval between 0.052 and 0.229 and an indirect effect size of $f^2 = 0.017$. The mediation effects of destination image are small but meaningful (upsilon $v = 0.012$ for SMAQ and 0.017 for OCIQ), indicating minimal-to-moderate mediation strength. The model demonstrates strong explanatory and predictive power, with $R^2 = 0.585$ and $Q^2 = 0.578$ for DI-MICE, and $R^2 = 0.531$ and $Q^2 = 0.484$ for PMDC, confirming substantial variance explained and high predictive relevance.

Table 5. MICOM summary

Construct	Step 2: Compositional Invariance (p-value)	Step 3a: Mean Difference (p-value)	Step 3b: Variance Difference (p-value)	MICOM Conclusion
DI-MICE	0.652	0.517	0.517	Invariant
OCIQ	0.445	0.936	0.936	Invariant
PMDC	0.949	0.383	0.383	Invariant
SMAQ	0.731	0.803	0.803	Invariant

(Source: Analyzed by SmartPLS4, 2025)

Table 5 shows that all constructs exhibit $p > 0.05$ in Step 2, Step 3a, and Step 3b, indicating partial measurement invariance is established. This confirms that MGA comparisons between groups are valid and unbiased (Cheah et al., 2023). Since all p-values in Steps 2 and 3 exceed 0.05, partial measurement invariance is established, which is sufficient to justify meaningful multi-group comparisons using PLS-MGA.

Table 6. MGA final result

Hypothesis	Ft-V	R-V	Difference (Ft-V - R-V)	2-tailed P value	Report?
SMAQ -> DI-MICE	0.537	0.185	0.352	0.012	Yes
OCIQ -> DI-MICE	0.304	0.638	-0.334	0.020	Yes
DI-MICE -> PMDC	0.254	0.364	-0.109	0.501	No

Explanation Ft-V : First-time visitor; R-V : Repeat Visitor

Table 6 shows that the MGA results reveal meaningful differences between first-time visitors (Ft-V) and repeat visitors (R-V). For H5a, visitor experience the path SMAQ → DI-MICE, first-time visitors show a substantially stronger effect (0.537) compared with repeat visitors (0.185), and the difference is statistically significant (2-tailed $p = 0.012$), indicating that users

encountering Bali's MICE marketing for the first time respond more strongly to social-media affordances. Likewise, for H5b visitor experience, the effect of OC IQ → DI-MICE differs significantly between groups (2-tailed $p = 0.020$), with repeat visitors (0.638) responding more strongly to omnichannel consistency than first-time visitors (0.304), suggesting that repeated engagement enhances sensitivity to integrated digital touchpoints. In contrast, for H5c visitor experience, DI-MICE → PMDC shows no significant group difference ($p > 0.05$), indicating that both groups evaluate competitiveness similarly once their destination image is formed. These findings confirm that group-specific differences exist in selected structural paths, supporting hypotheses related to the moderating role of the visitor. The results support H5a and H5b, indicating that visitor experience moderates the effects of SMAQ and OC IQ on destination image. However, H5c is not supported, as the effect of destination image on perceived competitiveness does not differ significantly between first-time and repeat visitors.

Discussions

Effects of Social-Media Affordance Quality

Social-Media Affordance Quality (SMAQ) significantly strengthens Bali's MICE destination image and perceived competitiveness. Interactive and media-rich official content functions not only as an information source but as a professional signal that enhances trust, credibility, and perceived capability. This extends social-media affordance theory from leisure tourism to high-stakes MICE decision-making contexts characterized by higher risk and coordination demands (Keelson et al., 2024; Liu et al., 2024; Wang et al., 2024).

Effects of Omnichannel Integration Quality

Omnichannel Integration Quality (OC IQ) positively influences both MICE destination image and perceived competitiveness. Seamless integration across digital and on-site touchpoints signals operational readiness and professional coordination, reducing friction across the MICE journey. These findings confirm omnichannel quality as a key competitive signal for destinations hosting complex international events (Gerea et al., 2021; Lazaris et al., 2021; Liu et al., 2024).

Mediating Role of MICE Destination Image

MICE Destination Image acts as a central mediating mechanism linking digital quality to perceived competitiveness. While SMAQ and OC IQ directly enhance competitiveness, their indirect effects through destination image underscore the role of image as a cognitive filter through which digital signals translate into competitive evaluations. This supports destination competitiveness theory and extends it by embedding digital affordances and omnichannel integration in the MICE context (González-Rodríguez et al., 2023; Song, 2024).

Moderating Role of Visitor Experience

Visitor experience moderates selected relationships. First-time visitors rely more heavily on social-media affordances to form destination image, whereas repeat visitors respond more strongly to omnichannel integration quality, reflecting experience-based evaluation processes. However, once an image is formed, both groups assess competitiveness similarly, indicating the stabilizing role of destination image across experience levels (Avloniti et al., 2025; Gerea et al., 2021; Schofield et al., 2020).

Managerial Implications for Bali's MICE Sector

For practitioners, the results suggest a dual digital strategy. Interactive social-media content should be prioritized to attract first-time MICE visitors, while seamless omnichannel integration across websites, messaging platforms, and event applications is essential for retaining repeat clients and professional planners. Aligning these digital tools across the MICE journey can strengthen Bali's position as a competitive, high-quality MICE destination.

Evidence that is inconsistent or contingent

Although our findings support positive effects of SMAQ and OC IQ on DI-MICE and perceived competitiveness, prior literature also suggests that digital-channel effects are not universally positive and can be context-dependent. First, some studies report that social-media engagement and rich digital content do not always strengthen destination evaluations when audiences question credibility (e.g., perceived promotional bias, influencer commercialization) or when negative user-generated content is salient; under these conditions, high interactivity or vivid formats may amplify skepticism rather than improve image. This implies that the impact of SMAQ on DI-MICE can weaken or even become ambiguous when trust cues and information authenticity are insufficient. Second, omnichannel integration benefits can also be mixed. Research on omnichannel experience shows that integration quality may yield limited gains when cross-channel “seamlessness” raises expectations that are not matched during on-site delivery, creating a confirmation gap (high digital promise but uneven service reality). In such cases, integrated messaging may increase perceived risk because consumers interpret inconsistency as a signal of operational weakness.

Therefore, OC IQ may not uniformly strengthen competitiveness perceptions unless integration is paired with consistent operational performance. Third, some destination and service studies indicate that destination image does not always translate strongly into competitiveness or choice once decision-makers prioritize functional constraints such as budget, flight connectivity, venue availability, and risk management requirements. In MICE contexts specifically, competitiveness judgments can be driven by tangible capacity and organizational readiness, meaning image can play a smaller role when decision criteria are dominated by logistical feasibility. These mixed findings help interpret our multi-group results. The non-significant difference in the DI-MICE → PMDC path between first-time and repeat visitors suggests that, once an image is formed, competitiveness judgments may converge across experience levels, consistent with the notion that competitiveness is partly anchored in functional considerations beyond image alone. Overall, incorporating these inconsistent findings indicates that SMAQ and OC IQ operate as strategic signals, but their effectiveness depends on credibility, expectation management, and the alignment between digital communication and on-site delivery.

Conclusions

This study examined how Social-Media Affordance Quality (SMAQ) and Omnichannel Integration Quality (OC IQ) influence Bali’s MICE destination image (DI-MICE) and perceived MICE destination competitiveness (PMDC), while comparing first-time and repeat visitors. The findings confirm that both SMAQ and OC IQ have significant positive effects on DI-MICE and PMDC. In addition, DI-MICE functions as a critical mediating mechanism, indicating that digital-quality investments strengthen competitiveness perceptions largely by enhancing the destination’s professional and trustworthy image. The model demonstrates strong explanatory power for the proposed digital pathways. The multi-group results further suggest that digital mechanisms are experience-contingent: first-time visitors depend more heavily on social-media quality to form MICE-related perceptions of Bali, whereas repeat visitors are more influenced by seamless omnichannel integration across platforms and touchpoints. This pattern aligns with the logic that first-time visitors rely more on digitally mediated persuasion and cues, while repeat visitors evaluate consistency and coordination based on accumulated interactions. Theoretically, this study extends destination competitiveness research by integrating digital experience and affordance perspectives into MICE tourism. The results show that digital channels are not merely informational but operate as strategic signals of competence that shape destination image and, through image, influence competitiveness judgments in B2B/B2C MICE markets.

Based on the results, three actionable recommendations are proposed for Bali’s DMO and MICE stakeholders.

1. Strengthen SMAQ to convert attention into confidence (first-time market): prioritize interactive and navigable content, including venue walkthroughs, short-form videos, live Q&A, and clear calls-to-action that reduce uncertainty and communicate readiness.

2. Institutionalize OCIQ through cross-channel alignment (repeat market and professional planners): ensure consistency of venue specifications, packages, contacts, and response standards across websites, apps, email/WhatsApp, and partner listings, so inquiries, quotations, registration, and follow-up feel seamless rather than fragmented.
3. Segment digital strategy by visitor experience: deploy image-building and credibility cues for first-time visitors, while emphasizing frictionless coordination, continuity, and service integration for repeat visitors and business-oriented users.

This study is cross-sectional and focused on Bali; thus, it cannot capture how perceptions evolve over time or whether the pattern generalizes to other destinations. The sample also comprises users who engage with Bali's official digital channels, which may bias responses towards digitally engaged visitors. Future research should apply longitudinal or multi-destination designs and expand the model to include additional determinants such as sustainability signals, perceived risk, and AI-driven personalization. Mixed-method designs that combine surveys with interviews of event planners and MICE organizers would also deepen understanding of how digital cues translate into destination choice and competitiveness assessments.

References

- Alim, A., Shafiullah, Sazid, Y. K., Kanon Datta, Huq, F., Akib, A. A., & Hossain, J. (2025). Omni-Channel Customer Experience and Advancing Customer Loyalty. *Asian Academy of Management Journal*, 30(1), 97–119. <https://doi.org/10.21315/aamj2025.30.1.4>
- Avloniti, C., Yfantidou, G., Papaioannou, A., Kouthouris, C., & Costa, G. (2025). Participant Perceptions and Destination Image: Cognitive and Affective Dimensions in Local Sports Contexts. *Tourism and Hospitality*, 6(2), 120. <https://doi.org/10.3390/tourhosp6020120>
- Ban, O., Faur, M., Coita, D. C., Benea, C., Özdoğan, O. N., & Kavoura, A. (2025). Tourists' destination perception of competitiveness based on travel motivation. *Journal of Vacation Marketing*. <https://doi.org/10.1177/13567667251319036>
- BNDCC. (2024). Bali Nusa Dua Convention Center, the Official Venue of G20 Meeting Series. Bali Nusa Dua Convention Center. <https://baliconventioncenter.com/news/bali-nusa-dua-convention-center-the-official-venue-of-g20-meeting-series/>
- BPS-Bali. (2024). Bali Province Tourism Development July 2024. <https://bali.bps.go.id/en/pressrelease/2024/09/02/717897/bali-province-tourism-development-july-2024.html>
- BPS-Statistics Bali. (2025). Number of Monthly Foreign Visitors to Bali by Gate (Person), 2025 . BPS-Statistics Bali. <https://bali.bps.go.id/en/statistics-table/2/MTA2IzI%3D/number-of-monthly-foreign-visitor-to-bali-by-gate--person-.html>
- Buckley, J. A. B., & Feldman, P. S. M. (2024). Effects of channel integration on the omnichannel customer experience. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2364841>
- Cheah, J.-H., Amaro, S., & Roldán, J. L. (2023). Multigroup analysis of more than two groups in PLS-SEM: A review, illustration, and recommendations. *Journal of Business Research*, 156, 113539. <https://doi.org/10.1016/j.jbusres.2022.113539>
- Cooper, M.-A., Camprubí, R., Koc, E., & Buckley, R. (2021). Digital Destination Matching: Practices, Priorities and Predictions. *Sustainability*, 13(19), 10540. <https://doi.org/10.3390/su131910540>
- Croasmun, J. T., & Ostrom, L. (2011). Using Likert-type scales in the social sciences. *Journal of Adult Education*, 40(1), 19–22. <https://eric.ed.gov/?id=EJ961998>
- Cronjé, D. F., & du Plessis, E. (2020). A review on tourism destination competitiveness. *Journal of Hospitality and Tourism Management*, 45, 256–265. <https://doi.org/10.1016/j.jhtm.2020.06.012>
- Flynn, K., & Fischer, S. (2024, December 9). Global ad market to surpass \$1 trillion for first time. Axios Media Inc. <https://www.axios.com/2024/12/09/ad-revenue-growth-2024>
- Gao, W., Fan, H., Li, W., & Wang, H. (2021). Crafting the customer experience in omnichannel contexts: The role of channel integration. *Journal of Business Research*, 126, 12–22. <https://doi.org/10.1016/j.jbusres.2020.12.056>

- Gerea, C., Gonzalez-Lopez, F., & Herskovic, V. (2021). Omnichannel Customer Experience and Management: An Integrative Review and Research Agenda. *Sustainability*, 13(5), 2824. <https://doi.org/10.3390/su13052824>
- González-Rodríguez, M. R., Díaz-Fernández, M. C., & Pulido-Pavón, N. (2023). Tourist destination competitiveness: An international approach through the travel and tourism competitiveness index. *Tourism Management Perspectives*, 47, 101127. <https://doi.org/10.1016/j.tmp.2023.101127>
- Grand View Research. (2025). MICE Market (2025 - 2030). <https://www.grandviewresearch.com/industry-analysis/mice-market-report>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Keelson, S. A., Bruce, E., Egala, S. B., Amoah, J., & Bashiru Jibril, A. (2024). Driving forces of social media and its impact on tourists' destination decisions: a uses and gratification theory. *Cogent Social Sciences*, 10(1). <https://doi.org/10.1080/23311886.2024.2318878>
- Lachowicz, M. J., Preacher, K. J., & Kelley, K. (2018). A novel measure of effect size for mediation analysis. *Psychological Methods*, 23(2), 244–261. <https://doi.org/10.1037/met0000165>
- Lazaris, C., Sarantopoulos, P., Vrechopoulos, A., & Doukidis, G. (2021). Effects of Increased Omnichannel Integration on Customer Satisfaction and Loyalty Intentions. *International Journal of Electronic Commerce*, 25(4), 440–468. <https://doi.org/10.1080/10864415.2021.1967005>
- Lee, N., & Kim, B.-S. (2023). Differences of Host Country-Destination Image Assessment for International Students According to Risk Perception in COVID-19 Tourism. *Sage Open*, 13(3). <https://doi.org/10.1177/21582440231181592>
- Litvinova-Kulikova, L., Aliyeva, Z., & David, L. D. (2023). MICE Tourism: How the Pandemic Has Changed It. *Journal of Tourism and Services*, 14(26), 197–218. <https://doi.org/10.29036/jots.v14i26.496>
- Liu, J., Wang, C., & Zhang, T. (Christina). (2024). Exploring social media affordances in tourist destination image formation: A study on China's rural tourism destination. *Tourism Management*, 101, 104843. <https://doi.org/10.1016/j.tourman.2023.104843>
- Liu, Q., Tian, J., & Huang, L. (2024). Influence of Omnichannel Integration Quality on Consumer Cross-channel Retention Behavior. *Procedia Computer Science*, 242, 633–639. <https://doi.org/10.1016/j.procs.2024.08.120>
- Nasution, F. A., Ginting, P., Silalahi, A. S., & Situmorang, S. H. (2025). Attractive inbound marketing on tourist loyalty at tourism destinations in Indonesia. *Innovative Marketing*, 21(2), 93–104. [https://doi.org/10.21511/im.21\(2\).2025.08](https://doi.org/10.21511/im.21(2).2025.08)
- Nazir, M. U., Yasin, I., & Tat, H. H. (2021). Destination image's mediating role between perceived risks, perceived constraints, and behavioral intention. *Heliyon*, 7(7), e07613. <https://doi.org/10.1016/j.heliyon.2021.e07613>
- Ogbeibu, S., Jabbour, C. J. C., Burgess, J., Gaskin, J., & Renwick, D. W. S. (2022). Green talent management and turnover intention: the roles of leader STARA competence and digital task interdependence. *Journal of Intellectual Capital*, 23(1), 27–55. <https://doi.org/10.1108/JIC-01-2021-0016>
- Rahman, S. M., Carlson, J., Gudergan, S. P., Wetzels, M., & Grewal, D. (2025). How do omnichannel customer experiences affect customer engagement? Theory and empirical validation. *Journal of Business Research*, 189, 115196. <https://doi.org/10.1016/j.jbusres.2025.115196>
- Ramos, C. M. Q., & Pinto, K. (2024). How Gastronomic Image Shapes Tourism Competitiveness: An Approach with Sentiment Analysis. *Applied Sciences*, 14(20), 9524. <https://doi.org/10.3390/app14209524>
- Rittichainuwat, B., Laws, E., Maunchontham, R., Rattanaphinanchai, S., Muttamara, S., Mouton, K., Lin, Y., & Suksai, C. (2020). Resilience to crises of Thai MICE stakeholders: A longitudinal study of the destination image of Thailand as a MICE destination. *Tourism Management Perspectives*, 35, 100704. <https://doi.org/10.1016/j.tmp.2020.100704>

- Romanova, A. (2025). Digitalization in the event industry: a bibliometric analysis. *EuroMed Journal of Business*, 20(3), 577–594. <https://doi.org/10.1108/EMJB-11-2023-0306>
- Schofield, P., Coromina, L., Camprubi, R., & Kim, S. (2020). An analysis of first-time and repeat-visitor destination images through the prism of the three-factor theory of consumer satisfaction. *Journal of Destination Marketing & Management*, 17, 100463. <https://doi.org/10.1016/j.jdmm.2020.100463>
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach*. (7th ed.). Wiley & Sons.
- Sin, C. Y., Mohamad, A. A., Chiun, L. M., Suaidi, M. K., & Tong, H. S. (2021). Determinants of Destination Image And Competitiveness In Sibu Heritage Trail: A PLS-SEM Approach. *Studies of Applied Economics*, 40(1). <https://doi.org/10.25115/eea.v40i1.4671>
- Song, Z. (2024). Research on Assessing Comprehensive Competitiveness of Tourist Destinations Within Cities, Based on Field Theory and Competitiveness Theory. *Sustainability*, 17(1), 90. <https://doi.org/10.3390/su17010090>
- Sriraksa, C., Pongsa, P., & Rodjanapradied, R. (2021). MICE Destination Competitiveness and Air Transportation Facility – Thailand. Thailand. *Journal of Research Methodology*, 34(2), 239-264. <https://doi.org/10.14456/jrm.2021.15>
- Tse, S., & Tung, V. W. S. (2022). Measuring the Valence and Intensity of Residents' Behaviors in Host–Tourist Interactions: Implications for Destination Image and Destination Competitiveness. *Journal of Travel Research*, 61(3), 565–580. <https://doi.org/10.1177/0047287521997576>
- Wang, Z., Udomwong, P., Fu, J., & Onpium, P. (2023). Destination image: A review from 2012 to 2023. *Cogent Social Sciences*, 9(1). <https://doi.org/10.1080/23311886.2023.2240569>
- Wang, Z., Udomwong, P., Fu, J., & Onpium, P. (2024). Destination image analysis and marketing strategies in emerging panda tourism: a cross-cultural perspective. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2364837>
- Yhee, Y., Goo, J., Koo, C., & Chung, N. (2024). Meme-affordance tourism: The power of imitation and self-presentation. *Decision Support Systems*, 179, 114177. <https://doi.org/10.1016/j.dss.2024.114177>
- Yoon, T.-H., & Wang, S. (2023). How Important Is Stakeholder Collaboration in the MICE Industry: Antecedents and Outcomes of Supply Chain Integration. *Sustainability*, 15(20), 14966. <https://doi.org/10.3390/su152014966>
- Zazueta-Hernández, M. G., & Velarde-Valdez, M. (2024). Analysis of the competitiveness factors for MICE tourism: the case of Mazatlan, Sinaloa. *International Journal of Tourism Cities*, 10(2), 701–717. <https://doi.org/10.1108/IJTC-11-2022-0248>

Beyond Sustainability: Assessing the Regenerative Margins and Community Participation Gaps in Serangan Tourism

Dewa Ayu Diyah Sri Widari ^{1*}, Dewa Putu Oka Prasiasa ²

¹Universitas Triatma Mulya, Indonesia

²Universitas Dhyana Pura, Indonesia

*Corresponding Author: sri.widari@triatmamulya.ac.id

Abstract: This research investigates the strategic evolution of Serangan Tourism Village, Bali, as it transitions from conventional sustainability paradigms toward a proactive regenerative framework. The study primarily aims to assessing regenerative margins and diagnose systemic gaps within local social governance. Employing a qualitative methodology, the investigation utilizes a robust analytical toolkit comprising Value Chain Analysis, Power-Interest Mapping, and Arnstein's Ladder of Participation. Data derived from participatory observation, semi-structured in-depth interviews, and longitudinal document reviews were integrated through a comprehensive cross-analysis. The findings empirically confirm the attainment of a positive regenerative margin in Serangan, largely catalyzed by the marine conservation community's restorative efforts. This achievement is underpinned by regenerative parallelism, a mechanism where the restoration of coral reefs and turtle habitats directly augments the destination's economic competitiveness. Despite these gains, a critical participation disparity remains; while conservation actors spearhead the regenerative transition, essential stakeholders most notably Local Culinary Community are relegated to the placation stage with limited decision-making agency. Such governance imbalances threaten the long-term resilience of regenerative outcomes. This study contributes to the field by operationalizing regenerative parallelism as a functional metric for tourism development. Ultimately, the research concludes that enduring regenerative success necessitates fundamental governance restructuring, moving toward delegated power for local actors and the diversification of restorative funding through impact investment.

Keywords: Community Participation; Regenerative Margin; Regenerative Tourism; Serangan Village; Stakeholder Mapping; Value Chain Analysis.

History Article: Submitted 29 January 2026 | Revised 25 February 2026 | Accepted 10 March 2026

How to Cite: Widari, D. A. D. S., Prasiasa, D. P.O.. (2026). Beyond sustainability: assessing the regenerative margins and community participation gaps in Serangan tourism. *Journal of Applied Sciences in Travel and Hospitality*, 9(1), 27-40.

Introduction

The conventional tourism development model, traditionally oriented towards short-term economic gains and maximizing visitor arrivals, has demonstrably resulted in significant negative externalities. These effects are most evident in the accelerating deterioration of environmental quality within coastal ecosystems (Holden, 2009), the erosion of local cultural integrity, and widening socio-economic disparities among host populations (Scheyvens & Russell, 2012). Destinations endowed with fragile natural resources, particularly coastal tourism villages, now confront existential challenges that necessitate a more visionary governance paradigm. In response to these systemic failures, the concept of Regenerative Tourism has emerged as the most progressive contemporary perspective. Unlike sustainability, which focuses on harm reduction, this paradigm seeks to actively restore and enrich ecological assets while expanding the socio-economic capacities of the community (Hutchins & Storm, 2019). The efficacy of this model hinges on a fundamental shift in power dynamics, positioning local communities not merely as passive beneficiaries but as autonomous decision-makers and central actors in the recovery process. Consequently, tourism is increasingly redefined as a transformative mechanism that restores the symbiotic relationship between humans and their environment (Bellato et al., 2023; Pung et al., 2024).

Within this regenerative framework, local communities function as the critical nexus connecting conservation, cultural heritage, and economic resilience (Salazar, 2012). Established literature on community-based tourism underscores that meaningful participation is determined by the degree of control communities possess over development trajectories (Hutchins & Storm, 2019; Miedes-Ugarte & Flores-Ruiz, 2025). According to Arnstein's Ladder of Citizen Participation, genuine empowerment is only achieved when communities reach the levels of Delegated Power or Citizen Control (Hurlbert & Gupta, 2024). However, contemporary research suggests that many destinations remain stagnant at the Placation level, a form of pseudo-participation where consultation exists but transformative power is withheld (Paddison & Hall, 2024; Gonçalves, 2025). This discrepancy creates participation gaps that impede the realization of equitable regenerative benefits. Furthermore, Regenerative Tourism Value Chain theory (Lara-Morales & Clarke, 2024) offers a robust framework for integrating social and ecological dimensions into value creation. Every stage of the tourism chain is expected to generate a positive regenerative margin, defined as the net benefit that improves the state of natural and social systems beyond their baseline condition.

Coastal tourism villages in Bali, renowned for their ecological uniqueness and socio-cultural wisdom, represent ideal candidates for this regenerative transition. This study focuses on Serangan Tourism Village in Denpasar, Bali, a destination currently navigating the complexities of marine ecosystem restoration through turtle and coral reef conservation. Despite a robust formal management structure, Serangan faces internal stakeholder dynamics where certain local groups remain in supportive, non-autonomous roles, a condition described by (Hutchins & Storm, 2019) as a failure to adopt living systems thinking in organizational structures. While the framework by (Bellato, 2025) provides a strong conceptual foundation, there remains a critical shortage of empirical tools to measure these regenerative margins at the village level (Dredge, 2022; Myran et al., 2025). Most existing studies remain predominantly qualitative, making it difficult to distinguish between simple impact management and true ecosystem restoration (Prihadi et al., 2024).

While the transition toward regenerative paradigms is increasingly debated, current literature remains heavily skewed toward theoretical abstractions, leaving a methodological void in how these restorative outcomes are empirically evaluated at the micro-village level. To address this gap, this research introduces two original conceptual frameworks: Regenerative Parallelism and Regenerative Asymmetry. While established works, such as Bellato et al. (2023), primarily focus on macro-level systemic healing, these proposed concepts pivot toward the socio-political friction within the local governance unit. Regenerative Parallelism is formulated here to describe the strategic alignment where economic diversification and ecological restoration function as mutually reinforcing, non-competing drivers within the tourism value chain. Conversely, Regenerative Asymmetry characterizes the documented imbalance in power and autonomy among local stakeholder clusters, a phenomenon that often serves as a primary barrier to equitable regenerative distribution but remains under-theorized in coastal contexts.

Furthermore, there is a persistent lack of empirical analysis that explicitly links the dynamics of power and interests among stakeholders with community participation gaps defined as the dissonance between community aspirations and the reality of their on the ground involvement (Price et al., 2025; Swarbrooke & Horner, 2012). These organizational power dynamics often constitute major points of inertia, limiting the opportunities for equitable participation. This study aims to bridge these conceptual and empirical gaps by introducing the frameworks of Regenerative Parallelism, the strategic alignment of economic and ecological goals, and Regenerative Asymmetry, the power imbalances that stifle community autonomy. By evaluating the transformation of Serangan Tourism Village through the assessment of regenerative margins and community involvement, this research offers significant theoretical and practical contributions. Theoretically, it enriches regenerative tourism literature by operationalizing the assessment of regenerative margins, moving beyond the macro-level systemic focus of existing studies (e.g., Bellato et al., 2023). Practically, the findings serve as a roadmap for local policymakers to design inclusive governance, enhance the autonomy of supporting groups, and ensure that regenerative success is inextricably linked to equitable social governance.

Methodology

This study adopts a qualitative, descriptive approach to explore the dynamics of roles, challenges, and community contributions in the development of regenerative tourism in Serangan Tourism Village, Bali. This methodology was selected for its ability to provide a deep understanding of the social, cultural, and environmental contexts, acknowledging that the meaning of regeneration and participation gaps are socially constructed through the holistic analysis of stakeholder interactions (Creswell, 2014).

Data were collected through three principal methods: (1) participatory observation to directly document regenerative tourism practices in the field; (2) semi-structured interviews with key informants to explore their experiences and perspectives; and (3) document studies to gather relevant theories, concepts, and policy perspectives. Informants were selected through purposive sampling, encompassing the village head, tourism awareness groups (*Pokdarwis*), customary village leaders, coral reef and turtle conservation communities, fishing communities, and local business actors. A total of 14 key informants (N=14) participated in this study. The selection followed the principle of data saturation, where no new thematic insights emerged from subsequent interviews. The detailed profile of these informants is presented in Table 1.

Table 1. Profile of Research Participants

Partisipant Code	Stakeholder Category	Role/Position	Gender	Experience (Years)
P-01	Village Government	Village Head	Female	6
P-02	Customary Village	Customary Village Leader	Male	5
P-03	Tourism Awareness Group	Head of <i>Pokdarwis</i>	Male	10
P-04	Tourism Awareness Group	<i>Pokdarwis</i> Secretary	Male	6
P-05	Marine Conservation	Coral Reef Conservation	Male	5
P-06	Marine Conservation	Turtle Conservation	Male	20
P-07	Marine Conservation	Conservation Community Member	Male	9
P-08	Fishing Communities	Head of Fisherman Association	Male	12
P-09	Fishing Communities	Traditional Fisherman Representative	Male	11
P-10	Local Business Actors	Watersport Operator	Male	10
P-11	Local Business Actors	Local Tour Coordinator	Male	7
P-12	Local Culinary Community	Culinary Group Representative	Female	12
P-13	Local Culinary Community	Small-scale Food Vendor	Male	9
P-14	Local Culinary Community	Culinary Business Owner	Female	13

Ethics and compliance

To ensure the highest standards of research integrity, this study adhered to the following protocols:

1. Ethical clearance: beyond administrative permits, formal Ethical Clearance was obtained from the University's Institute of Research, Publication, and Community Service (LP3M). This approval ensures that the research design protects the rights and well-being of all participants.
2. Administrative and field access: An official research permit from the university was submitted to the Serangan Village administration. Once administrative clearance was obtained, potential informants were contacted individually via WhatsApp to introduce the study and seek their participation.
3. Informed consent: participation was entirely voluntary. Prior to each interview, an informed consent process was conducted where the research objectives, data usage, and the right to withdraw at any time were clearly explained. To maintain privacy, all informants were pseudonymized using codes (P-01 to P-14) as shown in Table 1. Face-to-face meetings were arranged at the informants' convenience to build rapport and ensure a secure environment for data sharing.

To ensure the validity and reliability of the findings, this study employed triangulation techniques, specifically source triangulation by cross-checking information across different stakeholder groups, and methodological triangulation by verifying interview data with direct field observations and official records.

Data analysis and analytical framework

The raw qualitative data gathered from interviews and observations were initially processed using a systematic thematic analysis approach. This involved coding the data and grouping them into coherent themes: regenerative governance, value generation, and participation deficits. To facilitate the multi-layered analytical design of this study, Microsoft Excel 365 was employed for systematic cross-tabulation and qualitative codification procedures, following the qualitative data analysis framework established by (Miles et al., 2014). The data were subjected to a multi-layered analytical design consisting of: (1) Power-Interest Matrix: employed to map stakeholder positions based on their influence and interest. To visualize these dynamics, stakeholders were assigned qualitative descriptors which were then codified into numerical scores (1–5). This scoring is not intended for statistical inference but serves as a systematic heuristic to compare relative positions based on qualitative evidence, such as the documented frequency of participation and commitment of personal resources; (2) Arnstein's Ladder of Participation: used to assess the actual degree of community involvement in decision-making, distinguishing between symbolic participation and genuine empowerment (Hurlbert & Gupta, 2024); and (3) Cross-Analysis: this technique synthesized the previous two analyses with the identification of internal and external constraints faced by each stakeholder group. This approach highlights the interrelationships among stakeholder position, participation level, and obstacles. To ensure inter-rater reliability and minimize researcher bias, the qualitative scoring and thematic categorization underwent a peer-debriefing process, where initial interpretations were cross-verified against the interview transcripts to reach an analytical consensus.

Additionally, the study incorporated Regenerative Tourism Value Chain framework (Lara-Morales & Clarke, 2024) to empirically measure the regenerative margin. This framework systematically maps the net value created by each activity, underscoring that every stage from inbound logistics to post-service, must generate not only economic value but also a positive regenerative margin that actively improves social and environmental conditions (Dredge, 2022). The analysis specifically identified how Serangan's conservation mandates are integrated into the value chain's economic activities. Consequently, this multi-faceted framework enables a holistic understanding of the relationships among power, interests, participation, and the creation of regenerative value, as illustrated in Figure 1.

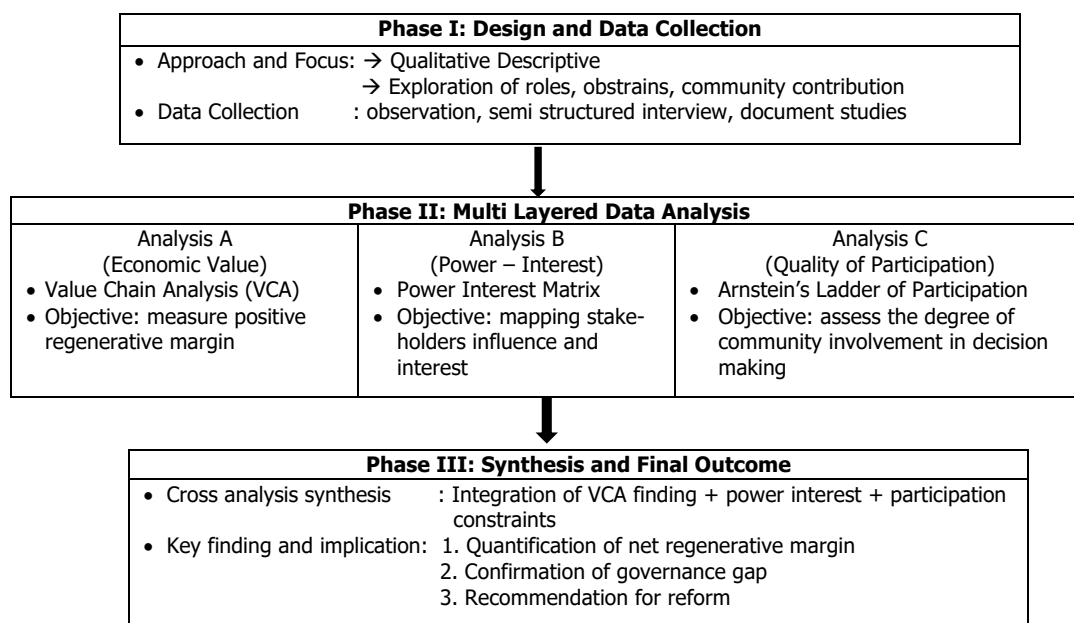


Figure 1. Multi-Layered Research Methodology Framework

The framework illustrates the interconnected phases of the research, moving from primary data collection (observation, interviews, document study) to the synthesis of three core analytical

tools: Stakeholder Power-Interest Matrix (mapping influence), Arnstein's Ladder of Participation (assessing community control gaps), and Regenerative Tourism Value Chain Analysis (measuring net social and ecological margin). The Cross-Analysis phase then integrates these findings to formulate policy recommendations for inclusive regenerative governance in the Serangan Tourism Village.

Results and Discussions

Community Participation Gaps in Serangan Tourism Village

Serangan Tourism Village represents a strategic integration of ecological restoration and cultural preservation, serving as a vital nexus for education, history, and maritime tourism. The village's identity is anchored by spiritual landmarks such as Pura Sakenan and Masjid Asyuhada, which provide a robust foundation for its social fabric. Ecologically, the area is defined by its rich marine biodiversity, where regenerative tourism is operationalized through restorative engagements like turtle release programs and coral adoption. These initiatives are complemented by traditional boat (*jukung*) craftsmanship and a unique maritime-based culinary sector, featuring seaweed-based dishes and grilled fish, collectively forming an authentic tourist experience. This transition marks a radical paradigm shift from historical turtle consumption toward a contemporary conservation movement, deeply embedded in local wisdom and codified through customary regulations (*awig-awig*) guided by the *Tri Hita Karana* principle.

The governance model in Serangan demonstrates a potent synergy between spiritual values and customary administration, ensuring tourism facilitates a net-positive impact on ecosystem recovery. Rather than merely neutralizing environmental pressures, tourism activities actively support the management of mangrove forests, which serve as both critical biophysical shields and participatory educational platforms. While seaweed cultivation has declined as a primary economic driver, it persists as a symbolic representation of local wisdom regarding the sustainable utilization of maritime resources. Under the legitimizing force of *awig-awig*, Serangan ensures that all tourism initiatives align with communal social etiquette and ecological harmony, positioning the village as a resilient model for community-based regenerative development.

The successful operationalization of regenerative tourism within Serangan is intrinsically linked to the multifaceted roles and active engagement of the local community. This grassroots support system is categorized into several strategic functions:

1. Institutional Leadership: the Tourism Awareness Group (*Pokdarwis*) and the Customary Village (*Desa Adat*) act as the primary catalysts for community-based initiatives, overseeing the holistic management and strategic expansion of the tourism village.
2. Marine Restoration Experts: the Coral Reef Community leads technical conservation efforts, including the maintenance of transplanted corals and the preparation of grafting substrates, ensuring the long-term vitality of the seabed ecosystem.
3. Socio-Economic Operators: Local residents drive the circular economy as managers of homestays and culinary establishments. Their involvement extends to waste management programs, eco-preneurship training, and the diversification of local tourism packages.
4. Maritime Stewards: the Fishing Community maintains a dual-purpose role by balancing traditional fishing with tourism services, such as guiding visitors to conservation zones and assisting reef communities in monitoring underwater restoration sites.
5. Conservation Practitioners: Dedicated community members staff the Turtle Conservation Education and Training Center (TCEC), fulfilling critical roles as hatchery technicians and caretakers who ensure the survival of hatchlings prior to their release.
6. Value-Added Entrepreneurs: The Local Culinary Community has established specialized culinary clusters focused on seafood, a strategic move designed to amplify the market value of the daily catch provided by local fishermen and strengthen the local supply chain.

Following the identification of these diverse roles, a systematic scoring and mapping process was executed to evaluate the relative power and interest of each stakeholder. This quantitative assessment provides a foundation for understanding the governance dynamics within Serangan's regenerative framework. The comprehensive results of this stakeholder power-interest mapping are synthesized in Table 2.

Table 2. Scoring and Mapping of Stakeholder Power-Interest

Stakeholder	Power (1-5)	Interest (1-5)	Total Score	Quadrant Position	Management Strategy
The Tourism Awareness Group	5	5	10	High-High	Manage closely
The Customary Village	5	5	10	High-High	Manage closely
The Local Business Actors	4	5	9	High-High	Manage closely
The Fishing Community	4	4	8	High-High	Manage closely
The Marine Conservation Community	3	5	8	Medium-High	Keep Informed & Engage
The Local Culinary Community	3	4	7	Medium-High	Keep Informed & Satisfied

The "Key Players" identified in the high power-interest quadrant constitute the foundational pillars of regenerative tourism in Serangan. These stakeholders represent the operational and philosophical core of the initiative, exercising substantial influence and unwavering commitment to the program's long-term trajectory. Consequently, the optimal management strategy necessitates a manage closely approach across all development phases. Within this quadrant, the Tourism Awareness Group and the Customary Village (*Desa Adat*) hold dual legitimacy, blending formal administrative authority with traditional customary power. Acting as institutional gatekeepers, they ensure that tourism development remains congruent with indigenous values. Their comprehensive involvement, from strategic planning to rigorous evaluation, is essential to prevent developmental stagnation. Similarly, Local Business Actors serve as the primary economic drivers. Their influence necessitates the daily integration of regenerative practices, such as circular waste management and ethical service standards. For this group, management must prioritize equitable benefit-sharing to sustain local motivation. Furthermore, the Fishing Community possesses noteworthy practical control over maritime access and traditional transportation (*jukung*). Their role in facilitating eco-tourism is pivotal for livelihood diversification, thus, formalizing their status as sea monitors or active conservation partners is a critical strategy to secure their full support for marine initiatives.

Stakeholders positioned within the Medium Power, High Interest quadrant act as the functional executors of Serangan's ecosystem restoration agenda. Despite possessing limited formal authority, their high level of interest makes them indispensable to the village's regenerative goals. The management focus here is to keep them informed and engage to maintain their high commitment. The Marine Conservation Community is the definitive engine of environmental recovery. The success of coral and turtle restoration programs is a key determinant of the destination's regenerative margin. Since their power is primarily technical and operational, the stability of the entire model relies on the consistent resource commitment and official recognition provided by the Key Players. Meanwhile, the Local Culinary Community represents a vital link in the circular economy, focusing on enhancing the market value of maritime products. While their culinary offerings are a major tourist draw, their moderate formal power necessitates interventions aimed their economic autonomy. Strategies should focus on capacity building and securing a resilient supply chain from local fishermen, aligning with the core principles of community empowerment.

In synthesis, the regenerative tourism governance model in Serangan demands a collaborative framework centered on interest synchronization. Strengthening collective governance is paramount to ensure that the three primary groups: The Tourism Awareness Group, Local Business Actors, and Fishing Community, operate synergistically to facilitate inclusive decision making and mitigate potential conflicts of interest (Naylor et al., 2021; Prasiasta & Widari, 2024). Furthermore, empowering ecosystem implementers involves providing comprehensive institutional legitimacy and resource support to Marine Conservation Community. As a high priority group with vital interests but limited formal leverage, their technical capacity for ecosystem restoration must be reinforced (Jager et al., 2020). This integrated governance approach is a fundamental prerequisite for successfully transitioning Serangan's tourism sector from a conventional sustainability model toward a truly regenerative paradigm.

Following the categorization of stakeholders through the power-interest matrix, the analysis proceeds to an in-depth examination of how their respective levels of involvement are manifested within the tourism management process. To evaluate the diversity and substantive depth of this engagement, the theoretical framework of Arnstein's Ladder of Participation is employed, as adapted from (Wondirad & Ewnetu, 2019). This framework functions as a critical diagnostic tool to discern whether the community exercises genuine power-sharing and control or remains confined to a passive role as mere information recipients. Table 3 synthesizes the mapping of the stakeholder participation ladder within Serangan Tourism Village.

Table 3. Mapping of Stakeholder Participation Ladder

Level of Participation	Characteristics of Involvement	The Role of Community	Mapping Analysis
8. Citizen Control	The community has full control over the planning process and programs.	The Tourism Awareness Group & Customary Village (a) act as the main drivers, managers, and policymakers of the tourist village.	Highest level: the local community, through customary institutions and the Tourism Awareness Group, has full control over the direction and operation of tourism.
7. Delegated Power	The community holds the majority in decision-making; external partners only provide advice.	The Local Business Actor (c) manage homestays and restaurants; Fishing Community (d) determines rates and routes for jukung tourism.	High: technical and economic management is decentralized to communities, who run the business without intervention from the Tourism Awareness Group /Customary Village.
6. Partnership	Power is shared through negotiation, planning, and joint decision-making.	The Marine Conservation Community (b) in designing restoration and education programs.	High: there is a close partnership between the community and Tourism Awareness Group and external partners (NGOs/Government agencies related to conservation).
5. Placation	The community is allowed to give suggestions and input, but the main stakeholders still have the right to assess and make the final decision.	The Local Culinary Community (e) participates in the establishment of the culinary village; the community (c) is involved in waste management	Moderate: participation is accommodated and turned into a program, but the framework (location, budget) is often determined by the managers
4. Consultation	The community voices their opinions through surveys and public meetings, but there is no guarantee that their input will be used.	Participation in ecotourism-based entrepreneurship training or regular village meetings to gather input.	Medium: used as a tool to collect feedback and ideas, especially from residents who are not yet part of formal structures.
3. Informing	The community is only provided with information about rights, options, or programs. Communication is one-way.	Launching new programs or announcing the results of evaluations/awards for tourist villages.	Low: occurs at the program socialization stage, where the community is only informed about the results or decisions.
2. Therapy	Pretending to involve the community, but the actual goal is to change community behavior to align with the objectives of the main stakeholders.	No explicit role is found.	Very low: the concept of regenerative tourism attacks is based on local initiatives, so this practice is minimal.
1. Manipulation	Using community representatives to secure public support.	No explicit roles were found.	Very low: the concept of regenerative tourism attacks is based on

local initiatives, so this practice is minimal.

The empirical evidence synthesized in Table 3 reveals that community engagement in Serangan Tourism Village is predominantly concentrated at the higher echelons of Citizen Power (Levels 6 through 8). This indicates the successful integration of a robust, high-participation model within the village's regenerative tourism framework. Formal institutional bodies, specifically the Tourism Awareness Group and the Customary Village, occupy the Citizen Control level, exerting autonomous authority over the strategic direction and policy-making of the destination. These results align with previous scholarship emphasizing that the resilience of sustainable village governance is intrinsically linked to the institutional sovereignty of local organizations (Jager et al., 2020; Simanihuruk et al., 2024). Furthermore, functional actors such as local entrepreneurs, fishing communities, and conservation groups operate at the Delegated Power and Partnership levels, signifying a decentralized governance structure where authority is effectively shared and technical management is managed independently by the community.

In contrast, certain peripheral activities—particularly specialized training programs and the nascent development of the culinary sector, remain positioned at the Placation and Consultation levels. While this 'participation gap' is frequently attributed to varying degrees of individual capacity within the community, it is imperative to ensure these stages do not stagnate into pseudo-participation or tokenism, which could ultimately stifle long-term empowerment. This disparity suggests that while stakeholders are heard, their influence over structural decisions remains advisory rather than pivotal. However, the near-absence of Manipulation and Therapy is a noteworthy indicator of institutional health; it confirms that the residents of Serangan act as sovereign subjects rather than passive objects within the tourism ecosystem. This finding robustly supports the regenerative paradigm, which necessitates that local communities serve as the primary architects in the restoration of socio-ecological assets (Hussain & Haley, 2022; Widari, et al., 2025). The observed progression from Informing to Partnership underscores a burgeoning culture of transparency and bidirectional communication. This shift is not merely procedural but foundational, serving as the bedrock for social trust and participatory governance. To bridge the remaining gaps, the transition from consultation to delegated power must be intentional, ensuring that even emerging sectors like Local Culinary Community can evolve from participants into stewards of the regenerative value chain.

The maturity of Serangan's participation model is further evidenced by the Marine Conservation Community's position at the Partnership level, ensuring that critical environmental mandates, such as coral reef and turtle rehabilitation, are executed through equitable collaboration. At this stage, the community functions as a co-manager in both the planning and implementation phases, fulfilling the core requirements of sustainable co-management principles (Nasution et al., 2024; Miedes-Ugarte & Flores-Ruiz, 2025). However, as new initiatives like the Culinary Village are currently categorized under Placation, the Tourism Awareness Group must proactively facilitate a transition toward higher autonomy to ensure that local voices are influential in profit distribution and management. Ultimately, the participation architecture in Serangan confirms that structured, cross-sectoral synergy is a vital prerequisite for realizing an inclusive regenerative model that delivers tangible socio-ecological dividends (Bellato, 2025). Consequently, the success of this governance model serves as a critical empirical benchmark and a strategic blueprint for other coastal tourism destinations in Bali and across the archipelago, proving that the redistribution of power to local institutions is the primary catalyst for transforming tourism into a genuine restorative force for both natural and social capital.

The operationalization of regenerative tourism in Serangan is confronted by a diverse array of challenges that are non-uniform and vary notably significantly across various stakeholder groups. These impediments are fundamentally shaped by each stakeholder's respective positioning within the power-interest matrix and their substantive degree of engagement in management processes. This analysis seeks to elucidate the critical intersection between stakeholder status, participation dynamics, and specific constraints, thereby facilitating the formulation of the targeted mitigation strategies synthesized in Table 4.

Table 4. Cross-Analysis of Power-Interest, Participation, and Constraints

Stakeholder	Level of Participation	Main Constraint	Mitigation Strategy
The Tourism Awareness Groups & the Customary Village	Citizen Control (8)	Risk of abuse of power and lack of transparency in fund allocation.	Implement an open financial reporting system that is periodically audited by the customary village and the village advisory body. Set clear terms of office.
The Local Business Actor	Delegated Power (7)	Limited capital to meet higher regenerative tourism standards.	Facilitate access to revolving funds or microcredit programs to improve business quality.
The Fishing Community	Delegated Power (7)	Conflict of interest between traditional fishing and the use of waters for conservation ecotourism.	Establish clear utilization zones and conservation zones. Provide attractive incentives from ecotourism so that fishermen choose tourism.
The Marine Conservation Community	Partnership (6)	Limited resources to sustain long-term coral and turtle restoration programs.	Ensure a consistent allocation of operational funds from the village tourism's own revenue. Build sustainable partnerships with NGOs or universities.
The Local Culinary Community	Placation (5)	Symbolic participation (Placation), lack of autonomy in management and marketing, which could potentially lower motivation.	Encourage this group to move up to the level of Delegation of Authority; give full authority over profit management and market development.

The examination of stakeholder dynamics in Serangan Tourism Village indicates that primary groups specifically Tourism Awareness Group, Customary Village, Local Business Actors, and Fishing Community, exercise pivotal authority within the realms of delegated power and citizen control. This governance structure is inherently aligned with the paradigms of community-based tourism and the regenerative model. Nevertheless, these stakeholders are confronted by internal impediments and resource scarcities, including transparency risks and potential conflicts of interest. Strategic mitigation necessitates the reinforcement of institutional frameworks, such as implementing mandatory financial audits and delineating precise resource zones to uphold communal trust and deter the centralization of power.

In contrast, the Local Culinary Community, despite maintaining a high degree of interest, is currently restricted to the Placation level. While their involvement is acknowledged, they lack substantive autonomy over operational management and the distribution of financial surpluses. To harmonize their interest with actual participation, targeted initiatives must be enacted to elevate this group toward delegated authority, empowering them to manage activities independently and maximize local maritime economic value (Widari & Prasiasa, 2022).

Furthermore, the Marine Conservation Community functions as a strategic collaborator at the Partnership level, despite possessing moderate formal power. Their technical proficiency in reef restoration and turtle protection is essential to the village's regenerative margin; however, their reliance on volatile funding remains a critical vulnerability. Mitigation efforts must prioritize financial resilience, perhaps through earmarked allocations from village-owned tourism revenue or the establishment of environmental endowment funds. Such measures are vital to ensuring the continuity of restorative practices amidst the inherent variations of the tourism market.

Overall, the participatory architecture in Serangan exemplifies a sophisticated cross-sectoral synergy where the institutional core maintains strategic oversight while support groups are progressively guided toward higher levels of empowerment. This nuanced approach is fundamental to securing the long-term viability of regenerative tourism and delivering authentic socio-ecological dividends to the local population (Paddison & Hall, 2024; Gonçalves, 2025). By successfully aligning institutional oversight with grassroots agency, the Serangan model demonstrates how community-led governance can effectively transform tourism into a restorative force, ensuring

the long-term resilience of both natural ecosystems and cultural heritage through proactive and structured mitigation.

Measuring the regenerative margins in Serangan Tourism Village

The assessment of regenerative margins in Serangan Tourism Village necessitates a comprehensive value chain analysis. This approach elucidates how stakeholder roles are operationalized to generate synergistic economic and regenerative outcomes across all functional stages, as detailed in Table 5 and Table 6.

Table 5. Main Activities (Direct Economic Creation)

Value Chain Stage	Main Stakeholder	Economic Value Generated	Regenerative Value Generated
Inbound Logistics	The Fishing Community, the Local Culinary Community	Diversifying fishermen's income through the sale of seafood (to meet culinary needs).	Encouraging the local circular economy, strengthening localized supply chains
Operations	The Local Actor Business, the Marine Conservation Community, the Fishing Community	The largest income comes from accommodation, culinary, and tourism transportation.	Core of regeneration: coral reef restoration; care and release of baby turtles; eco-friendly homestay practices
Outbound Logistics	The Local Culinary Community, the Tourism Awareness Group	Branding and increasing the market value of Serangan's specialty cuisine.	Enhancing the added value of local products, strengthening cultural identity.
Ethical Market Differentiation	The Tourism Awareness Group	Sales of premium-priced tour packages based on impact.	Market differentiation: attracting high-value tourists who care about the environment.
Service	The Local Community, the Conservation Community	Maintaining the reputation of the tourist village.	Environmental recovery: efficient waste reduction/management; post-visit conservation follow-up.

While Table 5 illustrates the direct creation of regenerative margins (which corresponds to Regenerative Value Generated in the table), their long-term viability depends on robust foundational support. Table 6 therefore maps these essential supporting activities, highlighting how governance, technology, and human resource management provide the critical infrastructure necessary to sustain the entire regenerative value chain.

Table 6. Supporting Activities (Foundation of Sustainability)

Value Chain Stage	Main Stakeholder	Economic Value Generated	Regenerative Value Generated
Governance Infrastructure	The Tourism Awareness Group & the Customary Village	Stability and authority: providing legitimacy to the entire value chain through citizen control.	Critical: these high positions must be used to ensure transparency so that the foundation does not collapse.
Technology/ Ecotourism Development	The Marine Conservation Community	Regenerative innovation: providing technical expertise (coral grafting, turtle conservation) which becomes a unique selling proposition.	Priority: although their power is moderate, their role is central to regenerative value. Ensuring their stable funding is a prerequisite for the success of this model.
Human Resource Management	The Local Actor Business, the Tourism Awareness Group	Improvement of service quality and local entrepreneurship.	Opportunity: to encourage Local Culinary Community that are still at the placation level to increase their capacity so they can move up to the delegated power level.

A comprehensive assessment of the tourism value chain in Serangan Village reveals that its institutional success is predicated on a strategic transition from conventional sustainability toward a regenerative paradigm. The empirical evidence confirms the attainment of a positive regenerative margin, a state where socio-ecological dividends outweigh environmental costs, primarily facilitated by the Marine Conservation Community during the operational phase. The role of this community, functioning at the Partnership level, is essential; without the tangible outcomes from these asset-based restoration efforts, Serangan's value chain would likely regress into traditional tourism, forfeiting its unique competitive edge. This synergy aligns with the discourse that regenerative and nature-based tourism harmonizes visitor interests with impact investment, requiring the integration of profound sustainability ethics into commercially viable tourism initiatives (Pung et al., 2024)

Moreover, the resilience of this framework is bolstered by regenerative parallelism, a mechanism where economic and ecological objectives are mutually reinforced through value integration and cross-subsidization. The Tourism Awareness Group (Pokdarwis) leverages the Marine Conservation Community as its core marketing narrative, fostering a positive feedback loop that strengthens the destination's overall stability. However, the equilibrium of this value chain faces substantial threats from asymmetric participation. The restricted autonomy of the Local Culinary Community, currently operating at the Placation level, risks bottlenecking outbound logistics and fracturing the local circular economy loop. Such participation gaps undermine the equitable capitalization of environmental impacts. To counteract this, governance must transcend traditional hierarchies to grant increased autonomy to economic support groups, thereby solidifying the community-based oversight essential for regenerative tourism. Consequently, Serangan's value chain must be managed as a conservation-centric model where strategic oversight by the Pokdarwis is supported by stabilized funding and enhanced autonomy for supporting economic actors.

Beyond the operational dynamics in Serangan, these findings offer a crucial theoretical shift by re-evaluating the ladder of participation within the specific context of regenerative tourism. While traditional Community-Based Tourism (CBT) frameworks often advocate for a uniform upward progression toward full local control (Naylor et al., 2021; Salazar, 2012), the Serangan case introduces the concept of Regenerative Asymmetry. This suggests that a positive regenerative margin can be sustained even with uneven participatory levels, provided that core restoration assets are managed through high-functioning partnerships. This perspective expands upon the regenerative paradigm proposed by (Bellato et al., 2023), emphasizing that regeneration is a non-linear process of socio-ecological healing rather than a static destination. Furthermore, the integration of conservation into the value chain supports the argument of (Haley, 2023), regarding restorative feedback loops. By bridging these theories, the research contributes a new lens to regenerative governance: that resilience lies in managing the dynamic tension between centralized strategic oversight and localized autonomy.

Furthermore, this study extends the theoretical understanding of the tourism value chain by repositioning ecological restoration as the primary driver of competitive advantage, rather than a secondary operational cost. In the context of Serangan, the Positive Regenerative Margin observed suggests that value creation is intrinsically linked to the health of the local commons, aligning with the living systems approach to tourism (Dredge, 2022). This necessitates a shift from traditional linear value chains toward a Restorative Value Network. Such a network implies that the economic viability of supporting actors, like the local culinary community, depends on the ecological integrity maintained by conservation groups, a concept that resonates with the principles of place-based planetary health (Bellato, 2025). Consequently, these findings propose that regenerative tourism theory must integrate a cross-sectoral dependency lens, where destination stability is measured by the strength of the feedback loops between environmental health and community-wide economic distribution (Duxbury et al., 2021).

In summary, the value chain analysis in Serangan underscores a fundamental shift from sustainability toward a regenerative tourism model, evidenced by the generation of positive regenerative margins during operations. The efficacy of the Serangan model is deeply rooted in regenerative parallelism, with Marine Conservation Community acting as a primary conservation asset that bolsters competitive advantage and creates a resilient feedback loop (Haley, 2023). Nevertheless, this research identifies critical vulnerabilities regarding the uneven distribution of

environmental dividends, particularly the limited participatory autonomy of supporting economic groups. This imbalance, which contradicts the beyond the ladder principle of engagement (Gonçalves, 2025), suggests that while strategic control is successfully held by Pokdarwis, long-term sustainability requires institutional reform. To maintain a robust value chain capable of attracting impact investment, future efforts must prioritize inclusive participation and the empowerment of all local actors, consistent with the evolving principles of regenerative governance (Dredge, 2022; Bellato, 2025; Duxbury et al., 2021). These findings establish Serangan Village as a pivotal case study for navigating the complexities of community-led regenerative tourism.

Conclusions

This research concludes that Serangan Tourism Village has evolved beyond the traditional boundaries of passive sustainability to establish a functional and active regenerative value chain. The core of this transformation lies in the achievement of a positive regenerative margin, propelled by regenerative parallelism. This mechanism ensures that the Marine Conservation Community's ecosystem restoration efforts act as a direct catalyst for the destination's economic vitality. The primary novelty of this study is the empirical validation of this restorative feedback loop, which demonstrates that destination resilience is fundamentally dependent on the vitality of its natural capital. However, the analysis also exposes critical participation disparities. While the institutional core is robust, supporting economic actors most notably the Local Culinary Community remain positioned at Placation level. This participation gap not only risks the equitable distribution of environmental benefits but also poses a threat to the enduring stability of the entire value chain, highlighting the critical need for stakeholder autonomy as a cornerstone of regenerative governance.

The implications of these findings are noteworthy for both academic discourse and field application. Theoretically, this study advances the governance literature by integrating Regenerative Value Chain with Arnstein's Ladder. This synthesis provides a sophisticated model that links community engagement gaps directly to the challenge of equitably capitalizing on regenerative assets. Furthermore, it contributes a nuanced framework for measuring regenerative margins, thereby enhancing the operational clarity of regenerative value. From a practical standpoint, the research serves as a strategic roadmap for local policymakers to initiate governance reforms. These reforms should prioritize elevating supporting economic groups from mere consultation toward delegated power to solidify the local circular economy. Moreover, the evidence of net-positive margins provides a compelling rationale for attracting impact investment and establishing endowment funds, ensuring the long-term stewardship of Serangan's ecological assets.

Despite its contributions, this study acknowledges limitations inherent in its qualitative, single-site approach. The findings are deeply rooted in the unique socio-ecological fabric of Serangan Tourism Village, and the analysis of participation dynamics relies on a targeted group of key stakeholders. Future research should address these constraints by employing mixed-methods approaches to examine the relationship between community autonomy and visitor satisfaction across a broader demographic. Additionally, investigating the effectiveness of diverse impact investment strategies and conducting comparative studies in similar coastal contexts would substantially enrich the global scholarship on regenerative tourism governance.

References

- Bellato, L. (2025). Regenerative development approaches involving tourism: insights derived from place. *Tourism Planning and Development*, 22(6), 960–980. <https://doi.org/10.1080/21568316.2024.2415119>
- Bellato, L., Frantzeskaki, N., & Nygaard, C. A. (2023). Regenerative tourism: a conceptual framework leveraging theory and practice. *Tourism Geographies*, 25(4), 1026–1046. <https://doi.org/10.1080/14616688.2022.2044376>
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA :Sage.
- Dredge, D. (2022). Regenerative tourism: transforming mindsets, systems and practices. *Journal of Tourism Futures*. <https://doi.org/10.1108/JTF-01-2022-0015>

- Duxbury, N., Bakas, F. E., de Castro, T. V., & Silva, S. (2021). Creative tourism development models towards sustainable and regenerative tourism. *Sustainability (Switzerland)*, 13(1), 1–17. <https://doi.org/10.3390/su13010002>
- Gonçalves, J. (2025). Participation beyond the ladder: A critical framework for understanding spatial engagement in Portugal. *Urban Governance*, 5(4), 447–454. <https://doi.org/10.1016/j.ugj.2025.09.001>
- Haley, M. (2023). Host Communities: The foundation of regenerative tourism. *Journal of Sustainability and Journal of Sustainability and Resilience Resilience*, 3(2).
- Holden, A. (2009). *An introduction to tourism and the environment*. London: Routledge.
- Hurlbert, M., & Gupta, J. (2024). The split ladder of participation: A literature review and dynamic path forward. *Environmental Science and Policy*, 157. <https://doi.org/10.1016/j.envsci.2024.103773>
- Hussain, A., & Haley, M. (2022). Regenerative tourism model: challenges of adapting concepts from natural science to tourism industry. *Journal of Journal of Sustainability and Resilience*, 2(1), 4.
- Hutchins, G., & Storm, L. (2019). *Regenerative leadership: the dna of life-affirming 21st century organizations*. Wyoming: Worldsworth Publishing.
- Jager, N. W., Newig, J., Challies, E., & Kochskämper, E. (2020). Pathways to implementation: evidence on how participation in environmental governance impacts on environmental outcomes. *Journal of Public Administration Research and Theory*, 30(3), 383–399. <https://doi.org/10.1093/jopart/muz034>
- Lara-Morales, O., & Clarke, A. (2024). Sustainable tourism value chain analysis as a tool to evaluate tourism's contribution to the sustainable development goals and local indigenous communities. *Journal of Ecotourism*, 23(2), 129–147. <https://doi.org/10.1080/14724049.2022.2147189>
- Miedes-Ugarte, B., & Flores-Ruiz, D. (2025). Strategies for the promotion of regenerative tourism: hospitality communities as niches for tourism innovation. *Administrative Sciences*, 15(1). <https://doi.org/10.3390/admsci15010010>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: a methods sourcebook* (3rd ed.). Thousand Oaks: Sage.
- Myran, M., Burrai, E., & Sterchele, D. (2025). From sustainable to regenerative? Embedding indigenous values into Norwegian tourism policies. *Journal of Policy Research in Tourism, Leisure and Events*. <https://doi.org/10.1080/19407963.2025.2535569>
- Nasution, R. K., Harahap, R. H., Kurniawati, D., & Ridho, H. (2024). The impact of community participation, government support, and private sector involvement on sustainable tourism development: moderating the role of collaborative governance. *Social Space*, 24(2), 202–225
- Naylor, R. S., Hunt, C. A., Zimmerer, K. S., & Taff, B. D. (2021). Emic views of community resilience and coastal tourism development. *Societies*, 11(3). <https://doi.org/10.3390/soc11030094>
- Paddison, B., & Hall, J. (2024). Regenerative tourism development as a response to crisis: harnessing practise-led approaches. *Tourism Geographies*. <https://doi.org/10.1080/14616688.2024.2381071>
- Prasiasa, D. P. O., & Widari, D. A. D. S. (2024). *Pro poor tourism di desa wisata*. Denpasar: Pustaka Larasan.
- Price, S., Taylor, S., Turnbull, K., & Stafford, M. R. (2025). A regenerative approach to tourism: Learnings from community enterprises. *Journal of Outdoor Recreation and Tourism*, 51. <https://doi.org/10.1016/j.jort.2025.100900>
- Prihadi, D. J., Zhang, G., Lahbar, G. M., & Pasaribu, B. (2024). Integration of community-based tourism (cbt) index and biophysical assessment for sustainable ecotourism mangrove: a case study of Karangsang, Indonesia. *Sustainability*, 16(7). <https://doi.org/10.3390/su16072806>
- Pung, J. M., Houge Mackenzie, S., & Lovelock, B. (2024). Regenerative tourism: perceptions and insights from tourism destination planners in aotearoa new zealand. *Journal of Destination Marketing and Management*, 32. <https://doi.org/10.1016/j.jdmm.2024.100874>

- Salazar, N. B. (2012). Community-based cultural tourism: Issues, threats and opportunities. *Journal of Sustainable Tourism*, 20(1), 9–22. <https://doi.org/10.1080/09669582.2011.596279>
- Scheyvens, R., & Russell, M. (2012). Tourism and poverty alleviation in Fiji: Comparing the impacts of small- and large-scale tourism enterprises. *Journal of Sustainable Tourism*, 20(3), 417–436. <https://doi.org/10.1080/09669582.2011.629049>
- Simanihuruk, M., Arafah, W., & Rahmanita, M. (2024). The role of governance, social welfare, and community participation on sustainable tourism village: a case study in pioneering tourism village, Bogor Regency, Indonesia. *International Journal of Research and Review*, 11(6), 432–439. <https://doi.org/10.52403/ijrr.20240650>
- Swarbrooke, J., & Horner, S. (2012). *Business travel and tourism*. London: Routledge.
- Widari, D. A. D. S., & Prasiasa, D. P. O. (2022). Nilai estetika lokal dan nilai ekonomi lokal dalam pengelolaan destinasi pariwisata di Bali Utara. *Mudra Jurnal Seni Budaya*, 37(1), 60–68. <https://doi.org/10.31091/mudra.v37i1.1883>
- Widari, D. A. D. S., Prasiasa, D. P. O., & Subadra, I. N. (2025). *Pariwisata regeneratif desa wisata pesisir*. Yogyakarta: Deepublish.
- Wondirad, A., & Ewnetu, B. (2019). Community participation in tourism development as a tool to foster sustainable land and resource use practices in a National Park Milieu. *Land Use Policy*, 88. <https://doi.org/10.1016/j.landusepol.2019.104155>

Mapping Tourist Attractions and Analyzing Travel Patterns in Jembrana Regency, Bali, Indonesia

Agus Muriawan Putra ^{1*}, Nyoman Ariana ², Agung Suryawan Wiranatha ³, Putu Perdana Kusuma Wiguna ⁴, I Gusti Bagus Arya Yudiastina ⁵

^{1,2,3,4,5} Udayana University, Indonesia

*Corresponding Author: muriawan@unud.ac.id

Abstract: Bali Province is one of Indonesia's leading tourism regions; however, empirical studies examining the spatial distribution of tourist attractions and tourist travel patterns at the regency scale remain limited, particularly in peripheral areas such as Jembrana Regency. This study addresses this gap by mapping the spatial distribution of tourist attractions and analyzing tourist travel patterns in Jembrana Regency. A spatial/GIS-based approach was employed by integrating secondary data from official tourism documents with field surveys, followed by geographic plotting and clustering based on administrative boundaries, accessibility, and spatial proximity. Tourist attractions were classified into four clusters: East (Pekutatan District), Central-East (Mendoyo District), Central-West (Jembrana District), and West (Negara and Melaya Districts). Tourist travel patterns were analyzed using observations, interviews, and Focus Group Discussions (FGDs), focusing on movement flows, travel routes, and visitation sequences. Destinations with high visitor numbers, strategic locations, and adequate amenities were identified as tourism hubs, including Medewi Beach, Pelataran Rambut Siwi, Perancak Village, Gilimanuk Bay, Blimbingsari Tourism Village, and Candikusuma Beach. The Denpasar–Gilimanuk road emerges as the primary corridor shaping accessibility and inter-cluster tourist mobility. The findings reveal that tourist movements follow structured spatial patterns influenced by accessibility, destination hierarchy, and geographic configuration. These results highlight the importance of integrated spatial planning, infrastructure enhancement, targeted destination promotion, and community capacity development to support balanced and sustainable tourism development in Jembrana Regency.

Keywords: Bali; Jembrana Regency; Mapping; Travel Patterns; Tourist Attractions.

History Article: Submitted 19 January 2026 | Revised 3 February 2026 | Accepted 3 March 2026

How to Cite: Putra, A.M., Ariana, Nyoman, Wiranatha, A. S., Wiguna, P. P. K., & Yudiastina, I. G. B. A. (2026). Mapping tourist attractions and analyzing travel patterns in Jembrana Regency, Bali, Indonesia. *Journal of Applied Sciences in Travel and Hospitality*, 9(1), 41-60.

Introduction

Travel patterns refer to the movement patterns of tourists, whether individually or in groups, as they engage in tourism activities, including travel routes, chosen destinations, and how tourists interact with tourist attractions or visited destinations (Shende et al., 2023; Sivalingam et al., 2024). In recent decades, travel patterns have undergone significant transformations driven by key factors such as preferences, tourist destinations, accessibility, globalization, the development of information technology, lifestyle changes, and the socio-economic conditions of tourists (Andani et al., 2024; Hughes et al., 2015; Muchlisin et al., 2024). Generally, travel patterns are not static but dynamic, changing over time as tourist preferences and behaviors evolve in how they plan and undertake their travels (Dantsuji et al., 2023).

One of the biggest changes in travel patterns is the access to information through the internet. In this digital age, tourists have greater ease in searching for and booking tour packages, transportation tickets, and accommodations through online platforms. The rapid development of technology allows tourists to plan their trips more flexibly, thanks to online applications and destination reviews that can be accessed directly (Hughes et al., 2015; Parvaneh et al., 2011; Shende et al., 2023). This pattern contrasts with the past when tourists relied more heavily on travel agents and information from brochures or tour guides. Now, tourists tend to be more independent in planning and organizing their trips, which is known as the "do-it-yourself" (DIY) travel phenomenon (Kagerbauer et al., 2024; Lavoie et al., 2024). These advancements in technology and information have brought about a revolution in the tourism industry, significantly

influencing tourist behavior (Zhang et al., 2023). Offline travel information used to be limited, rigid, and time-consuming to obtain, making travel planning more difficult and less flexible (Zhang et al., 2023).

Various online platforms have emerged, causing shifts in travel patterns. For instance, tourists can now easily book their trips. The emergence of travel platforms like Klook, AirBnB, Traveloka, Booking.com, Agoda, and others has significantly transformed travel patterns worldwide (Birenboim et al., 2023; Chang et al., 2023; Perelygina et al., 2022). These platforms offer tourists ease in planning, booking, and managing their trips independently and efficiently. For example, with platforms like Klook, tourists can easily book tickets for attractions, tours, and local activities at various destinations. Similarly, AirBnB provides unique and private accommodation options, often offering a more authentic experience for tourists. These platforms allow tourists to compare prices and availability for flights, hotels, and other services across global destinations (Perelygina et al., 2022).

Additionally, social media and visual content-sharing platforms like Instagram, YouTube, and TikTok have also transformed how tourists plan their travels (Shende et al., 2023). Tourists now often seek inspiration through visual content published by other travelers and influencers (Chen et al., 2022). Photos and videos showcasing the beauty of a destination or unique experiences often motivate tourists to visit those places (Yosmaoglu et al., 2023). These social media platforms also play a crucial role in promoting destinations that were previously less well-known, contributing to tourism trends that help make those destinations more recognized by tourists (Chen et al., 2022; Levi et al., 2024). With the ease of sharing experiences online, tourists also become part of a global community that influences each other's travel choices and preferences.

Behind this transformation in travel patterns, the topic of mapping travel patterns has long attracted the interest of researchers. For example, Shende et al. (2023) studied the changes in travel patterns during the pandemic on Twitter, while Chowdhury et al. (2025) conducted research on the unobserved heterogeneity factors in changing travel patterns in Florida. Similarly, Tang et al. (2024) studied the interesting topic of analyzing the repeated travel patterns of metro passengers, considering unexpected disruptions or barriers during travel. These studies highlight that travel patterns are an important research topic and should be explored at tourism destinations. Sardiana et al. (2021) used mapping to support tourism village promotion in Badung Regency, Bali, Indonesia. Recent studies in Bali further suggest that foreign market share is shaped by the choice of marketing channels and strategies (Ariana et al., 2025), while tourism village development increasingly incorporates sustainability considerations into local planning and management (Putra et al., 2023).

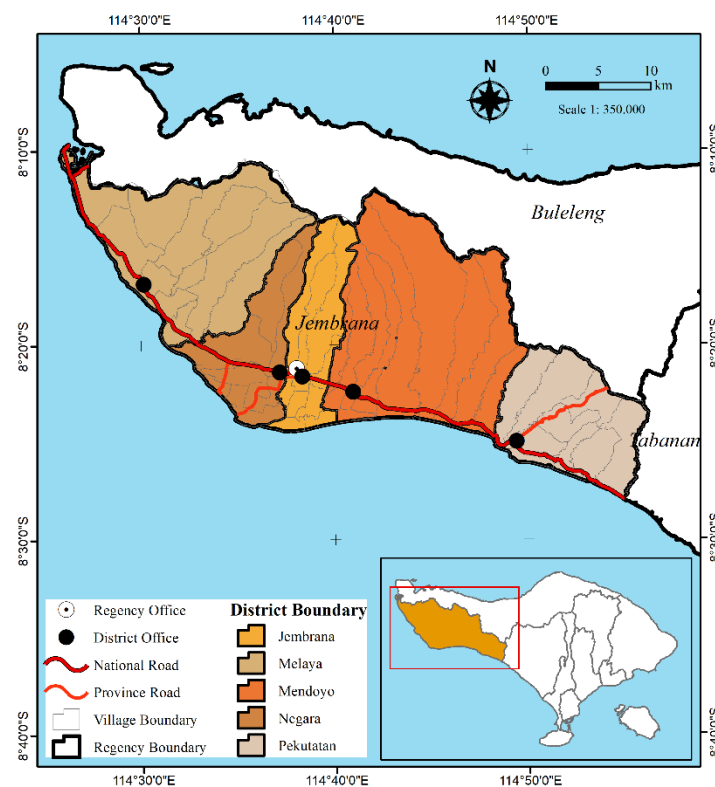
Following up on the general empirical condition and basic review of travel patterns, regarding the preferences of tourists visiting Bali, they tend to choose cultural tourism products combined with nature tourism (Ariana et al., 2023; Mihardja et al., 2023). This is in line with the history of Bali's tourism, which focuses on the utilization of culture and the preservation of nature. Bali is often referred to by beautiful names like the "Island of Heaven" and the "Island of the Gods." It is famous for its unique culture, lifestyle, traditions, arts, subak (irrigation system), temples, palaces, and social structure (Mihardja et al., 2023). As a region rich in both nature and culture, Bali offers various destinations with diverse attractions and tourist villages in each of its regencies and cities. These attractions are also found in one of its regencies, Jembrana. Jembrana is a potential transit and tourism destination. However, compared to other areas in Bali, Jembrana is still relatively quiet from the hustle and bustle of tourist activity, making its travel patterns more focused on tourists seeking a quieter, more authentic experience (authentic tourists). Tourists usually visit Jembrana as part of adventure tourism, ecotourism, and cultural journeys. This study will map the tourist attractions, and formulating travel patterns for tourists in Jembrana Regency.

Despite Bali's prominence as a global tourism destination, previous studies have a limited empirical investigation at the regency scale, particularly in peripheral regions such as Jembrana Regency. Existing research rarely integrates spatial mapping of tourist attractions with analyses of tourist travel patterns, resulting in an incomplete understanding of how spatial distribution, accessibility, and destination hierarchy interact to shape tourist mobility. Jembrana Regency represents a significant case due to its role as Bali's western gateway, its linear configuration

along the Denpasar–Gilimanuk corridor, and the spatially dispersed nature of its tourist attractions. Addressing this gap, the present study contributes to the body of knowledge by integrating a GIS-based spatial approach with empirical analysis of tourist travel patterns, offering insights into destination clustering, hub formation, and corridor-influenced mobility structures. Conceptually, this research is grounded in tourism spatial structure and mobility theories, which posit that the spatial distribution of attractions, mediated by accessibility and transportation networks, influences destination hierarchy and hub development, ultimately shaping tourist travel patterns. This integrated perspective provides a localized framework for understanding tourism dynamics in emerging and spatially fragmented destinations.

Methodology

The study on the travel patterns of tourists via land routes in Bali in 2024 focuses on the West Bali region, specifically in Jembrana Regency. Jembrana Regency is located at the western tip of Bali Island and is one of the 9 regencies/cities in Bali Province. The boundaries of Jembrana Regency are to the north by Buleleng Regency, to the south by the Indian Ocean, to the west by the Bali Strait, and to the east by Tabanan Regency. Geographically, Jembrana Regency is situated at coordinates $8^{\circ}09'30'' - 8^{\circ}28'02''$ South Latitude and $114^{\circ}25'53'' - 114^{\circ}56'38''$ East Longitude. The total area of Jembrana Regency is 84,180 hectares, or 14.96% of the total land area of Bali Island. The region includes mountains in the northern part, formed by the Peninguman Mountain Range, Mount Klatakan, Mount Bakungan, Mount Nyangkrut, Mount Sanggang, and Mount Batas. Administratively, Jembrana Regency consists of 5 districts: Pekutatan District, Mendoyo District, Jembrana District, Negara District, and Melaya District (Jembrana Regency Government, 2022). Figure 1 shows the location of the study.



(Source: Geospatial Information Agency of Indonesia, 2024)

Figure 1. Research Location

This study uses several data collection techniques, including document study, interviews, observations, mapping, and Focus Group Discussions (FGD). Document study is a data collection technique that involves obtaining data from documents, including primary and official sources, government documents, and other letters (Finnegan, 2006; Nasution, 2003). The credibility of

qualitative research results will be higher when documentation study is involved. The documents used as data sources in this study include activity reports from the Bali Provincial Tourism Office and data from the Jembrana Regency Tourism Office, as well as literature and data obtained online.

Two types of interviews are used in this research: in-depth (unstructured) interviews and structured interviews. In-depth interviews are informal interactions between the interviewer and the informant with the goal of obtaining more comprehensive and detailed data on the research topic. On the other hand, structured interviews are more formal as they are conducted according to predetermined guidelines. According to Creswell (2009), observation is a data collection technique in research when the researcher makes a direct visit to the research site to observe the behavior and activities of the community at the site. While at the research site, the researcher can make structured or semi-structured notes related to the activities observed. In this study, direct observations were made at each of the tourist attractions in Jembrana Regency. Interviews were conducted with 100 informants selected using purposive sampling. The selection criteria included: (1) tourists who had visited at least two tourist attractions within Jembrana Regency, (2) local community members involved in tourism-related activities, and (3) tourism stakeholders such as destination managers and government representatives. This approach ensured that informants possessed relevant knowledge and direct experience regarding tourist movement, destination characteristics, and accessibility conditions. The distribution of informants consisted of 50 tourists and 50 local residents.

This sample size was considered adequate for qualitative inquiry, as it allowed for the collection of diverse perspectives from key stakeholder groups directly involved in tourism activities (Gao et al., 2024; Pham et al., 2025). The number of informants was determined based on the principle of information richness rather than statistical representativeness, ensuring sufficient variation in experiences, travel behavior, and local knowledge.

Data collection continued until data saturation was achieved, defined as the point at which no new themes, patterns, or substantive insights emerged from subsequent interviews. Saturation was observed when responses became repetitive and additional informants did not contribute novel information (Naeem et al., 2024). This approach is consistent with established qualitative research standards, where sample adequacy is evaluated by thematic completeness and analytical depth rather than numerical thresholds (Lim, 2025).

Mapping in this research involving collecting, analyzing, and presenting information about tourist attractions to depict or describe the features within it. In the field, mapping were carried out using GPS technology to identify location of the tourist attraction and office stationery to record the location and uniqueness of tourist attractions. Location coordinate data from GPS will be downloaded and made into a map using Geographic Information System software.

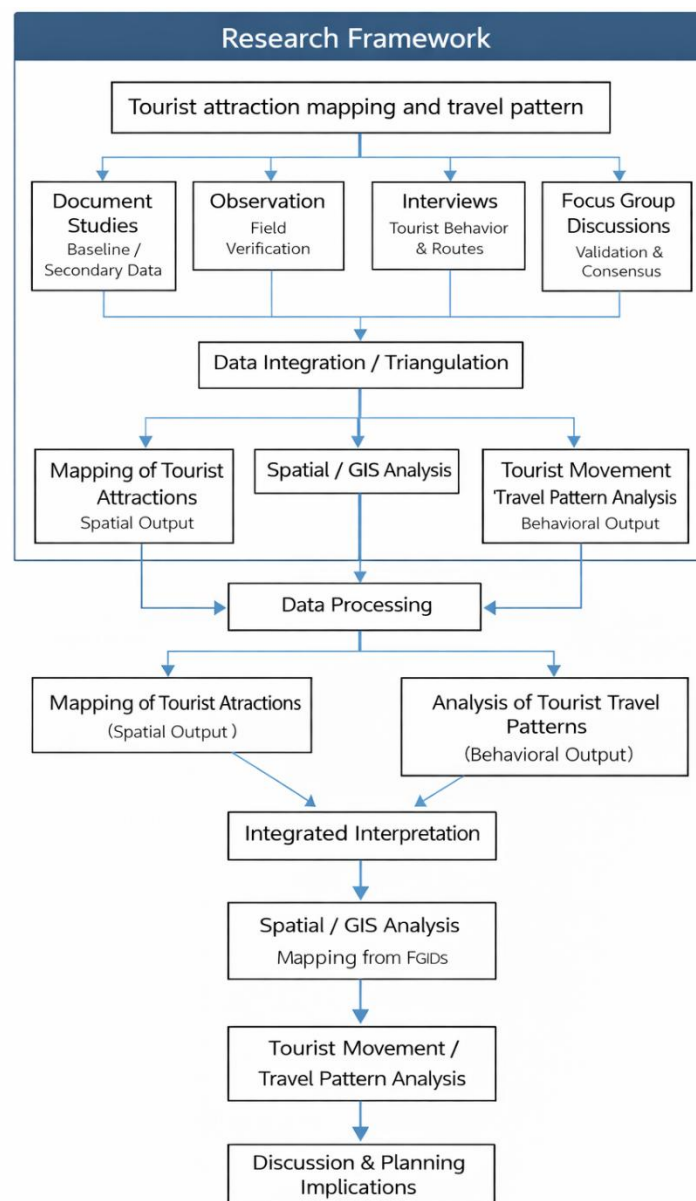
Focus Group Discussion (FGD) is a qualitative research method used to obtain interactive data from various sources with different backgrounds, allowing for more comprehensive data collection. The data collected provides a clearer and more directed understanding due to input from participants coming from diverse perspectives. FGD was conducted by inviting tourism stakeholders in Jembrana Regency, including government representatives, academics, entrepreneurs, tourism groups, and village tourism managers. The purpose of the FGD was to complement and confirm the results of the study.

Focus Group Discussions were conducted to validate spatial mapping results and to obtain collective insights into tourist travel behavior and destination linkages. A total of 50 participants were involved, representing local government agencies, tourism managers, community leaders, and tourism practitioners. The FGD sessions were held in Negara, the capital of Jembrana Regency in July, 2025. The discussions were guided by key themes, including: (1) validation of tourist attraction distribution and clustering, (2) identification of tourism hubs, (3) accessibility constraints and travel routes, and (4) perceived tourist movement patterns.

Moleong (2017) explains that data analysis begins with examining the available data, which is obtained from various methods including documentation, interviews, observations, and FGD. Subsequently, the data is reduced, or selected based on the research needs, while irrelevant data is excluded. Data analysis is performed through activities such as data reduction, data presentation, and drawing conclusions or verifying data. Two types of data analysis were used:

descriptive statistics and qualitative descriptive analysis. Descriptive statistics, also known as deductive statistics, are useful for data collection, organization, processing, presentation, and numerical data analysis. Statistical data can provide an orderly, concise, and clear picture of certain conditions, events, or phenomena, allowing for specific meanings or interpretations to be drawn (Husnul et al., 2020). This study used statistical data obtained from document studies related to visitor numbers, accommodation, restaurants, and tourism workforce in tourist destinations (DTW). Descriptive statistical analysis complements the qualitative descriptive analysis.

Creswell (2009) states that qualitative data analysis is carried out by the researcher concurrently with data collection, data interpretation, and writing the research report. This study uses a qualitative descriptive approach that aims to describe tourist attractions based on their current conditions. Tourist attractions are analyzed using the 4A concept (attraction, accessibility, accommodations, and ancillary). The DTW study is presented in a brief description focusing on the strengths and uniqueness of each tourist object, so that the findings can be used as a means of tourism promotion in Jembrana Regency. Figure 2 shows research diagram.



(Source: The Authors, 2024)

Figure 2. Research Diagram

The flowchart illustrates the integrated research framework employed to map tourist attractions and analyze tourist travel patterns in Jembrana Regency. The study begins with multi-method data collection consisting of document studies, field observations, interviews, and Focus Group Discussions (FGDs), each serving complementary roles in generating baseline data, field verification, behavioral insights, and stakeholder validation. The collected data are subsequently consolidated through a data integration and triangulation stage to ensure consistency and validity. The analytical process then proceeds through data processing, followed by two parallel yet interconnected analyses: spatial/GIS analysis for mapping the distribution and clustering of tourist attractions, and tourist movement analysis for identifying travel routes, flows, and visitation sequences. The outputs of both analyses are synthesized through integrated interpretation, enabling a comprehensive understanding of the spatial and behavioral dimensions of tourism. Finally, the findings are contextualized in the discussion stage to derive planning and development implications.

Results and Discussion

Results

The tourism condition in Jembrana Regency

Jembrana Regency consists of 5 districts: Pekutatan, Mendoyo, Jembrana, Negara, and Melaya, each of which has various tourist attractions and key tourism potential, including natural attractions, cultural attractions, artificial attractions, and tourist villages. There are 37 tourist attractions, consisting of 17 or 45.95% natural attractions, 5 or 13.51% cultural attractions, 8 or 21.62% artificial attractions, and 7 or 18.92% tourist villages.

In each district, the distribution of tourist attractions in Jembrana Regency is as follows:

- Pekutatan District has 8 natural tourist attractions and 2 tourist villages.
- Mendoyo District has 2 natural tourist attractions, 1 cultural tourist attraction, 4 artificial tourist attractions, and 1 tourist village.
- Jembrana District has 3 natural tourist attractions, 2 cultural tourist attractions, and 1 tourist village.
- Negara District has 1 natural tourist attraction and 1 cultural tourist attraction.
- Melaya District has 3 natural tourist attractions, 1 cultural tourist attraction, 4 artificial tourist attractions, and 3 tourist villages.

Table 1 shows the data on the number of tourist attractions in Jembrana Regency.

Table 1. Tourist Attraction in Jembrana Regency

District	Tourist Attraction						Total	Total (%)
	Nature	%	Cultural	%	Artificial and Tourism Village	%		
Pekutatan	8	21.63%	0	0.00%	2	5.40%	10	27.03%
Mendoyo	2	5.40%	1	2.70%	5	13.51%	8	21.62%
Jembrana	3	8.11%	2	5.40%	1	2.79%	6	16.22%
Negara	1	2.70%	1	2.70%	0	0.00%	2	5.40%
Melaya	3	8.11%	1	2.70%	7	18.91%	11	29.73%
Total	17	45.95%	5	13.51%	15	40.54%	37	100.00%

Source: Tourism Agency of Jembrana Regency and field surveys

Jembrana Regency is known for its unique characteristics and prominent tourist attractions, such as the Gilimanuk Harbor, which serves as the link between Bali Island and Java Island, and the iconic *Jalak Bali* (Bali Starling), which is a critically endangered bird native to the island of Bali especially in Jembrana Regency. Similarly, Medewi Beach has gained international recognition, often being used as a surfing competition venue by world-class surfers, making the name "Medewi

Beach" well-known and familiar to tourists. The Jegog and Mekepung arts are also original cultural icons of Jembrana, which are well-known and familiar to both local and international tourists.

In 2024, Jembrana successfully attracted a total of 266,189 tourists. Of these, 243,411 were domestic tourists and 22,778 were international tourists (Badan Pusat Statistik Kabupaten Jembrana, 2024). The five tourist attractions with the largest number of visits in Jembrana in 2023 were Baluk Rening Beach with 41,659 tourist visits, Perancak Tourist Village with 29,677 visits, Gelar River with 27,638 visits, Rambut Siwi Temple with 27,238 visits, and Yeh Leh Beach with 22,344 visits (Badan Pusat Statistik Kabupaten Jembrana, 2024). The tourist attractions in Jembrana Regency, which include natural attractions, cultural attractions, artificial attractions, and tourist villages, are spread across 5 districts. Figure 3 shows the map of tourist attractions in Jembrana Regency.



(Source: Author's Field Survey, 2024)

Figure 3. Map of Distribution of Tourist Attractions in Jembrana Regency

Tourist Travel Pattern Planning in Jembrana Regency

The travel patterns of tourists in Jembrana Regency will be analyzed by district. The development of travel patterns can enhance the efficiency of time for tourists, allowing them to visit more tourist attractions in Jembrana Regency. The tourist attractions in Jembrana Regency are grouped into four clusters: Eastern Cluster (Pekutatan District), Central-Eastern Cluster (Mendoyo District), Central-Western Cluster (Jembrana District), and Western Cluster (Negara and Melaya Districts). The travel pattern will refer to tourist attractions that serve as hubs or connecting points to other tourist attractions. A hub attraction is one that has developed or offers more complete facilities and accommodations. There are 6 tourist attractions and tourism villages that serve as hubs. These include Gilimanuk Bay, Blimbingsari Tourism Village, and Candikusuma Beach in Melaya District; Perancak Tourism Village in Jembrana District; Pelataran Rambut Siwi in Mendoyo District; and Medewi Beach in Pekutatan District.

The selection of the six tourism hubs was based on objective and measurable criteria to ensure analytical consistency. Destinations were classified as hubs if they demonstrated relatively higher visitation levels, greater availability of facilities and amenities (such as accommodations, restaurants, and parking areas), strong accessibility and connectivity to the Denpasar–Gilimanuk

arterial road, and a functional role as key nodes structuring tourist movements. In addition, spatial analysis indicated that these destinations occupy strategically central positions within their respective clusters. Based on these indicators, Medewi Beach, Pelataran Rambut Siwi, Perancak Tourism Village, Gilimanuk Bay, Blimbingsari Tourism Village, and Candikusuma Beach were identified as hubs, as they consistently exhibit superior accessibility, infrastructure support, and visitor concentration compared to surrounding attractions.

Gilimanuk Bay, located at the western tip of Bali and close to the Gilimanuk Ferry Port, offers a resting place after crossing from Java or for tourists preparing to head to Java. The natural beauty and mesmerizing underwater coral reefs provide a refreshing experience for tourists after a long journey. Additionally, tourists can enjoy the beauty of the small islands surrounding Gilimanuk Bay. For those arriving from Java through the Gilimanuk Port, this destination is an ideal starting point for visiting nearby tourist attractions and tourism villages.

Blimbingsari Village offers a unique blend of culture and beautiful nature. Blimbingsari Tourism Village also features the Nyiur Melambai Recreational Park for visitors traveling with family. The availability of homestay accommodations makes Blimbingsari Tourism Village a complete package for tourists. Candikusuma Beach is one of Jembrana's hidden gems, offering beautiful scenery and tranquility, making it an ideal spot for healing. In addition to its natural beauty and activities, Candikusuma Beach also provides homestay accommodations and other amenities. The beach also has a historical monument in the form of a triangular-shaped monument, which, according to local legend, was the site where a dagger was said to have emitted light.

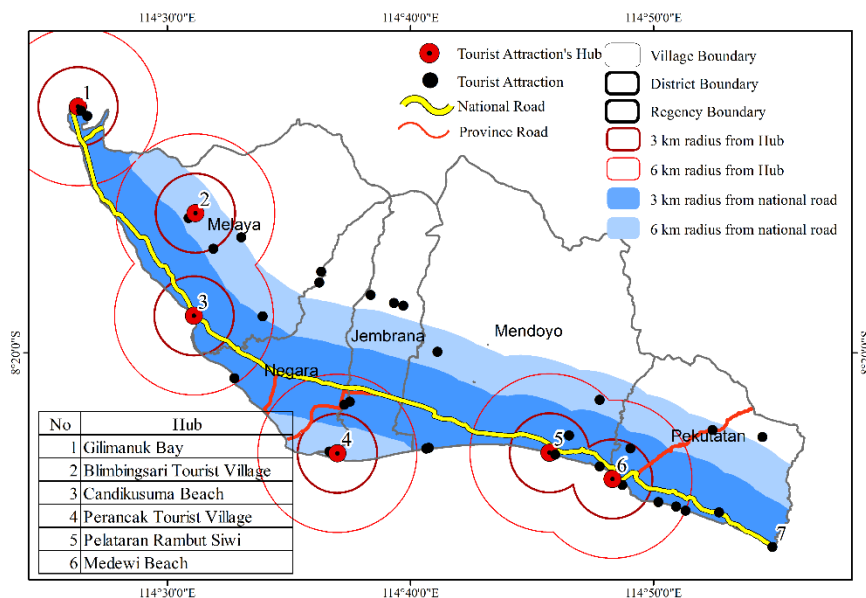
Perancak Tourism Village, as a hub, offers various attractions, such as a turtle conservation site, a recreational park, a motocross arena, and lush mangrove forests. Perancak is a well-known fishing village, famous for its black sand beach. It is also ideal for tourists who enjoy fishing activities due to its location at the river delta. As a hub, Perancak Tourism Village is equipped with villas, homestays, and other facilities. Pelataran Rambut Siwi is an open area located west of the Rambut Siwi Temple, frequently visited by tourists in the evening while waiting for the sunset at Rambut Siwi Beach. Many tourists choose to play in the sand or water at the beach's edge, and some enjoy swinging on the swings. The favorite visiting time for tourists is during weekends. On weekends, the area is bustling with tourists, as horseback riding and ATV activities are available on the beach. The Pelataran Rambut Siwi area has also been developed into a culinary center, with gazebos and stalls set up along the beachside.

Medewi Beach in Pekutatan District is the most popular beach among foreign tourists due to its perfect waves for surfing. Foreign tourists flock to Medewi Beach to try surfing. Located on the eastern side of Jembrana, the beach is strategically positioned for tourists arriving from Gilimanuk Port or from Denpasar City. Not only is it a stopover point, but Medewi Beach also provides accommodations such as homestays and villas, which tourists often use for overnight stays.

The tourist attractions in Jembrana Regency are interconnected by the Denpasar-Gilimanuk main road, which serves as the primary transportation route linking various districts and tourist destinations. This main road runs across the regency, connecting key areas and making it convenient for tourists to visit multiple attractions in a single trip. The Denpasar-Gilimanuk highway is crucial for accessing the various tourist attractions in Jembrana, especially since many of these destinations are scattered across the districts of Pekutatan, Mendoyo, Jembrana, Negara, and Melaya. The road provides direct access to popular attractions like Gilimanuk Bay, Blimbingsari Tourism Village, Candikusuma Beach, Perancak Tourism Village, Pelataran Rambut Siwi, and Medewi Beach.

The results show that most respondents expressed a preference for nature-based attractions, easy accessibility, and adequate facilities. Additionally, the Denpasar-Gilimanuk arterial road was consistently identified as the most frequently used travel route, serving as the primary corridor connecting major destinations. The ease of access provided by the Denpasar-Gilimanuk road makes it possible for tourists to create efficient travel routes and itineraries, allowing them to visit several tourist spots within a short time. The road not only facilitates transportation but also contributes to the overall tourism experience by providing scenic views and offering a smooth, well-maintained path that connects the westernmost part of Bali

(Gilimanuk) to the central and southern regions of the island. This interconnected road system helps promote tourism in Jembrana Regency by making it more accessible and appealing to visitors. Most of the tourist attractions in Jembrana Regency are within a radius of 3 km to 6 km from the hub and are within a radius of 3 km to 6 km from the Denpasar Gilimanuk highway. Only a few tourist attractions are located in the northern part of Jembrana Regency which are more difficult to reach from the highway and hub. Figure 3 shows a map of the accessibility of tourist attractions and tourism villages to the hubs and the Denpasar-Gilimanuk main road. Figure 4 shows distance of tourist attractions to the Denpasar-Gilimanuk Highway and Tourist Hub



(Source: Author's Field Survey, 2024)

Figure 4. Distance Of Tourist Attractions to the Denpasar-Gilimanuk Highway and Tourist Hub

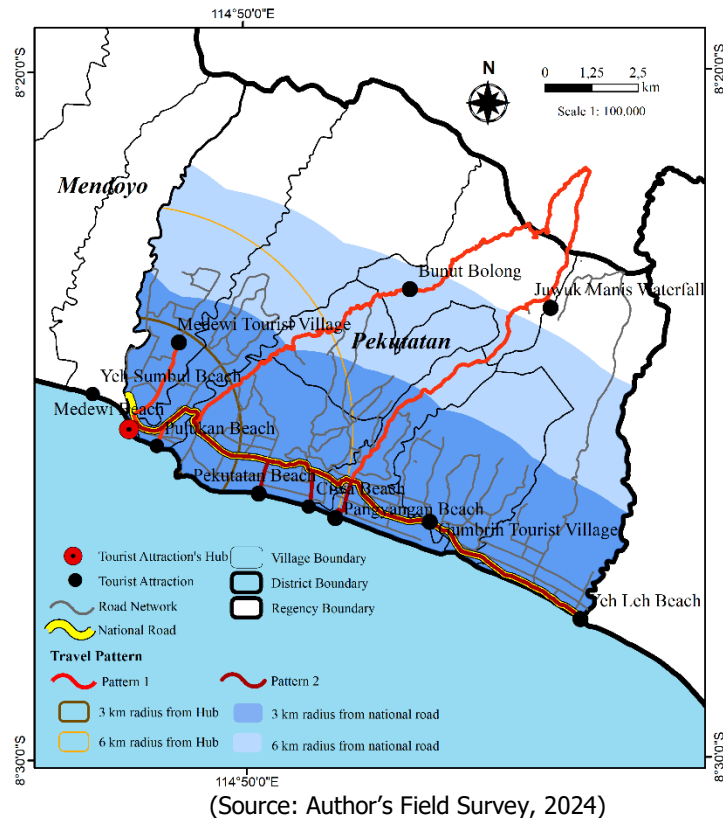
1. Tourist Travel Patterns in the Eastern Cluster (Pekutatan District)

The tourist attractions in Pekutatan District with high visitor numbers are Medewi Beach, Medewi Tourism Village, and Yeh Leh Beach. The tourist attractions with moderate visitor numbers are Pulukan Beach and Bunut Bolong. Meanwhile, the tourist attractions with low visitor numbers are Ciwa Beach, Pekutatan Beach, Pangyangan Beach, and Gumbrih Tourism Village. The hub tourist attraction is Medewi Beach. All the tourist attractions are within a 6 km radius of the hub and the Denpasar-Gilimanuk main road.

Medewi Beach, located south of the Denpasar-Gilimanuk main road, has a strategic location for tourists coming from Gilimanuk Harbor or Denpasar City. The accommodations at Medewi Beach are also well-established, providing convenience for tourists to stay before visiting other tourist attractions. Tourists visiting Pekutatan from the east can stay at Medewi Beach before heading to Medewi Tourism Village in the north, followed by Pulukan Beach, Bunut Bolong, and Juwuk Manis Waterfall. Tourists coming from Denpasar can rest or stop over at Yeh Leh Beach before proceeding to Gumbrih Tourism Village, Pangyangan Beach, Ciwa Beach, Pekutatan Beach, and finishing at Medewi Beach. Tourists coming from the west can first visit Medewi Beach before continuing to visit other tourist attractions, such as Pekutatan Beach, Ciwa Beach, Pangyangan Beach, Gumbrih Tourism Village, and stopping over at Yeh Leh Beach. After staying at Medewi Beach, tourists can head north to Medewi Tourism Village, Bunut Bolong, and Juwuk Manis Waterfall. Table 2 presents the travel patterns in Pekutatan District. Figure 5 displays a map of the tourist travel patterns in Pekutatan District.

Table 2. the travel patterns in Pekutatan District

Travel Pattern	Tourist Attraction
Pattern 1	Medewi Tourism Village - Medewi Beach - Pulukan Beach - Bunut Bolong - Juwuk Manis Waterfall or vice versa
Pattern 2	Yeh Leh Beach - Gumbrih Tourism Village - Pangyangan Beach - Ciwa Beach - Pekutatan Beach - Medewi Beach or vice versa

**Figure 5.** Map Of The Tourist Travel Patterns in Pekutatan District.

2. Tourist Travel Pattern for the Central-East Cluster (Mendoyo Subdistrict)

Mendoyo is a subdistrict in Jembrana Regency. It is located about 5.5 km from the capital of Jembrana Regency. A major tourist attraction that experiences high visitor traffic is the Rambut Siwi Plaza. Rambut Siwi Plaza is used as a hub to provide easy accessibility for tourists. It is a coastal area with restaurants and accommodations. From Rambut Siwi Plaza, all tourist destinations can be accessed within a 6 km radius from the hub and the main road from Denpasar to Gilimanuk.

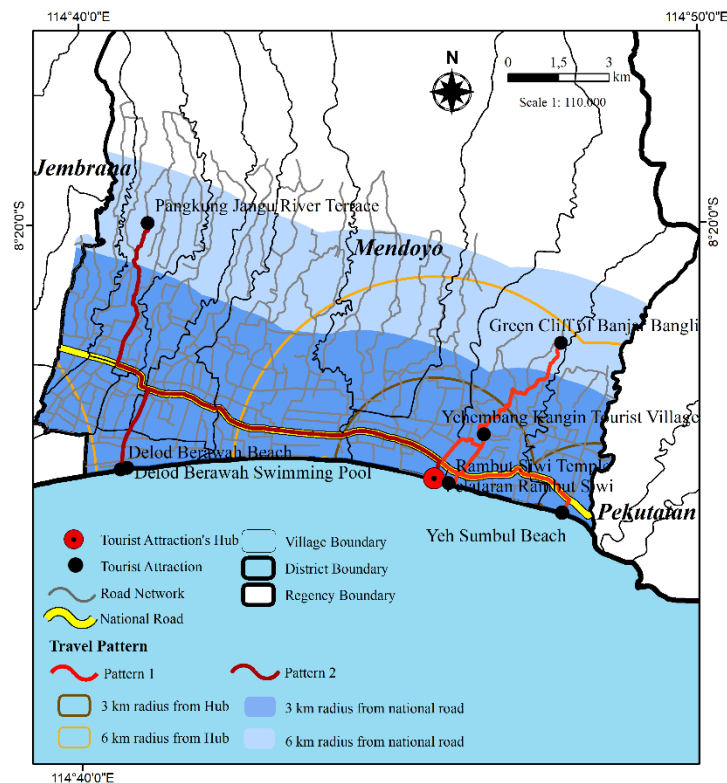
The travel pattern in Mendoyo Subdistrict is largely influenced by the shape of the administrative boundaries of the subdistrict. Mendoyo is elongated northward, so the distribution of tourist destinations and tourism villages is also spread out in that direction. Teras Pangkung Jangu and Green Cliff Banjar Bangli are located farthest from the main road access, requiring special attention to boost tourist visits.

There are two travel patterns that can be followed from Rambut Siwi Plaza. The first pattern is for tourists from Pelataran Rambut Siwi who wish to pray, they can visit Rambut Siwi Temple or go to Yeh Sumbul Beach, or vice versa. Then, from Rambut Siwi Temple, they can head north to visit Yeh Embang Kangin Tourism Village and Green Cliff Banjar Bangli. The second pattern allows tourists from Rambut Siwi Plaza to head west to visit Delod Berawah Beach and Delod Berawah Swimming Pool before heading north to visit Teras Pangkung Jangu. Table 3 shows the

travel patterns for tourists in Mendoyo Subdistrict. Figure 6 shows a map of the tourist travel patterns in Mendoyo Subdistrict.

Table 3. Tourist Travel Patterns in Mendoyo District

Travel Pattern	Tourist Attraction
Pattern 1	Yeh Sumbul Beach - Rambut Siwi Courtyard - Rambut Siwi Temple - Yeh Embang Kangin Tourism Village - Green Cliff of Banjar Bangli
Pattern 2	Pelataran Rambut Siwi - Delod Berawah Beach - Swimming Pool of Delod Berawah - Pangkung Jangu River Terrace



(Source: Author's Field Survey, 2024)

Figure 6. Map of Tourist Travel Patterns in Mendoyo District

3. Tourist Travel Pattern for the Central-West Cluster (Jembrana District)

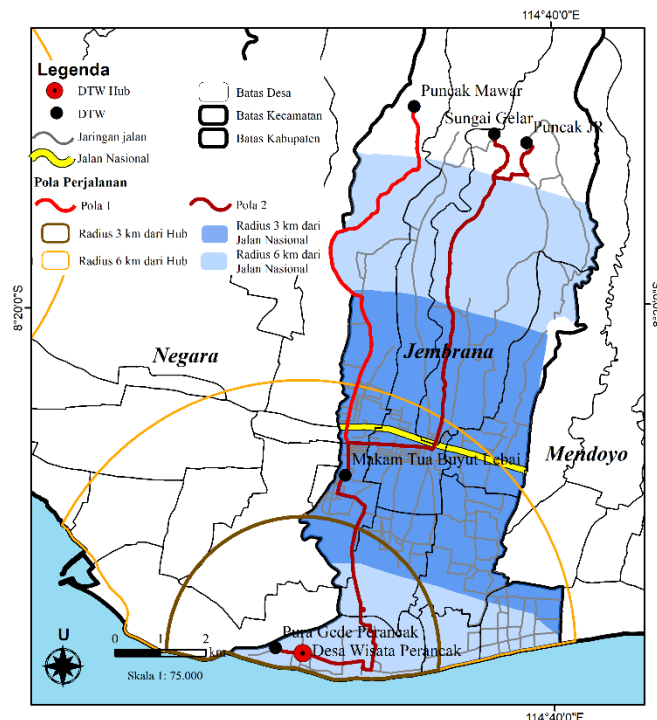
Like Mendoyo Subdistrict, Jembrana Subdistrict also has an elongated shape that stretches northward. The presence of tourist destinations such as Puncak Mawar, Sungai Gelar, and Puncak JR, which are located far from the main road (Denpasar - Gilimanuk), means that tourists will spend more travel time compared to other tourist destinations and villages in Jembrana Subdistrict. This situation requires good management and continuous promotion to attract tourists. Access to these three tourist destinations relies on regency roads, so the condition of these roads needs to be improved. In addition, the availability of amenities, infrastructure, and accommodations needs more attention.

Jembrana District's elongated shape towards the north causes the travel patterns to concentrate on reaching the tourist destinations located in the northern part of the subdistrict. The first travel pattern starts at Perancak Tourism Village as the hub, heading to Pura Gede Perancak or Makan Tua Buyut Lebai, or directly heading north to Puncak Mawar. The second travel pattern starts at Perancak Tourism Village heading to Pura Gede Perancak or Makan Tua Buyut Lebai, or directly heading north to Sungai Gelar and Puncak JR. Travel time effectiveness plays a significant role in the tourist travel pattern in Jembrana Subdistrict because of the considerable distance to the northern tourist destinations. The travel time from Perancak Tourism

Village to Rose Peak, Gelar River, or JR Peak is around 45 minutes, covering a distance of approximately 17 km, with hilly and mountainous terrain. Table 4 shows the tourist travel patterns in Jembrana Subdistrict. Figure 7 shows a map of the tourist travel patterns in Jembrana District.

Table 4. The Tourist Travel Patterns in Jembrana District.

Travel Pattern	Tourist Attraction
Pattern 1	Perancak Tourist Village - Pura Gede Perancak Temple / Ancient Tomb of Buyut Lebai – Rose Peak
Pattern 2	Perancak Tourism Village - Pura Gede Perancak Temple/ Ancien Tomb of Buyut Lebai - Gelar River - JR Peak



(Source: Author's Field Survey, 2024)

Figure 7. Map Of The Tourist Travel Patterns in Jembrana District.

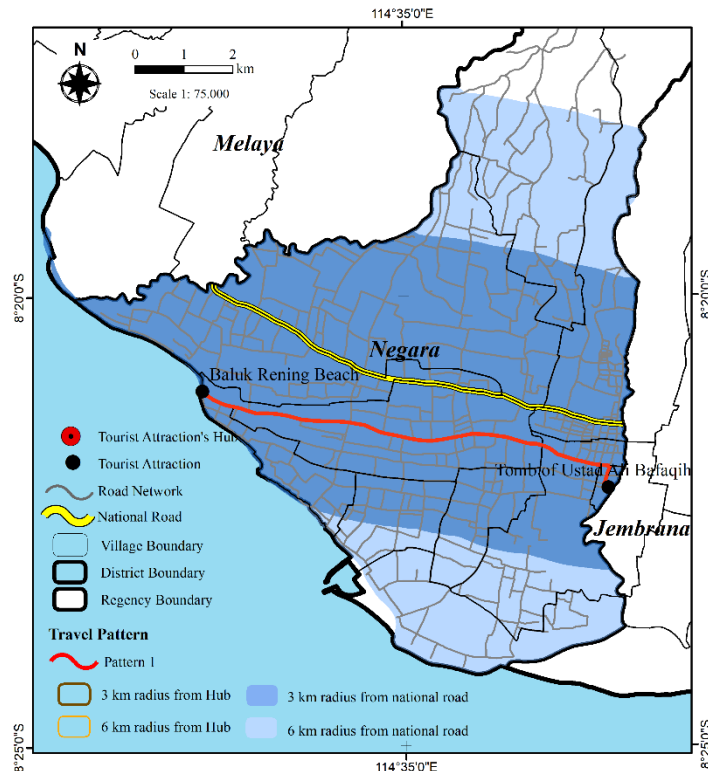
4. Tourist Travel Pattern for the Western Cluster (Negara Subdistrict and Melaya District)

Negara Subdistrict is the subdistrict with the fewest tourist destinations (DTW), having only two. The Ustad Ali Bafaqih Tomb is a site frequently visited by Muslim pilgrims. Meanwhile, Baluk Rening Beach is a natural tourist destination that is one of the best spots to witness the sunset, with its beautiful scenery and coconut trees swaying in the wind. Both tourist destinations can be reached via Arjuna Street, located south of the main road (Denpasar - Gilimanuk). With only two tourist destinations, Negara Subdistrict mainly serves as a stopover for tourists coming from Gilimanuk who wish to enjoy the beauty of the coastline. Pilgrims can visit the Ustad Ali Bafaqih Tomb and the Buyut Lebai Tomb in Jembrana Subdistrict. Figure 8 shows a map of the tourist travel patterns in Negara Subdistrict.

Melaya Subdistrict, the westernmost subdistrict in Jembrana Regency and on the island of Bali, has many advantages in attracting tourists. Its strategic location attracts tourists arriving from Java Island via Gilimanuk Harbor or those heading to Java Island. Tourists can rest and enjoy the natural beauty in Melaya Subdistrict. Melaya is also the subdistrict with the most tourist destinations and tourism villages, offering many travel pattern options.

There are three hubs in Melaya Subdistrict: Gilimanuk Bay, Blimbingsari Tourism Village, and Candikusuma Beach. With these three hubs, tourists can explore more of Melaya Subdistrict. The tourist destinations and tourism villages in Melaya have good accessibility, with only the

Manistutu Camping Ground and Benel Dam being located more than 6 km from the main road and the hubs.



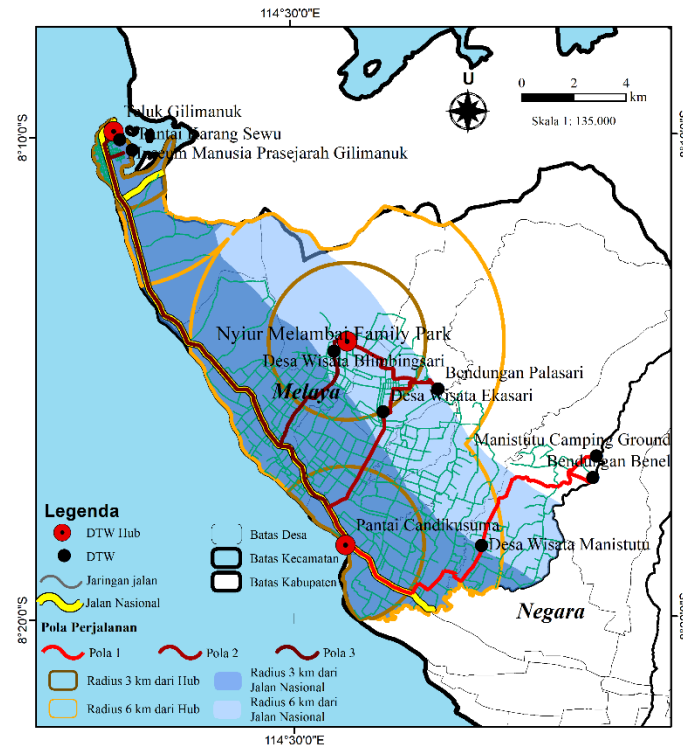
(Source: Author's Field Survey, 2024)

Figure 8. Tourist Travel Pattern Map in Negara District

Tourists coming from Denpasar can start their journey from the Candikusuma Beach hub, heading to Manistutu Tourism Village, then to Manistutu Camping Ground, and enjoy the beauty of Benel Dam. Alternatively, tourists from Denpasar can head from Candikusuma Beach to Ekasari Tourism Village, then enjoy the natural beauty of Palasari Dam and experience the culture and beauty of Blimbingsari Tourism Village, as well as visit Nyiur Melambai Family Park for family-friendly activities. Tourists arriving from Gilimanuk Harbor can take the reverse route, starting from Gilimanuk Bay, heading to Nyiur Melambai Family Park, then to Blimbingsari Tourism Village, followed by Palasari Dam, and enjoy the beauty of Ekasari Tourism Village before staying at Candikusuma Beach. Table 5 shows the tourist travel patterns in Melaya District. Figure 9 shows a map of the tourist travel patterns in Melaya District.

Table 5. Tourist Travel Pattern in Melaya District

Travel Pattern	Tourist Attraction
Pattern 1	Candikusuma Beach - Manistutu Tourism Village - Manistutu Camping Ground - Benel Dam or vice versa
Pattern 2	Candikusuma Beach - Ekasari Tourism Village - Palasari Dam - Blimbingsari Tourism Village - Nyiur Melambai Family Park or vice versa
Pattern 3	Gilimanuk Bay - Museum of Early Man - Karangsewu Beach - Belimbingsari Tourism Village - Nyiur Melambai Family Park - or vice versa



(Source: Author's Field Survey, 2024)

Figure 9. Map of The Tourist Travel Patterns in Melaya District.

Tourists arriving from Gilimanuk Harbor can also rest and enjoy the beauty of Gilimanuk Bay and the attractions around it. They can explore Karangsewu Beach and the Ancient Human Museum. Additionally, the beauty of the coral island and its flora is also fascinating to explore. After enjoying Gilimanuk Bay, tourists can continue to Blimbingsari Tourism Village to stay or proceed to Candikusuma Beach and its surrounding tourist destinations

Discussions

The findings of this study demonstrate that tourist travel patterns in Jembrana Regency are strongly shaped by spatial accessibility, functional hierarchy of destinations, and transportation corridors. The GIS-based mapping reveals a clustered distribution of tourist attractions, where destinations with high accessibility, adequate amenities, and strategic locations along the Denpasar–Gilimanuk main road function as tourism hubs. This finding aligns with the hub-and-spoke tourism model, which explains how core destinations act as nodes that distribute tourist flows to surrounding attractions (Kádár & Gede, 2021; Paulino et al., 2021; Paulino & Prats, 2024). The research findings also consistent with previous studies showing that spatial mapping of tourism potential supports sustainable destination management (e.g., remapping village-based attractions), while the role of the Denpasar–Gilimanuk corridor as a primary transportation axis significantly influences accessibility and travel patterns within tourism regions such as Jembrana Regency (Adinegara et al., 2025; Soimun et al., 2025).

Across all clusters, destinations located closer to the main arterial road attract higher visitor numbers, while attractions situated farther inland or requiring travel via secondary roads experience lower visitation. This pattern reflects the principle of distance decay in tourism, where visitation decreases as travel distance, time, and effort increase (Lee & Pennington-Gray, 2025; Zikirya et al., 2024). In elongated subdistricts such as Mendoyo and Jembrana, the northward spatial configuration produces linear travel patterns, as tourists prioritize time-efficient routes to reach inland destinations. Travel time effectiveness thus becomes a critical determinant of itinerary choice, consistent with previous studies on tourist mobility and spatial behavior (Bausch et al., 2024; Karayazi et al., 2024).

In the Western Cluster, the contrast between Negara and Melaya further illustrates functional differentiation within a regional tourism system. Negara acts primarily as a transit and stopover area with simple, purpose-driven visits, while Melaya functions as a gateway destination due to its proximity to Gilimanuk Harbor and the presence of multiple hubs. Gateway and transit tourism patterns have been widely documented in regions located at major entry points, where tourists combine resting, short visits, and multi-destination travel (Masiero et al., 2020; Suparman et al., 2023).

The findings confirm that tourist movement in Jembrana Regency is not random but follows structured spatial patterns influenced by infrastructure, destination hierarchy, and geographic configuration. These results highlight the importance of integrated spatial planning, improved accessibility to peripheral destinations, and strategic hub development to achieve more balanced and sustainable tourism growth.

The emergence of key tourism hubs such as Medewi Beach, Pelataran Rambut Siwi, and Gilimanuk Bay demonstrates the operation of a hub-and-spoke spatial model (Lew & McKercher, 2006). These hubs function as primary nodes that concentrate tourist activities due to superior accessibility, availability of amenities, and strategic locations. Consequently, tourist movements tend to radiate from these hubs toward nearby complementary attractions, producing structured and sequential travel patterns rather than random mobility. In elongated subdistricts such as Mendoyo and Jembrana, the linear spatial configuration further reinforces corridor-oriented travel behavior. Tourists prioritize time-efficient routes, especially when accessing inland attractions requiring longer travel times and secondary road networks. This confirms that travel time effectiveness is a critical determinant of tourist itinerary decisions (Bafail & Hanbazazah, 2025; de Sá et al., 2025).

The findings of this study are consistent with previous research emphasizing the role of accessibility and transport corridors in structuring tourist mobility. Similar hub-centered and corridor-driven travel patterns have been observed in other destinations, where highly accessible attractions function as primary nodes concentrating visitor flows (Soimun et al., 2025; Wang et al., 2025; Wardana et al., 2025). The dominance of main arterial routes influencing visitation intensity also aligns with studies conducted in regional and peripheral tourism areas (Ahn et al., 2023; Dalimunthe et al., 2020; Pedrosa et al., 2022; Song et al., 2024).

However, this study reveals distinct characteristics specific to Jembrana Regency. Unlike compact urban destinations where tourist movements tend to be multi-directional and dense (Shoval & Isaacson, 2007), Jembrana exhibits linear and sequential travel patterns shaped by elongated administrative configurations and spatially dispersed attractions. Additionally, the strong influence of gateway dynamics associated with Gilimanuk Harbor differentiates Jembrana from inland or single-core tourism systems. These differences highlight how geographic structure and regional positioning modify general tourist movement models.

The development of tourism in Jembrana Regency, Bali, although holding great potential, also faces several weaknesses that need to be addressed for the sector to reach its full potential. One of the biggest weaknesses in tourism development in Jembrana Regency is limited accessibility, especially in the northern areas which are bordered by mountains. Although the Denpasar - Gilimanuk Road is the main route, some tourist destinations farther from the main road require road infrastructure improvements to ease access for tourists. Remote and hilly roads are often difficult to reach, limiting the tourism potential in those areas.

The promotion and marketing as well as supporting facilities and infrastructure for tourism, such as accommodations, restaurants, and other services, are still limited in Jembrana Regency. Although there are some inns and dining places, their number is not sufficient to accommodate a surge in tourists, especially during peak seasons. The existing facilities also need to be improved to ensure tourists' comfort. Many tourists, both domestic and international, are not fully aware of the tourism potential in Jembrana, especially for more remote destinations. Most tourist destinations in Jembrana Regency are still focused on nature and beach tourism. While Bali is known for its natural beauty, Jembrana needs to develop more diverse tourism products, such as cultural tourism, culinary experiences, or ecotourism, to attract various segments of tourists. The lack of diversification can make Jembrana less competitive compared to other areas in Bali that offer a wider range of tourism options.

Many tourist destinations in Jembrana Regency experience higher visitor numbers during holidays or good weather conditions. This dependence creates instability in the tourism sector, as the number of tourists can fluctuate significantly between peak seasons and off-seasons. Therefore, efforts are needed to attract tourists throughout the year. One of the most important factor is limited skilled human resources. The quality of human resources in the tourism sector in Jembrana Regency still needs improvement. Many workers in the tourism sector lack sufficient skills or training to provide quality service to tourists. This can negatively affect the experience of visitors and impact the region's tourism image. The people in Jembrana Regency also not accompanied by attention to environmental preservation can have negative impacts. In some tourist areas in Jembrana Regency, waste management and the maintenance of natural beauty are still challenges. If not addressed, this could damage the natural attractions that are one of Jembrana's main draws.

The distribution of tourist attractions in Jembrana Regency is greatly influenced by the accessibility of the main Denpasar - Gilimanuk road and is limited by the mountainous structural terrain in the northern part. This condition creates an imbalance in the development and promotion of tourist destinations between the more accessible southern region and the more difficult-to-reach northern region. Based on the findings, several strategic recommendations are proposed:

1. Improve Accessibility to Peripheral Attractions. Upgrading regency and secondary roads connecting inland destinations (e.g., northern attractions) to reduce travel time barriers.
2. Strengthen Hub-Based Destination Management. Enhancing amenities, signage, and visitor services at identified hubs to optimize tourist distribution within clusters.
3. Develop Cluster-Integrated Tourism Packages. Designing thematic travel routes (coastal–nature, religious–cultural, rural–scenic) to encourage multi-destination visitation.
4. Targeted Promotion for Low-Visitation Destinations. Marketing strategies focusing on unique attributes of remote attractions to balance spatial visitation patterns.
5. Enhance Transport and Information Infrastructure. Providing clear route information, digital maps, and wayfinding systems.
6. Community Capacity Building. Supporting tourism villages through training, product development, and service quality improvement.

This study has several limitations. The study reflects limited numbers of sample and conditions during the specific study period, and seasonal variations in visitation patterns were not comprehensively examined. Future studies are encouraged to incorporate larger samples, longitudinal data, and advanced mobility tracking techniques.

Conclusions

This study reveals that tourist attractions in Jembrana Regency exhibit a clustered spatial structure consisting of four main tourism clusters: Eastern (Pekutatan District), Central-East (Mendoyo District), Central-West (Jembrana District), and Western (Negara and Melaya Districts), comprising a total of 37 tourist attractions. The spatial mapping confirms that destinations are unevenly distributed and strongly influenced by accessibility along the Denpasar–Gilimanuk arterial corridor. The analysis of tourist travel patterns shows that tourist movements are structured around six key hubs—Medewi Beach, Pelataran Rambut Siwi, Perancak Tourism Village, Gilimanuk Bay, Blimbingsari Tourism Village, and Candikusuma Beach—which function as primary nodes facilitating tourist circulation within and between clusters. These findings answer the research objectives by demonstrating that both the spatial distribution of attractions and accessibility conditions significantly shape tourist mobility.

This research contributes to the body of knowledge by integrating GIS-based spatial mapping with empirical travel pattern analysis at the regency scale, providing a localized understanding of cluster formation, hub dominance, and corridor-driven tourist flows in a peripheral tourism region. Practically, the findings highlight the importance of strengthening accessibility to peripheral destinations, enhancing amenities at hub locations, developing cluster-integrated tourism routes, and implementing targeted promotion strategies. Policy implications emphasize the need for integrated spatial tourism planning, infrastructure improvement, and

community capacity building to support balanced and sustainable tourism development in Jembrana Regency.

Acknowledgement

The authors would like to express their sincere gratitude to the Faculty of Tourism, Udayana University, particularly the Center of Excellence in Tourism (Pusat Unggulan Pariwisata/PUPAR), for academic support and facilitation throughout this research. The authors also acknowledge the Institute for Research and Community Service (LPPM) of Udayana University for institutional support and research coordination. Special appreciation is extended to the Tourism Office of Jembrana Regency and the Tourism Office of Bali Province for providing data, information, and valuable insights that greatly contributed to this study.

References

- Adinegara, G. N. J., Sirna, I. K., & Nainggolan, G. (2025). Remapping the potential of Gumbrih Village for sustainable tourism management. *Journal of Applied Sciences in Travel and Hospitality*, 8(2), 126–136. <https://doi.org/10.31940/jasth.v8i2.126-136>
- Ahn, Y., Kim, K. B., & Kim, J. (2023). Characteristics and Temporal Trends of Regional Tourism Along the Border Areas. *Sustainability*, 15(4). <https://doi.org/10.3390/su15043111>
- Andani, I. G. A., Miharja, M., Rachmat, S., Desiana, R., & Mangkoesoebroto, G. (2024). Travel behaviour transformations in Indonesia: Assessing the long-term impact of COVID-19 on mobility patterns. *Case Studies on Transport Policy*, 17, 101267. <https://doi.org/https://doi.org/10.1016/j.cstp.2024.101267>
- Ariana, N., Putra, A. M., Sukana, M., & Panca P, W. A. (2023). The Happiness of European Tourists (HoET) in Bali: Tourism Services and Happiness Types. *E-Journal of Tourism*, 138. <https://doi.org/10.24922/eot.v10i1.106723>
- Ariana, N., Sutama, I. K., Pujaastawa, I. B. G., Wiranatha, A. S., Yudiastina, I. G. B. A., & Panca P, W. A. P. P. (2025). Tourism marketing: Channel, factor, and strategy for foreign market share in Badung Regency. *Journal of Applied Sciences in Travel and Hospitality*, 8(1), 1–23. <https://doi.org/10.31940/jasth.v8i1.1-23>
- Badan Pusat Statistik Kabupaten Jembrana. (2024). *Kabupaten Jembrana dalam Angka, 2024*.
- Bafail, O., & Hanbazazah, A. (2025). Optimizing Tour Guide Selection: A Best–Worst Scaled Assessment of Critical Performance Criteria for Enhanced Tour Quality. *Sustainability*, 17(9). <https://doi.org/10.3390/su17094213>
- Bausch, T., Peluso, A. M., Bursa, B., Mailer, M., & Amegah, M. L. (2024). Determinants Encouraging Tourists to Use Public Transport in Their Vacation Destination. *International Journal of Tourism Research*, 26(5), e2791. <https://doi.org/https://doi.org/10.1002/jtr.2791>
- Birenboim, A., Bulis, Y., & Omer, I. (2023). A typology of tourism mobility apps. *Tourism Management Perspectives*, 48, 101161. <https://doi.org/https://doi.org/10.1016/j.tmp.2023.101161>
- Chang, J. Y.-S., Cheah, J.-H., Lim, X.-J., & Morrison, A. M. (2023). One pie, many recipes: The role of artificial intelligence chatbots in influencing Malaysian solo traveler purchase intentions. *Tourism Management Perspectives*, 49, 101191. <https://doi.org/https://doi.org/10.1016/j.tmp.2023.101191>
- Chen, J., Becken, S., & Stantic, B. (2022). Harnessing social media to understand tourist travel patterns in multi-destinations. *Annals of Tourism Research Empirical Insights*, 3(2), 100079. <https://doi.org/https://doi.org/10.1016/j.annale.2022.100079>
- Chowdhury, A. Z., Titiloye, I., Sarker, M. A. A., & Jin, X. (2025). Exploring unobserved heterogeneity in ICT usage and travel pattern changes as the pandemic subsides: A quasi-longitudinal analysis in Florida. *International Journal of Transportation Science and Technology*, 17, 276–292. <https://doi.org/https://doi.org/10.1016/j.ijtst.2024.04.010>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches third edition*. SAGE Publications, Inc.
- Dalimunthe, D. Y., Valeriani, D., Hartini, F., & Wardhani, R. S. (2020). The Readiness of Supporting Infrastructure for Tourism Destination in Achieving Sustainable Tourism

- Development: Kesiapan Infrastruktur Pendukung pada Destinasi Wisata dalam Mewujudkan Sustainable Tourism Development. *Society*, 8(1), 217–233. <https://doi.org/10.33019/society.v8i1.149>
- Dantsuji, T., Sugishita, K., & Fukuda, D. (2023). Understanding changes in travel patterns during the COVID-19 outbreak in the three major metropolitan areas of Japan. *Transportation Research Part A: Policy and Practice*, 175, 103762. <https://doi.org/https://doi.org/10.1016/j.tra.2023.103762>
- de Sá, A. L. S., Lavieri, P. S., & Pawlak, J. (2025). Examining the determinants of travel time use and the transfer of activities into trips. *Transportation Research Part A: Policy and Practice*, 195, 104460. <https://doi.org/https://doi.org/10.1016/j.tra.2025.104460>
- Finnegan, R. (2006). *Using Documents*. In R. Sapsford & V. Jupp (Eds.) ((2nd Ed)). Sage Publications.
- Gao, J., Sakcharoen, T., Suwanteep, K., & Niyommaneerat, W. (2024). Stakeholder Perceptions of Sustainable Tourism Development: A Case Study in Haikou, China. *Sustainability*, 16(16). <https://doi.org/10.3390/su16166742>
- Hughes, K., Wang, J., & Shu, M. (2015). Exploring the travel patterns, preferences and recommendations of Chinese university students living in Australia. *Journal of Hospitality and Tourism Management*, 23, 12–22. <https://doi.org/https://doi.org/10.1016/j.jhtm.2015.03.002>
- Husnul, N. R. I., Prasetya, E. R., S. P., & Ajimat, & P. L. I. (2020). *Statistik Deskriptif*. Unpam Press.
- Kádár, B., & Gede, M. (2021). Tourism flows in large-scale destination systems. *Annals of Tourism Research*, 87, 103113. <https://doi.org/https://doi.org/10.1016/j.annals.2020.103113>
- Kagerbauer, M., Wilkes, G., von Behren, S., & Stark, J. (2024). Time Use during Activities and Trips — Potentials for Analyzing Future Travel and Activity Behavior. *Transportation Research Procedia*, 76, 222–232. <https://doi.org/https://doi.org/10.1016/j.trpro.2024.01.035>
- Karayazi, S. S., Dane, G., & Arentze, T. (2024). Analyzing the Influence of Visitor Types on Location Choices and Revisit Intentions in Urban Heritage Destinations. *ISPRS International Journal of Geo-Information*, 13(4). <https://doi.org/10.3390/ijgi13040115>
- Lavoie, B., Ong, F., & Habib, K. N. (2024). Relax on the way to work or work on the way to relax? Influences of vehicle interior on travel time perceptions in autonomous vehicles. *Transportation Research Part A: Policy and Practice*, 183, 104073. <https://doi.org/https://doi.org/10.1016/j.tra.2024.104073>
- Lee, S., & Pennington-Gray, L. (2025). Metatheorizing tourist flow at macro-level: Universal forces theory and herding among tourists. *Annals of Tourism Research*, 113, 103961. <https://doi.org/https://doi.org/10.1016/j.annals.2025.103961>
- Levi, S., Tesler, R., Findling, L., & Baron-Epel, O. (2024). Adolescent active travel and physical activity: Role of social media, norms and the environment. *Journal of Transport & Health*, 36, 101796. <https://doi.org/https://doi.org/10.1016/j.jth.2024.101796>
- Lew, A., & McKercher, B. (2006). Modeling Tourist Movements: A Local Destination Analysis. *Annals of Tourism Research*, 33(2), 403–423. <https://doi.org/https://doi.org/10.1016/j.annals.2005.12.002>
- Lim, W. M. (2025). Sample Size in Qualitative Research: Moving from Data Saturation to Theoretical Saturation. *Journal of Global Marketing*, 1–11. <https://doi.org/10.1080/08911762.2025.2590757>
- Masiero, Lorenzo, Qiu, Richard T R, & Zoltan, Judit. (2020). Long-Haul Tourist Preferences for Stopover Destination Visits. *Journal of Travel Research*, 59(5), 811–827. <https://doi.org/10.1177/0047287519867143>
- Mihardja, E. J., Alisjahbana, S., Agustini, P. M., Sari, D. A. P., & Pardede, T. S. (2023). Forest wellness tourism destination branding for supporting disaster mitigation: A case of Batur UNESCO Global Geopark, Bali. *International Journal of Geoheritage and Parks*, 11(1), 169–181. <https://doi.org/https://doi.org/10.1016/j.ijgeop.2023.01.003>
- Moleong, L. J. (2017). *Metode Penelitian Kualitatif*. Penerbit PT Remaja Rosdakarya.

- Muchlisin, M., Soza-Parra, J., Susilo, Y. O., & Ettema, D. (2024). Unraveling the travel patterns of ride-hailing users: A latent class cluster analysis across income groups in Yogyakarta, Indonesia. *Travel Behaviour and Society*, 37, 100836. <https://doi.org/https://doi.org/10.1016/j.tbs.2024.100836>
- Naeem, Muhammad, Ozuem, Wilson, Howell, Kerry, & Ranfagni, Silvia. (2024). Demystification and Actualisation of Data Saturation in Qualitative Research Through Thematic Analysis. *International Journal of Qualitative Methods*, 23, 16094069241229776. <https://doi.org/10.1177/16094069241229777>
- Nasution, S. (2003). Metode Research (penelitian ilmiah). *Jakarta: Bumi Aksara*.
- Parvaneh, Z., Arentze, T., & Timmermans, H. (2011). A Simulation Model Assessing Impacts of Advanced Information and Communication Technologies on Activity-Travel Patterns. *Procedia - Social and Behavioral Sciences*, 20, 236–243. <https://doi.org/https://doi.org/10.1016/j.sbspro.2011.08.029>
- Paulino, I., & Prats, L. (2024). Reframing mountain destinations from the perspective of tourist mobility: hub-and-spoke travel patterns. *Current Issues in Tourism*, 27(12), 1898–1915. <https://doi.org/10.1080/13683500.2023.2214851>
- Paulino, I., Prats, L., & Domènech, A. (2021). Breaking Brands: New Boundaries in Rural Destinations. *Sustainability*, 13(17). <https://doi.org/10.3390/su13179921>
- Pedrosa, A., Martins, F., & Breda, Z. (2022). Tourism routes: a scoping review. In *European Journal of Tourism Research* (Vol. 32).
- Jembrana Regency Government. (2022). *Laporan Kinerja Instansi Pemerintah Kabupaten Jembrana Tahun 2022*. Pemerintah Kabupaten Jembrana.
- Perelygina, M., Kucukusta, D., & Law, R. (2022). Digital business model configurations in the travel industry. *Tourism Management*, 88, 104408. <https://doi.org/https://doi.org/10.1016/j.tourman.2021.104408>
- Pham, K., Andereck, K. L., & Vogt, C. A. (2025). Stakeholders' involvement in an evidence-based sustainable tourism plan. *Journal of Sustainable Tourism*, 33(4), 673–696. <https://doi.org/10.1080/09669582.2023.2259117>
- Putra, A. M., Wiranatha, A. S., Putra, I. N. D., Ariana, N., & Suryawardani, I. G. A. O. (2023). Tourism village development is reviewed from a sustainable aspect in Marga District, Tabanan Regency. *International Journal of Tourism and Hotel Management*, 5(2), 33–43. <https://doi.org/10.22271/27069583.2023.v5.i2a.77>
- Sardiana, I., Purnawan, N., Wiguna, P., Suyarto, R., & Kusmiyarti, T. (2021). Analysis of Spatial Data Infrastructure (SDI) to Support Tourism Village Promotion in Badung Regency, Bali, Indonesia. *Indonesian Journal of Geography*, 53(2), 179–184. <https://doi.org/https://doi.org/10.22146/ijg.52556>
- Shende, S., Bhaduri, E., & Goswami, A. K. (2023). Analyzing changes in travel patterns due to Covid-19 using Twitter data in India. *Case Studies on Transport Policy*, 12, 100992. <https://doi.org/https://doi.org/10.1016/j.cstp.2023.100992>
- Shoval, N., & Isaacson, M. (2007). Tracking tourists in the digital age. *Annals of Tourism Research*, 34(1), 141–159. <https://doi.org/https://doi.org/10.1016/j.annals.2006.07.007>
- Sivalingam, P., Asirvatham, D., Marjani, M., Syed Masood, J. A. I., Chakravarthy, N. S. K., Veerisetty, G., & Lestari, M. T. (2024). A review of travel behavioural pattern using GPS dataset: A systematic literature review. *Measurement: Sensors*, 32, 101031. <https://doi.org/https://doi.org/10.1016/j.measen.2024.101031>
- Soimun, A., Sadri, P. D. A., Navianti, D. R., & Fitri, S. N. (2025). The impact of traffic congestion on freight transport efficiency in a tourism corridor: A case study of the Denpasar–Gilimanuk road. *Journal of Applied Sciences in Travel and Hospitality*, 8(2), 177–198. <https://doi.org/10.31940/jasth.v8i2.177-198>
- Song, X., Du, L., & Wang, Z. (2024). Correlation Analysis of Urban Road Network Structure and Spatial Distribution of Tourism Service Facilities at Multi-Scales Based on Tourists' Travel Preferences. *Buildings*, 14(4). <https://doi.org/10.3390/buildings14040914>
- Suparman, N., Abdal, Hidayat, A., Effendi, A. D., & Septiadi, M. A. (2023). Integration of strategic planning and air connectivity in tourism development. *Corporate and Business Strategy Review*, 4(2), 184–196. <https://doi.org/10.22495/cbsrv4i2art17>

- Tang, Y., Jiang, Z., Zou, X., Liu, X., Zhang, Q., & Liao, S. (2024). Mining motif periodic frequent travel patterns of individual metro passengers considering uncertain disturbances. *International Journal of Transportation Science and Technology*, 15, 102–121. <https://doi.org/https://doi.org/10.1016/j.ijst.2023.07.005>
- Wang, D., Harun, N. Z. B., & Ja`afar, N. H. B. (2025). Transport-Node-Based Performance Indicators and Tourism Infrastructure Strategies in Historic Cultural Districts. *Sustainability*, 17(23). <https://doi.org/10.3390/su172310621>
- Wardana, W. W., Haryanto, T., Jamil, I. R., Ismail, N. A., Heriqbaldi, U., Correa, E., Rohmah, W. N., & Ajija, S. R. (2025). Does improved accessibility translate into tourism growth? A difference-in-differences analysis of bridge infrastructure in Indonesia. *Annals of Tourism Research Empirical Insights*, 6(2), 100189. <https://doi.org/https://doi.org/10.1016/j.annale.2025.100189>
- Yosmaoglu, S., Diallo, D., Hecking, T., & Schengen, A. (2023). Refining agent-based travel demand models using social media data. *Transportation Research Procedia*, 72, 1161–1168. <https://doi.org/https://doi.org/10.1016/j.trpro.2023.11.573>
- Zhang, X., Yang, C., & Yuan, Q. (2023). A strategic analysis model of residents' travel demand for Shanghai 2035 under new technology. *International Journal of Sustainable Transportation*, 17(12), 1337–1355. <https://doi.org/10.1080/15568318.2023.2188498>
- Zikirya, B., Xing, Y., & Zhou, C. (2024). The Matching Relationship Between the Distribution Characteristics of High-Grade Tourist Attractions and Spatial Vitality in Xinjiang. *Sustainability*, 16(21). <https://doi.org/10.3390/su16219426>

Qualified Ingredients: Professionalism in Chefs' Culinary Ingredient Selection

Faisal Akbar Zaenal ^{1*}, Hamka Naping ², Syamsu Rijal ³, Yahya ⁴

^{1,3}Politeknik Pariwisata Makassar, Indonesia

^{2,4}Universitas Hasanuddin, Indonesia

*Corresponding Author: faisalakbar85@poltekparmakassar.ac.id

Abstract: Professionalism in gastronomy is often judged through visible outputs – brigade leadership, menu design, and guest experience – while chefs' ingredient work remains largely backstage. Existing research has been less explicit about how chefs qualify ingredients as professional judgment under real-time service constraints. This study defines chefs' knowledge of qualified ingredients and identifies two complementary evaluative logics: naturalistic quality in cookery and built-in quality in pastry and bakery. Drawing on a qualitative field study involving six purposively selected chefs working in hotel and independent operations, we conducted one-to-one, face-to-face interviews in 2024, transcribed them verbatim, and analysed the data thematically through manual coding. Chefs treated ingredient selection not as a routine purchasing task but as qualification work resolved through kitchen practice. Labels, brands, and price informed initial screening, while performance in use determined acceptance – sensory behaviour in context for cookery, and functional performance and repeatability within pastry-and-bakery production systems such as doughs, batters, creams, and fillings. The analysis also shows how these logics converge in hybrid judgement when service tightens margins, clarifying professionalism as the sustained labour of making ingredient decisions defensible so that technical integrity and intended sensory character can both hold under pressure. The study reframes ingredient selection as situated professional judgement and supports the inclusion of ingredient qualification as an explicit learning outcome in vocational culinary education.

Keywords: Built-in Quality; Commercial Kitchens; Ingredient Qualification; Ingredient Selection; Naturalistic Quality; Professional Judgement.

History Article: Submitted 16 September 2025 | Revised 3 March 2026 | Accepted 9 March 2026

How to Cite: Zaenal, F. A., Naping, H., Rijal, S., & Yahya. (2026). Qualified ingredients: Professionalism in chefs' culinary ingredient selection. *Journal of Applied Sciences in Travel and Hospitality*, 9(1), 61-72.

Introduction

Professionalism brings together competence, action, ethics, and responsibility, and it is sustained through ongoing learning and skill development (Agravat & Macwan, 2024; DeIuliis, 2024). It is also tied to social legitimacy: professional authority rests not only on technical expertise but also on standards of conduct recognised by others (Tapper & Millett, 2015). In hospitality and gastronomy, that legitimacy is often judged through visible outputs and guest-facing experiences – what reaches the plate and what is perceived in the dining room (Castillo-Manzano & Zarzoso, 2023; Chiang & Guo, 2021; Daries et al., 2021). This emphasis foregrounds service performance, menu design, and the guest experience, while less visible practices such as ingredient selection are seldom examined explicitly as sites of professional judgement, even though chefs may treat them as foundational to product quality.

Research on chef professionalism largely follows this emphasis on public-facing work. In high-end and contemporary kitchens, chefs are frequently framed as brigade leaders and entrepreneurial actors, with professionalism expressed through coordination, innovation, and reputation (Elbasha & Baruch, 2022; Giousmpasoglou et al., 2022). Related studies map the competencies that sustain chefs in demanding environments – organising labour, managing knowledge, and coping with organisational pressures (Bressan et al., 2023; Filimonau et al., 2024; Marinakou & Giousmpasoglou, 2022; Traynor et al., 2022). Taken together, this literature shows convincingly what professionalism looks like in public; it has paid far less attention to how

professionalism is enacted in the quieter backstage decisions made before service, including the ingredient judgements that shape what can be produced reliably once service is underway.

Beyond professionalism and leadership, scholarship on culinary creativity and menu development likewise underscores the centrality of ingredient decisions. Studies of creativity show how chefs generate and refine ideas within aesthetic, technical, and organisational constraints, treating ingredients as the material through which dishes and dining experiences are composed (Ekincek & Günay, 2023; Hsia et al., 2021; Öztürk, 2024). Research on menu and recipe development similarly highlights the need to balance flavour, structure, and operational viability under cost, mise en place, holding quality, and service tempo (Behnke, 2023; Petkova et al., 2024). Practice-based culinary texts go further by treating ingredient selection as anticipatory work: chefs must judge how ingredients will behave across techniques and production systems in both cookery and pastry-and-bakery (Chugh, 2025; Vaclavik & Haynes, 2013; Varghese, 2020). This body of work shows clearly why ingredient decisions matter, but it still does not explain – at the level of chefs' own reasoning – how ingredients become “qualified,” or how that knowledge is mobilised in everyday commercial kitchen practice conditions.

What is missing, then, is a practice-based explanation of ingredient qualification as professional judgement: how chefs conceptualise the knowledge by which ingredients are judged fit for specific products; how that judgement is justified, recalibrated, and defended under service pressure, and how the logic of qualification differs across cookery and pastry-and-bakery domains. Without such an account, ingredient selection is easily reduced to purchasing routines, label reputation, or static product knowledge (Cho et al., 2021; Vasilakakis & Sdrali, 2023; Winata et al., 2023), rather than being understood as situated expertise that underpins reliable culinary outcomes in commercial kitchens.

Accordingly, this study is guided by two research questions: (RQ1) How do chefs in professional commercial kitchens practise ingredient selection as a process of ingredient qualification under real-time service constraints? (RQ2) What evaluative logics organise chefs' knowledge of qualified ingredients across cookery and pastry-and-bakery work, and what do these logics reveal about chef professionalism?

To address these questions, we develop the concept of knowledge of qualified ingredients. We then identify two complementary evaluative logics – naturalistic quality in cookery and built-in quality in pastry-and-bakery – and show how qualification is structured and recalibrated under service constraints.

Methodology

This qualitative field study examines ingredient selection as a process of ingredient qualification in professional commercial kitchens. Rather than estimating the prevalence of particular selection criteria, the study is concept-driven and aims to clarify how chefs articulate, justify, and recalibrate their ingredient judgements under real-time service constraints. We treat ingredient judgment as situated work embedded in everyday production, drawing on chefs' accounts of decision episodes and the practical reasoning through which an ingredient becomes “qualified” for a product.

Participants were purposively selected as chefs who routinely hold responsibility for ingredient quality judgements in professional commercial kitchens. The dataset comprised six participants across two domains to enable analytical comparison: three cookery participants (two Executive Chefs, P1 and P3; and one Executive Sous Chef, P2) and three pastry-and-bakery participants (a Pastry Chef, P4; a Pastry Chef–Chocolatier, P5; and a Pastry Sous Chef, P6). This balanced design (three participants per domain) was conceptually adequate for the aims of the paper because it anchors each evaluative logic in multiple information-rich cases within its relevant domain and role, rather than relying on a single exemplar. The sample was therefore designed for depth and contrast – capturing decision-making from positions where ingredient qualification is enacted under service constraints – rather than for statistical representativeness. Analytic sufficiency was assessed iteratively; subsequent interviews did not add substantively new thematic dimensions to the two-logics comparison.

Data were collected through face-to-face, one-to-one in-depth interviews conducted between 8 June 2024 and 10 October 2024. Interviews lasted 60–90 minutes (mean 80 minutes;

median 90 minutes) and were audio-recorded with permission before being transcribed verbatim. Interview venues were selected separately from participants' operational workplaces to avoid conflating meeting locations with kitchen settings. For three participants (P1, P5, and P6), interviews were held in a training-kitchen laboratory at a vocational higher-education institution (HEI) as a neutral meeting venue rather than at their workplaces. The remaining interviews took place on-site at relevant hospitality and food-service operations (two hotel operations and one independent restaurant operation; P2–P4). One interview was briefly interrupted due to ongoing kitchen activity (P1). Participant characteristics are summarised in Table 1.

Table 1. Participant characteristic

Code	Domain	Role	Workplace type (operational setting)	Interview venue (meeting place)	Date (YYYY-MM-DD)	Mode	Duration (minutes)	Career length (years, approx.)
P1	Cookery	Executive Chef	Independent restaurant kitchen (commercial)	Training kitchen laboratory (vocational HEI)	2024-10-07	Face-to-face	90	34
P2	Cookery	Executive Sous Chef	Hotel kitchen (commercial)	On-site hotel operation	2024-10-10	Face-to-face	90	27
P3	Cookery	Executive Chef	Hotel kitchen (commercial)	On-site hotel operation	2024-06-08	Face-to-face	60	30
P4	Pastry-and-bakery	Pastry Chef	Independent restaurant operation (commercial)	On-site independent operation	2024-08-17	Face-to-face	90	27
P5	Pastry-and-bakery	Pastry Chef–Chocolatier	Pastry production – central kitchen (commercial)	Training kitchen laboratory (vocational HEI)	2024-07-29	Face-to-face	90	12
P6	Pastry-and-bakery	Pastry Sous Chef	Hotel pastry operation (commercial)	Training kitchen laboratory (vocational HEI)	2024-07-29	Face-to-face	60	8

Note. HEI = higher-education institution. "Training kitchen laboratory (vocational HEI)" indicates a neutral meeting venue rather than the participant's operational workplace. Career length is an approximate summary based on participants' self-reported career histories.

Interview transcripts were analysed using thematic analysis (Braun & Clarke, 2021; Kiger & Varpio, 2020; Ohlyver et al., 2025). Coding was conducted manually by the first author, with iterative recoding and the use of analytic memos (Bingham, 2023; Olmos-Vega et al., 2023) to refine emerging patterns across participants. Analysis proceeded in two steps: first, we identified segments where chefs described specific episodes of ingredient judgement; second, we grouped these segments into higher-order themes that captured how ingredient qualification was reasoned and justified under service constraints. Themes were then compared across the two domains (cookery versus pastry-and-bakery) to clarify similarities and differences in evaluative logic, leading to the articulation of naturalistic quality and built-in quality as two complementary organising logics.

Trustworthiness was supported primarily through peer debriefing to test interpretations, surface alternative readings, and refine analytic claims (Ahmed, 2024; Dahal, 2025). After initial coding and theme development, the emerging themes and the two-logics account were discussed with an academic colleague experienced in qualitative analysis and vocational culinary education. Credibility and confirmability were further strengthened through iterative recoding and analytic memos documenting how interpretations developed across cases (Bingham, 2023; Olmos-Vega

et al., 2023). As the primary interviewer and coder, the first author used reflexive memoing to surface and manage prior assumptions about culinary work and ingredient quality; peer debriefing provided an additional check on interpretation. Because the study relied on interview data, triangulation across data sources was limited. Instead, dependability and transferability were supported by maintaining an audit trail – linking codes to transcript excerpts and recording key analytic decisions as the coding framework evolved – and by providing transparent descriptions of participant roles, operational settings, and the service conditions under which ingredient judgements were described (Johnson et al., 2020).

Results and Discussions

Results

Across interviews, chefs described ingredient selection not as a routine extension of purchasing but as a form of qualification work that shapes whether dishes and products can be produced reliably under service conditions. This work was organised through two complementary evaluative logics. In cookery, chefs emphasised naturalistic quality, judging ingredients through sensory behaviour in context – how products behaved when handled, cooked, and served under time pressure. In pastry-and-bakery work, chefs emphasised built-in quality, assessing ingredients through functional performance and repeatability within production systems such as doughs, batters, creams, and fillings.

In cookery, chefs described qualification as a judgement grounded in use rather than inspection. Initial cues such as labels, brands, and price could narrow options, but ingredients were ultimately “qualified” when their sensory behaviour held up in context – how they responded to handling, heat, timing, and plating under service pressure. One executive chef framed this as the “intrinsic energy” of ingredients (P1) and illustrated it with pandan leaves: when handled carefully with poultry, he described pandan leaves as deepening aroma and flavour without masking the character of the main protein. In this logic, quality was not treated as a fixed market category; it was established in the dish through performance at the point of use.

Two cookery participants stressed that qualification was often settled at the range rather than at receiving. Aromatics and proteins, they said, were not simply checked and signed off; they had to be “read” during service – smelled, tasted, and watched to see how they behaved under heat and time. What counted was not an ingredient’s appearance at delivery but what it did in the pan: how quickly aroma lifted, how moisture released or held, and how the same piece could respond differently when seared hard, simmered gently, braised longer, or fired quickly on the grill (P2; P3). This is why receiving was described as provisional. A delivery might look acceptable, yet once service began, the ingredient could “turn” with the rhythm of the kitchen: a slightly wetter batch, a hot spot on the range, a longer hold than planned, a run of tickets on the rail that compressed every margin. Rather than making a single pass–fail call, they spoke about “working with” the ingredient as the dish unfolded – tasting at familiar moments, recalibrating heat, layering seasoning, and making small corrections before a problem became visible on the plate. The adjustments were modest but cumulative: when aromatics went in, how long they were allowed to develop, where salt and acidity entered, and which finishing moves helped keep flavour and mouthfeel stable when time was tight, and variability had less room to show itself. Qualification, in this sense, was reached when the ingredient’s sensory contribution could still be steered towards the intended aroma, taste, and mouthfeel at the point of use, despite the pressures of service (P2; P3).

In pastry-and-bakery work, qualification was described less as “reading” ingredients in the moment and more as locking in built-in performance before service begins. One pastry chef pointed out that a cream or filling can look acceptable in the bowl yet fail later – splitting after holding, slackening after piping, or losing structure once it meets heat or humidity – so ingredients were judged by what they enabled the recipe to deliver repeatedly, not by how they appeared at delivery (P5). In this domain, “qualified” ingredients were those that behaved predictably in production: they held shape, emulsified cleanly, and carried consistent texture across batches, even when output had to be scaled and timed against service (P5).

A pastry sous chef described qualification as something you feel in the system before you trust it in production: doughs, batters, and creams “tell on” ingredients when the kitchen asks for repeatability (P6). He spoke about watching how a batch mixes – whether it comes together cleanly or fights back – then tracking what happens after resting, shaping, and baking, when small differences become amplified. In this logic, ingredients were “qualified” when they reduced surprise: the same flour, fat, or dairy behaved consistently across days and batch sizes, and the product held its intended structure through the full chain of work – mixing, lamination or aeration, proofing, baking, cooling, and holding (P6). A pastry chef made a similar point in an all-day dining outlet, where humidity and service tempo can expose weak ingredients quickly: a filling that looks smooth at finishing can weep later, a batter that seems stable can lose lift in the oven, and a crust that appears set can soften once it meets a moist component (P4). Qualification, then, was described as a form of prevention: selecting ingredients that keep the product’s “built-in” properties intact so texture remains repeatable even when the kitchen is scaling output and timing batches against service (P4; P6).

Chefs did not treat naturalistic quality and built-in quality as two sealed compartments; they described moments in practice where the logics began to blur once service put the kitchen under strain. In cookery, “naturalistic” judgement – reading aroma lift, moisture release and heat response – remained central, but it became inseparable from a quieter question of repeatability when the same pan work had to survive the rhythm of tickets: batching, holding, reheating and plating without drifting off target (P2). In those moments, an ingredient could be exciting in the first pass and still fail the kitchen if it did not carry consistently across repeated cycles – if it dulled, turned harsh, or lost its line once time, heat, and holding began to stack up. Pastry-and-bakery participants described the overlap from the other direction. They were committed to built-in performance – structure, emulsion stability, repeatable texture – yet they also watched for sensory behaviour, especially in humid, high-tempo settings where a product was exposed, portioned, held, and served rather than judged only at the bench (P4; P6). An ingredient might meet functional expectations in production but still be rejected if it produced an unexpected taste shift once the product sat, warmed, or absorbed moisture in the dining environment; likewise, a “stable” component was not fully qualified if it compromised the intended aroma or mouthfeel at the point of service (P4; P6). Overlap, then, was narrated as a hybrid judgement: chefs sought ingredients that could hold technical integrity and sensory character at the same time – so the product remained repeatable without becoming bland, and expressive without becoming fragile – when service tightened margins and variability had less room to hide (P2; P4; P6).

P3’s account from a hotel kitchen put it in practical terms: qualification was not a once-and-for-all verdict at delivery, because ingredients could shift with season and humidity in ways that only became apparent in storage and during service. He used fresh chilli as an example. In the rainy season, chillies carried higher moisture and deteriorated faster – softening, developing mould, and showing early signs of spoilage – so the same “acceptable” delivery could become unstable on the line and in the cold room. In the dry season, by contrast, chillies were firmer, more durable, and less prone to rapid spoilage, making them easier to hold without quality drifting across service cycles. The seasonal shift was not only physical but sensory: rainy-season chillies tasted less sharp, with heat perceived as diluted, whereas dry-season chillies were more “biting” and aromatic, as if the same quantity landed differently in the dish. For P3, this was why receiving remained provisional. What counted was not the chilli’s appearance at the door but how it behaved once the kitchen had to run it through real work – storage, prep, and repeated service moments – where moisture, time, and ambient humidity could alter both usability and flavour. Qualification, in his telling, meant adjusting judgment to these conditions: assessing whether the ingredient would stay stable long enough to support consistent output and whether its flavour contribution could still be steered towards the intended heat and aroma under service pressure (P3).

Across domains, chefs did not describe ingredient qualification as working through a checklist of “good ingredients”, but as a professional capacity to justify why a given ingredient was fit for purpose in a particular kitchen at a particular moment. P1’s language of an ingredient’s “intrinsic energy” captured this orientation: ingredients were not treated as fixed categories whose quality was known in advance, but as materials whose value was established through how

they behaved in the dish and under the pressures of service (P1). Taken together, the accounts reported above can be summarised through two evaluative logics – cookery leaning on sensory behaviour in context, pastry-and-bakery leaning on built-in performance and repeatability – while also showing that both logics addressed the same practical problem: producing reliable outcomes without losing intended sensory character when margins tightened and variability had less room to hide (P1; P2; P4; P6). Figure 1 synthesises this process by mapping the two evaluative logics, their recalibration during production/service, and the points where they overlap under service constraints.

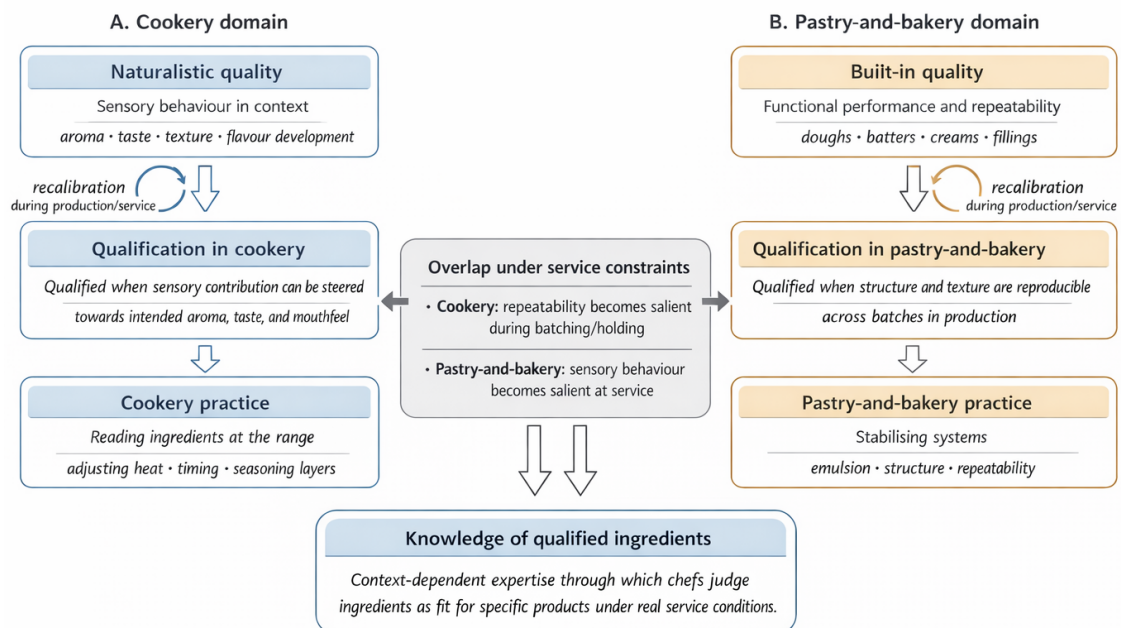


Figure 1. Ingredient qualification as professional judgement under service constraints: Two evaluative logics and their overlap

Figure 1 is intended to be read as a process account of how ingredients become “qualified” in use, rather than as a static classification of ingredient types. In the cookery domain, qualification is anchored in naturalistic quality: chefs judge sensory behaviour in context and recalibrate decisions during service as heat, timing, and holding conditions accumulate. In the pastry-and-bakery domain, qualification is anchored in built-in quality: ingredients are assessed for functional performance and repeatability within production systems (doughs, batters, creams, and fillings), with recalibration occurring as production is scaled and timed against service. The overlap zone makes the empirical point explicit: cookery becomes increasingly concerned with repeatability once batching and holding enter the workflow, while pastry-and-bakery becomes increasingly attentive to sensory behaviour during service, especially under humidity and tempo (P2; P4; P6). In that overlap, chefs are not switching logics; they are solving the same professional problem from two directions – protecting technical integrity and sensory character at once so outcomes remain reliable when margins tighten, and variability has less room to hide (P2; P4; P6).

Discussions

Practising Ingredient Selection as Ingredient Qualification in Professional Commercial Kitchens under Real-Time Service Constraints (RQ1)

The findings show that chefs in professional commercial kitchens practise ingredient selection as an ongoing process of ingredient qualification rather than a discrete act of product choice. Ingredients do not become “qualified” simply by carrying a trusted label, a familiar brand, or an assumed grade; rather, they become qualified through chefs’ repeated efforts to determine

whether the ingredients remain fit for purpose once they are drawn into the demands of production and service. What matters, therefore, is not only what an ingredient appears to promise at the point of selection, but also how it behaves when exposed to heat, timing, holding, humidity, and service tempo. In this sense, ingredient selection operates as a form of knowing-in-action (Hadjimichael et al., 2024; Ng et al., 2022), through which chefs test, revise, and defend their judgments in use so that reliable quality can still be secured when the tolerance for error narrows under real-time service constraints.

What the findings make clearer, then, is that practising ingredient qualification under real-time service constraints requires more than recognising ingredients that initially appear suitable at the point of selection. It requires the practical competence to judge whether ingredient decisions remain workable as production unfolds and service compresses time, increases repetition, and narrows the margin for adjustment. As service intensifies, chefs must notice early signs of drift, anticipate how ingredients are likely to behave as work unfolds, and recalibrate before variation becomes consequential (Farmer & Hingst, 2025). Ingredient qualification, in this sense, is not exhausted by the initial choice; it is sustained through the ongoing work of keeping flavour, texture, and performance aligned with the intended output as service conditions tighten. Existing studies on creativity, menu development, and operational constraints (Behnke, 2023; Ekincek & Günay, 2023; Hsia et al., 2021; Öztürk, 2024; Petkova et al., 2024) help to situate these pressures. Yet they have been less explicit about how chefs keep ingredient decisions workable under the accumulating demands of service.

Rather than being settled at receiving, ingredient qualification is better understood as a judgement that remains provisional until an ingredient's fitness for purpose has been established across the movement from storage and prep to holding and service (P3). The point is not simply that ingredients change over time, but that their qualification depends on how those changes affect what chefs can still achieve with them under working conditions. P3's account of fresh chilli makes this especially clear: seasonal variation altered not only durability but also the ingredient's sensory force in the dish, making qualification inseparable from the kitchen's need to manage both stability and flavour in use (P3). A comparable temporal logic was evident in pastry-and-bakery, although it appeared through production performance rather than pan work alone; ingredients became qualified insofar as they continued to hold structure, emulsion, texture, and consistency as they moved through the production chain (P4; P5; P6). Ingredient qualification, then, takes shape progressively through an ingredient's ability to support the intended product under service conditions that leave little room for correction.

Seen in this light, practising ingredient qualification involves judging not only whether an ingredient appears suitable at the point of selection, but also whether it can continue to support the intended dish or product once service pressure reduces margins and leaves less room for correction (P2; P3; P4; P6). In this sense, qualification takes on a preventive orientation, not because chefs can eliminate variation altogether, but because they seek to stop small shifts in flavour, texture, structure, or holding performance from escalating into more serious problems during service (P4; P6). Initial suitability, therefore, is insufficient on its own. Ingredients must remain dependable under the conditions in which kitchen work actually unfolds (P2; P3; P4; P6). Ingredient selection, then, becomes part of the work through which chefs preserve room for judgment before service pressures turn manageable variation into failure that is harder to recover from.

This also clarifies why ingredient selection in professional commercial kitchens cannot be reduced to an initial procurement decision. Supplier criteria, delivery checks, and other early assessments remain important for narrowing options and securing an acceptable starting point (Cho et al., 2021; Vasilakakis & Sdrali, 2023). Yet the present findings suggest that such procedures do not exhaust what chefs mean by selection in practice, because selection is only fully resolved through kitchen work itself. Ingredients are reassessed in use as they encounter the technical and temporal demands of production and service. In this sense, ingredient qualification makes clear that selection extends beyond procurement: what is selected is not merely a product that appears acceptable at receiving, but an ingredient that can continue to justify that choice once the pressures of service begin to test its usability, stability, and contribution to the intended output.

Evaluative Logics Organising Chefs' Knowledge of Qualified Ingredients across Cookery and Pastry-and-Bakery Work and Their Implications for Chef Professionalism (RQ2)

What RQ1 makes visible is not only that ingredient selection is practised as qualification under service constraints, but also that chefs rely on two evaluative logics to keep ingredient qualification workable across cookery and pastry-and-bakery domains. These logics are less about categorising ingredients in the abstract than about organising judgement in practice – how chefs decide, under pressure, whether ingredients will still deliver what the kitchen needs. In cookery, qualification is oriented towards naturalistic quality, with ingredients judged through their sensory behaviour in context: how aroma lifts, how moisture moves, and how flavour holds its line once heat, timing, and tempo begin to press (P1; P2). In pastry-and-bakery, qualification is oriented towards built-in quality, with ingredients judged through their functional performance and repeatability within production systems – doughs, batters, creams, and fillings – especially when scale, holding, and humidity begin to test stability (P4; P6). Taken together, the two logics clarify how chefs turn ingredient variation into defensible professional judgement while still pursuing the same practical end: reliable outcomes without sacrificing intended sensory character under service pressure.

Naturalistic quality, as it appears in cookery, is best understood as a way of reading ingredients in situ, where “quality” is established through sensory behaviour as it meets the contingencies of kitchen work rather than through static categories of grade or reputation. What chefs evaluate, then, is whether an ingredient’s aroma, moisture behaviour, and flavour line remain steerable once handling, heat, timing, and tempo begin to press (P1; P2; P3). This logic aligns with an epistemology-of-practice, in which judgement takes shape as knowing-in-action (Hadjimichael et al., 2024; Ng et al., 2022), carried by sensory attention and situated adjustment rather than by declarative product knowledge alone. Sensory perception here is not treated as a private “palate”, but as a professional mode of attunement to how ingredients perform in context (Schifferstein et al., 2022). In this sense, naturalistic quality also foregrounds tacit competence, not as an invisible residue behind decision-making, but as the practical ability to anticipate drift, recalibrate early, and defend judgment when the margin for error narrows (Farmer & Hingst, 2025).

Built-in quality, as it emerges in pastry-and-bakery work, rests less on reading ingredients moment by moment and more on securing functional performance that will hold once production becomes repetitive, scaled up, and exposed to delay. Here, “quality” is established through what ingredients enable production systems to do reliably – whether doughs, batters, creams, and fillings can be made to behave predictably across batches and through resting, piping, baking, cooling, and holding, especially when humidity and service tempo begin to test stability (P4; P5; P6). In that respect, built-in quality can be read as a practical logic of repeatability and quality assurance, in which the aim is to keep performance consistent without stripping products of their intended texture and finish (Magnusson Sporre et al., 2025). What matters is not simply whether a component looks correct at the bench, but whether it continues to carry structure and texture as time and environment begin to work against it. On this logic, qualification is achieved when ingredients reduce surprise in the system: when emulsions do not split after holding, fillings do not weep, and batters do not lose lift as output is timed to service (P4; P6). Built-in quality, therefore, describes a professional orientation to locking in performance early, so that service pressure does not convert small variation into structural failure later.

What becomes clear when these logics meet in practice is that naturalistic quality and built-in quality are not competing styles of judgement, but complementary ways of keeping ingredient qualification workable once service begins to tighten margins. Under strain, cookery cannot rely on sensory reading alone if the same preparations must survive repetition, holding, and compressed timing without drifting off target (P2). Pastry-and-bakery, meanwhile, cannot rely on functional stability alone if humidity, delay, and handling begin to unsettle texture and sensory character at the point of delivery (P4; P6). Their overlap therefore marks a hybrid judgement oriented towards the same practical problem from two directions: protecting technical integrity

and intended sensory character at once, so that output remains repeatable without becoming bland, while remaining expressive without becoming fragile. This coupling of repeatability with sensory intent aligns with a view of culinary quality as something that is both designable and defensible in practice, rather than reducible to either creativity or standardisation (Magnusson Sporre et al., 2025; Schifferstein et al., 2022). In that sense, the two logics operate in mutually corrective ways, keeping qualification accountable both to sensory behaviour in context and to performance across production systems when variation becomes consequential in real time.

Existing accounts of chef professionalism tend to foreground what is readily visible – leadership in the brigade, entrepreneurial identity, and performance that can be publicly evaluated (Elbasha & Baruch, 2022; Giousmpasoglou et al., 2022; Traynor et al., 2022). That emphasis, however, leaves less room for the quieter work that makes such visible performance possible in the first place. In this study, professionalism is located in ingredient judgement: sustaining decisions that can still be defended as service pressure tightens and the margin for correction narrows. Naturalistic quality captures the sensory side of that labour, where attention and adjustment keep flavour on track in the moment; built-in quality captures the systems side, where repeatable performance is secured within production processes. Read together, the two logics suggest that professionalism also includes making judgment shareable – articulating, revising, and handing over ingredient calls so that technical integrity and intended sensory character can both survive the pressures of service (Lim & Ok, 2021).

Across cookery and pastry-and-bakery work, then, chefs' knowledge of qualified ingredients is organised through two evaluative logics that keep ingredient qualification workable under service constraints, while responding to different vulnerabilities in practice – sensory drift on the one hand, and system performance on the other. Their overlap shows that qualification is sustained by hybrid judgement rather than by a single rule-set: chefs must secure repeatability without flattening sensory intent, and sustain sensory character without making production fragile (Magnusson Sporre et al., 2025; Schifferstein et al., 2022). What these logics reveal about professionalism is that ingredient judgement is not incidental to "good cooking," but a core professional labour of making decisions defensible as conditions tighten and the scope for correction narrows (Traynor et al., 2022). In that sense, professionalism lies in keeping ingredient qualification accountable to what the kitchen must deliver in real time, and sustaining that accountability across domains where the margin for error is thin.

By making ingredient qualification conceptually explicit as professional judgement under service constraints, this study shifts ingredient selection away from being treated as a procurement routine or a private matter of taste. The two-logics framework specifies how chefs keep ingredient decisions defensible across domains: naturalistic quality foregrounds sensory attunement in context, while built-in quality foregrounds repeatable performance within production systems. The analysis shows that these logics do not sit apart but converge in a hybrid judgement when margins tighten, offering a way of understanding culinary quality as both sensory and systematically designable in practice, rather than as a choice between creativity and standardisation (Magnusson Sporre et al., 2025; Schifferstein et al., 2022). On this reading, professionalism is located in the sustained labour of ingredient judgement that enables kitchens to deliver reliably when variation becomes consequential, rather than only in the more visible registers of leadership, entrepreneurship, or performance (Traynor et al., 2022).

Because the evidence base is interview-led rather than observational, the analysis captures how chefs articulate and justify qualification work more than it traces every micro-decision as it unfolds during periods of peak service. This constrains what can be claimed about the fine-grained timing of judgement in action and about how ingredient calls are negotiated moment by moment within sections. Future research could therefore extend the account through in situ observation of qualification work as it moves between receiving, production, holding, and service during high-tempo periods, where environmental conditions and time pressure reshape decisions in real time (Filimonau et al., 2023). It could also examine how qualification knowledge is transferred within brigades – through handovers, section notes, and apprenticeship-style learning – and whether making judgment more inspectable changes how novices learn to manage variation without flattening sensory character (Escalante et al., 2024).

Conclusions

Ingredient selection in professional commercial kitchens is completed through work rather than at the point of purchase. Chefs qualify ingredients as they move from receiving into production and service, repeatedly checking whether ingredients remain fit for purpose when time compresses, holding intervenes, and repetition makes drift costly under real-time service constraints. That qualification is organised through two evaluative logics across domains. Cookery relies on naturalistic quality, where ingredients are judged through sensory behaviour in context; pastry-and-bakery relies on built-in quality, where ingredients are judged through functional performance and repeatability within production systems. What these logics reveal about chef professionalism is a form of sustained judgement: keeping ingredient decisions defensible so that technical integrity and intended sensory character can both hold when service leaves little room for correction.

A central contribution of this study is to conceptualise ingredient qualification as a form of professional judgement under service constraints. This offers a practice-based account of how commercial kitchens maintain reliability when variation becomes consequential. The two-logics framework also provides a way of making ingredient judgement more inspectable and teachable by clarifying what chefs attend to, what they test in use, and what constitutes a defensible call across domains, without reducing qualification to a rigid checklist. At the same time, the argument is based on interview material rather than observation. Further research using in situ observation could follow qualification across receiving, production, holding, and service during peak periods, and examine how such judgment is transmitted within brigades through handovers and apprenticeship-style learning.

References

- Agravat, M. & Macwan, P. (2024). *Professionalism Across Professions: Navigating Challenges, Embracing Excellence (1st ed.)*. OrangeBooks Publication.
- Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 2, 100051. <https://doi.org/10.1016/j.glmedi.2024.100051>
- Behnke, C. (2023). *Blended Learning in the Culinary Arts: Tradition Meets Technology*. In F. S. Glazer (Ed.), *Blended Learning: Across the Disciplines, Across the Academy (1st ed.)*. Routledge. <https://doi.org/10.4324/9781003443285>
- Bingham, A. J. (2023). From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. *International Journal of Qualitative Methods*, 22. <https://doi.org/10.1177/16094069231183620>
- Braun, V. & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis?. *Qualitative Research in Psychology*, 18(3), 328–352. <https://doi.org/10.1080/14780887.2020.1769238>
- Bressan, A., Alonso, A. D., Kim Vu, O. T., Tran, L. N., & Tran, T. D. (2023). The importance of knowledge management in gastronomy: a chef's future career, the next generations of chefs and trends. *International Journal of Contemporary Hospitality Management*, 35(3), 1087–1108. <https://doi.org/10.1108/IJCHM-03-2022-0391>
- Castillo-Manzano, J. I. & Zarzoso, Á. (2023). Towards “a sky full of Michelin Stars”. *International Journal of Gastronomy and Food Science*, 32, 100738. <https://doi.org/10.1016/j.ijgfs.2023.100738>
- Chiang, C.-F. & Guo, H.-W. (2021). Consumer perceptions of the Michelin Guide and attitudes toward Michelin-starred restaurants. *International Journal of Hospitality Management*, 93, 102793. <https://doi.org/10.1016/j.ijhm.2020.102793>
- Cho, M., Bonn, M. A., Giunipero, L. & Jaggi, J. S. (2021). Supplier selection and partnerships: Effects upon restaurant operational and strategic benefits and performance. *International Journal of Hospitality Management*, 94, 102781. <https://doi.org/10.1016/j.ijhm.2020.102781>
- Chugh, B. (2025). *Exploring Culinary Arts (PublishDrive)*. Educohack Press.
- Dahal, N. (2025). Qualitative data analysis: reflections, procedures, and some points for

- consideration. *Frontiers in Research Metrics and Analytics*, 10. <https://doi.org/10.3389/frma.2025.1669578>
- Daries, N., Moreno-Gené, J. & Cristobal-Fransi, E. (2021). Michelin stars shine brightly, but are they profitable?. *International Journal of Gastronomy and Food Science*, 24, 100352. <https://doi.org/10.1016/j.ijgfs.2021.100352>
- DeJuliis, E. (2024). *Professionalism Across Occupational Therapy Practice (1st Edition)*. Routledge. <https://doi.org/10.4324/9781003526018>
- Ekincek, S. & Günay, S. (2023). A recipe for culinary creativity: Defining characteristics of creative chefs and their process. *International Journal of Gastronomy and Food Science*, 31, 100633. <https://doi.org/10.1016/j.IJGFS.2022.100633>
- Elbasha, T. & Baruch, Y. (2022). Becoming top global chef: what does it take to become a highly successful entrepreneurial careerist?. *International Journal of Contemporary Hospitality Management*, 34(7), 2559–2578. <https://doi.org/10.1108/IJCHM-07-2021-0940>
- Escalante, R., Bernardo, M. & Arbussa, A. (2024). Knowledge Transfer in Haute Cuisine: The Relationship between Chefs as an Enabler Factor. *Journal of Culinary Science & Technology*, 22(5), 870–891. <https://doi.org/10.1080/15428052.2022.2087578>
- Farmer, N. & Hingst, R. (2025). Tacit Knowledge in Cooking: A Key to Teaching and Integrating Cooking as a Practice. *Journal of Nutrition Education and Behavior*, 57(8), 787–797. <https://doi.org/10.1016/j.jneb.2025.03.010>
- Filimonau, V., Chiang, C.-C., Wang, L., Muhialdin, B. J. & Ermolaev, V. A. (2023). Resourcefulness of chefs and food waste prevention in fine dining restaurants. *International Journal of Hospitality Management*, 108, 103368. <https://doi.org/10.1016/j.ijhm.2022.103368>
- Filimonau, V., Sezerel, H., Ashton, M., Kubal-Czerwińska, M., Bhaskara, G. I. & Ermolaev, V. A. (2024). How chefs develop the practice to manage food waste in professional kitchens. *International Journal of Hospitality Management*, 119, 103712. <https://doi.org/10.1016/j.ijhm.2024.103712>
- Giousmpasoglou, C., Marinakou, E., Zopiatis, A. & Cooper, J. (2022). *Managing People in Commercial Kitchens: A Contemporary Approach (1st Edition)*. Routledge. <https://doi.org/10.4324/9781003160250>
- Hadjimichael, D., Ribeiro, R. & Tsoukas, H. (2024). How Does Embodiment Enable the Acquisition of Tacit Knowledge in Organizations? From Polanyi to Merleau-Ponty. *Organization Studies*, 45(4), 545–570. <https://doi.org/10.1177/01708406241228374>
- Hsia, H., Chen, T.-L. & Tan, T.-S. (2021). Examining the Concept of Creativity in a Culinary School Setting. *Journal of Hospitality & Tourism Education*, 33(1), 66–73. <https://doi.org/10.1080/10963758.2020.1726766>
- Johnson, J. L., Adkins, D. & Chauvin, S. (2020). A Review of the Quality Indicators of Rigor in Qualitative Research. *American Journal of Pharmaceutical Education*, 84(1), 7120. <https://doi.org/10.5688/ajpe7120>
- Kiger, M. E. & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846–854. <https://doi.org/10.1080/0142159X.2020.1755030>
- Li, S. & Seale, C. (2007). Learning to do qualitative data analysis: An observational study of doctoral work. *Qualitative Health Research*, 17(10), 1442–1452.
- Lim, S. (Edward) & Ok, C. "Michael." (2021). Knowledge sharing in hospitality organizations: A meta-analysis. *International Journal of Hospitality Management*, 95, 102940. <https://doi.org/10.1016/j.ijhm.2021.102940>
- Magnusson Sporre, C., Wennström, S. & Wellton, L. (2025). Gastronomic Variables: A Framework for Design and Quality Assurance of Food Dishes, Meals, and Menus. *Journal of Culinary Science & Technology*, 1–28. <https://doi.org/10.1080/15428052.2025.2550432>
- Marinakou, E. & Giousmpasoglou, C. (2022). Chefs' competencies: a stakeholder's perspective. *Journal of Hospitality and Tourism Insights*, 5(1), 205–229. <https://doi.org/10.1108/JHTI-06-2020-0101>
- Ng, S. L., Forsey, J., Boyd, V. A., Friesen, F., Langlois, S., Ladonna, K., Mylopoulos, M., & Steenhof, N. (2022). Combining adaptive expertise and (critically) reflective practice to support the development of knowledge, skill, and society. *Advances in Health Sciences Education*, 27(5), 1265–1281. <https://doi.org/10.1007/s10459-022-10178-8>

- Ohyver, D. A., Azinuddin, M. & Son, A. P. M. (2025). The role of POKDARWIS on homestay digital marketing: A case study in South Sulawesi's tourist villages. *Journal of Applied Sciences in Travel and Hospitality*, 8(2), 165–176. <https://doi.org/10.31940/jasth.v8i2.165-176>
- Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L. & Kahlke, R. (2023). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher*, 45(3), 241–251. <https://doi.org/10.1080/0142159X.2022.2057287>
- Öztürk, B. (2024). Art of food: Systematic literature review of culinary creativity. *International Journal of Gastronomy and Food Science*, 36, 100940. <https://doi.org/10.1016/j.ijgfs.2024.100940>
- Petkova, I., Ivanova, M. & Boutin, H. (2024). *Innovation and creativity in culinary arts*. In A. Correia, J. D. Lopes & M. Portugal (Eds.), *International Case Studies in Innovation and Entrepreneurship in Tourism* (1st Edition, pp. 166–175). Routledge. <https://doi.org/10.4324/9781003390817>
- Schifferstein, H. N. J., Kudrowitz, B. M. & Breuer, C. (2022). Food Perception and Aesthetics - Linking Sensory Science to Culinary Practice. *Journal of Culinary Science & Technology*, 20(4), 293–335. <https://doi.org/10.1080/15428052.2020.1824833>
- Tapper, A. & Millett, S. (2015). *Revisiting the Concept of a Profession*. In M. Beard & S. Lynch (Eds.), *Conscience, Leadership and the Problem of 'Dirty Hands'* (Vol. 13, pp. 1–18). Emerald Group Publishing Limited. <https://doi.org/10.1108/S1529-209620150000013001>
- Traynor, M., Cain, L. & Moreo, A. (2022). Shooting for the stars: the case of an elite chef. *Journal of Foodservice Business Research*, 25(1), 107–125.
- Vaclavik, V. A. & Haynes, A. (2013). *The Art of Nutritional Cuisine*. CRC Press.
- Varghese, C. R. (2020). *The Art of Fusion: Innovative Recipes with a Blend of Culture and Taste*. Notion Press.
- Vasilakakis, K. & Sdrali, D. (2023). Supplier selection criteria in the Greek hotel food and beverage divisions. *Journal of Hospitality and Tourism Insights*, 6(2), 447–463. <https://doi.org/10.1108/JHTI-07-2021-0169>
- Winata, I. K. T. A., Bagiasuti, N. K., Wendri, I. G. M. & Septevany, E. (2023). Green purchasing of kitchen equipment at Anantara Uluwatu Bali Resort. *Journal of Applied Sciences in Travel and Hospitality*, 6(2), 72–83. <https://doi.org/10.31940/jasth.v6i2.72-83>

Integrated Marketing Communication, Brand Equity, and Perceived Value in Shaping Tourist Loyalty: Evidence from Nusa Penida Tourism

Iswahyu Pranawukir ^{1*}, Rudy Haryanto ², Dipa Teruna Awaludin ³, Rustaniah ⁴, Aprih Santoso⁵

¹Institut Bisnis dan Informatika (IBI) Kosgoro 1957, Indonesia

^{2,4}Politeknik Negeri Banjarmasin, Indonesia

³Universitas Nasional, Indonesia

⁵ Universitas Semarang, Indonesia

*Corresponding Author: prana1enator@gmail.com

Abstract: Nusa Penida in Bali has emerged as a marine tourism destination facing intensifying competition while continuing to attract both domestic and foreign visitors. This competitive environment requires highly integrated marketing communications to reinforce destination brand strength, enhance tourists' perceived value, and stimulate long-term loyalty. This research examines the causal relationships and structural linkages among Integrated Marketing Communication (IMC), Brand Equity, Perceived Value, and Tourist Loyalty using a quantitative framework based on Partial Least Squares–Structural Equation Modeling (PLS-SEM). The study involved 150 respondents who had previously traveled to Nusa Penida and were selected using purposive sampling criteria. Primary data were collected using a structured survey instrument and analyzed using SmartPLS 4. The empirical findings indicate that IMC positively and significantly influences both Brand Equity and Perceived Value. In addition, Brand Equity and Perceived Value serve as mediating mechanisms that amplify IMC's impact on Tourist Loyalty. The structural model evaluation revealed a high R-square for the loyalty construct, demonstrating the model's strong explanatory power for variation in tourist behavior. Overall, the results highlight the critical role of consistent and integrated marketing communication in shaping destination image, increasing perceived value, and cultivating tourist loyalty. From a practical standpoint, the findings emphasize the importance of collaboration among destination authorities, local governments, and tourism stakeholders in developing a robust digital-based marketing communication ecosystem to ensure Nusa Penida's sustained competitiveness as a world-class marine tourism destination.

Keywords: Brand Equity; Integrated Marketing Communication; Perceived Value; Tourist Loyalty.

History Article: Submitted 19 January 2026 | Revised 07 February 2026 | Accepted 10 March 2026

How to Cite: Pranawukir, I., Haryanto, R., Awaludin, D. T., Rustaniah, & Santoso, A.. (2026). Integrated marketing communication, brand equity, and perceived value in shaping tourist loyalty: Evidence from Nusa Penida tourism. *Journal of Applied Sciences in Travel and Hospitality*, 9(1), 73-83.

Introduction

Tourism has become a strategic sector within the global economy, including in Indonesia. Bali is widely recognized as a national tourism icon, contributing substantially to foreign exchange earnings, cultural representation, and marine tourism development. One destination that has experienced rapid growth is Nusa Penida, an island southeast of Bali renowned for its pristine beaches, marine biodiversity, and natural landscapes. Over the past decade, tourist arrivals to Nusa Penida have increased significantly. However, this growth has also intensified competition among marine tourism destinations at both national and international levels (Putra & Novani, 2020). Competition dynamics require destination managers to implement effective, integrated, and adaptive marketing communication strategies to keep pace with developments in the digital era.

Integrated Marketing Communication (IMC) is crucial because it enables organizations to coordinate various promotional instruments—such as digital advertising, social media, public

relations, sponsorships, and word of mouth—within a single, consistent communication framework. IMC helps convey a destination's message, strengthen brand image, and build emotional connections with tourists (Kliatchko, 2019). In tourism marketing, the effectiveness of IMC is closely related to how well communication strategies shape tourists' perceptions and experiences before, during, and after visiting a destination.

Furthermore, the success of IMC is closely related to the formation of brand equity. Brand equity reflects tourists' perceptions regarding the uniqueness, attractiveness, and quality of a destination that differentiates it from competitors. Destinations with strong brand equity are able to create clear differentiation, expand their market share, and increase tourists' preference for repeat visits (Pike et al., 2018). In marine tourism contexts, brand equity does not only include logos or visual symbols but also encompasses the overall experiential value tourists associate with the destination (Gursoy et al., 2021). Brand credibility, as a component of brand equity, further strengthens tourists' willingness to engage with and remain loyal to a destination brand (Isah et al., 2024).

Another important factor influencing tourist behavior is perceived value. Perceived value refers to tourists' evaluations of the benefits obtained relative to the costs or efforts expended during their visit. Destinations that provide high perceived value are more likely to generate satisfying experiences that encourage tourists to revisit and recommend the destination to others (Wu et al., 2020). Consumer purchase decisions and revisit intentions are often influenced by brand image, product quality, and promotional factors (Andriyanty & Wahab, 2022). In marine tourism destinations such as Nusa Penida, perceived value can be influenced by various elements including natural beauty, service quality, supporting infrastructure, and accessibility.

The interaction among Integrated Marketing Communication, brand equity, and perceived value ultimately contributes to the formation of tourist loyalty. Tourist loyalty represents a critical indicator of destination sustainability because loyal tourists are more likely to revisit a destination, share positive experiences on social media, and provide word-of-mouth recommendations to other potential visitors. Loyalty also helps destinations reduce promotional costs since positive reputation can be reinforced through direct tourist experiences (Chen & Rahman, 2018). In an industry that heavily relies on image and experiential value, building long-term tourist loyalty becomes essential for maintaining destination competitiveness.

Several previous studies have examined relationships among these marketing constructs. For instance, Dwivedi et al. (2021) found that integrated marketing communication significantly contributes to the development of brand equity through consistent marketing messages. Research by Foroudi (2019) demonstrated that strong brand equity enhances consumers' perceived value, which subsequently influences loyalty. Meanwhile, Jalilvand et al. (2022) identified perceived value as an important mediating variable linking brand-related perceptions with tourist loyalty. These findings suggest that tourist loyalty is not formed instantly but develops through accumulated perceptions and experiences generated through marketing communication and brand interaction.

However, despite the growing literature on destination marketing and tourist behavior, several limitations remain in previous studies. Many studies tend to examine these variables separately or focus primarily on urban tourism, hospitality services, or cultural tourism contexts. Empirical studies that simultaneously analyze the structural relationships among Integrated Marketing Communication, Brand Equity, Perceived Value, and Tourist Loyalty in marine tourism destinations remain relatively limited. Moreover, previous research has produced varying findings regarding whether marketing communication directly influences loyalty or whether this relationship occurs indirectly through mediating variables such as brand perception and perceived value.

In addition, limited empirical research has focused on rapidly developing island tourism destinations such as Nusa Penida. These destinations possess unique characteristics where natural attractions, digital promotion, and experiential tourism interact in shaping tourist perceptions and behavioral intentions. Understanding how integrated marketing communication strategies contribute to the development of brand equity and perceived value in such contexts remains an important research agenda.

Therefore, this study aims to address these gaps by examining the causal relationships among Integrated Marketing Communication, Brand Equity, Perceived Value, and Tourist Loyalty within the context of Nusa Penida marine tourism. Specifically, this study investigates how IMC contributes to the formation of brand equity and perceived value, and how these constructs subsequently influence tourist loyalty. By applying Partial Least Squares Structural Equation Modeling (PLS-SEM), this research provides empirical evidence regarding the structural relationships among these variables.

This research is expected to contribute both theoretically and practically. Theoretically, the study enriches the literature on destination marketing by integrating Integrated Marketing Communication (IMC), brand equity, and perceived value into a comprehensive framework explaining tourist loyalty. Practically, the findings provide insights for destination managers, tourism stakeholders, and local governments regarding the importance of implementing integrated and digitally oriented marketing communication strategies to strengthen destination branding, enhance tourists' perceived value, and foster sustainable tourist loyalty.

This research adopts a quantitative design using Partial Least Squares–Structural Equation Modeling (PLS-SEM) analyzed with SmartPLS 4. The method is appropriate because it allows the examination of complex relationships among latent constructs even when the sample size is relatively limited. The study involved 150 respondents who had previously visited Nusa Penida and were selected through purposive sampling. Primary data were collected through a structured questionnaire designed to measure tourists' perceptions of Integrated Marketing Communication, Brand Equity, Perceived Value, and Tourist Loyalty.

Integrated Marketing Communication and Brand Equity

People worldwide are largely engaged and attached with the web 2.0 technology and Social media platforms (Alalwan et al, 2017). In times of increasing uncertainty, authenticity is an essential human aspiration, making it a key issue in contemporary marketing and a major factor for brand success (Bruhn et al., 2018). Integrated Marketing Communication (IMC) refers to the strategic coordination of multiple communication channels to deliver a consistent and persuasive message to target audiences. In tourism marketing, IMC combines tools such as digital advertising, social media engagement, public relations, and promotional campaigns to strengthen destination positioning and brand identity (Kliatchko, 2019).

Previous empirical studies have shown that effective IMC strategies play an important role in developing strong brand equity. Dwivedi et al. (2021) demonstrated that consistent and integrated marketing communication enhances brand awareness, improves brand associations, and strengthens consumers' emotional connections with a brand. Similarly, research in tourism marketing indicates that destinations that communicate consistent messages across multiple platforms are more likely to develop stronger brand perceptions among tourists (Pike et al., 2018). In the context of tourism destinations, brand equity represents the added value that a destination brand provides to tourists through positive associations, perceived quality, and memorable experiences. Strong brand equity enables destinations to differentiate themselves from competing locations and encourages tourists to develop stronger psychological attachments to the destination. Previous empirical studies suggest that integrated marketing communication strategies contribute significantly to strengthening brand equity by delivering consistent and persuasive messages across multiple communication channels. For instance, Dwivedi et al. (2021) found that integrated marketing communication enhances brand awareness, improves brand associations, and strengthens emotional connections between consumers and brands. In tourism marketing, consistent communication through digital platforms, advertising, and public relations can strengthen destination identity and improve tourists' perceptions of the destination brand. Therefore, effective integrated marketing communication strategies are expected to enhance brand equity in tourism destinations.

Based on these arguments, the following hypothesis is proposed:

H1: Integrated Marketing Communication (IMC) has a significant positive effect on Brand Equity.

Integrated Marketing Communication and Perceived Value

Besides influencing brand equity, integrated marketing communication also plays an important role in shaping tourists' perceived value. Perceived value reflects tourists' overall evaluation of the benefits obtained from visiting a destination relative to the costs and efforts required. Marketing communication can shape tourists' expectations prior to visiting a destination and influence how they interpret their overall experience.

Foroudi (2019) demonstrated that integrated marketing communication positively affects consumers' perceived value by communicating the advantages and unique attributes of products or services. In tourism contexts, communication strategies that emphasize natural attractions, accessibility, facilities, and experiential value can significantly strengthen tourists' perceptions of value.

In marine tourism destinations such as Nusa Penida, perceived value may be influenced by the effective communication of environmental beauty, tourism facilities, cultural experiences, and accessibility. When communication strategies clearly highlight these benefits, tourists are more likely to perceive the destination as offering high value for their travel investment.

Therefore, the integration of marketing communication channels is expected to positively influence tourists' perceived value.

H2: Integrated Marketing Communication (IMC) has a significant positive effect on Perceived Value.

Brand Equity and Tourist Loyalty

Brand equity has long been recognized as a key determinant of consumer loyalty. In tourism contexts, strong brand equity creates favorable perceptions and emotional connections that encourage tourists to revisit a destination and recommend it to others. Chen and Rahman (2018) noted that destinations with strong brand images are more likely to retain tourists and benefit from positive word-of-mouth promotion.

Empirical evidence also supports this relationship. Jalilvand et al. (2022) found that tourists who perceive strong brand value are more likely to develop long-term commitment to a destination. Similarly, Pike et al. (2018) highlighted that tourism brand equity contributes to destination competitiveness by strengthening tourists' trust and preference toward the destination.

In marine tourism destinations, brand equity is often shaped by distinctive natural landscapes, environmental quality, and memorable travel experiences. When tourists associate a destination with strong and positive brand attributes, they are more likely to demonstrate loyal behaviors such as revisit intentions and recommendations.

Based on these arguments, the following hypothesis is proposed:

H3: Brand Equity has a significant positive effect on Tourist Loyalty.

Perceived Value and Tourist Loyalty

Perceived value is widely recognized as an important determinant of tourist loyalty. Tourists who perceive that a destination offers benefits exceeding their expectations are more likely to revisit the destination and recommend it to others. Suhartanto et al. (2020) found that perceived value significantly influences tourist satisfaction and loyalty in hospitality and tourism contexts.

Wu et al. (2020) also demonstrated that perceived value positively affects revisit intentions and positive word-of-mouth behavior among tourists. When tourists perceive that a destination provides meaningful experiences, high-quality services, and reasonable travel costs, they are more likely to develop stronger loyalty attitudes.

In marine tourism contexts such as Nusa Penida, perceived value is shaped by environmental beauty, unique coastal attractions, and authentic cultural experiences. These factors collectively influence tourists' evaluations of the destination and their future behavioral intentions.

Based on these findings, the following hypothesis is proposed:

H4: Perceived Value has a significant positive effect on Tourist Loyalty.

Mediating Role of Brand Equity and Perceived Value

In addition to the direct relationships proposed above, previous studies suggest that marketing communication may influence tourist loyalty indirectly through intermediate variables such as brand perceptions and value evaluations. Integrated marketing communication does not only influence behavioral outcomes directly but also shapes tourists' cognitive and affective responses, which subsequently affect loyalty intentions.

Research by Foroudi (2019) and Jalilvand et al. (2022) indicates that brand-related perceptions and perceived value often act as mediating mechanisms linking marketing communication strategies with consumer loyalty. In tourism contexts, effective communication can strengthen destination branding and enhance perceived value, which in turn encourages tourists to develop stronger loyalty behaviors.

Therefore, brand equity and perceived value are conceptually expected to mediate the relationship between integrated marketing communication and tourist loyalty.

Based on this reasoning, the following mediation hypotheses are proposed:

H5: Brand Equity mediates the relationship between Integrated Marketing Communication (IMC) and Tourist Loyalty.

H6: Perceived Value mediates the relationship between Integrated Marketing Communication (IMC) and Tourist Loyalty.

Methodology

This study employs a quantitative research approach to examine the causal and structural relationships among Integrated Marketing Communication (IMC), Brand Equity, Perceived Value, and Tourist Loyalty within the marine tourism context of Nusa Penida, Bali. The research adopts an explanatory design using Partial Least Squares–Structural Equation Modeling (PLS-SEM) to analyze both direct and indirect relationships among the constructs.

The target population of this study consists of domestic and international tourists who have previously visited Nusa Penida. The sampling technique used in this research is purposive sampling, with the main criterion being tourists who had visited Nusa Penida at least once within the past two years. This criterion was used to ensure that respondents possessed adequate experience and knowledge of the destination. Data were collected from 150 respondents, which is considered sufficient for PLS-SEM analysis because the method can effectively estimate complex models with relatively small sample sizes.

Primary data were collected through a structured questionnaire distributed both online and offline. The online questionnaire was distributed through digital platforms such as social media travel communities and tourism forums related to Bali tourism, while the offline questionnaires were distributed directly to tourists in several tourism service locations, including travel agencies and tourist gathering points. Before the full survey was conducted, a small pilot test was carried out with several respondents to ensure the clarity and relevance of the questionnaire items. Respondents were informed about the purpose of the study, and participation was voluntary and anonymous.

All constructs in this study were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The measurement indicators were adapted from established scales in previous tourism and marketing studies to ensure content validity. The measurement of each variable is described as follows:

1. Integrated Marketing Communication (IMC) was measured using 5 indicators adapted from Kliatchko (2019) and Dwivedi et al. (2021), capturing aspects such as message consistency, integration of communication channels, digital promotion effectiveness, and communication clarity.
2. Brand Equity was measured using 4 indicators adapted from Pike et al. (2018) and Jalilvand et al. (2022), including brand awareness, brand image, perceived quality, and brand associations related to the tourism destination.
3. Perceived Value was measured using 4 indicators adapted from Foroudi (2019) and Wu et al. (2020), reflecting tourists' evaluation of the benefits obtained from the destination relative to the costs incurred.
4. Tourist Loyalty was measured using 4 indicators adapted from Chen and Rahman (2018) and Suhartanto et al. (2020), including revisit intention, willingness to recommend the destination, positive word-of-mouth behavior, and overall loyalty to the destination.

Data analysis was conducted using SmartPLS 4 software. The analysis followed two main stages of PLS-SEM evaluation: the measurement model (outer model) and the structural model (inner model). The outer model evaluates the relationships between latent variables and their indicators. This stage aims to assess the validity and reliability of the measurement model. Convergent validity is assessed using outer loading values, where indicators with loading values above 0.5–0.7 are considered acceptable. Additionally, composite reliability and average variance extracted (AVE) are used to confirm construct reliability and validity. The inner model evaluates the relationships among latent constructs to test the proposed hypotheses. According to Ghazali and Latan (2020), the structural model describes the magnitude and significance of relationships between latent variables based on theoretical assumptions. The evaluation of the inner model includes examining path coefficients, t-statistics, and p-values obtained through the bootstrapping procedure to determine the significance of each hypothesized relationship. Furthermore, the structural model also assesses the coefficient of determination (R^2) and examines indirect effects to evaluate potential mediating relationships among the variables. Through this analytical approach, the study provides empirical evidence regarding how Integrated Marketing Communication influences Tourist Loyalty both directly and indirectly through Brand Equity and Perceived Value.

Results and Discussions

Results

Respondent Characteristics

Table 1. Descriptive Statistics

Variables	Category	Amount
Age	< 20 years	10
	21–35 years	87
	36–50 years	41
	> 50 years	12
Gender	Woman	80
	Man	70
Tourist Origin	Domestic	93
	Overseas	57

As shown in Table 1, the study collected data from 150 tourists who had previously visited Nusa Penida through both online and face-to-face surveys. The most significant proportion of respondents was in the 21–35 age category, accounting for 58% of the sample, followed by those aged 36–50 years at 27%, while smaller proportions were represented by those under 20 and over 50 years of age. In terms of gender composition, the distribution was relatively even, with women comprising 53% of respondents and men 47%. Regarding tourist origin, domestic visitors

accounted for 62% of the sample, while international tourists accounted for 38%. These demographic patterns suggest that Nusa Penida attracts a diverse range of visitors across age groups and nationalities, particularly younger travelers who rely heavily on digital platforms for travel-related information.

Measurement Model Test (Outer Model)

Table 2. Outer Model Test Results

Construct	Indicator	Loading	AVE	CR	CA
IMC	IMC1	1,000	0.72	0.91	0.89
	IMC2	0.989			
	IMC3	0,906			
	IMC4	0,893			
Brand Equity	BE1	1,000	0.74	0.93	0.91
	BE2	0.968			
	BE3	0.963			
	BE4	0.931			
Perceived Value	PV1	1,000	0.70	0.92	0.88
	PV2	0.943			
	PV3	0.878			
	PV4	0.931			
Tourist Loyalty	LOY1	1,000	0.73	0.93	0.90
	LOY2	0.968			
	LOY3	0.990			
	LOY4	0,892			

Referring to Table 2, all measurement indicators for the constructs of Integrated Marketing Communication (IMC), Brand Equity, Perceived Value, and Tourist Loyalty achieved factor loadings above the recommended cutoff of 0.7. This outcome suggests that each indicator sufficiently reflects its corresponding latent variable, thereby satisfying the requirements for convergent validity. In addition, the Average Variance Extracted (AVE) for each construct exceeded the 0.5 criterion, indicating that the constructs explain a greater proportion of variance in their indicators than is attributable to measurement error, which supports adequate discriminant validity. The reliability assessment further revealed that both Composite Reliability and Cronbach's Alpha for all constructs were above 0.7. These results confirm that the measurement instrument demonstrates strong internal consistency and is reliable for assessing IMC, Brand Equity, Perceived Value, and Tourist Loyalty.

Structural Model Test (Inner Model)

Table 3. Inner Model Test Results

Connection	Path Coefficient	t-value	p-value	Significance
IMC → Brand Equity	0.521	8.34	0,000	Significant (positive)
IMC → Perceived Value	0.473	7.92	0,000	Significant (positive)
Brand Equity → Tourist Loyalty	0.412	6.15	0,000	Significant (positive)
Perceived Value → Tourist Loyalty	0.443	6.73	0,000	Significant (positive)
IMC → Tourist Loyalty	0.091	1.41	0.156	Not significant

Table 4. R-Squared Values of Endogenous Constructs

Endogenous Construct	R ²
Brand Equity	0.27
Perceived Value	0.46
Tourist Loyalty	0.68

The results of the structural model analysis conducted using SmartPLS 4, as reported in Table 3, indicate that Integrated Marketing Communication (IMC) does not exert a statistically significant direct influence on Tourist Loyalty. This finding suggests that IMC alone is insufficient to generate loyal tourist behavior directly. Conversely, Brand Equity and Perceived Value were found to have substantial roles in enhancing Tourist Loyalty. Furthermore, as shown in Table 4, the coefficient of determination (R²) for the Tourist Loyalty construct was 0.68, indicating that Brand Equity and Perceived Value together explain 68% of the variance in tourist loyalty, with the remaining variance attributed to variables outside the proposed model. In line with the guidelines of Hair et al. (2021), this R² value is classified as strong, indicating that the research model has substantial predictive capability.

1. H1 (IMC → Brand Equity): path coefficient = 0.52; t-value = 8.34; $p < 0.001$ → indicates a significant positive effect.
2. H2 (IMC → Perceived Value): path coefficient = 0.47; t-value = 7.92; $p < 0.001$ → indicates a significant positive effect.
3. H3 (Brand Equity → Tourist Loyalty): path coefficient = 0.41; t-value = 6.15; $p < 0.001$ → indicates a significant positive effect.
4. H4 (Perceived Value → Tourist Loyalty): path coefficient = 0.44; t-value = 6.73; $p < 0.001$ → indicates a significant positive effect.

These findings support all four hypotheses and indicate that all model variables contribute substantially to explaining tourist loyalty.

Discussion

This study examined the structural relationships among Integrated Marketing Communication (IMC), Brand Equity, Perceived Value, and Tourist Loyalty in the context of marine tourism at Nusa Penida. The results provide several important insights regarding how communication strategies influence tourists' perceptions and behavioral intentions.

First, the results show that Integrated Marketing Communication has a significant positive effect on Brand Equity. This finding indicates that consistent and well-integrated communication across multiple channels—such as digital media, social platforms, tourism campaigns, and promotional activities—plays an important role in strengthening the brand identity of a tourism destination. Effective communication helps tourists develop stronger awareness and more favorable associations with the destination. This result is consistent with previous studies suggesting that integrated marketing communication enhances destination branding by improving brand visibility and reinforcing emotional connections with potential visitors.

Second, the study finds that Integrated Marketing Communication significantly influences Perceived Value. This result suggests that communication strategies are not only important for creating brand recognition but also for shaping tourists' perceptions of the benefits offered by the destination. When marketing communication clearly highlights the natural attractions, tourism facilities, accessibility, and unique experiences available in Nusa Penida, tourists are more likely to perceive the destination as providing higher value for their travel investment. This finding supports earlier research indicating that well-designed communication strategies can influence consumer expectations and enhance perceived value.

Third, Brand Equity is found to have a significant positive effect on Tourist Loyalty. Destinations with strong brand equity tend to generate stronger emotional attachment and trust among tourists. In the case of Nusa Penida, the destination's distinctive marine landscapes, coastal scenery, and unique travel experiences contribute to the development of a strong destination brand. When tourists associate the destination with positive experiences and

memorable images, they are more likely to revisit and recommend the destination to others. This result confirms prior studies suggesting that brand equity plays a central role in sustaining destination competitiveness and fostering long-term tourist relationships.

Fourth, Perceived Value also shows a significant positive effect on Tourist Loyalty. Tourists who perceive that the benefits of visiting a destination exceed the costs and effort involved are more likely to develop favorable behavioral intentions, including revisit intentions and positive word-of-mouth recommendations. In marine tourism contexts such as Nusa Penida, perceived value is influenced by the quality of natural attractions, environmental beauty, travel experiences, and tourism services. When these elements create meaningful and satisfying experiences, tourists tend to form stronger loyalty toward the destination.

An important finding of this study is that Integrated Marketing Communication does not have a significant direct effect on Tourist Loyalty. This result suggests that communication strategies alone may not directly translate into loyalty behavior. Instead, the influence of communication may operate indirectly through mediating variables such as Brand Equity and Perceived Value. In other words, marketing communication first shapes tourists' perceptions of the destination and strengthens the destination brand, which subsequently leads to loyalty. This finding aligns with several previous studies indicating that communication strategies often influence consumer behavior through cognitive and perceptual mechanisms rather than direct behavioral responses.

In the context of tourism destinations, loyalty is typically formed through accumulated experiences and perceived benefits, rather than communication exposure alone. Tourists may initially become aware of a destination through marketing communication, but their loyalty ultimately depends on how they evaluate the destination's value and how strongly they identify with the destination brand. Therefore, the non-significant direct relationship between IMC and Tourist Loyalty highlights the importance of understanding the mediating role of destination perception variables in tourism marketing models.

Theoretical and Practical Implications

This study contributes to tourism marketing literature in several ways. First, it provides empirical evidence supporting the role of Integrated Marketing Communication as an antecedent of both Brand Equity and Perceived Value within the context of marine tourism destinations. By integrating these constructs into a single structural model, the study extends previous research that often examined these relationships separately.

Second, the findings highlight the mediating mechanisms through which communication strategies influence tourist loyalty. The absence of a direct effect of IMC on loyalty suggests that destination marketing strategies operate primarily through perceptual constructs such as brand equity and perceived value. This insight contributes to the theoretical understanding of how marketing communication influences tourist behavior within experiential tourism environments.

Third, the study enriches tourism marketing research by providing empirical evidence from an emerging island tourism destination, which remains relatively underexplored in the literature. The findings therefore add contextual insights to destination branding and communication strategies in marine tourism settings.

Practical Implications

From a practical perspective, the findings provide useful insights for destination managers, tourism stakeholders, and local governments responsible for tourism development in Nusa Penida.

First, tourism authorities should prioritize integrated and consistent marketing communication strategies across multiple digital and offline platforms. Coordinated communication efforts can strengthen destination brand identity and improve tourists' perceptions of the destination.

Second, marketing communication should focus not only on promotional messages but also on highlighting the value offered by the destination, including natural attractions, environmental sustainability, accessibility, and unique tourism experiences.

Third, tourism managers should recognize that tourist loyalty is largely driven by perceived value and destination brand strength. Therefore, improving service quality, maintaining environmental sustainability, and enhancing visitor experiences are essential for strengthening tourist loyalty in the long term.

Conclusions

This study provides a brief overview of current developments in the analysis of causality and correlation among structurally integrated marketing communications, brand equity, perceived value, and tourist loyalty. The findings of this study indicate that the effectiveness of marine tourism destinations such as Nusa Penida is primarily determined by the application of integrated marketing communication (IMC) strategies, the development of substantial brand equity, and the enhancement of perceived value, all of which play a vital role in fostering tourist loyalty. The analysis conducted using SmartPLS shows that IMC significantly influences Brand Equity and Perceived Value but does not directly affect loyalty; instead, these two variables act as mediators linking IMC initiatives to loyal tourist behavior. This suggests that loyalty is built progressively through a strengthened destination image and tourists' favorable evaluations of the benefits offered. From a practical standpoint, the results emphasize that successful tourism promotion requires more than attractive visuals or digital content distribution, and must be supported by sustained efforts to shape destination identity and deliver meaningful, high-value experiences. Elements such as natural attractions, adequate infrastructure, service quality, and active involvement of local communities are essential for increasing perceived value and encouraging repeat visits and recommendations. Moreover, the R^2 value of 0.68 confirms the strong predictive capability of the proposed model, making it a valuable reference for marine tourism development strategies in Indonesia. Academically, this study enriches tourism marketing literature by providing empirical insights into the causal relationships among IMC, Brand Equity, Perceived Value, and Tourist Loyalty, particularly within the context of marine tourism destinations. In practice, the findings highlight the need for coordinated efforts among local governments, destination managers, and tourism stakeholders to establish an integrated, collaborative, and digitally oriented communication ecosystem that supports Nusa Penida's long-term competitiveness and sustainability as a world-class marine tourism destination.

References

- Alalwan, AA, Rana, NP, Dwivedi, YK, & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34(7), 1177–1190. <https://doi.org/10.1016/j.tele.2017.05.008>
- Andriyanty, R., & Wahab, D. (2022). Indonesian Generation Z Consumer Ethnocentrism on Food and Beverage Product. *Technium Social Sciences Journal*, 28(1), 522–538. <https://doi.org/10.47577/tssj.v28i1.5909>
- Bruhn, M., Schoenmueller, V., & Schäfer, D. B. (2018). Brand authenticity: Towards a framework for understanding brand management practices. *Journal of Business Research*, 83, 445–456. <https://doi.org/10.1016/j.jbusres.2017.11.053>
- Chen, C.F., & Chen, F.S. (2016). Experience quality, perceived value, satisfaction, and behavioral intentions for heritage tourists. *Tourism Management*, 31(1), 29–35. <https://doi.org/10.1016/j.tourman.2015.12.002>
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., ... Wang, Y. (2021). Setting the future of digital and social media marketing research. *International Journal of Information Management*, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Foroudi, P. (2019). Influence of brand signature, brand awareness, brand attitude, brand reputation on hotel industry's brand performance. *International Journal of Hospitality Management*, 76, 271–285. <https://doi.org/10.1016/j.ijhm.2018.05.016>
- Ghozali, I., & Latan, H. (2020). Partial Least Squares: Konsep, teknik, dan aplikasi menggunakan SmartPLS 3.0 (2nd ed.). Badan Penerbit Universitas Diponegoro.
- Gursoy, D., Akova, O., & Atsız, O. (2021). Understanding the heritage experience: a content

- analysis of online reviews of World Heritage Sites in Istanbul. *Journal of Tourism and Cultural Change*, 20(3), 299–322. <https://doi.org/10.1080/14766825.2021.1937193>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage Publications.
- Isah, S., Andriani, E., Albadry, S. A., & Pranawukir, I. (2024). Analysis of the influence of endorser and brand credibility on Samsung brand equity. *International Journal of Economics (IJE)*, 3(1), 147–158. <https://doi.org/10.55299/ijec.v3i1.549>
- Jalilvand, M. R., Vosta, L. N., Mahyari, H. K., & Pool, J. K. (2022). Social media and destination marketing: The mediating role of brand equity and perceived value. *Tourism Management Perspectives*, 42, 100970. <https://doi.org/10.1016/j.tmp.2022.100970>
- Kliatchko, J. (2019). Integrated marketing communications: Putting the human person at the core. *Journal of Marketing Communications*, 25(1), 1–20. <https://doi.org/10.1080/13527266.2018.1427133>
- Pike, S., Bianchi, C., Kerr, G., & Patti, C. (2018). Consumer-based brand equity for Australia as a long-haul tourism destination. *International Marketing Review*, 35(1), 1–19. <https://doi.org/10.1108/IMR-03-2017-0055>
- Putra, I. G. N., & Novani, S. (2020). Sustainable tourism development in Nusa Penida. *Journal of Tourism Development Studies*, 8(2), 45–55.
- Suhartanto, D., Brien, A., Primiana, I., Wibisono, N., & Triyuni, NN (2020). Tourist loyalty in creative tourism: The role of experience quality, value, satisfaction, and motivation. *Current Issues in Tourism*, 23(7), 867–879. <https://doi.org/10.1080/13683500.2019.1568400>
- Wu, H. C., Cheng, C. C., & Ai, C. H. (2020). A study of experiential quality, perceived value, heritage image, experiential satisfaction, and behavioral intentions. *Journal of Hospitality & Tourism Research*, 44(6), 1–26. <https://doi.org/10.1177/1096348019896548>

Increasing Employee Loyalty through Career Development and Engagement: The Mediating Role of Job Satisfaction in Five-Star Hotels in Greater Jakarta

Soerjanto^{1*}, Sulisty Haryono², Sulih Wahyudiono³

^{1,2,3} Asa Indonesia University, Indonesia

*Corresponding Author: soerjanto@asaindo.ac.id

Abstract: Employee loyalty remains a critical challenge in the hospitality industry, where high work pressure and dynamic service demands often lead to high employee turnover. Although career development and employee engagement have been widely recognized as drivers of employee retention, few studies have examined how these factors influence loyalty through job satisfaction in the context of five-star hotels. This study aims to analyze the effects of career development and employee engagement on employee loyalty, with job satisfaction acting as a mediating variable. Using a quantitative approach, data were collected from employees working in five-star hotels in Greater Jakarta between January and March 2025 and analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings reveal significant positive relationships among variables. Employee engagement exerts a strong influence on job satisfaction ($\beta = 0.468$), which, in turn, enhances employee loyalty ($\beta = 0.444$). In contrast, career development shows the weakest direct effect on loyalty ($\beta = 0.153$), indicating that emotional engagement and daily work experiences play a more prominent role in shaping employee commitment than long-term career advancement opportunities. Furthermore, job satisfaction is confirmed as a mediating mechanism that translates organizational investments in career development and employee engagement into sustained employee loyalty. These findings contribute to hospitality management literature by emphasizing the central role of psychological and emotional engagement in strengthening employee loyalty. From a practical perspective, hotel management should prioritize strategies that foster employee engagement, recognition, and positive workplace experiences to enhance job satisfaction and build long-term employee commitment.

Keywords: Career Development; Employee Engagement; Employee Loyalty; Five-Star Hotel; Job Satisfaction.

History Article: Submitted 28 January 2026 | Revised 17 February 2026 | Accepted 18 March 2026

How to Cite: Soerjanto, Haryono, S., Wahyudiono, S.. (2026). Increasing employee loyalty through career development and engagement: The mediating role of job satisfaction in five-star hotels in Greater Jakarta. *Journal of Applied Sciences in Travel and Hospitality*, 9(1), 84-99.

Introduction

The hospitality industry is one of the sectors that relies heavily on employee performance to deliver high-quality services to customers. In this context, employee loyalty (EL) is a critical factor in determining organizational sustainability and long-term success, particularly in five-star hotels where service excellence is a primary competitive advantage. Loyal employees contribute to service consistency, improve customer experiences, and support organizational profitability. In the hospitality industry, employee loyalty is increasingly important because it can reduce employee turnover and improve service quality (Fan et al., 2021). Employees who demonstrate strong loyalty also tend to contribute more significantly to organizational productivity and maintain higher retention rates, thereby reducing turnover costs that frequently challenge the hospitality sector.

However, employee loyalty does not emerge automatically. It is influenced by several organizational and psychological factors that shape employees' workplace experiences. One of the most important factors is job satisfaction (JS), which reflects employees' evaluation of various aspects of their work environment. Previous studies indicate that job satisfaction plays an im-

portant role in strengthening employee loyalty and often functions as a mediating variable between organizational practices and employee attitudes (Amin et al., 2024; Cinnioglu, 2024). In addition, career development (CD) and employee engagement (EE) are widely recognized as key factors that influence employee attitudes and well-being in service industries, including hospitality (Hosen et al., 2024).

Career development represents an organizational effort to provide employees with opportunities for learning, skill improvement, and career advancement. When employees perceive that their organization offers clear career pathways and professional development opportunities, they tend to feel valued and motivated to remain with the organization. This issue is particularly relevant in the hospitality industry, where high employee turnover is a persistent challenge due to demanding job characteristics, including long working hours, stressful service interactions, and limited opportunities for career advancement, which negatively affect workforce stability and retention. Recent empirical evidence confirms that the hospitality sector consistently records higher turnover rates than many other industries, reflecting both intrinsic job demands and scarce progression pathways that undermine employee retention (Dogru et al., 2023). In addition to career development, employee engagement has also received significant attention in human resource management literature. Employee engagement refers to a positive, fulfilling work-related psychological state in which employees feel emotionally connected and committed to their work, resulting in higher energy, dedication, and lasting involvement in organizational goals (Qi et al., 2023). Highly engaged employees tend to demonstrate greater commitment, stronger motivation, and higher performance.

Despite the well-established importance of career development and employee engagement, prior research has yielded inconsistent empirical results regarding their impact on job satisfaction and employee loyalty. Some studies suggest that career development has a significant positive effect on job satisfaction and employee loyalty (Katharina & Dewi, 2020), while others find no such relationship (Natsepa & Saladin, 2025). Similarly, although employee engagement is often identified as a strong predictor of job satisfaction and employee loyalty (Sudiarta et al., 2025; Wardana et al., 2024), its effect may vary depending on contextual factors such as organizational culture, work pressure, and industry characteristics (George et al., 2020). These mixed findings suggest that further empirical investigation is needed to clarify the relationships among these variables.

The empirical gap becomes particularly relevant in the context of five-star hotels. Compared with other hotel categories, five-star hotels operate with more complex organizational structures and higher service expectations, including personalized guest experiences and premium service standards. As a result, employees often face higher emotional and physical demands in their daily work. Under these conditions, career development and employee engagement may not automatically translate into employee loyalty unless employees experience stable job satisfaction. In this context, job satisfaction can function as a psychological mechanism that balances work demands with positive work experiences, thereby strengthening employee loyalty (Jung & Takeuchi, 2018; Robbins & Judge, 2024).

To explain these relationships, this study adopts Social Exchange Theory (SET) as the theoretical framework. Social Exchange Theory proposes that relationships within organizations are built on reciprocal exchanges in which individuals provide contributions in exchange for valuable returns, whether psychological, social, or economic (Blau, 2017). Support, fair treatment, and opportunities for professional growth are key factors in fostering positive employee attitudes such as satisfaction, engagement, and loyalty. Recent studies show that when employees perceive fairness and support, they are more likely to exhibit higher job satisfaction and commitment, which in turn promotes loyalty (Lahlou-kassi & Eddakir, 2025). When employees perceive that the organization invests in their career development and supports their involvement at work, they are more likely to show stronger commitment and loyalty to the organization (Aristana et al., 2022).

Employee loyalty is viewed as a multifaceted attitudinal and behavioral construct that encompasses an employee's psychological attachment to and supportive behaviors toward the organization, including a strong desire to remain and contribute to organizational goals and perfor-

mance outcomes (Lourenco & Rodrigues, 2025). In service industries such as hospitality, employee loyalty has been linked to positive employer-employee exchanges. It plays a crucial role in fostering service quality, satisfaction, and organizational success by strengthening employee commitment and reducing turnover intentions. Previous research indicates that employee loyalty is influenced by various organizational factors, including workplace relationships, organizational culture, reward systems, and career opportunities (Anukampa & Ranga, 2021; Chang & Busser, 2020; Hosen et al., 2024). In the context of Social Exchange Theory, loyalty emerges when employees perceive that the organization provides sustainable benefits and fulfills their expectations for career growth and professional stability (Blau, 2017).

Career development, therefore, becomes an important organizational practice that supports employee competence and long-term career advancement. Career development includes training programs, skill development, and promotion opportunities designed to prepare employees for greater responsibilities (Noe et al., 2022). From the perspective of Social Exchange Theory, such initiatives represent organizational investments that encourage employees to reciprocate with positive attitudes toward the organization (McDonald & Hite, 2023). In the hospitality industry, particularly in five-star hotels, career development opportunities are highly valued because employees often aspire to achieve managerial positions, international certifications, and professional recognition. When organizations provide clear, meaningful career pathways, employees are more likely to develop positive attitudes toward their work and demonstrate greater loyalty. Based on this reasoning, the following hypotheses are proposed:

H1: Career development positively affects the employee loyalty of five-star hotel employees.

H2: Career development positively affects the job satisfaction of five-star hotel employees.

Employee engagement also plays an important role in shaping employee attitudes and organizational outcomes. In recent research, employee engagement is described as a multidimensional psychological construct that captures employees' emotional ties, enthusiasm, and deep involvement in their work roles, reflecting how strongly they are committed to achieving organizational objectives and contributing positively to performance outcomes (Coetzee et al., 2025). Employees with high engagement tend to display vigor, dedication, and absorption in their work, showing strong passion and focus that not only supports job performance but also contributes to overall organizational success (Ghani et al., 2023). As such, employee engagement is consistently linked with higher job satisfaction, stronger organizational commitment, and lower intentions to leave, making it a key factor in sustaining human capital in competitive environments.

In service industries such as hospitality, employee engagement is particularly important because frontline employees directly influence customer experiences and service quality. Previous studies have demonstrated that higher levels of employee engagement are associated with increased job satisfaction and stronger employee loyalty (Book et al., 2019; George et al., 2020; Nirinjan & Thomas, 2018; Taware & Bodla, 2022). Employees who feel engaged with their work are more likely to perceive their work environment positively and remain committed to their organization. Based on this theoretical perspective, the following hypotheses are proposed:

H3: Employee engagement positively affects the employee loyalty of five-star hotel employees.

H4: Employee engagement positively affects the job satisfaction of five-star hotel employees.

Job satisfaction refers to an employee's positive emotional evaluation of their overall work experiences and aspects of their job, reflecting how employees feel about the meaningfulness, conditions, and rewards associated with their work (Bennouna et al., 2025). In the hospitality industry, recent studies suggest that social factors such as supportive supervisors, positive coworker relationships, and perceptions of organizational justice play an important role in shaping job satisfaction in hotel settings (Saito et al., 2025; Zhang et al., 2023). These factors are particularly important in five-star hotels where teamwork, coordination, and emotional stability are essential for delivering premium service experiences.

From the perspective of Social Exchange Theory, employees who experience high levels of job satisfaction are more likely to reciprocate positive organizational treatment by demonstrating stronger commitment and loyalty (Babakus et al., 2017). Employees who experience higher levels of job satisfaction are more likely to exhibit lower turnover intentions, as satisfaction reduces the desire to leave an organization and enhances retention (Salahudin et al., 2025). Therefore, job

satisfaction may function as an important mediating variable that explains how career development and employee engagement influence employee loyalty. Based on these theoretical arguments, the following hypotheses are proposed:

H5: Job satisfaction positively affects the employee loyalty of five-star hotel employees.

H6: Career development positively affects employee loyalty through job satisfaction.

H7: Employee engagement positively affects employee loyalty through job satisfaction.

Methodology

This study investigates the impacts of CD and EE on EL via JS at five-star hotels in the Greater Jakarta area, using a quantitative, survey-based approach. Greater Jakarta, the capital city of Indonesia, is a bustling metropolis and the country's primary hub for business, government, and commerce. As one of the busiest urban centers in Southeast Asia, Jakarta attracts a wide range of domestic and international visitors, generating significant demand for accommodation services. The hospitality industry, particularly in the five-star segment, is highly competitive, where hotels are expected to maintain exceptional service standards, operational efficiency, and workforce stability.

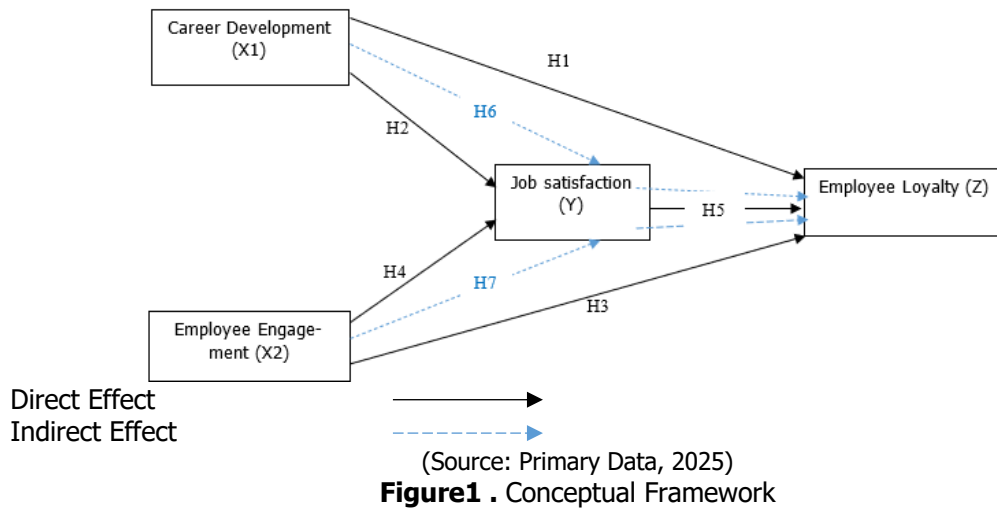
This approach enables the assessment of correlations between variables using numerical data that can be statistically analyzed (Bougie & Sekaran, 2020). This research is descriptive and explanatory, where descriptive aims to describe the variables involved, while explanatory explains the link between variables in terms of cause and effect (Bougie & Sekaran, 2020). The conceptual model is a mediation model, with JS mediating the relationship between CD and EE on EL.

The study's population consisted of all employees at five-star hotels in the Greater Jakarta region. Purposeful sampling was used to select workers who had been with the company for more than a year and had participated in training or career development. The sample, comprising 100–150 respondents, met the requirements for path analysis using SmartPLS (Hair et al., 2022). This study involved 300 five-star hotel employees in Jabodetabek who met these criteria.

A questionnaire measuring CD, EE, JS, and EL was used as the study tool. A five-point Likert scale was used, with one representing strongly disagree and five representing strongly agree. A scale developed by McDonald & Hite (2023) with categories for training, promotion, and skill development was used to quantify career progression. The Utrecht Work Engagement Scale (UWES) from Schaufeli et al. (2006), which has three dimensions: vigour, devotion, and absorption, was used to quantify employee engagement. Karatepe and Uludag's (2007) indicators gauge job happiness. These indicators include overall job satisfaction, contentment with supervisors and coworkers, organizational policies, support, pay, prospects for advancement, and customer relations. A scale developed by Meyer and Allen (1991) that incorporates affective commitment is used to gauge employee loyalty. Normative commitment and continuity commitment

An online survey was used to gather data, and 30 participants' instruments were examined to ensure validity and reliability. Cronbach's Alpha was used to assess reliability, and SmartPLS outer loadings were used to test validity (Sarstedt et al., 2022).

PLS-SEM from SmartPLS was used to analyze the data. Because PLS-SEM can handle complex models with comparatively few samples, it was chosen (Hair et al., 2022). Path coefficients and p-values were used for hypothesis testing; an inner model test was used to examine the relationships among the variables; and construct validity and reliability were evaluated using an outer model test.



Results and Discussions

Results

Respondent Profile

The demographic profile of the respondents in this study reflects the diversity of characteristics crucial to understanding the work context and its influence on employee loyalty in five-star hotels. The following table presents the details regarding gender, age, education level, job position, work experience, employment status, weekly working hours, and the frequency of career development training attended by the respondents.

Table 1. Respondent Demographics

Characteristics Respondents	Variable	Frequency	Percentage (%)
Gender	M	140	46.7
	F	160	53.3
Age (Years Old)	18 to 25	73	24.3
	26 to 35	126	42
	36 to 55	76	25.3
	>55	6	2
Highest level of education	High School/Vocational School	197	65.7
	Diploma (D1/D2/D3)	65	21.7
	Bachelor's Degree (S1)	31	10.3
	Postgraduate	7	2.3
Position/Job Title	Front Office	90	30
	Housekeeping	69	23
	F&B (Food and Beverage)	107	35.7
	Management	22	7.3
	Others	12	4
Years of Experience (Years)	2 to 4	44	14.7
	5 to 7	140	46.7
	>7	116	38.7
Employment Status	Permanent Employee	213	71
	Contract Employees	61	20.3
	Internship/Training	26	8.7
Average Number of Working Hours per Week:	0-40	152	50.7
	41-50	103	34.3
	> 50	45	15
	1 X	106	35.3

Characteristics Respondents	Variable	Frequency	Percentage (%)
Career Development Training Attended:	2-3 X	109	36.3
	4-5 X	53	17.7
	>5 X	32	10.7

Based on demographic data, most respondents were female (53.3%), with males comprising 46.7% of the sample. This distribution shows gender diversity among employees of five-star hotels in Greater Jakarta. Regarding age, 42% of respondents were aged 26-35, reflecting a productive age group with sufficient work experience. A total of 24.3% of respondents were aged 18-25 years, and 2% were aged 55 or older.

Most respondents had a high school or vocational education (65.7%), followed by a diploma (21.7%), while those with a bachelor's degree (S1) and a postgraduate degree accounted for 10.3% and 2.3%, respectively. Regarding job positions, 35.7% worked in the F&B sector, 30% in the Front Office, and 23% in Housekeeping. Only 7.3% held managerial positions, while the remaining 4% held other positions.

Most respondents had 5-7 years of work experience (46.7%), 38.7% had more than 7 years, and 14.7% had 2-4 years. Employment status showed that 71% were permanent employees, 20.3% were contract employees, and 8.7% were interns or trainees.

Most respondents work 0-40 hours per week (50.7%), followed by 34.3% who work 41-50 hours, and 15% who work more than 50 hours. Regarding career training, 36.3% of respondents attended training 2-3 times, 35.3% only once, and 10.7% more than 5 times.

This data provides an overview of the characteristics of five-star hotel employees in Greater Jakarta, most of whom have adequate work experience and stable employment status. The diversity in age, education, position, and working hours provides important insights into career development, engagement, and factors influencing employee satisfaction and loyalty.

Measurement Models

In this section, the measurement model used to assess the constructs involved in this study is described in detail. The measurement model was evaluated for validity and reliability to ensure that the indicators accurately and consistently measure the constructs. The following table presents the measurement model for this study, including the outer loadings, Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) for each variable.

Table 2. Measurement Models

Variable	Measure- ment Item	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
CD	CD1	0.845	0.944	0.955	0.781
	CD2	0.872			
	CD3	0.868			
	CD4	0.885			
	CD5	0.880			
	CD6	0.949			
EE	EE1	0.857	0.961	0.969	0.840
	EE2	0.876			
	EE3	0.927			
	EE4	0.895			
	EE5	0.969			
	EE6	0.969			
JS	JS1	0.746	0.958	0.966	0.804
	JS2	0.919			
	JS3	0.889			
	JS4	0.852			
	JS5	0.960			
	JS6	0.961			
	JS7	0.931			

EL	EL1	0.902	0.963	0.970	0.843
	EL2	0.913			
	EL3	0.938			
	EL4	0.938			
	EL5	0.894			
	EL6	0.922			

The outer loadings for each indicator exceeded the 0.7 threshold, indicating good convergent validity (Hair et al., 2022). Additionally, all variables had AVEs greater than 0.5, indicating that each construct accounts for more than 50% of the variance in its indicators, further supporting convergent validity (Sarstedt et al., 2020). Furthermore, the Cronbach's Alpha and Composite Reliability values for each variable exceeded the 0.7 threshold, indicating high reliability (Hair et al., 2022). These results demonstrate that the measurement model has robust validity and reliability, making it appropriate for further analysis in this study.

The Heterotrait–Monotrait Ratio (HTMT) is a widely accepted criterion for assessing discriminant validity, as it evaluates the correlations between distinct constructs. In this study, the HTMT values were calculated for the constructs of CD, EE, EL, and JS. The results indicate that all HTMT values are below the recommended threshold of 0.90, suggesting that discriminant validity has been adequately established among the constructs. Recent literature in PLS-SEM confirms that HTMT values below 0.85 or 0.90 indicate satisfactory discriminant validity (Hair et al., 2022). These findings demonstrate that the constructs are empirically distinct and that there are no critical multicollinearity issues among the latent variables.

Following the HTMT analysis, additional procedures were employed to evaluate discriminant validity in the measurement model. As recommended in recent PLS-SEM literature, discriminant validity was assessed by comparing the square root of the Average Variance Extracted (AVE) for each construct with its correlations with other constructs, and by examining cross-loadings and HTMT criteria (Hair et al., 2024). The results showed that each construct's AVE square root exceeded its inter-construct correlations, confirming that discriminant validity was satisfied. These findings provide robust support for the validity of the measurement model in this study.

Cronbach's Alpha and CR for each variable are both higher than 0.7, suggesting high reliability, according to the reliability test results (Table 2) (Hair et al., 2022). According to the findings of the outer model test, the measurement model has strong validity and reliability overall, making it suitable for additional study.

Structural Model Evaluation

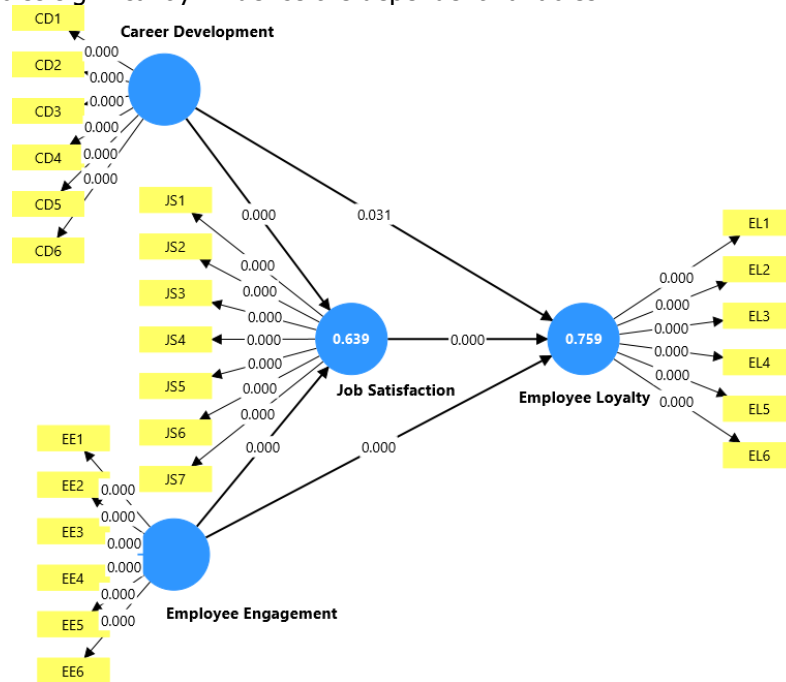
Based on the inner model test results from this study, several important indicators of the quality of the structural Model are R-squared, multicollinearity among latent variables (Inner VIF), F-squared, and hypothesis testing.

The R-squared values for both the EL and JS variables, 0.759 and 0.639, respectively, indicate relatively high levels of explanatory power. Recent guidelines in PLS-SEM suggest that R-squared values of 0.75, 0.50, and 0.25 can be described as substantial, moderate, and weak, respectively (Hair et al., 2022). Therefore, the R-squared value for employee loyalty (0.759) can be considered substantial, while job satisfaction (0.639) falls within the moderate-to-substantial range. These results indicate that the independent variables in this study explain a significant proportion of the variance in both EL and JS, suggesting strong predictive power and meaningful relationships among the constructs.

Regarding multicollinearity, the Variance Inflation Factor (VIF) values for the latent variables are all below 5, indicating no serious multicollinearity issues within the structural model (Hair et al., 2022). Specifically, the VIF values range from 2.769 to 3.534, suggesting that the relationships among the latent variables are within acceptable limits and that there is no excessive dependence among them.

Regarding the F-square values, which indicate the magnitude of the independent variables' influence on the dependent variables, the analysis shows a moderate to strong effect. For example, the F-square for EE on JS is 0.207, indicating a moderate effect, while the F-square for JS on EL is 0.296, indicating a strong effect. According to Hair et al. (2022), f^2 values of 0.02, 0.15,

and 0.35 are considered small, medium, and large effects, respectively, confirming that the independent variables significantly influence the dependent variables.



(Source: Primary Data, 2025)

Figure 2. Conceptual Framework of Direct and Indirect Effects on Employee Loyalty

Following the structural model results illustrated in Figure 2, the overall model fit and predictive capability were further evaluated to ensure the robustness of the proposed model. In this study, model fit was assessed using the Standardized Root Mean Square Residual (SRMR) and the Normed Fit Index (NFI). Additionally, the model's predictive capability was examined using predictive relevance (Q^2_{predict}), along with Root Mean Square Error (RMSE) and Mean Absolute Error (MAE).

The results indicate that the proposed model demonstrates acceptable fit. As shown in Table 3, the SRMR value of 0.039 is below the recommended threshold of 0.08, indicating good alignment between the empirical data and the structural model (Sarstedt et al., 2021). Additionally, the NFI value of 0.908 suggests satisfactory model fit, as values closer to 1.0 indicate a stronger fit between the theoretical model and observed data (Hair et al., 2024).

Table 3 . Model Fit and Predictive Relevance Evaluation

Indicator	Construct	Value	Threshold	Interpretation
SRMR	Model Fit	0.039	< 0.08	Good Fit
NFI	Model Fit	0.908	> 0.90	Acceptable Fit
Q^2_{predict}	Employee Loyalty (EL)	0.680	> 0	Strong Predictive Relevance
Q^2_{predict}	Job Satisfaction (JS)	0.631	> 0	Strong Predictive Relevance
RMSE	Employee Loyalty (EL)	0.571	Lower is better	Acceptable Prediction Accuracy
MAE	Employee Loyalty (EL)	0.423	Lower is better	Acceptable Prediction Accuracy
RMSE	Job Satisfaction (JS)	0.614	Lower is better	Acceptable Prediction Accuracy
MAE	Job Satisfaction (JS)	0.473	Lower is better	Acceptable Prediction Accuracy

To further evaluate the model's predictive performance, the Q^2_{predict} values were examined. The results show that the Q^2_{predict} values for EL and JS are greater than zero, indicating that the model possesses strong predictive relevance for the endogenous constructs model (Hair et al., 2022). Additionally, the RMSE and MAE values were assessed and found to be comparatively low, suggesting that the model provides accurate predictions of the observed outcomes, consistent with contemporary predictive evaluation practices in PLS-SEM (Troville et al., 2025).

Overall, these findings confirm that the proposed structural model demonstrates good fit and strong predictive capability, supporting its robustness and reliability in explaining the relationships among career development, employee engagement, job satisfaction, and employee loyalty within the hospitality context.

The following table presents the results of the hypothesis testing, which assess the relationships between CD, EE, JS, and EL. The path coefficients and p-values indicate the strength and significance of the direct and indirect effects among the variables. All hypotheses were tested using Partial Least Squares Structural Equation Modeling (PLS-SEM), and the results provide valuable insights into the role of job satisfaction as a mediator in the relationships between career development, employee engagement, and employee loyalty.

Table 4. Testing Hypotheses

Hypothesis	Hypothesis Statement	Path Coefficients	P-Value	Description
H1	CD $\rightarrow$ EL	0.153	0.031	Accepted
H2	CD $\rightarrow$ JS	0.372	0.000	Accepted
H3	EE $\rightarrow$ EL	0.342	0.000	Accepted
H4	EE $\rightarrow$ JS	0.468	0.000	Accepted
H5	JS $\rightarrow$ EL	0.444	0.000	Accepted
H6	CD $\rightarrow$ JS $\rightarrow$ EL	0.165	0.000	Accepted
H7	EE $\rightarrow$ JS $\rightarrow$ EL	0.208	0.000	Accepted

The analysis shows that all hypotheses were supported, with CD, EE, and JS significantly influencing EL. CD exhibited the weakest effect ($\beta = 0.153$), which aligns with evidence that employees with 5–7 years of experience value daily emotional support and relational conditions more than long-term career prospects (Noe et al., 2022). According to Peter Blau's Social Exchange Theory (2017), employees respond more strongly to immediate, meaningful benefits. In contrast, EE displayed a stronger mediating effect through JS, supporting arguments by Schaufeli et al. (2006) that engagement enhances vigour, dedication, and ultimately satisfaction and loyalty.

Discussions

The results of the hypothesis testing indicate that all hypotheses are true and that there is a significant correlation between the variables. Hypothesis H1, which states that career development (CD) affects employee loyalty (EL), is proven to be significant. This result is consistent with earlier research that indicates a strong relationship between CD and EL in the hospitality sector (Hosen et al., 2024; Katharina & Dewi, 2020; Majid et al., 2017; Sukmana et al., 2021). Recent studies demonstrate that CD programs in the hospitality industry are positively associated with EL and performance. In addition, CD is found to improve employee competence and adaptability to job demands in this sector (Hosen et al., 2024). The relatively low direct effect of CD on EL ($\beta = 0.153$) can be attributed to respondents' demographic characteristics. Most respondents (42%) are in the 26-35 age group, a stage where career progression may feel uncertain, and 65.7% have a high school or vocational education. Many respondents hold operational roles, such as in Food and Beverage (F&B), Front Office, and Housekeeping, which often offer limited immediate promotion opportunities. These roles may cause employees to prioritize daily work conditions, emotional rewards, and recognition over long-term career advancement. Employees in operational roles often value job satisfaction and immediate recognition more than career growth, as they may not perceive structural career paths as attainable or impactful in the short term (Noe et al., 2022). Therefore, the emphasis on emotional satisfaction and job stability helps explain why Career Development has a weaker effect on loyalty in this study.

Hypothesis H2, which tests the effect of career development on job satisfaction (JS), is accepted, in line with the theory that CD opportunities increase employee JS (Anukampa & Ranga,

2021; Hakuduwal, 2021; Katharina & Dewi, 2020; Kaur & Bhanage, 2020; Saputra, 2022). Garavan (2021) states that structured CD programs can increase employee JS and performance by empowering and valuing employees, thereby increasing their job satisfaction.

Hypothesis H3, which tests the effect of employee engagement (EE) on employee loyalty (EL), shows significant results. This finding confirms previous research showing that high EE can increase EL, as employees feel more attached to the company (Book et al., 2019; George et al., 2020; Nirinjan & Thomas, 2018; Taware & Bodla, 2022). Saks (2019) also found that EE significantly affects EL. High engagement improves performance and strengthens employees' commitment and loyalty to the organization, as they feel valued and emotionally connected to their work. Recent empirical research has shown that higher levels of employee engagement are associated with greater job satisfaction and can contribute to stronger employee loyalty, as engaged workers tend to develop closer psychological bonds with their organization and exhibit more positive work attitudes that support long-term retention and commitment (Presbitero et al., 2025).

Hypothesis H4 examines the impact of EE on JS and is accepted, in line with research showing that engaged Workers are more likely to be content with their positions (Anukampa & Ranga, 2021; Kaur & Bhanage, 2020). EE has been shown to enhance employees' intrinsic motivation and psychological involvement in their work, which in turn contributes to higher levels of JS (Presbitero et al., 2025). Employee engagement conceptualized as a psychological state involving emotional attachment and cognitive focus on work responsibilities, has been shown to positively influence job-related attitudes such as job satisfaction, as employees who feel more emotionally and cognitively invested in their work report higher levels of satisfaction with their job experience (Coetzee et al., 2025).

Hypothesis H5, which tested the effect of JS on EL, was supported by a path coefficient of 0.444, consistent with research showing that JS is an important predictor of EL (Katharina & Dewi, 2020; Ogbeide, 2020; Thi Kim Phuong & Trung Vinh, 2020). High JS increases employee commitment and loyalty, as employees are more likely to remain in organizations they find satisfying (Salanova et al., 2020).

In addition, hypotheses H6 and H7, which test the mediating effect of CD and EE on EL through JS, show significant results. Hypothesis H6, with a mediation effect of 0.165 (p-value 0.000), confirms that JS mediates the relationship between CD and EL, per the partial mediation theory (Hayes, 2022). Hypothesis H7, which shows the mediation of EE on JS and loyalty, is also proven to be significant with a mediation effect of 0.208 (p-value 0.000), supporting the partial mediation theory (Hayes, 2022).

The stronger mediating effect of EE on EL ($\beta = 0.208$) compared to CD ($\beta = 0.165$) can be attributed to the unique characteristics of the five-star hotel industry, where emotional labor is crucial. In this setting, daily emotional interactions and psychological appreciation have a more immediate impact on JS and EL than long-term career prospects such as promotions. Schaufeli & Bakker's (2004) Work Engagement theory highlights that emotionally engaged employees exhibit greater vigor, dedication, and absorption, thereby enhancing job satisfaction and loyalty. Employees who feel valued are more committed and loyal to the organization (Bakker & Demerouti, 2008).

While CD is important, its effects tend to be long-term. According to Blau's (2017) Social Exchange Theory, loyalty arises from reciprocal exchanges between employees and organizations. However, in high-contact service environments like five-star hotels, emotional recognition and daily positive feedback are more influential than career advancement opportunities. Noe et al. (2022) note that more experienced employees often shift their focus from long-term career growth to immediate emotional rewards, which explains why CD has a weaker mediating effect on loyalty.

Thus, in five-star hotels, where emotional labor and personal interactions are key, EE plays a more significant role in driving job satisfaction and loyalty than CD (Bakker & Albrecht, 2018).

In essence, in high-contact service environments like five-star hotels, where the quality of daily interactions and employees' emotional well-being are paramount, Employee Engagement plays a more significant role in fostering job satisfaction and employee loyalty than career development initiatives. This underscores the importance of creating a work environment that nurtures

emotional connections, recognition, and engagement, while also providing career advancement opportunities.

The mediation effect of EE through JS ($\beta = 0.208$) was stronger than the mediation of CD through JS ($\beta = 0.165$). This suggests that emotional and psychological attachment to work plays a more substantial role in retaining employees than long-term career promises. In high-contact service environments such as luxury hotels, employees' daily emotional experiences, such as feeling energized, appreciated, and absorbed in their tasks, tend to have stronger immediate effects on satisfaction and loyalty. This pattern aligns with engagement theory, in which Schaufeli & Bakker (2004) assert that vigour, dedication, and absorption enhance job fulfilment and long-term attachment. Given that service encounters in five-star hotels rely heavily on emotional labour and consistent service excellence, emotionally engaged employees are more likely to reciprocate through loyalty, demonstrating that engagement-driven satisfaction contributes more strongly to EL than CD-driven satisfaction.

Overall, the results of this hypothesis test confirm the important role of CD, EE, and JS in increasing EL, both directly and via the JS mediator. The study's findings strongly resonate with Social Exchange Theory (SET). SET posits that employees reciprocate the benefits they perceive from the organization (Blau, 2017; Cropanzano & Mitchell, 2005). With a high explained variance for EL ($R^2 = 0.759$), the results indicate that employees display loyalty as a reciprocal return for the organisation's investments, whether in training, support, meaningful work experiences, or emotional acknowledgement. EE and JS appear to serve as the psychological channels through which employees internalize these investments and respond with loyalty behaviours. Thus, the high employee loyalty can be interpreted as a direct reflection of the positive social exchange they experience in the workplace.

Clear, structured career development is crucial to enhancing employee loyalty and job satisfaction in five-star hotels. Training programs and internal promotions can reduce turnover and boost employee commitment, aligning with findings that show career development positively impacts loyalty and job satisfaction (Hosen et al., 2024; Katharina & Dewi, 2020). Employee engagement also influences loyalty and satisfaction, so managers need to create an environment that supports employees' emotional and cognitive engagement, such as recognizing their contributions and providing opportunities for decision-making participation (Bakker & Albrecht, 2018). High job satisfaction, influenced by factors like recognition and personal development, plays an important role in strengthening employee loyalty (Saks, 2019).

This study enriches social exchange theory by showing how career development and employee engagement create mutually beneficial relationships that enhance employee loyalty and performance (Blau, 2017). The findings support partial mediation theory, with job satisfaction serving as a mediator between career development, employee engagement, and loyalty, consistent with Hayes's (2022) approach. Additionally, the study contributes to the employee engagement literature by underscoring that emotion-related work processes and employees' emotional investment play an important role in shaping positive work outcomes, including job satisfaction and employee loyalty, thereby extending engagement theory in the hospitality context (Shulga & Busser, 2024).

In the premium hospitality industry, where consistent service standards, exceptional hospitality, and emotional readiness are required, frontline staff must deliver personalized, warm, and professional service in every guest interaction. Consequently, emotional engagement becomes vital for maintaining service quality stability, which explains why Employee Engagement (EE) contributes more strongly than Career Development (CD) in shaping employee loyalty.

Overall, the discussion affirms that loyalty in five-star hotels is driven less by long-term structural career pathways and more by emotional bonds, immediate psychological rewards, and the quality of daily work experiences. Strengthening EE and JS while providing accessible skill-development opportunities will be essential for hotel managers aiming to build a stable, committed, and high-performing workforce.

Conclusions

This study examines the relationships among career development, employee engagement, job satisfaction, and employee loyalty within the context of five-star hotels. The findings confirm

that both career development and employee engagement play important roles in shaping employees' job satisfaction and loyalty. However, employee engagement appears to exert a stronger influence on employee loyalty. This finding indicates that employees who feel emotionally connected to their work, are valued by their organization, and are actively involved in workplace activities are more likely to develop stronger commitment and loyalty to their organization.

In addition, the results demonstrate that job satisfaction serves as an important mediating mechanism linking organizational practices to employee loyalty. Job satisfaction enables organizational efforts, particularly those related to career development, to be translated into stronger employee commitment and long-term loyalty. In other words, career development initiatives are more likely to yield meaningful outcomes when supported by a work environment that fosters employee satisfaction and positive work experiences.

The findings further reveal that employee engagement plays a more dominant role in shaping employee loyalty compared with career development. This result highlights the importance of emotional and psychological factors in fostering loyalty within the hospitality industry. Employee engagement, reflected in employees' daily emotional connection to their work and their sense of psychological appreciation from the organization, appears to be more effective at strengthening loyalty than career development, which is often perceived as a longer-term organizational investment. This condition may also be influenced by respondents' demographic characteristics, who are predominantly employees aged 26 to 35. At this stage of their professional careers, many employees experience a career plateau, a situation in which opportunities for advancement may seem limited or progress more slowly. As a result, employees may prioritize immediate emotional satisfaction, workplace relationships, and day-to-day work experiences over long-term career advancement.

From a theoretical perspective, this study contributes to the hospitality and human resource management literature by integrating career development, employee engagement, and job satisfaction within a comprehensive framework to explain employee loyalty in the hotel industry. The findings demonstrate that these factors not only influence employee loyalty individually but also interact to shape employee behavioral outcomes in a service-oriented work environment.

From a managerial perspective, the findings emphasize the importance of implementing holistic human resource management strategies. Hotel management should not only focus on structured career development opportunities but also on creating a supportive work environment that enhances employee engagement and job satisfaction. Initiatives such as fostering a positive organizational culture, recognizing employees' contributions, and encouraging active employee participation in organizational activities can strengthen employees' sense of belonging. These strategies can ultimately enhance employee loyalty and support sustainable organizational performance in the increasingly competitive hospitality industry.

Despite its contributions, this study has several limitations. The research focuses solely on employees working in five-star hotels, which may limit the generalizability of the findings to other hospitality sectors or service industries. In addition, the cross-sectional design of this study captures employee perceptions at a single point in time and does not account for potential changes over time. Future research is therefore encouraged to expand the scope of investigation by including different categories of hotels or other hospitality organizations and by applying longitudinal approaches to understand better the dynamic relationships among career development, employee engagement, job satisfaction, and employee loyalty.

Overall, this study provides a more comprehensive understanding of the factors influencing employee loyalty in the hospitality sector. By emphasizing the integrated roles of career development, employee engagement, and job satisfaction, the findings highlight that fostering employees' emotional engagement represents a critical strategy for hospitality organizations seeking to build a loyal, committed, and sustainable workforce.

References

- Amin, M. R., Khandakar, S. A. & Akata, F. F. (2024). Organizational Culture, Job Satisfaction, and Job Loyalty: A Study on Employees in the Hospitality Industry of Bangladesh. *Bangladesh Journal of MIS*, 10(02). <https://doi.org/https://doi.org/10.61606/BJMIS.V10N2.A6>
- Anukampa & Ranga, D. P. (2021). Impact Of Employee Engagement Factors On Job Satisfaction

- In Employees Working In Five-Star Hotels In Haryana. *Natural Volatiles & Essential Oils*, 8(6), 4451–4463.
- Aristana, I. N., Arsawan, I. W. E. & Rustiarini, N. W. (2022). Employee loyalty during the slowdown of COVID-19: Do satisfaction and trust matter? *International Journal of Tourism Cities*, 8(1), 223–243. <https://doi.org/10.1108/IJTC-03-2021-0036>
- Babakus, E., Yavas, U. & Karatepe, O. M. (2017). Work Engagement and Turnover Intentions: Correlates and Customer Orientation as a Moderator. *International Journal of Contemporary Hospitality Management*, 29(6). <https://doi.org/10.1108/IJCHM-11-2015-0649>
- Bakker, A. B. & Albrecht, S. (2018). Work engagement: current trends. *Career Development International*, 23(1), 4–11. <https://doi.org/10.1108/CDI-11-2017-0207>
- Bakker, A. B. & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>
- Bennouna, A., Boughaba, A., Djabou, S. & Mouda, M. (2025). Enhancing Workplace Well-being : Unveiling the Dynamics of Leader e Member Exchange and Worker Safety Behavior Through Psychological Safety and Job Satisfaction. *Safety and Health at Work*, 16(1), 36–45. <https://doi.org/10.1016/j.shaw.2024.11.003>
- Blau, P. (2017). *Exchange and Power in Social Life* (2nd Edition). New York: Routledge.
- Book, L., Gatling, A. & Kim, J. (Sunny). (2019). The effects of leadership satisfaction on employee engagement, loyalty, and retention in the hospitality industry. *Journal of Human Resources in Hospitality & Tourism*, 18(3), 368–393. <https://doi.org/10.1080/15332845.2019.1599787>
- Bougie, R. & Sekaran, U. (2020). *Research Methods for Business: A Skill-Building Approach* (Eight Edit). Chichester: John Wiley & Sons Ltd.
- Chang, W. & Busser, J. A. (2020). Hospitality career retention: the role of contextual factors and thriving at work. *International Journal of Contemporary Hospitality Management*, 32(1), 193–211. <https://doi.org/10.1108/IJCHM-10-2018-0831>
- Cinnioglu, H. (2024). The Mediating Role of Job Satisfaction in the Effect of Perceived Organizational Justice by Five-Star Hotel Employees on Turnover Intention : The Case of Antalya. *Journal of Tourism and Gastronomy Studies*, 12(3), 1548–1566. <https://doi.org/10.21325/jotags.2024.1450>
- Coetzee, M., Veldsman, D., Potgieter, I. L. & Ferreira, N. (2025). Measuring Enablers and Indicators of Employee Engagement : Internal Validity of The Flow @ Work Engagement Survey. *Heliyon*, 11(3), e42386. <https://doi.org/10.1016/j.heliyon.2025.e42386>
- Cropanzano, R. & Mitchell, M. S. (2005). Social Exchange Theory : An Interdisciplinary Review. *Journal of Management*, 31(6). <https://doi.org/10.1177/0149206305279602>
- Dogru, T., McGinley, S., Sharma, A., Isik, C. & Hanks, L. (2023). Employee turnover dynamics in the hospitality industry vs. the overall economy. *Tourism Management*, 99(December 2023.). <https://doi.org/https://doi.org/10.1016/j.tourman.2023.104783>
- Fan, X., Li, J., Mao, Z. & Lu, Z. (2021). Can ethical leadership inspire employee loyalty in hotels in China? -From the perspective of the social exchange theory. *Journal of Hospitality and Tourism Management*, 49, 538–547. <https://doi.org/10.1016/j.jhtm.2021.11.006>
- Garavan, T. N., McCarthy, A., Lai, Y., Clarke, N., Carbery, R., Gubbins, C., Sheehan, M. & Saunders, M. N. K. (2021). Putting the system back into training and firm performance research: A review and research agenda. *Human Resource Management Journal*, 31(4), 870–903. <https://doi.org/10.1111/1748-8583.12337>
- George, C., Omuudu, O. S. & Francis, K. (2020). Employee engagement: a mediator between organizational inducements and industry loyalty among workers in the hospitality industry in Uganda. *Journal of Human Resources in Hospitality and Tourism*, 19(2), 220–251. <https://doi.org/10.1080/15332845.2020.1702869>
- Ghani, B., Hyder, S. I., Yoo, S. & Han, H. (2023). Does Employee Engagement Promote Innovation? The Facilitators of Innovative Workplace Behavior Via Mediation and Moderation. *Heliyon*, 9(11), e21817. <https://doi.org/10.1016/j.heliyon.2023.e21817>
- Hair, J. F., Hult, G. T. M., Ringle, C. M. & Sarstedt, M. (2022). A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). In *Sage Publications* (Third). Los Angeles: Sage.
- Hair, J. F., Sarstedt, M., Ringle, C. M. & Gudergan, S. P. (2024). *Advanced Issues in Partial Least Squares Structural Equation Modeling* (Second Edition). Thousand Oaks: Sage.

- Hakuduwal, K. (2021). Factors Affecting Employee Job Satisfaction in Nepalese Hospitality Industry: A Study of Hotels in Bhaktapur. *Nepalese Journal of Hospitality and Tourism Management*, 2(1), 14–26. <https://doi.org/10.3126/njhtm.v2i1.44392>
- Hayes, A. F. (2022). *Introduction to Mediation, Moderation, and Conditional Process Analysis, Third Edition: A Regression-Based Approach (Methodology in the Social Sciences)* (Third Edition). New York: The Guilford Press.
- Hosen, S., Hamzah, S. R. Ah, Arif Ismail, I., Noormi Alias, S., Faiq Abd Aziz, M. & Rahman, M. M. (2024). Training & development, career development, and organizational commitment as the predictor of work performance. *Heliyon*, 10(1), e23903. <https://doi.org/10.1016/j.heliyon.2023.e23903>
- Jung, Y. & Takeuchi, N. (2018). A lifespan perspective for understanding career self-management and satisfaction: The role of developmental human resource practices and organizational support. *Human Relations*, 71(1), 73–102. <https://doi.org/10.1177/0018726717715075>
- Karatepe, O. M. & Uludag, O. (2007). Conflict, exhaustion, and motivation: A study of frontline employees in Northern Cyprus hotels. *International Journal of Hospitality Management*, 26(3), 645–665. <https://doi.org/10.1016/j.ijhm.2006.05.006>
- Katharina, L. P. P. & Dewi, A. S. K. (2020). The Effect of Career Development on Employee Performance Through Work Satisfaction As a Variable of Mediation. *International Journal of Business, Economics and Law*, 22(1), 1.
- Kaur, S. & Bhanage, J. (2020). The Impact Of Employee Engagement on Customer Satisfaction in the Indian Hotel Industry: An Analytical Study. *UGC Care Journal*, 68(65), 292–305. <https://doi.org/10.1259/0007-1285-11-121-38>
- Lahlou-kassi, H. & Eddakir, A. (2025). Exploring the Impact of Perceived Distributive Justice on Organizational Commitment. *Scientific African*, 29(June). <https://doi.org/https://doi.org/10.1016/j.sciaf.2025.e02782>
- Lourenco, B. & Rodrigues, R. (2025). Open Organisational Onboarding and Talent Retention : The Mediating Role of Workplace Attachment and Supervisor Support. *Social Sciences & Humanities*, 12(September). <https://doi.org/10.1016/j.ssaho.2025.101909>
- Majid, M. A. A., Samsudin, A., Noorkhizan, M. H. I., Noor, S. N. A. M. & Zuffri, N. S. H. A. (2017). Career Development, Job Security and Employee Loyalty at a Luxury Resort in Terengganu, Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 7(10), 667–674. <https://doi.org/10.6007/IJARBS/v7-i10/3422>
- McDonald, K. S. & Hite, L. M. (2023). *Career Development: a Human Resource Development Perspective* (2nd ed.). Routledge.
- Meyer, J. P. & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- Natsepa, O. D. & Saladin, K. (2025). The Influence of Career Development and Work Motivation on Employee Loyalty at Hotel Pangeran. *Journal of Multidimensional Management (JoMM)*, 2(2).
- Nirinjan & Thomas, M. (2018). The Impact of Employee Engagement on Employee Loyalty. *International Journal of Trend in Scientific Research and Development*, Volume-2(Issue-3), 324–331. <https://doi.org/10.31142/ijtsrd10914>
- Noe, R. A., Hollenbeck, J. R., Gerhart, B. & Wright, P. M. (2022). *Fundamental of Human Resource Management* (9th ed., Issue 112). McGraw-Hill.
- Ogbeide, D. (2020). Employee Satisfaction and Organizational Loyalty in The Hospitality Industry. *Advances in Management*, 19(2), 35–52.
- Presbitero, A., Fujimoto, Y. & Lim, W. M. (2025). Employee Engagement and Retention in Multicultural Work Groups : The Interplay of Employee and Supervisory Cultural Intelligence. *Journal of Business Research*, 186(October 2024), 115012. <https://doi.org/10.1016/j.jbusres.2024.115012>
- Qi, J. (Miracle), Wang, S. & Hall, K. K. L. (2023). Bridging Employee Engagement and Customer Engagement in a Service Context. *Journal of Business Research*, 160(May 2023). <https://doi.org/https://doi.org/10.1016/j.jbusres.2023.113803>
- Robbins, S. P. & Judge, T. A. (2024). Organizational behavior. In *Pearson Education, Inc.*,

- publishing as Prentice Hall* (17th ed.). Pearson.
- Saito, H., Brozovic, D. & Baum, T. (2025). Well-Being of Hospitality Employees : A Systematic Literature Review. *International Journal of Hospitality Management*, 124(September 2025), 0–2. <https://doi.org/10.1016/j.ijhm.2024.103955>
- Saks, A. M. (2019). Antecedents and consequences of employee engagement revisited. *Journal of Organizational Effectiveness: People and Performance*, 6(1), 19–38. <https://doi.org/10.1108/JOEPP-06-2018-0034>
- Salahudin, S. N., Ismail, F., Al-qershi, N., Kassim, M. A. M. & Nasuredin, J. (2025). Exploring The Impact of Employee Well-Being As a Moderator in The Relationship Between Work-Related Factors And Turnover Intentions in Malaysian Small and Medium Enterprises : A Partial Least Squares Analysis. *Social Sciences & Humanities Open*, 12(September). <https://doi.org/https://doi.org/10.1016/j.ssaho.2025.101960>
- Salanova, M., Agut, S. & Peiró, J. M. (2020). Linking Organizational Resources and Work Engagement to Employee Performance and Customer Loyalty: The Mediation of Service Climate. *Journal of Applied Psychology*, 90(6), 1217–1227. <https://doi.org/10.1037/0021-9010.90.6.1217>
- Saputra, E. B. (2022). The Effect of Career Development and Rewards on Job Satisfaction (Study of Human Resource Management Literature). *International Journal of Advanced Multidisciplinary*, 1(2), 133–142. <https://doi.org/10.38035/ijam.v1i2.71>
- Sarstedt, M., Hair, J. F., Pick, M., Liengaard, B. D., Radomir, L. & Ringle, C. M. (2022). Progress in partial least squares structural equation modeling use in marketing research in the last decade. *Psychology & Marketing*, 39(5), 1035–1064. <https://doi.org/10.1002/mar.21640>
- Sarstedt, M., Ringle, C. M. & Hair, J. F. (2020). Handbook of Market Research. In *Handbook of Market Research* (Issue September). <https://doi.org/10.1007/978-3-319-05542-8>
- Sarstedt, M., Ringle, C. M. & Hair, J. F. (2021). *Partial Least Squares Structural Equation Modeling* (Handbook o). Springer Nature Switzerland AG. <https://doi.org/10.1007/978-3-319-05542-8>
- Schaufeli, W. B. & Bakker, A. B. (2004). Utrecht Work Engagement Scale Preliminary Manual Version 1.1. *Occupational Health Psychology Unit Utrecht University, December*, 1–60. <https://doi.org/10.1037/t01350-000>
- Schaufeli, Wilmar B, Bakker, A. B. & Salanova, M. (2006). The Measurement of Work Engagement With a Short Questionnaire. *Educational and Psychological Measurement*, 66(4), 701–716. <https://doi.org/10.1177/0013164405282471>
- Shulga, L. V. & Busser, J. A. (2024). Employee Emotional Investment: An Institutional Logic Perspective. *International Journal of Hospitality Management*, 122(September 2024). <https://doi.org/https://doi.org/10.1016/j.ijhm.2024.103841>
- Sudiarta, M., Sekarti, N. K., Wayan, I., Agung, A. & Mirah, A. (2025). Exploring The Relationship Between Employee Engagement, Job Satisfaction, and Turnover Intention in The Hospitality Industry. *Journal of Commerce Management and Tourism Studies*, 4(1), 120–135. <https://doi.org/https://doi.org/10.58881/jcmts.v3i2>
- Sukmana, I. T., Pertiwi, N. P. A. T., Sirna, I. K., Sulistiyo, E. & Susanto, P. C. (2021). How workplace discipline, transformational leadership, and career development affect employee performance at the Royal Beach Hotel, Seminyak, Bali. *Proceeding of the International Conference on Family Business and Entrepreneurship*, 2(1), 328–334. <https://doi.org/10.33021/icfbe.v2i1.3564>
- Taware, P. K. & Bodla, S. (2022). Impact of Customer Loyalty on Employee Engagement in the Hotel Industry Based in Vadodara, Gujarat. *International Journal of Research Publication and Reviews Journal Homepage: Www.Ijrpr.Com*, 3(4), 174–180. www.ijrpr.com
- Thi Kim Phuong, T. & Trung Vinh, T. (2020). Job Satisfaction, Employee Loyalty and Job Performance in the Hospitality Industry: A Moderated Model. *Asian Economic and Financial Review*, 10(6), 698–713. <https://doi.org/10.18488/journal.aefr.2020.106.698.713>
- Troiville, J., Moisescu, O. I. & Radomir, L. (2025). Using necessary condition analysis to complement multigroup analysis in partial least squares structural equation modeling. *Journal of Retailing and Consumer Services*, 82(March 2024). <https://doi.org/10.1016/j.jretconser.2024.104018>

- Wardana, I. M. A., Salain, P. P. P. & JS, I. P. W. D. (2024). *Transformational Leadership and Employee Satisfaction on Employee Loyalty: The Mediating Role of Employee Engagement*. 15(2). <https://doi.org/10.18196/mb.v15i2.22160>
- Zhang, J., Huang, R., Chen, Q. & Zhao, G. (2023). The Relationships Between Supervisor-Subordinate Guanxi, Perceived Supervisor Autonomy Support, Autonomous Motivation, and Employee Job Satisfaction: Evidence From International Hotel Chains in China. *International Journal of Hospitality Management*, 108(January 2023). <https://doi.org/https://doi.org/10.1016/j.ijhm.2022.103354>

The Role of Tour Guides in Enhancing Revisit Intentions of Couple Tourists to Bali

I Putu Koisuki Suriana ¹, Lukia Zuraida ^{2*}, Ni Putu Evi Wijayanti ³

^{1,2,3} Politeknik Pariwisata Bali, Indonesia

* Corresponding Author: lukiazuraida@ppb.ac.id

Abstract: This study examines the role of tour guides in enhancing the intention of couples to revisit Bali, using the framework of experiential marketing theory. The research aims to understand how human-touch elements provided by tour guides influence the travel experience and subsequent revisit intentions of couples visiting Bali. A descriptive, qualitative research design was employed, utilising a purposive sampling technique. Data were collected through in-depth, semi-structured interviews and observations with 16 couples of foreign tourists from diverse countries, including Europe, Asia, Australia, and the United States, aged 24-40 years, who had utilised tour guide services during their visit to Bali. Inductive thematic analysis was conducted using NVivo 12 software to analyse data based on the Experiential Marketing framework, encompassing five dimensions: Sense, Feel, Think, Act, and Relate. The findings reveal that tour guides play multidimensional roles as sensory interpreters, emotional architects, cultural translators, experiential facilitators, and social connectors. Four key functions emerged: facilitators overcoming language and cultural barriers, knowledge transfer agents providing deep destination insights, emotional support providers creating memorable experiences, and social catalysts enhancing security and connectedness. The analysis demonstrates that successful tour guides simultaneously address the sensory, emotional, cognitive, behavioural, and social needs of couple travellers, creating holistic experiences that significantly influence revisit intentions. Human-touch elements remain critical differentiators in tourism experiences, particularly for couples seeking personal and intimate travel encounters that cannot be replicated through digital alternatives. Practically, tourism stakeholders should strengthen tour guide training in emotional intelligence, storytelling, intercultural communication, and personalized service strategies.

Keywords: Bali; Couple Tourists; Experiential Marketing; Human Touch; Revisit Intention; Tour Guide.

History Article: Submitted 19 October 2025 | Revised 12 February 2026 | Accepted 24 March 2026

How to Cite: Suriana, I. P. K., Zuraida, L. & Wijayanti, N. P. E. (2026). The role of tour guides in enhancing revisit intentions of couple tourists to Bali. *Journal of Applied Sciences in Travel and Hospitality*, 9(1), 100-116.

Introduction

Bali is one of the destinations that is suitable for tourists from all walks of life (Suhartanto et al., 2020). Based on data from the Central Bureau of Statistics (BPS Provinsi Bali, 2025), in 2024, more than 6.3 million foreign tourists visited Bali, with tourists from Australia, India, China, the United Kingdom, and South Korea as the largest contributors to the number of visits. One of the main contributors to the number of visits comes from honeymooners and couple travellers, which can be seen from the award won by the island of Bali as a nominee for the most suitable destination for couples tourists at the prestigious World Travel Awards 2024 (The Bali Sun, 2024). This is due to various supporting factors, such as beautiful and personal natural settings, such as beaches and mountains, couple-friendly accommodation, and deep and emotional cultural experiences (Buenviaje et al., 2024; Yandi et al., 2023).

The strategy of Bali in attracting tourists to visit does not escape its primary goal, which is to ensure the comfort and safety of tourists, so that with this, tourism supporting elements are also very much considered by tourism industry stakeholders (Candranegara et al., 2021). The needs of tourists are supported by the development of accessible tourism facilities, including hotels, restaurants, shopping centres, and transportation services, reflected in Bali's well-developed infrastructure network and diverse accommodation options ranging from simple to luxurious (Criswandari et al., 2021; Sufa et al., 2024). Aside from the infrastructure development, service quality also becomes one of the most important components that must be calculated and controlled to provide an impressive experience for the tourists (Manyangara et al., 2025).

The background of each tourist who comes to Bali also influences the strategies of tourism stakeholders, especially in terms of service (Pasaco-González et al., 2023). The various backgrounds of tourists can be observed from multiple perspectives, ranging from country of origin, age, occupation, gender, social status, and others (Widiana et al., 2025). Therefore, tourism service providers face both challenges and opportunities in managing their services (Cejudo, 2024). The challenge is in the form of demands for the quality of Human Resources in terms of tourism services, and opportunities related to the opening of opportunities for various types of businesses, because they already have their market segments (Saiffudin et al., 2025; Sari et al., 2023). By capitalising on favourable opportunities, it is hoped that this will have a positive impact on Bali's tourism development, particularly in attracting returning tourists to the island (Koerniawati, 2022). Tourism stakeholders can drive revisit intention by focusing on human-touch elements (Supina et al., 2024). The human-touch element is still considered to have a significant influence on the sustainability of the tourism sector in Bali in this era of digitalisation, where this human-touch consists of many elements that can make tourists more impressed (Jaya et al., 2024). It can be seen that every type of tourism industry, starting from the accommodation business, attraction business, culinary business, and travel business, are involving human touch element (Carvalho & Alves, 2023).

In the tourism business, one of the human-touch elements that plays a direct role is the tour guide (Tsai et al., 2016). Tour guides have the main task of spearheading a country's tourism image (Al-Okaily, 2022). In Bali, in addition to helping tourists in terms of navigation and information, tour guides also have a role as a link between the tourist's point of view and the point of view of the local Balinese culture, which tends to be very different (Abas et al., 2025). Tourists can understand and appreciate Balinese culture more deeply through how tour guides convey stories, implied moral values, and Balinese customs in an engaging, informative, and easy-to-understand way for the general public (Susanthi & Warmadewi, 2020). Likewise, for tourists who travel with their partners, the role of tour guides is very crucial in creating meaningful experiences, both in terms of emotions, safety, and the quality of interaction offered, especially with a different perspective from the guided tourist pairs (Tsaur et al., 2021). With a good quality tour guide, it will undoubtedly form a deep impression on tourists during a tourist trip, so that tourists' desire to revisit Bali can be formed in their hearts (Yusuf et al., 2024).

Previous research by Tiwari et al. (2023) revealed that human touch has a significant indirect effect on the tourist experience. This human touch includes emotions such as joy, love, positive surprises, fear, and displeasure from tourists themselves, helping them form an impression in their hearts to revisit (Pestana et al., 2020). This relates to the tour guide's role, specifically when they interact with tourists, which, of course, involves a human touch. This is also supported by Agarwal & Mohan (2022) in their research, who stated that social interaction is essential in shaping the experience and loyalty of tourists, agreeing with Syakier & Hanafiah (2022), who emphasized that the performance of tour guides has a significant effect on satisfaction and intention to return, with satisfaction serving as the primary mediator. This social interaction needs to be supported by strong communication skills to foster positive perceptions of tourists toward tourist destinations (Li et al., 2021). Another finding by Guleria et al. (2024) also found that memorable travel experiences have a significant impact on the development of traveller attachment and satisfaction with tourist destinations, which further forms substantial destination brand equity. Kovačić & Šagovnović, (2023) have emphasized this through their research showing that positive emotional experiences facilitated by the destination environment are closely correlated with satisfaction and intention to revisit. Hill et al. (2022) reveal that safety, knowledgeable tour guides, and pricing are critical factors in the success of guided tours, which in turn influence tourists' tendencies to recommend, revisit, and make future destination choices. While Zou & Yu (2022) examined it from a social constructivist perspective, they found that travellers' sense of security is built through subject matter and key content at different stages of the journey, including before, during, and after the trip. On the other hand, research by Tu et al. (2020) found that tour guides' humour influenced tourists' behavioural intentions, either directly or indirectly, through positive emotions. Other research also discusses how aesthetic experiences (Zhang & Xu, 2020), guarantees of tourist safety and security (Bhatt et al., 2024), tourists' trust

in a tourist visit (Pujiastuti, 2020), and service quality (Ardani, 2021; Wijayanti, 2020) can influence tourists' intention to revisit.

Although interaction between tour guides and tourist couples is widely believed to influence revisit intention, empirical studies that explore in depth the *human-touch* aspect within tour guiding activities remain limited. More importantly, existing studies often treat tourists as a homogeneous group, overlooking the unique characteristics of couple tourists, whose travel experiences are strongly shaped by emotional connection, shared meaning, and interpersonal dynamics between partners.

Compared to solo travellers, who tend to prioritize efficiency and information (Zhang et al., 2024), or family tourists, who often focus on safety and child-oriented services (Tseng et al., 2023), couple tourists seek romantic atmosphere, emotional engagement, personalized attention, and meaningful shared experiences (Coffey et al., 2024). These expectations require tour guides to apply different forms of human-touch, such as empathetic communication, sensitivity to couple dynamics, storytelling that evokes emotions, and the ability to create intimate and memorable moments during the tour (Aytekin et al., 2025).

Therefore, to gain a deeper understanding of the role of tour guides, it is necessary to examine the extent to which tour guides contribute to couple tourists' desire to revisit Bali, specifically from the perspective of couples themselves. By understanding how tour guides deliver human-touch interactions tailored to couples, this study highlights how such personalized engagement not only enhances the travel experience but also strengthens emotional attachment and increases revisit intention to Bali in the future.

Methodology

This research was applied with a descriptive qualitative research design. As noted by Creswell (2018), A qualitative approach aims to gain a deeper understanding of a program, event, activity, process, or experience of a group or individual. With this, it can be said that the design of this study is suitable for analyzing behaviours, perceptions, and motivations from the perspective of tourists (Sutton & Austin, 2015). The descriptive qualitative approach has several characteristics, including exploring the informant's experience in detail, in-depth interviews, and limited between time, place, and object of research (White & Cooper, 2022). The descriptive qualitative approach is well-suited to producing an in-depth picture of couples' perspectives and experiences when using a tour guide in Bali. Validity was achieved through in-depth and contextual explanations of the lessons learned (Aisyah et al., 2023). To understand the raw data brought to the research, the researcher's self-reflection was also carried out in this study (Liu, 2024).

The study involved 16 couples of tourists who visited Bali, and each couple was represented by one name as a representative. Of these 16 couples, 12 couples completed the open-ended questionnaire, and 4 couples participated in in-depth interviews, accompanied by their tour guides. Resource persons and informants were recruited through social media advertisements and direct searches at several tourist destinations, with explanations of the study's criteria and eligibility requirements. The resource persons and informants are tourists aged 20-40. With this number, researchers can interpret and describe research phenomena in depth. The sampling technique used is purposive sampling, which is the deliberate selection of informants based on their ability to explain specific themes, concepts, or phenomena. This technique enables the selection of samples based on criteria relevant to the research objectives (Denieffe, 2020).

Interviews and observations were used as data collection techniques in this study. The interviews were conducted to gather information based on the direct experiences of the couples tourists when experiencing services from tour guides during their visits to Bali. Raw data were collected through semi-structured in-depth interviews. The interview guide included open-ended questions that explored elements of the Experiential Marketing theory (EM) put forward by Schmitt (1999). In the tourism field study, EM was also used by Alam (2024) to analyze the influence of experiential marketing on tourism service providers. This theory encompasses sensory experiences (Sense), emotional (Feel), cognitive and creative (Think), behaviour (Act), and social interaction (Relate). The data was recorded in the journal as reflective notes during the observation. Tour guides, as a human-touch element in the travel industry, play a vital role.

The experience gained from using a local tour guide's service can be one of the factors that encourage tourists to return. The data analysis technique carried out in this study was inductive thematic analysis, which involves reading a series of raw data and looking for patterns of meaning from the data to understand the meaning from the perspective of the research informants (Heriyanto, 2018). The data were processed and analyzed using NVivo 12 qualitative data analysis software. The analysis followed a systematic coding procedure, beginning with open coding to identify initial concepts, followed by axial coding to establish relationships among categories, and concluding with selective coding to refine core themes aligned with the Experiential Marketing dimensions. NVivo facilitated data identification, organization, visualization, and classification, thereby enhancing the transparency and credibility of the qualitative analysis (Houghton et al., 2017).

Results and Discussions

Informant Description

The informants in this study were 16 couples from various countries who had used the services of tour guides during their visits to Bali. Of these, 12 couples completed the open-ended questionnaire, and 4 participated in in-depth interviews, for a total of 16 couples in this study. The demographic profile reveals significant diversity, with informants originating from Europe (Belgium, Russia, Poland, France, the United Kingdom), Asia (India, Myanmar, Taiwan, the Philippines, the UAE), Australia, and the United States. The age range of the informants spans 24 to 40 years, with most falling within the productive age range of 30 to 35 years. Tables 1 and 2 show the descriptions of the informants.

Table 1. Couples' descriptions of the open-ended questionnaire.

No.	Name (couple rep)	Country	Age	Gender
1	Jan Paredis	Belgium	40	Male
2	Viktoriia	Russia	24	Female
3	Gokul Kambhampati	India	33	Male
4	Wai Yan Htet Tin	Myanmar	32	Male
5	Lin Xinyu	Taiwan	32	Female
6	Bhawana	New Zealand	36	Male
7	Tomasz	Poland	32	Male
8	Pratik Patil	India	34	Male
9	Alan	Australia	27	Male
10	Amine	France	40	Male
11	Zineb Mansouri	France	27	Female
12	Michael	UK	34	Male

Table 2. Couples' Description of the Depth Interview.

No.	Name (couple rep.)	Country	Age	Gender
1	Michael	Philippines	33	Male
2	Ahmad	UEA	31	Male
3	Matthew	USA	30	Male
4	Heba	England	40	Female

This demographic diversity provides a comprehensive perspective on international travellers' perceptions of the role of tour guides in Bali. The variety of the informant's cultural

background allows for the identification of universal patterns in the couple traveller experience, while also uncovering specific nuances influenced by cultural factors of origin.

Human Touch in Tour Guidance

This research is analyzed based on the Experiential Marketing framework developed by Schmitt (1999) where it is said that there are 5 (five) Human Touch Dimensions that affect a profound and memorable experience for consumers through different approaches, namely: Sense, Feel, Think, Act, and Relate. The Sense dimension focuses on sensory stimuli through the senses of sight, hearing, smell, taste, and touch. The goal is to create aesthetic pleasure and satisfaction through sensory stimulation. Dimension Feel aims to build an emotional connection between customers and brands. Meanwhile, Think encourages consumers to think creatively and critically. Dimension Act encourages travellers to change their behaviour by demonstrating how guide services can enhance the quality of their trips. Relate connects individuals with a specific community or culture, building a social identity through tour guide services.

Sense Dimension Analysis

Sensory stimuli (the five senses) are one of the aspects of human touch. This sensory element can be stimulated by several things: visual, audio, physical touch, smell, and taste of food. Wordcloud Sense captures the sensory experience facilitated by a tour guide for couples of tourists in Bali. The visualization in Figure 1 illustrates how tour guides engage couples through multisensory experiences, creating sensory memories that are embedded in their travel experiences.



(Source: Nvivo 12, 2025)

Figure 1. Wordcloud Sense

The visual analysis in Figure 1 reveals that the tour guide plays a crucial role in directing the couple's attention to sensory details that might otherwise be overlooked. In addition, the dominant words, such as *appearance*, *smile*, *wearing*, *jokes*, *outfit*, *calm*, and *interesting*, that appear on Wordcloud Sense indicate the importance of the tour guide's ability to facilitate a stunning human sensory experience. It can be seen that the dominance of the words that appear refers more to visual and auditory sensory elements. This indicates that the tour guide has a vital role in processing these two sensory elements. The frequency and protrusion of sensory-related terms suggest that these sensory experiences will last a long time and may contribute to the desire to return to Bali. The following is an excerpt of the interview with the speaker:

"...Also the appearance (even if we shouldn't judge appearances) installs a climate of trust between the couple that's coming from a different country and the tour guide. And our tour guide was firstly wearing a traditional Balinese dress which brought us closer to the culture then he was wearing a smile that helped us connect and enjoy our day."
(Zineb Mansouri, Couple Tourist, France)

"The tour guide was calm, patient and informative. Sometimes he also made jokes and we just laughed together." (Michael, Couple Tourist, United Kingdom)

The sensory dimension is very important for couples of tourists, as shared sensory experiences create intimate moments and memories they associate with their relationship, making the destination emotionally meaningful throughout their journey. In this case, the tour guide is a "sensory interpreter" who not only shows the attraction but also helps the tourist enjoy the destination holistically through sensory perception.

Act Dimension Analysis

Direct or indirect actions or behaviors are one of the crucial dimensions of Human Touch in the interaction process between tour guides and couple tourists when they visit Bali. The visualization in Figure 2 reveals how the actions or behaviors of tour guides can affect the travel experience of couples in Bali.



(Source: NVivo 12, 2025)

Figure 2. Wordcloud Act

Wordcloud Act captures the behavioural and participatory experiences facilitated by tour guides for couples of tourists. This dimension represents active engagement and hands-on experiences that foster a deeper connection between couples, destinations, and tour guides. The words that stand out in this Wordcloud Act, such as "Answering," "Explain," "Helpful," "Caring," "Communicate," "Romantic," "Listening," and "Flexibility," show that tour guides encourage couples to actively participate in meaningful activities such as; cultural activities, local customs, and traditional practices. The following is an excerpt of the interview with the speaker:

"His sweetness at all times makes the trip outstanding. His skills on taking photography and above all his unlimited knowledge about the region, the culture and the history of the destination. He was professional, at the time, gave explanations all the time and above all he was so kind and patient with us." (Amine, Couple Tourist, France)

"Making jokes, laughing together, the tour guides suggest to take pictures... the tour guide offered different options "oh, we can go this way... or we can go that way.... It's really important." (Viktoria, Couple Tourist, Russia)

The appearance of the words suggests that experiential learning and participation are essential components of tour guide services for couples, as they provide opportunities for shared activities and new experiences that strengthen their bond while creating unique memories during the tour in Bali. These participatory experiences are often the most memorable aspect of their trip and a powerful motivator for return visits. These findings suggest that tour guides act as "experience facilitators" who encourage couples to actively engage with local culture. They create opportunities for co-creation experiences that strengthen couples' bonds while introducing local traditions.

Feel Dimension Analysis

The feel dimension represents the emotional aspect of using tour guide services in terms of the quality of travel in Bali. Figure 3 illustrates the intensity of the 'feel' dimension in influencing the couple's tourist trip.



(Source: Nvivo 12, 2025)

Figure 3. Wordcloud Feel

Word cloud analysis revealed that prominent words such as Comfortable, Safe, Trust, Convenient, and Kindness dominated the informant's narrative, suggesting that tour guides successfully created a deep emotional connection. The emotional dimension possessed by the guide indicates favourable conditions towards romance, joy, passion, peace, and intimacy. This shows that the tour guide creates and enhances the romantic, cozy atmosphere that couples of tourists are looking for. The prominence of positive emotional terms suggests that tour guides play a significant role in enhancing the couple's emotional satisfaction during their visit. The following is an excerpt of the interview with the speaker:

"With a tour guide there is much less pressure to organise and make a strict schedule because you trust the local guide to adapt and still make your experience a great one even if certain schedules are not met. Summing up it is the local perspective, sense of security and relaxation knowing they will manage and attempt to provide the best and most authentic experience and convenience of transport." (Alan, Couple Tourist, Australia)

"We felt very comfortable with our tour guide. He knew exactly when we needed time for a short break. When we travel we often use the service of a private tour guide, because it give us the sense of security at the unknown place. We felt safe in the car while moving from place to place. Our tour guide was very good driver." (Tomasz, Couple Tourist, Poland)

Furthermore, the emotional dimension reveals that the tour guide serves as a facilitator of emotional connection not only between the couple and the destination but also between the couple themselves. By creating romantic settings, suggesting intimate experiences, and providing privacy at the right moments, tour guides enhance the couple's experience of their relationship during their Bali visit. These findings confirm the proposition that tour guides function as "emotional architects" in couples' travel trips. The tour guide not only conveys factual information but also creates emotional moments that strengthen the bond among the couple, the destination, and the tour guide.

Relate Dimension Analysis

Social relational aspects in social interaction are considered an important dimension of human touch because they provide a subjective experience of feeling connected, accepted, and belonging in the environment visited. This concept includes feelings of belonging, emotional closeness, and support from others. Wordcloud Relate in figure 4 shows how tour guides facilitate different types of relationships and connections during a couple's travel experience in Bali.



(Source: Nvivo 12, 2025)

Figure 4. Wordcloud Relate

The analysis revealed that tour guides serve as social facilitators, connecting couples not only with local culture and communities but also improving the relationship between the couples themselves. The emergence of words such as *Interaction, Tradition, Connect, Contact, and Family* indicates that tour guides act as a social bridge between tourists and local communities. Additionally, this has also demonstrated that the relational dimension is highly valued by couple tourists during their visit to Bali. The following is an excerpt of the interview with the speaker:

"For us he's not just a tour guide but he became a friend to us. He speaks humble, he is very entertaining, and yeah he's more like a friend than just a tour guide." (Shina Marika, Couple Tourist, Philippines). "...more than a guide, he treated us to his own family." (Gokul Kambhampati, Couple Tourist, India)

Tour guides help couples connect with local communities, understand social customs, and participate in community activities. This function of social bridges is especially important for international couples who may face language barriers or cultural uncertainties. Additionally, tour guides help create opportunities for couples to strengthen their own relationships through shared social experiences. This research confirms that tour guides function as a "social connector" that facilitates authentic cultural exchange. Tour guides enable couples to experience Bali not only as a tourist destination but also as a vibrant living culture with a friendly and open community.

Think Dimension Analysis

The cognitive dimension of human touch is also considered very important in a tourist visit by a couple of tourists. This intellectual engagement creates a more meaningful and memorable experience, contributing to the couple's desire to return and explore further. This dimension captures how tour guides stimulate mental processes, learning, and cultural understanding among visiting couples. Figure 5 represents the cognitive and intellectual engagement that tour guides provide to couples travellers.



(Source: Nvivo 12, 2025)

Figure 5. Wordcloud Think

Wordcloud think showcases the intellectual complexity that tour guides create through words like *questions, answering, explain, explore, understand, and detailed*. This shows that couples travellers value the educational dimension of their experience. The analysis revealed that tour guides serve as cultural interpreters and educators, helping couples understand the deeper meaning behind Balinese traditions and customs. Additionally, the inclusion of learning-related words suggests that couples value the tour guide's intellectual stimulation and cultural insight. The following is an excerpt of the interview with the speaker;

"You can't get the same knowledge and information without the tour guide And they can help guide you to places where you wouldn't normally go and see, you can only look on Google and see some places, but then when you get there, you don't actually know what you're doing or what you're looking at whereas having to explain what we're doing, why it's here, the traditions behind it, it's really important. I think today, without him, we wouldn't have had the same experience." (Heba, Couple Tourist, England)

Beyond enhancing immediate understanding, this form of cognitive engagement plays a significant role in shaping couples' revisit intention. When tour guides explain Balinese philosophies, cultural values, and symbolic meanings in an accessible and engaging manner, couples are more likely to develop a deeper cognitive attachment to the destination. This intellectual connection transforms the visit from a one-time sightseeing activity into a meaningful learning journey, encouraging couples to return in order to further explore and deepen their understanding of Balinese culture. This confirms that tour guides act as "cultural translators," facilitating cross-cultural knowledge transfer. Tour guides help couples understand the complex socio-cultural context of Bali, creating a distinct and intellectually enriching learning experience.

Tour Guide Presence Effect

The effect dimension demonstrates that the cumulative impact of tour guide presence can result in a strong intention to revisit Bali. Word Cloud Effect combines the results and impact of tour guide interactions on the couple's experience and their future destinations.



(Source: Nvivo 12, 2025)

Figure 6. Wordcloud Effect

The visualisation in Figure 6 represents the culmination of all experiential marketing dimensions and their collective influence on return visit intentions. The analysis revealed a strong emphasis on terms related to satisfaction, recommendations, revisit, and positive word-of-mouth. Tour Guides create a multidimensional impact, encompassing educational, social, emotional, and practical aspects. The following is an explanation of the effects of the presence of a tour guide on a tourist trip by a tourist couple, including:

Facilitator

Tour guides help travellers overcome language or cultural barriers that may hinder their experience. They also help couples navigate tourist attractions more comfortably and efficiently (easier, convenient, efficient, smooth). As facilitators, tour guides play a crucial role in assisting travellers to overcome various obstacles that can disrupt the smooth flow of their experience. One of the main challenges that tourists often face is language and cultural differences, which can be a barrier to understanding information, interacting with locals, or even enjoying the tourist attractions themselves. In this context, tour guides serve as a bridge of communication, helping tourists interact more easily with their surroundings.

More than just translators, tour guides also facilitate the couple's experience by ensuring that the trip becomes more comfortable, efficient, and smooth. They help tourists navigate tourist attractions, provide clear directions, and ensure that all tourists' needs are well met. For example, they can help travellers locate essential destinations, such as restrooms, restaurants, or souvenir shops, and provide practical tips to help them explore destinations with greater confidence. In addition, tour guides also help tourists optimize their visit time by delivering a well-planned schedule, allowing them to explore more places within a limited time. They can also provide recommendations for additional activities or authentic local experiences that travellers may not be aware of when travelling independently.

Knowledge Transfer

Tour guides help tourists gain in-depth knowledge of local destinations, history, and culture. The word cloud in Figure 6 emphasizes words such as knowledge, information, and history, which highlight the importance of educational aspects in the travel experience. Tour guides serve as a bridge of understanding, connecting tourists with the intellectual heritage of a destination. The depth of knowledge shared spans various dimensions, ranging from traditional architecture that reflects the philosophy of life of the local community to rituals and traditions that are still preserved today. Effective knowledge transfer through authentic storytelling and accurate data creates a memorable and continuous experience, so that tourists not only take-home photos and souvenirs, but also a deep understanding of the cultural and historical diversity they visit.

Emotional Support and Alive Experience

Tour guides often share stories, jokes, or anecdotes that make the experience more interesting, memorable, and feel 'alive'. This is reflected in the words that appear in figure 6, such as *excellent, enthusiastic, enjoy, personally, fantastic, adventure*. The emotional support provided by the tour guide is a crucial element that transforms a physical journey into a profound and transformative emotional journey.

Through passionate storytelling, tour guides not only convey historical facts but also bring each location to life with emotionally rich narratives, timely humor, and personal anecdotes that create emotional resonance with tourists. Their ability to read the group's mood and adjust the tone of communication makes every moment of the trip feel more personal and meaningful. The skill at weaving emotions into each explanation creates a multi-sensory experience that goes beyond visual consumption. Well-timed jokes are not only entertaining, but they also relieve any tension that may arise from culture shock, creating a comfort zone that allows couples to be more open to new experiences. The personal touch dimension brought by tour guides, through sharing their personal experiences, creates an authentic connection that makes tourists feel like local friends, not just customers being entertained. The sincere enthusiasm for the destinations they present can inspire tourists to look at every detail with a more appreciative perspective. On the other hand, a fantastic moment created through a combination of profound knowledge, charismatic demeanor, and genuine care can result in memories that are not only etched in photographs but are firmly embedded in the emotions of the couple's travellers. These are often the most memorable highlights in a long period of time after the trip has ended.

Social Connectedness

The presence of a tour guide allows tourists to interact socially with both the guide and other tourists. This creates a sense of community, reduces loneliness, and increases a sense of security. Words such as helping, important, learn, together, and sharing in the word cloud in Figure 6 support this aspect of connectivity. The social connectedness facilitated by tour guides creates a dynamic and multidimensional ecosystem of interaction in the travel experience.

Through guided activities, a natural space is created to share stories, perspectives, and life experiences that enrich the social dimension of travel. The intertwined interactions go beyond ordinary transactional relationships, evolving into authentic interpersonal connections. Additionally, the psychological security aspect created through this social connectedness cannot be overstated. Couples travellers feel more confident exploring new destinations when they are part of a supportive temporary community. Sharing experiences, whether joyful, surprising, or small challenges during the trip, creates a deep bond between participants. Collaboration in learning about local cultures, providing mutual assistance with language or navigation barriers, and offering spontaneous emotional support all contribute to creating memorable social experiences. This connection often continues beyond the duration of the tour, with many tourists maintaining friendships formed during the trip. Social media and modern communication technologies allow these social networks to be maintained, creating a global community of travellers who share information, recommendations, and even plan future trips together.

The Relationship of Human Touch to the Decision to Revisit

The analysis results show that the presence of tour guides plays a significant role in increasing the intention of tourists to revisit, especially among couples travellers. The presence of a tour guide acts as a facilitator, providing relevant information, emotional experiences, and a sense of security to couples on vacation. This is especially helpful for couples who are visiting a particular destination for the first time.

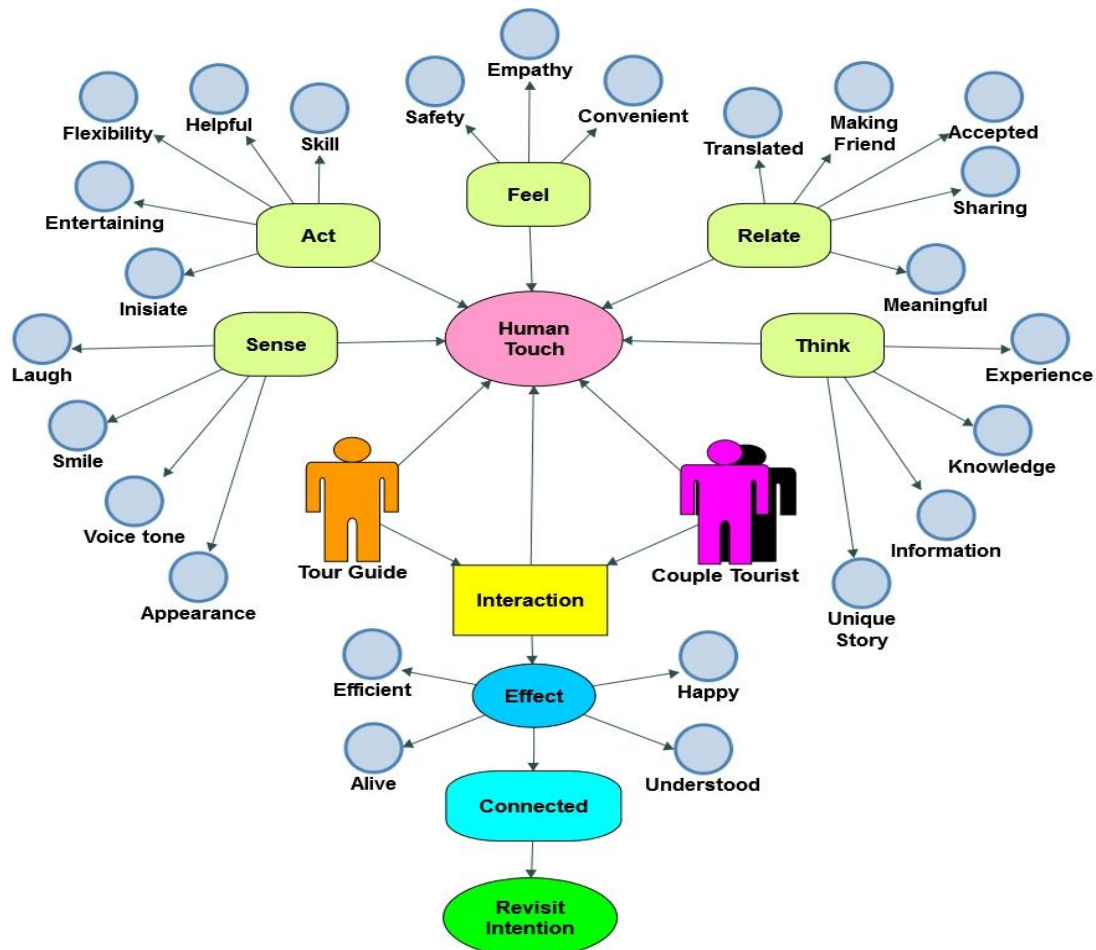


(Source: Personal Data, 2025)

Figure 7. The Interaction between a Tour Guide and a Couple Tourists in Tourist Destinations

For couples travellers, a tour guide not only helps them understand local history and culture but also fosters a sense of social and emotional connection through interactions during the tour. The presence of a tour guide helps tourists feel welcome, safe, and connected to the destination they are visiting. Human Touch aspects, including empathy, comfort, safety, and the guide's ability to respond to tourists' needs, are among the main reasons couples feel more connected to tourist destinations. Meanwhile, for tour guides, their presence is a platform to interact directly with partner travellers, promote tourism products and services, and build more personal relationships with tourists. These interactions positively impact the tourist's experience, ranging from satisfaction and happiness to a sense of "connectedness" that encourages revisiting.

Nonetheless, tour guides also need to anticipate challenges in dealing with tourists with diverse preferences and expectations. This relationship is shown in Figure 8.



(Source: NVivo 12, 2025)

Figure 8. The Interaction between a Tour Guide and a Couple Travellers

Figure 8 illustrates the pattern of interaction between tour guides and couple travellers. This diagram illustrates the relationships among elements such as Human Touch, Interaction, Effect, Connected, and Revisit Intention, all of which are linked by emotional connections, cognitive experiences, and information provided by tour guides. This diagram also shows how tour guides, through various aspects such as Act, Sense, Feel, Think, and Relate, can create meaningful travel experiences for couples travellers. The human touch element that tour guides provide emerges as a critical differentiator in the travel experience, offering personalized, culturally mediated, and emotionally rich interactions that cannot be replicated through digital alternatives. Especially for couple travellers, tour guides serve as facilitators of romantic experiences, cultural understanding, and relationship enhancement. The findings suggest that tour guides' success in increasing return visit intent lies in their ability to create an integrated experience that simultaneously addresses the sensory, emotional, cognitive, behavioural, and social needs of couples travellers. This holistic approach to experience creation yields strong, positive outcomes that directly translate into destination loyalty and advocacy behaviour.

Conclusions

This study successfully achieved its goal of understanding how tour guides influence couples' interest in revisiting Bali through a comprehensive analysis of their multidimensional role in experiential marketing. The study reveals that tour guides function as crucial facilitators who

create holistic experiences through five dimensions of human touch: Sense (sensory interpreter), Feel (emotional architect), Think (cultural translator), Act (experiential facilitator), and Relate (social connector). Through systematic analysis, four key roles have been identified: facilitators who overcome language and cultural barriers, knowledge-transfer agents who provide deep insights into destinations, emotional support providers who create memorable experiences, and social catalysts who enhance a sense of security and connectedness.

The results demonstrate that effective tour guides enhance couples' revisit intention by simultaneously addressing their sensory, emotional, cognitive, behavioural, and social needs. Importantly, couples placed strong value on specific soft skills demonstrated by tour guides, particularly empathetic communication, emotional sensitivity to couple dynamics, storytelling ability, attentiveness, and photography assistance. Practical skills such as helping couples capture meaningful photographs were perceived not merely as technical support but as an expression of care and personal attention, contributing to lasting emotional memories of the destination.

These findings confirm that human touch remains a critical differentiator in tourism experiences that cannot be replicated by digital alternatives, especially for couples seeking personal, intimate, and emotionally meaningful travel. Accordingly, this study offers practical implications for Bali's tourism industry by highlighting the need for targeted tour guide training programs that extend beyond technical knowledge to include soft skills such as empathy, interpersonal communication, emotional intelligence, storytelling, situational awareness, and basic photography skills. Strengthening these competencies can enhance couples' satisfaction, foster emotional attachment to the destination, and ultimately increase revisit intention and destination loyalty.

From a broader destination management perspective, the findings also suggest important implications for the sustainable development of tourism in Bali. Tour guides play a strategic role as cultural ambassadors who mediate interactions between tourists and local communities. By strengthening the human-touch elements in guiding services, Bali can create more authentic and emotionally engaging travel experiences that differentiate the destination from mass tourism competitors. This approach can support the development of higher-quality tourism experiences that encourage repeat visitation, strengthen destination branding, and contribute to the long-term competitiveness of Bali as one of the world's leading cultural tourism destinations.

However, this study has several limitations. First, the sample size of 16 couples limits the generalisability of the findings. Second, the research was conducted exclusively in Bali, which may restrict the applicability of the results to other destinations with different cultural and tourism contexts. Future research could involve larger and more diverse samples, comparative studies across multiple destinations, or quantitative approaches to statistically examine the relationship between human-touch dimensions and revisit intention. Longitudinal studies may also provide deeper insight into how emotional experiences translate into long-term destination loyalty over time.

References

- Abas, S., Nurhasanah, D. P., & Lesmana, T. (2025). What is the impact of tour guide quality and outdoor activity innovation on tourist satisfaction in Bali? *West Science Interdisciplinary Studies*, 03(06), 1027–1032. <https://doi.org/10.58812/wsis.v3i06.2027>
- Agarwal, N., & Mohan, A. (2022). Influence of Social Interaction on Customer Experience in Tourism Industry. *Purushartha*, 14(2), 104–116. <https://doi.org/10.21844/16202114209>
- Aisyah, S., Effendi, H., Wandu, J. I., Noer, S. M., & Priyono, C. D. (2023). The Validity of Problem-Based Contextual Model in the History Learning at Senior High School. *Studies in Learning and Teaching*, 4(2), 384–395. <https://doi.org/10.46627/silet.v4i2.265>
- Alam, K. (2024). An Analysis of the Impact of Experiential Marketing in the Tourism Industry: A Bibliometric Literature Review. *Journal of Economics, Management and Trade*, 30(8), 67–89. <https://doi.org/10.9734/jemt/2024/v30i81235>
- Al-Okaily, N. S. (2022). A Model for Tour Guide Performance. *International Journal of Hospitality and Tourism Administration*, 23(6), 1077–1101. <https://doi.org/10.1080/15256480.2021.1905584>

- Ardani, N. N. (2021). Effect of marketing mix and service quality on customer satisfaction and loyalty (A study on PT. Mutiara Cemerlang Utama Bali). *Journal of Applied Sciences in Travel and Hospitality*, 4(2), 77–84. <https://doi.org/10.31940/jasth.v4i2.77-84>
- Aytekin, E., Türkoğlu, A., Cankurtaran, M., & Bilge, A. (2025). The Effect of Tourist Guides' Storytelling Performances on Tour Satisfaction: An Application on Tourists Visiting the Ancient City of Ephesus. *GSI Journals Serie A: Advancements in Tourism Recreation and Sports Sciences*, 8(2), 808–826. <https://doi.org/10.53353/atrss.1660986>
- Bhatt, V., Sharma, B. K., Singh, P., & Arora, L. (2024). From Enchantment to Action: How Tourists' Experiences Drive Revisit Intention. *Journal of Promotion Management*, 30(7), 1113–1140. <https://doi.org/10.1080/10496491.2024.2347213>
- BPS Provinsi Bali. (2025). *Perkembangan Pariwisata Provinsi Bali Desember 2024*. <https://bali.bps.go.id/id/pressrelease/2025/02/03/717939/perkembangan-pariwisata-provinsi-bali-desember-2024.html>
- Buenviaje, M. J. Y., Castillo, K. R. M., Landicho, K. L. B., Lobo, F. B. D., Mendoza, L. L., & de Guzman, A. B. (2024). Honeymoon tourists' online representation of tagged locations in Bali, Indonesia. *Anatolia*, 35(1), 123–134. <https://doi.org/10.1080/13032917.2022.2145571>
- Candranegara, I. M. W., Mirta, I. W., & Putra, K. A. F. (2021). Implementasi Program "We Love Bali" Berbasis CHSE (Clean, Health, Safety, Environment) dalam Pemulihan Pariwisata Bali. *Journal of Contemporary Public Administration*, 1(1), 27–32. <https://doi.org/https://doi.org/10.22225/jcpa.1.1.2021.27-32>
- Carvalho, P., & Alves, H. (2023). Customer Value Co-creation in the Hospitality and Tourism Industry: A Systematic Literature Review. *International Journal of Contemporary Hospitality Management*, 35(1), 250–273. <https://doi.org/https://doi.org/10.1108/IJCHM-12-2021-1528>
- Cejudo, M. A. B. (2024). Towards a deeper understanding of senior tourists: challenges and opportunities of an emerging market segment. *REVISTA INTERNACIONAL DE TURISMO, EMPRESA Y TERRITORIO*, 8(1), 121–138. <https://doi.org/10.21071/riturem.v8i1.17379>
- Coffey, J. K., Shahvali, M., Kerstetter, D., & Aron, A. (2024). Couples Vacations and Romantic Passion and Intimacy. *Annals of Tourism Research Empirical Insights*, 5(1), 1–10. <https://doi.org/https://doi.org/10.1016/j.annale.2024.100121>
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications. <https://books.google.co.id/books?id=s4VviswEACAAJ>
- Criswandari, N. C., Astuti, W., Alvianna, S., & Anggraini, D. P. (2021). Analisis Faktor-Faktor Yang Mempengaruhi Kunjungan Wisatawan Asia Tenggara Di Bali (Studi di PT Dwidaya Wisata Indonesia). *Jurnal Tesla*, 1(1), 1–8. <https://doi.org/https://doi.org/10.26905/jt.v1i1.6995>
- Denieffe, S. (2020). Commentary: Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 662–663. <https://doi.org/https://doi.org/10.1177/1744987120928156>
- Guleria, A., Joshi, R., & Adil, M. (2024). The impact of memorable tourism experiences on customer-based destination brand equity: the mediating role of destination attachment and overall satisfaction. *Journal of Hospitality and Tourism Insights*, 7(4), 1994–2013. <https://doi.org/10.1108/JHTI-03-2023-0220>
- Heriyanto, H. (2018). Thematic Analysis sebagai Metode Menganalisa Data untuk Penelitian Kualitatif. *Anuva*, 2(3), 317–324. <https://doi.org/10.14710/anuva.2.3.317-324>
- Hill, K. L., Bama, H. K. N., & Muresherwa, G. (2022). Critical Success Factors for Guided Tours in the Western Cape Province of South Africa. *African Journal of Hospitality, Tourism and Leisure*, 11(4), 1502–1519. <https://doi.org/10.46222/ajhtl.19770720.305>
- Houghton, C., Murphy, K., Meehan, B., Thomas, J., Brooker, D., & Casey, D. (2017). From screening to synthesis: using nvivo to enhance transparency in qualitative evidence synthesis. *Journal of Clinical Nursing*, 26(5–6), 873–881. <https://doi.org/10.1111/jocn.13443>
- Jaya, I. M. A. K., Suasapha, A. H., & Liestiandre, H. K. (2024). Science in Tourism Destination The Influence of Acceptance of RAISA (Robots, Artificial Intelligence, And Service Automation)

- Technology on Intentions to Use Technology and Intentions to Visit Tourists in Bali. *Journal of Applied Science in Tourism Destination*, 2(1), 52. <https://doi.org/10.52352/jastd.v2i1.1551>
- Koerniawati, F. T. (2022). Destinasi Wisata, Sumber Daya Manusia Pariwisata Dan Pariwisata Berkelanjutan. *Siwayang Journal: Publikasi Ilmiah Bidang Pariwisata, Kebudayaan, Dan Antropologi*, 1(1), 39–50. <https://doi.org/https://doi.org/10.54443/siwayang.v1i1.52>
- Kovačić, S., & Sagovnović, I. (2023). Exploring the Relationship Between Tourists' Emotional Experience, Destination Personality Perception, Satisfaction and Behavioral Intentions. *Psihologija*, 56(3), 371–398. <https://doi.org/10.2298/PSI210626025K>
- Li, Y., Song, Y., Wang, M., & Huan, T. C. (T C.). (2021). The influence of tour guides' service quality on tourists' tour guide stigma judgment: An asian perspective. *Journal of Hospitality and Tourism Management*, 48, 551–560. <https://doi.org/10.1016/j.jhtm.2021.08.011>
- Liu, X. (2024). Investigating Written Reflection and Its Relation to Language Teaching Strategy Change: A Self-study. *Studies in English Language Teaching*, 12(1), p30. <https://doi.org/10.22158/selt.v12n1p30>
- Manyangara, M. E., Manyanga, W., Dangaiso, P., & Masveta, D. (2025). Examining service quality, tourist attitudinal loyalty, and the moderating role of tourist demographics: using the TOURQUAL model. *Cogent Business and Management*, 12(1). <https://doi.org/10.1080/23311975.2025.2579661>
- Pasaco-González, B. S., Campón-Cerro, A. M., Moreno-Lobato, A., & Sánchez-Vargas, E. (2023). The Role of Demographics and Previous Experience in Tourists' Experiential Perceptions. *Sustainability*, 15(4), 2–17. <https://doi.org/https://doi.org/10.3390/su15043768>
- Pestana, M. H., Parreira, A., & Moutinho, L. (2020). Motivations, emotions and satisfaction: The keys to a tourism destination choice. *Journal of Destination Marketing and Management*, 16, 2–9. <https://doi.org/https://doi.org/10.1016/j.jdmm.2018.12.006>
- Pujiastuti, E. E. (2020). Pengaruh Pengalaman Wisatawan Terhadap Kepuasan Dan Kepercayaan Serta Niat Berkunjung Kembali. *DIALEKTIKA: Jurnal Ekonomi Dan Ilmu Sosial*, 5(2), 185–201. <https://doi.org/https://doi.org/10.36636/dialektika.v5i2.465>
- Saiffudin, S., Bahrin, B., Pratiwira, N., & Radenhario. (2025). Impact of Human Resource Strategy on Service Quality, Sustainable Tourism. *Jurnal Administrare: Jurnal Pemikiran Ilmiah Dan Pendidikan Administrasi Perkantoran*, 12(1), 103–110. <https://doi.org/https://doi.org/10.71309/administrare.v12i1.7853>
- Sari, I. T. P., Rismanto, H., Rauf, M. I. A., & Purnawan, A. (2023). Optimalisasi Pelayanan Pada Umkm Di Bidang Pariwisata Menggunakan Pendekatan Human Sigma. *Dinamika: Jurnal Ilmiah Ilmu Administrasi Negara*, 11. <https://jurnal.unigal.ac.id/dinamika/article/view/15678/pdf>
- Schmitt, B. (1999). Experiential Marketing. *Journal of Marketing Management*, 15(1–3), 53–67. <https://doi.org/10.1362/026725799784870496>
- Sufa, S. A., Setiawati, D., Afiat, M. N., & Rijal, S. (2024). The Influence of Tourism Infrastructure and Online Promotion Of Tourist Visit Intention (Study on the Island of Bali with Tourist Satisfaction as an Intervening Variable). *International Journal of Business, Law, and Education*, 5(2), 1567–1577. <https://doi.org/https://doi.org/10.56442/ijble.v5i2.595>
- Suhartanto, D., Brien, A., Primiana, I., Wibisono, N., & Triyuni, N. N. (2020). Tourist loyalty in creative tourism: the role of experience quality, value, satisfaction, and motivation. *Current Issues in Tourism*, 23(7), 867–879. <https://doi.org/10.1080/13683500.2019.1568400>
- Supina, S., Dewantara, Y. F., & Krisnadi, A. R. (2024). Conceptual Analysis of the High-Touch, High-Tech Trend: The Suitability of Technology for Tourism Transformation in Rural Destinations. *TRJ Tourism Research Journal*, 8(2), 224. <https://doi.org/10.30647/trj.v8i2.264>
- Susanthi, I. G. A. A. D., & Warmadewi, A. A. I. M. (2020). Kesantunan Dalam Percakapan Pemandu Wisata Di Ubud Bali. *KULTURISTIK: Jurnal Bahasa Dan Budaya*, 4(1), 22–27. <https://doi.org/10.22225/kulturistik.4.1.1557>
- Sutton, J., & Austin, Z. (2015). Qualitative Research: Data Collection, Analysis, and Management. *The Canadian Journal Of Hospital Pharmacy*, 68(3), 226–231. <https://doi.org/https://doi.org/10.4212/cjhp.v68i3.1456>

- Syakier, W. A., & Hanafiah, M. H. (2022). Tour Guide Performances, Tourist Satisfaction And Behavioural Intentions: A Study On Tours In Kuala Lumpur City Centre. *Journal of Quality Assurance in Hospitality and Tourism*, 23(3), 597–614. <https://doi.org/10.1080/1528008X.2021.1891599>
- The Bali Sun. (2024, December 4). *Bali Named As World's Most Romantic Destination Of 2024*. <https://thebalisun.com/bali-named-as-worlds-most-romantic-destination-of-2024/>
- Tiwari, A. V., Bajpai, N., & Pandey, P. K. (2023). The role of human emotions in memorable tourism experience and revisit intention. *Tourism and Management Studies*, 19(1), 15–27. <https://doi.org/10.18089/tms.2023.190102>
- Tsai, C. Y., Wang, M. T., & Tseng, H. T. (2016). The Impact of Tour Guides' Physical Attractiveness, Sense of Humor, and Seniority on Guide Attention and Efficiency. *Journal of Travel and Tourism Marketing*, 33(6), 824–836. <https://doi.org/10.1080/10548408.2015.1068264>
- Tsaur, S. H., Yang, T. L., & Tsai, C. H. (2021). Tour Leader Likeability And Tourist Citizenship Behaviours: Mediating Effect Of Perceived Value. *Current Issues in Tourism*, 24(18), 2628–2642. <https://doi.org/https://doi.org/10.1080/13683500.2020.1849044>
- Tseng, T. A., Chien, H. W., & Shen, C. C. (2023). Exploring family travel motivation, preference, and decision-making with children of different ages. *Tourism and Management Studies*, 19(4), 35–45. <https://doi.org/https://doi.org/10.18089/tms.2023.190403>
- Tu, H. W., Guo, W. F., Xiao, X. N., & Yan, M. (2020). The Relationship between Tour Guide Humor and Tourists' Behavior Intention: A Cross-Level Analysis. *Journal of Travel Research*, 59(8), 1478–1492. <https://doi.org/10.1177/0047287519883033>
- White, R. E., & Cooper, K. (2022). Case Study Research. In R. E. White & K. Cooper (Eds.), *Qualitative Research in the Post-Modern Era: Critical Approaches and Selected Methodologies* (pp. 233–285). Springer International Publishing. https://doi.org/10.1007/978-3-030-85124-8_7
- Widiana, M. E., Widyaningrum, M. E., Wildanc, M. A., & Harsonod, S. (2025). The Role of Consumer Demographics in Shaping Tourism Businesses and Repeat Visitation in Indonesia: A Systematic Analysis. *Journal of System and Management Sciences*, 15(4), 122–137. <https://doi.org/10.33168/JSMS.2025.0409>
<https://www.aasmr.org/jsms/Vol15/No.4/Vol.15.No.4.09.pdf>
<https://www.aasmr.org/jsms/Vol15/No.4/index.html>
- Wijayanti, N. P. E. (2020). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan Pengguna Mobile Application Tiket.Com Pada Wisatawan Domestik Di Bali. *Jurnal Kepariwisataaan*, 19(2), 124–131. <https://doi.org/10.52352/jpar.v19i2.428>
- Yandi, A., Mahaputra, M. R., & Mahaputra, M. R. (2023). Faktor-Faktor Yang Mempengaruhi Minat Kunjungan Wisatawan (Literature Review). *Jurnal Kewirausahaan Dan Multi Talenta*. <https://doi.org/10.38035/jkmt.v1i1.8>
- Yusuf, M., Fadli, U. M. D., Liana, E., Santosa, J., & Sulistyowati, M. (2024). Analysis of Emotional Intelligence, Compensation and Career Path on Tour Guide Performance Through Job Satisfaction. *Greenation International Journal of Tourism and Management*, 2. <https://doi.org/10.38035/gijtm.v2i3.238>
- Zhang, Q., & Xu, H. (2020). Understanding aesthetic experiences in nature-based tourism: The important role of tourists' literary associations. *Journal of Destination Marketing and Management*, 16(16), 1–12. <https://doi.org/10.1016/j.jdmm.2020.100429>
- Zhang, Z., Zhang, Y., Li, Y., & Shen, Z. (2024). Solo traveller typology based on personal value: Incorporating cluster analysis into means-end chain. *Tourism Management Perspectives*, 51, 101247. <https://doi.org/https://doi.org/10.1016/j.tmp.2024.101247>
- Zou, Y., & Yu, Q. (2022). Sense of safety toward tourism destinations: A social constructivist perspective. *Journal of Destination Marketing and Management*, 24. <https://doi.org/10.1016/j.jdmm.2022.100708>



POLITEKNIK NEGERI BALI



Redaksi Jurnal JASTH

Gedung P3M Politeknik Negeri Bali

Bukit Jimbaran, PO BOX 1064 Tuban, Badung, Bali

Phone: +62361 701981, Fax: +62361 701128

<http://ojs.pnb.ac.id/index.php/JASTH>