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Master's Thesis
Academic Year 2025

My Sea Story and Sunset Calendar:
A Service Design for Place Attachment and
Sustainable Tourism in Rural Japan



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A Master's Thesis
submitted to Keio University Graduate School of Media Design
in partial fulfillment of the requirements for the degree of
Master of Media Design

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Abstract of Master's Thesis of Academic Year 2025

My Sea Story and Sunset Calendar:
A Service Design for Place Attachment and Sustainable
Tourism in Rural Japan

Category: Design

Summary

Rural tourism destinations face significant challenges in attracting visitors and developing sustainably due to resource constraints and the difficulty of translating authentic local character into compelling experiences. This research investigates how low-resource, place-based service design can foster place attachment in the rural Japanese tourism context. Employing an ethnographic, empirical approach, this study developed and empirically tested service design interventions at a guesthouse in Izumozaki, Niigata, a coastal village emblematic of rural Japan's tourism development challenges. Through sustained fieldwork and stakeholder collaboration, two complementary interventions emerged: the "My Sea Story" booklet utilizing sensory-rich prompts for individual reflection, and the "Sunset Calendar" installation enabling asynchronous Tourist-to-Tourist value co-creation through shared photography and messaging. Qualitative analysis through the Person-Process-Place framework demonstrated the systematic activation of place attachment mechanisms across individual-collective person dimensions, affective-cognitive-behavioral processes, and physical-social place characteristics. Findings revealed high participation rates, expressed intentions for repeat visitation, and confirmed operational feasibility. The research contributes empirical validation of the PPP framework through service design application, offers novel insights into asynchronous Tourist-to-Tourist co-creation, and provides transferable guidelines for sustainable rural tourism development that preserves local authenticity while fostering meaningful visitor engagement.

Keywords:

place attachment, service design, rural tourism, value co-creation, service dominant logic, Person-Process-Place framework, sustainable tourism, rural revitalization

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Contents

Acknowledgements	ix
1 Introduction	1
1.1. Introduction and Research Context	1
1.2. Field Site Selection and Rationale	2
1.3. Geographic and Cultural Context of Izumozaki	3
1.4. Problem Statement and Research Gap	4
1.5. Research Aim and Questions	5
1.6. Significance of the Study	6
1.7. Thesis Structure	8
2 Theoretical Foundations	10
2.1. Introduction	10
2.2. The Imperative for Innovation in Rural Japanese Tourism	11
2.2.1 Global Transformations and Rural Tourism Emergence	11
2.2.2 Structural Challenges of Rural Tourism Development	12
2.2.3 The Japanese Context: Demographic Imperatives	13
2.3. A Human-Centered Paradigm for Tourism Experience	14
2.3.1 The Paradigmatic Shift: Service-Dominant Logic and Co-Creation	14
2.3.2 Service Design as Operational Methodology	15
2.4. The Architecture of Place Attachment	16
2.4.1 Defining Place Attachment and Tourism Significance	16
2.4.2 The Person-Process-Place (PPP) Framework	17
2.4.3 Pathways to Attachment Formation	18
2.4.4 PPP Framework Application to Service Design	19

2.5. Co-Creating Value:	
From Synchronous Encounters to Asynchronous Communities . . .	20
2.5.1 Foundations of Tourist-to-Tourist Value Co-Creation . . .	20
2.5.2 Dominant Models of Synchronous Social Interaction	20
2.5.3 Customer-Dominant Logic: Expanding the Theoretical Lens	21
2.6. Identifying Gap:	
Asynchronous Co-Creation Within the PPP Framework	22
2.6.1 Defining the Research Gap Within Place Attachment Theory	22
2.6.2 Asynchronous Co-Creation as PPP Framework Extension .	23
2.6.3 Physical Media as Service Design Artifact	23
2.7. Synthesis and Conclusion	24
3 Design	26
3.1. Introduction	26
3.2. Research Methodology	27
3.2.1 Methodology Overview	27
3.2.2 Multi-Phase Data Collection Strategy	27
3.2.3 Research Participants	28
3.2.4 Data Analysis	29
3.3. Contextual Discovery: Field Investigations	30
3.3.1 Initial Field Visit (October 4-6, 2024): Baseline Assessment	30
3.3.2 Key Findings from Initial Assessment	32
3.3.3 Second Field Visit (February 25-26, 2025): Extended Stakeholder Engagement	34
3.4. Design Development	37
3.4.1 Design Concept and Objectives	37
3.4.2 Collaborative Design Process	37
3.4.3 Initial Prototype Development: “My Sea Story”	39
3.4.4 Prototype Testing Methodology	40
3.4.5 User Response Analysis:	
Emergent Themes from Prototype Testing	42
3.4.6 Design Iteration and Refinement	45
3.4.7 Final Prototype Development	47
3.5. Implementation and Service Integration	49

3.5.1	Field Installation and Real-World Testing (May 15-16, 2025)	49
3.5.2	Service Experience Analysis: The Interaction Flow Story-board	52
3.6.	Service Blueprint and Design Integration	53
3.6.1	Service Blueprint Development and Purpose	53
3.6.2	Blueprint Architecture and Components	55
3.7.	Chapter Conclusion: From Research to Design	55
4	Design Validation and Impact Assessment	58
4.1.	Introduction	58
4.2.	Validation Methodology	59
4.3.	Traveler Experience Validation Through the PPP Framework	59
4.3.1	The “Person” Dimension: Individual and Collective Con- nection	59
4.3.2	The “Process” Dimension: Affective, Cognitive, and Behav- ioral Manifestations	61
4.3.3	The “Place” Dimension: Physical and Social Elements . .	63
4.4.	Stakeholder Validation	64
4.4.1	Perceived Value and Operational Integration	65
4.4.2	Strategic Business Integration	65
4.5.	Discussion	66
4.5.1	Research Aim Achievement	66
4.5.2	Defense Discussion	67
4.5.3	Study Limitations	70
4.5.4	Future Research Directions	70
4.6.	Chapter Conclusion	71
5	Conclusion and Design Guidelines	72
5.1.	Introduction	72
5.2.	Research Contributions and Success Factors	72
5.3.	Design Guidelines for Rural Tourism Service Development	74
5.4.	Transferability and Adaptation Guidance	76

5.5. Concluding Reflections:	
Authentic Connection in Rural Tourism	77
References	79

List of Figures

1.1	The Tsuma-iri Streetscape	4
3.1	The Moriyama Guesthouse	31
3.2	The Paper Balloon Crafting Event in Local Festival	31
3.3	A Shop in Teradomari Fish Market	32
3.4	The Coastal Scene of Izumozaki and the Sunset of Sea of Japan .	33
3.5	Mr. Moriyama and His Fruits Garden	34
3.6	The Outside Environment of the Villa	35
3.7	The Room of Sunset and the Room of Sea	35
3.8	The Proposal Analyzing the Current Challenge	38
3.9	The Proposal of Izumozaki's resource and the Original Design Idea	39
3.10	The Proposal of Draft User Journey	39
3.11	Photo of the Physical Prototype of "My Sea Story" Booklet . . .	41
3.12	The Miro Board for Participants to Share Sunset Moments . . .	41
3.13	The Thematic Analysis of Prototype User Response	42
3.14	The Miro Board with Participants' Reponse	46
3.15	The Final Booklet's Pages with Refined Prompts	47
3.16	The Final Booklet with the Binder Ring	48
3.17	The Title Board Design, Making and Implementation	49
3.18	The Setting of Instax Printer and Instruction Board	50
3.19	The Wall Before and After Implemented with Hanging Display and Titleboard	51
3.20	A Finished Booklet Sample and Message Card Sample on Display	51
3.21	The Story Board of Interaction Flow	54
3.22	The Service Blueprint	56
4.1	Mapping Traveler Experience to the PPP Framework	60

4.2	Igarashi-san's SNS Post After the Design Implementation	64
4.3	Igarashi-san's SNS Post of Guests' Participation on Sunset Calendar	65
4.4	Sunset Calendar Situation after One Month	65
4.5	Igarashi-san Filing Application to Funding	66
5.1	The Five Design Principles for Sustainable Rural Service Design	76

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Chapter 1

Introduction

1.1. Introduction and Research Context

The Transforming Landscape of Global Tourism

Contemporary global tourism is undergoing fundamental transformation, accelerated by recent global events including the COVID-19 pandemic and increasing environmental consciousness. These catalysts have precipitated significant shifts in traveler motivations and behaviors, moving beyond traditional mass tourism paradigms toward experiential forms of travel that prioritize authenticity, sustainability, and meaningful engagement with destinations [1] [2]. Modern travelers increasingly seek deeper connections with places rather than superficial sightseeing experiences, valuing personal transformation and cultural immersion over conventional tourist consumption patterns.

This evolving landscape has positioned rural tourism as a critical response to contemporary travel demands. Rural tourism, encompassing travel to and within non-urban areas that offer experiences focused on nature, agriculture, local culture, and traditional lifestyles, has emerged as a vital alternative to overcrowded urban destinations [3]. Such destinations possess significant potential for local economic development, cultural preservation, and provision of unique restorative experiences that contrast markedly with urban or highly commercialized alternatives.

Challenges in Rural Tourism Development

Despite growing interest in rural tourism experiences, many such destinations continue to encounter substantial obstacles in attracting and retaining travelers. Common challenges include limited accessibility, insufficient local resources

(financial, human, infrastructural), difficulties in effective marketing to broader audiences, and the delicate balance between preserving authenticity while accommodating visitor needs [4]. These systemic challenges underscore the urgent need for innovative, context-sensitive development approaches that work within existing resource constraints while leveraging inherent local assets.

Traditional tourism development models often prove inadequate for rural contexts, as they typically require substantial infrastructure investment and may compromise the authentic character that constitutes rural destinations' primary appeal. This creates a fundamental tension between development aspirations and preservation of the qualities that make rural areas attractive to contemporary travelers seeking authentic, restorative experiences.

1.2. Field Site Selection and Rationale

This research emerged from an unanticipated encounter that ultimately shaped its trajectory. My initial visit to Niigata Prefecture in May 2024 was not intended as a research expedition but rather a personal trip following my mother's enthusiastic recommendation. Her experience in the region, particularly her appreciation for the Japanese sake, Wagyu beef, scenic Sea of Japan coastline, and the absence of mass tourism, prompted her to encourage my own exploration of the area.

Unlike Japan's internationally recognized destinations such as Osaka, Kyoto, and Hokkaido, Niigata remains relatively undiscovered by international travelers. However, my exploration revealed a region of considerable cultural heritage, natural beauty, and strong local commitment to sharing its distinctive character with the world. During this visit, I met Naomi, a tourism industry professional based in Niigata Prefecture, who served as my guide and introduced me to the focal point of this research: Izumozaki.

Izumozaki represents a community actively engaged in revitalization efforts while possessing significant untapped cultural, historical, and natural resources. This small coastal village is distinguished by its dramatic sunset views over the Sea of Japan, traditional paper balloon crafts (kami fusen), and historical associations with the renowned Edo period poet and monk Ryokan. Central to the community's tourism development efforts is Igarashi-san, a passionate local

entrepreneur who has established a seaside villa “OneStory”¹ with sauna facilities designed to enhance visitors’ appreciation of Izumozaki’s coastal setting. His continuous innovation, stakeholder collaboration, and focus on attracting foreign visitors exemplify the community’s tourism development aspirations.

This research investigates how service design methodologies can contribute to rural destination promotion efforts. While Izumozaki possesses elements essential for destination attractiveness, several challenges impede its growth: limited accessibility, insufficient local resources, minimal international awareness, and lack of structured tourism experiences. This preliminary assessment indicated that Izumozaki represented an appropriate case study for examining rural tourism development challenges and opportunities in contemporary Japan.

1.3. Geographic and Cultural Context of Izumozaki

Izumozaki (出雲崎) is a historic town located in the central part of Niigata Prefecture, Japan, facing the Sea of Japan². Once a crucial administrative and economic hub during the Edo period, serving as a direct shogunate territory and vital port for Sado Island’s gold and silver trade, Izumozaki is also recognized as the birthplace of the revered Zen poet Ryōkan and a pioneer in Japan’s modern petroleum industry. Despite its rich historical legacy and scenic beauty, the town has experienced significant and steady population decline over the past five decades, with recent data indicating a population of 4,113 in 2020³.

The town’s tourism landscape is predominantly centered around its cultural heritage, particularly sites dedicated to Ryōkan and its Edo-era past. Izumozaki is notable for its picturesque scenery, which beautifully integrates views of both sea and mountains, earning high recognition. This natural beauty represents a significant but underutilized asset for tourism development.

Izumozaki is located approximately four hours by automobile from Tokyo, or

1 The official website of the villa, <https://sunsetvilla-onestory.com/>, last accessed Jun 13, 2025

2 Izumozaki’s official travel site, <https://www.izumozaki.net/en/>, last accessed Jun 17, 2025

3 The population statistics by the government, <https://www.e-stat.go.jp>, last accessed Jun 17, 2025

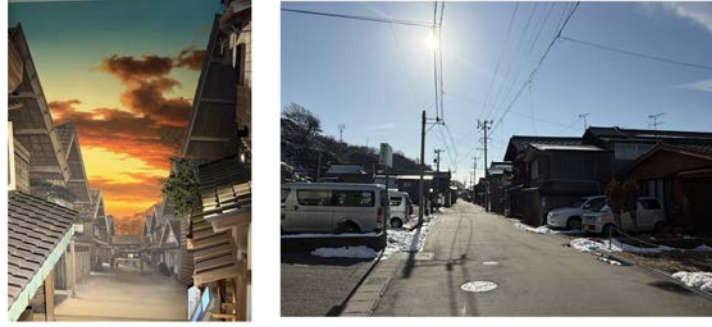


Figure 1.1 The Tsuma-iri Streetscape

alternatively, 1.5 hours via Shinkansen to Nagaoka followed by a 30-minute drive, positioning it within reasonable accessibility parameters for domestic tourism from Japan's primary metropolitan region. The town's situation along the Sea of Japan coast creates a diverse landscape encompassing extensive rice paddies, forested mountain terrain, and coastal access. This topography creates a distinctive transition zone where visitors traverse mountainous terrain before reaching the dramatic coastal setting.

The community features significant historical architecture, particularly the traditional tsuma-iri streetscape (妻入り街並み), representing a well-preserved example of historical Japanese residential architecture where houses are positioned with gabled ends facing the street. This configuration creates a distinctive overlapping roofline pattern reflecting traditional spatial organization and construction techniques. Additionally, Izumozaki serves as the birthplace of Ryokan, the celebrated Edo period poet and calligrapher, adding cultural significance to its historical landscape.

1.4. Problem Statement and Research Gap

The Core Challenge in Context

Despite growing interest in rural tourism and the unique assets of places like Izumozaki, many such destinations continue to struggle with attracting and retaining travelers due to significant resource limitations (human, financial, infrastructural)

and the inherent difficulty in translating authentic local charm into compelling, sustainable visitor experiences. Traditional tourism development approaches often overlook these constraints, proposing solutions that require substantial investment or risk compromising the authenticity that constitutes rural destinations' primary appeal. The challenge is particularly acute in Japan's rural regions, which face unprecedented demographic decline and aging populations while possessing distinctive cultural and natural assets that could attract contemporary travelers seeking authentic experiences. This creates an urgent need for innovative approaches that can enhance visitor engagement and foster lasting connections between travelers and places without requiring extensive resource investment.

Identified Research Gap

Current academic literature provides valuable insights into place attachment theory and value co-creation mechanisms, but comprehensive understanding of how tangible, low-cost service design interventions can foster place attachment in resource-constrained rural settings remains underexplored. Existing research on Tourist-to-Tourist (T2T) value co-creation focuses predominantly on synchronous, co-located interactions, leaving significant gaps in understanding how meaningful social connections and shared value can be created through asynchronous means. Furthermore, while place attachment theory provides robust frameworks for understanding human-place bonds, empirical studies demonstrating how specific service design interventions can systematically activate these psychological mechanisms in tourism contexts are limited. This research directly addresses these gaps by offering an empirical case study of low-resource service design intervention in rural Japan, emphasizing qualitative impact assessment and sustainable development approaches.

1.5. Research Aim and Questions

Research Aim

This study explores how a low-resource, place-based service design, by engaging travelers through sensory-rich prompts, facilitating emotional resonance, and en-

abling asynchronous social connection and co-created value, contributes to the development of place attachment and the potential for repeat visitation and organic destination advocacy in rural Japan.

Research Questions

The investigation addresses three interconnected research questions:

- RQ1: How does a sensory-rich service design intervention, utilizing interactive prompts, influence travelers' emotional and cognitive experiences, contributing to their individual connection with meaning-making in a rural Japanese destination?
- RQ2: In what ways does an asynchronous co-creation platform foster social connection among travelers and contribute to their sense of shared humanity and collective belonging in a rural Japanese setting?
- RQ3: How do these co-created and emotionally resonant experiences, facilitated by the service design, lead to enhanced place attachment and behavioral intentions for repeat visitation and destination advocacy among travelers?

These questions are designed to systematically examine how service design interventions can activate the multiple dimensions of place attachment as conceptualized in the Person-Process-Place (PPP) framework, providing comprehensive understanding of the mechanisms through which design influences human-place relationships.

1.6. Significance of the Study

Theoretical Significance

This research makes several important theoretical contributions to academic understanding:

Place Attachment Theory: The study provides empirical validation of the Person-Process-Place (PPP) framework [5] by systematically demonstrating how

specific, tangible design interventions can activate and influence the individual-collective person dimensions, affective-cognitive-behavioral processes, and physical-social place characteristics that constitute place attachment. This moves beyond theoretical description to practical application guidance.

Tourist-to-Tourist Value Co-Creation: The research extends existing theories on social dynamics in tourism [6] by exploring mechanisms and impacts of asynchronous interaction in physical spaces. This contributes novel insights to co-creation literature, which has predominantly focused on synchronous, co-located interactions.

Service Design Theory: The study provides a robust case study demonstrating how human-centered, low-resource design approaches [7] can be effectively applied in rural, resource-constrained environments, contributing to an enhanced understanding of service design’s potential in challenging contexts.

Practical Significance

The research offers substantial practical benefits across multiple stakeholder groups:

For Rural Businesses: The study provides a practical, low-cost, easily implementable solution for enhancing guest experiences, fostering loyalty, generating authentic promotional content, and stimulating organic advocacy and repeat visitation. The validated interventions offer actionable guidance for small-scale rural service providers seeking to differentiate their offerings.

For Rural Tourism Destinations: The research presents a sustainable development model that prioritizes quality, authenticity, and strong visitor-place relationships over mass tourism approaches. This proves particularly relevant for preserving fragile rural environments while achieving economic benefits within existing resource constraints.

For Contemporary Travelers: The study addresses growing demand for deeper, more authentic, and memorable experiences in less-explored destinations, providing pathways for travelers to fulfill desires for meaningful engagement with rural places and communities.

For Service Design Practitioners: The research offers methodological insights for conducting collaborative, ethnographically-informed design work in rural contexts, demonstrating effective approaches for building trust and developing

contextually appropriate interventions.

1.7. Thesis Structure

This thesis is organized into five chapters that systematically develop the research from theoretical foundations through empirical investigation to practical implications:

Chapter 2: Theoretical Foundations for Fostering Place Attachment in Rural Tourism establishes comprehensive theoretical foundations spanning rural tourism development challenges, service design paradigms, place attachment theory (with emphasis on the Person-Process-Place framework), and value co-creation literature (particularly Tourist-to-Tourist or Customer-to-Customer interactions). The chapter identifies key research gaps and positions the study's contribution within existing scholarly discourse.

Chapter 3: Design Methodology and Development documents the empirical process of design conception, iterative prototyping, and final implementation through ethnographic fieldwork in Izumozaki. This chapter details the bottom-up, discovery-driven methodology that allowed design insights to emerge from contextual understanding before theoretical frameworks were applied for validation.

Chapter 4: Design Validation and Impact Assessment presents comprehensive empirical findings from traveler and stakeholder interviews, systematically analyzed through the Person-Process-Place framework to validate the design's effectiveness in fostering place attachment across its individual, psychological, and spatial dimensions.

Chapter 5: Conclusion and Design Guidelines synthesizes overall conclusions, articulates research contributions to theory and practice, and presents practical design guidelines for future application in similar rural tourism contexts. The chapter reflects on methodological insights and provides transferable principles for service design work in resource-constrained environments.

This structure ensures logical progression from theoretical grounding through empirical investigation to practical application, providing comprehensive exploration of how service design can contribute to sustainable rural tourism develop-

ment through place attachment cultivation.

Chapter 2

Theoretical Foundations

2.1. Introduction

This chapter establishes the comprehensive theoretical foundation underpinning this research inquiry. Its primary function is to construct a systematic argument that progresses from the broad socio-economic context of contemporary rural tourism to the specific research gap this study addresses. The chapter provides theoretical justification for the research statement: “This study explores how a low-resource, place-based service design, by engaging travelers through sensory-rich prompts, facilitating emotional resonance, and enabling asynchronous social connection and co-created value, contributes to the development of place attachment and the potential for organic destination advocacy in rural Japanese guest-house settings.”

The argumentative structure unfolds systematically across three integrated theoretical domains. First, it establishes the problem space by examining global tourism transformations following COVID-19 and situating these within the acute challenges facing rural Japan, demonstrating the urgent need for innovative, sustainable, low-resource tourism models. Second, it introduces the theoretical paradigm through which this study approaches the problem, positioning Service-Dominant Logic, the Experience Economy, and Service Design as a coherent, human-centered framework for creating meaningful value through co-creation. Third, it defines the desired outcome—place attachment—utilizing the Person-Process-Place (PPP) framework to deconstruct its psychological formation pathways and demonstrate how it can be intentionally cultivated through design intervention.

The chapter culminates in identifying a distinct research frontier by critically examining value co-creation literature, progressing from established models of synchronous Tourist-to-Tourist (T2T) interaction to the under-explored territory

of asynchronous T2T value co-creation. Through this progression, it introduces Customer-Dominant Logic and physical artifacts as conceptual tools framing the thesis's primary theoretical contribution. This structured approach ensures the research is positioned as a logical and necessary extension of existing scholarly discourse rather than an isolated investigation.

2.2. The Imperative for Innovation in Rural Japanese Tourism

Understanding the rationale for the proposed service design requires establishing the critical context within which it operates. The global tourism sector navigates unprecedented transformation while rural Japan confronts a unique confluence of demographic and economic pressures. This section synthesizes macro-level trends with specific challenges of the research setting, Izumozaki, to argue for new, context-aware tourism models prioritizing quality, sustainability, and resilience over volume-based approaches.

2.2.1 Global Transformations and Rural Tourism Emergence

The COVID-19 pandemic catalyzed fundamental shifts in global travel patterns, precipitating near-total cessation of international movement and exposing the profound fragility of economies dependent on mass tourism ¹. This disruption extended beyond economic impact, triggering comprehensive re-evaluation of travel values among consumers and accelerating paradigmatic shifts in traveler motivations and behaviors [1].

Post-pandemic travelers demonstrate a marked increase in preferences for authenticity, sustainability, and wellness-oriented experiences [2]. There exists a discernible pivot from crowded, iconic destinations toward low-density, nature-based locales offering safety, tranquility, and escape from urban pressures. This rep-

¹ the UN Tourism review in 2021, <https://www.unwto.org/2021-a-year-in-review>, last accessed Jun 16, 2025

resents enduring behavioral change rather than temporary trend, where tourists transition from passive sightseers to active participants seeking genuine engagement with local culture, nature, and communities [8].

This evolution in consumer preferences has elevated rural tourism from niche sector to vital engine for regional development and sustainability [3]. The inherent assets of rural areas—pristine natural landscapes, rich local traditions, slower life pace—align with contemporary travel demands [9]. Consequently, domestic travel resurgence, initially necessitated by border closures, has become a durable trend as citizens rediscover destinations within their own countries [10]. This positions rural areas like Izumozaki at a critical juncture, presenting significant opportunities to capitalize on shifting demands through high-quality, sustainable tourism development.

2.2.2 Structural Challenges of Rural Tourism Development

While global context appears favorable, rural tourism development encounters inherent structural challenges. The qualities constituting desired “rural charm” are often systemically linked to factors impeding tourism development. Rural areas frequently exhibit inadequate infrastructure, including poorly maintained transportation networks, limited digital connectivity, and insufficient service facilities, creating barriers to visitor access and satisfaction [4].

A complex systemic tension emerges where rurality’s assets paradoxically intertwine with its liabilities. Low population density providing tranquility and urban escape simultaneously contributes to limited labor pools and specialized skill deficits required for modern service economies [11].

Successful intervention cannot simply address challenges through conventional high-impact development, as this risks eroding the very assets attracting tourists. This underscores the critical need for innovative, low-resource solutions enhancing visitor experience through “software” value addition—guided sensory engagement, mediated connection—without requiring “hardware” overhaul that would disrupt the destination’s essential character.

2.2.3 The Japanese Context: Demographic Imperatives

This systemic tension reaches acute levels in Japan, which faces unprecedented demographic crisis characterized as “super-aged, shrinking society” [12]. Since peaking in 2008, Japan’s population has experienced continuous decline, felt most acutely in rural regions through sustained out-migration and low fertility rates [13]. This has generated the phenomenon of *kasō*, or “very scarce and/or too depopulated” areas, now constituting a majority of the nation’s landmass [13].

This demographic reality constitutes the single most critical design constraint rather than mere contextual backdrop. The aging population creates severe work-force bottlenecks in tourism sectors, with stark deficits in young residents to inherit and operate guesthouses, restaurants, and essential services [14]. This directly threatens long-term viability of tourism strategies reliant on traditional, labor-intensive service models, elevating the need for low-resource, technologically-facilitated, scalable solutions from innovation preference to strategic necessity for rural economic survival.

Compounding internal pressures is Japan’s tourism landscape reality. International tourism concentrates disproportionately in the urban “Golden Route” of Tokyo, Kyoto, and Osaka, benefiting from extensive infrastructure and marketing investment. Lesser-known rural prefectures like Niigata, where Izumozaki is located, struggle to attract visitors and overcome significant language and information barriers. While government initiatives including “Green Tourism”² and “Contents Tourism” have been launched to revitalize these regions, they have achieved only moderate success [15].

Rural providers historically focus on developing “hardware” (physical facilities), while contemporary urban tourists increasingly seek “software” (rich information, digital convenience, unique participatory experiences) [16]. This confluence of factors—global demand for authentic rural experiences, systemic paradox of rural assets, acute demographic crisis, and policy-practice gaps—creates compelling urgency for this research. Izumozaki, with its natural beauty, cultural heritage,

2 Some example of Green Tourism initiatives, <https://www.japan.travel/en/japan-magazine/2111.travel-sustainably-by-visiting-one-of-japans-green-destinations/>, last accessed Jun 16, 2025

and position within a depopulating region, serves as a quintessential case study whose challenges represent countless other rural communities across Japan.

2.3. A Human-Centered Paradigm for Tourism Experience

Given the complex challenges and opportunities outlined, a comprehensive theoretical lens is required to guide effective tourism solution development. Traditional goods-based economic models prove insufficient for industries where the primary product is intangible experience. This section establishes the core theoretical paradigm of this thesis, arguing for a “theory-to-practice pipeline” flowing from Service-Dominant Logic’s fundamental worldview, through the Experience Economy’s contextual framework, to Service Design’s actionable methodology. This integrated paradigm provides robust foundation for creating human-centered services facilitating value co-creation.

2.3.1 The Paradigmatic Shift: Service-Dominant Logic and Co-Creation

The foundational perspective shift emerges from Service-Dominant (S-D) Logic, a marketing theory introduced by Vargo and Lusch (2004) [7] redefining economic exchange nature. S-D Logic posits that service—the application of specialized skills and knowledge for another entity’s benefit—constitutes the fundamental basis of all economic activity, not tangible goods exchange [17]. From this perspective, value is not embedded in products by producers and delivered to passive consumers. Instead, value is always co-created by multiple actors, including customers, through interaction and resource integration [18].

The customer becomes the ultimate arbiter of this value, realized as “value-in-use” during their unique experience [19]. This framework proves particularly resonant in tourism, where travelers are not merely purchasing transportation or accommodation but actively participating in creating their own experiences through interaction with destination resources [20].

This co-created experience concept finds ideal context in Pine and Gilmore’s

(1998) Experience Economy theory [21]. This framework argues that as services become commoditized, the next competitive battleground lies in staging memorable experiences. In the Experience Economy, businesses function as “experience stagers” rather than service providers, with offerings centered on resulting memories created in customers’ minds rather than services themselves [22].

The “staging” of experiences provides rich context within which S-D Logic’s “co-creation” of value occurs. For tourism, success measurement shifts from functional service delivery to engaging tourists as active participants in crafting unique, personal, unforgettable events [23].

2.3.2 Service Design as Operational Methodology

While S-D Logic provides fundamental ontology (what value is) and the Experience Economy provides context (staging memorable events), Service Design provides practical methodology for operationalizing these abstract concepts. Service design represents a human-centered, collaborative, iterative discipline focused on planning and organizing service components—people, infrastructure, communication, material artifacts—to improve quality and provider-user interaction [24].

Service Design serves as the operational bridge translating theoretical understanding into tangible, desirable, effective service offerings. It employs holistic approaches considering entire customer journeys and seeking solutions that are useful, usable, and desirable from user perspectives [25].

Key methodologies include:

Ethnographic Research: Methods including contextual interviews and participant observation gain deep, qualitative insights into user behaviors, motivations, and unmet needs within natural environments. In tourism contexts, this enables designers to understand how travelers genuinely interact with destinations beyond survey limitations [26].

Customer Journey Mapping (CJM): This core service design tool creates visual representations of users’ step-by-step service interactions over time [25]. By mapping touchpoints, actions, and crucially, users’ emotional states, CJM helps designers identify frustration moments (“pain points”) and delight moments, providing clear roadmaps for service improvement [27].

Service Blueprinting: This tool provides more comprehensive mapping than

CJM by including “backstage” processes invisible to customers but essential for service delivery. By illustrating links between customer actions, frontstage employee actions, and backstage support systems, blueprints ensure organizational alignment for seamless, coherent experience delivery [28].

The application of this human-centered design paradigm practically operationalizes S-D Logic and Experience Economy principles. Methodologies like CJM transcend process diagrams, becoming tools for understanding and visualizing “value-in-use” and “lived experience” that these theories champion.

2.4. The Architecture of Place Attachment

With the problem space defined and theoretical paradigm established, this section defines the primary research outcome: place attachment. Fostering deep, lasting connections between visitors and destinations constitutes a central goal of sustainable tourism. This section deconstructs this complex psychological construct using the Person-Process-Place (PPP) framework, arguing that place attachment represents a predictable outcome that can be intentionally cultivated through theory-driven design rather than an accidental byproduct of pleasant vacations.

2.4.1 Defining Place Attachment and Tourism Significance

Place attachment refers to the multifaceted emotional, cognitive, and behavioral bond individuals form with specific, meaningful locations [29]. It represents the psychological process through which undifferentiated “space” becomes imbued with personal and social meaning, transforming into significant “place” [30]. In tourism scholarship, place attachment has emerged as a critical construct for understanding and predicting tourist behavior, with profound implications for destination management and sustainability [31].

Place attachment significance stems from strong, consistent correlations with pro-sustainability outcomes. Research demonstrates that tourists developing strong destination attachment exhibit significantly higher loyalty, revisit intentions, and positive word-of-mouth (WOM) promotion, effectively becoming organic destination advocates [32], [33]. Furthermore, this emotional bond directly links to

tourists' pro-environmental behaviors; visitors feeling connected to places demonstrate greater inclination to act as stewards, respecting natural and cultural resources [34].

For low-resource destinations like Izumozaki requiring quality over volume strategies, fostering place attachment represents not merely a marketing objective but a core strategic imperative for achieving long-term economic and environmental viability [35].

2.4.2 The Person-Process-Place (PPP) Framework

To systematically analyze place attachment's multifaceted nature, the Person-Process-Place (PPP) framework developed by Scannell and Gifford (2010) offers comprehensive organizing structure [5]. This tripartite model proves particularly suited for the present study because its three-dimensional structure—examining the actor (Person), psychological mechanisms (Process), and context (Place)—enables systematic examination of how designed interventions influence different facets of person-place bonds.

The 'Person' Dimension addresses “who is attached?” recognizing that attachment can be based on both individual (personal experiences, self-identity) and collective (shared meanings, group identity) connections [5]. Individual attachment emerges from personal experiences and memories associated with places, while collective attachment stems from symbolic meanings and group memberships that places represent.

The 'Process' Dimension describes the psychological bond nature, deconstructing it into three core components: affective (emotions, feelings), cognitive (memories, knowledge, meaning), and behavioral (proximity maintenance, place reconstruction) [5]. The affective process involves emotional connections and feelings about places. The cognitive process encompasses thoughts, memories, and meanings associated with places. The behavioral process includes actions demonstrating attachment, such as proximity maintenance and efforts to restore places.

The 'Place' Dimension focuses on attachment objects, distinguishing between physical (natural and built environments) and social (social arena, social symbols) characteristics [5]. Physical characteristics include natural features and built environments, while social characteristics encompass the social interactions and

cultural meanings places facilitate.

2.4.3 Pathways to Attachment Formation

Understanding place attachment’s psychological architecture enables design of interventions effectively fostering these bonds. Literature identifies several core pathways transforming visitor experiences into lasting connections, which the proposed service design deliberately targets.

The Sensory-Emotional Pathway

Place attachment formation is profoundly influenced by immediate, embodied place experiences mediated through human senses. Research demonstrates that rich sensory inputs—sunset sights, wave sounds, sea air smells, local material textures—instrumentally evoke powerful positive emotional states including delight, awe, and relaxation [36]. These emotions directly precede place attachment, establishing clear psychological chains: sensory experience leads to positive emotion, which leads to attachment.

This theoretical pathway provides direct justification for “My Sea Story” prompt booklet. The booklet functions as a service design artifact intentionally directing travelers’ attention toward Izumozaki environment’s rich sensory tapestry. By providing prompts encouraging visitors to consciously notice, reflect upon, and document sensory experiences, the intervention deliberately catalyzes and amplifies the sensory-emotional-attachment chain.

The Cognitive-Narrative Pathway

Beyond immediate sensory and emotional responses, place attachment is deeply shaped by cognitive processes, specifically through meaning-making, memory, and narrative construction. Personal memories serve as cornerstones when places become identity anchors by serving as backdrops for significant life events or evoking powerful autobiographical memories [37]. The active process of narrative construction represents a powerful mechanism for solidifying attachment [38].

When individuals construct and tell stories of their place experiences—to themselves or others—they engage in cognitive acts of organizing perceptions, mak-

ing sense of journeys, and integrating places into personal identities [39]. This cognitive-narrative pathway provides direct theoretical justification for the design’s overarching goal of empowering travelers to “create their own story” in Izumozaki.

The Social-Communal Pathway

Place attachment rarely represents purely solitary phenomena; it interweaves deeply with social lives. This dimension, often termed “place social bonding,” derives from social interactions, relationships, and community sense that places facilitate [40]. People become attached to places serving as arenas for meaningful social connection and reinforcing group identity and belonging senses [41].

This social-communal pathway provides core justification for the “Sunset Calendar” installation. The calendar targets this social pathway through novel means, designed to facilitate an asynchronous or imagined community. Knowledge that countless others—past, present, future—have witnessed the same natural spectacle from the same location and left traces through photos or messages connects individual travelers to larger human collectives, fostering “we-ness” transcending time. [42]

2.4.4 PPP Framework Application to Service Design

The PPP framework provides systematic structure for analyzing how specific design elements influence different place attachment dimensions:

Person Dimension: The Izumozaki service design addresses both individual attachment through personal sensory reflection (My Sea Story booklet) and collective attachment through shared ritual and communal identity creation (Sunset Calendar).

Process Dimension: The service design stimulates all three psychological processes: affective through sensory-emotional pathway, cognitive through narrative-meaning-making pathway, and behavioral as ultimate intended outcome of strengthened bonds.

Place Dimension: Interventions deepen attachment to both Izumozaki’s physical attributes (sea, sunset) and social attributes (temporary community around

guesthouse and shared experiences).

2.5. Co-Creating Value: From Synchronous Encounters to Asynchronous Communities

Having established place attachment as the desired outcome and its social-communal pathway as a key target, this section examines the primary mechanism fostering social connection: value co-creation. This review critically examines literature on this topic, moving from general principles to specific, under-researched Tourist-to-Tourist (T2T) interaction domains. By highlighting existing model limitations focused overwhelmingly on synchronous encounters and introducing Customer-Dominant Logic’s advanced perspective, this section establishes the thesis’s main theoretical contribution: asynchronous value co-creation exploration.

2.5.1 Foundations of Tourist-to-Tourist Value Co-Creation

Value co-creation extends S-D Logic principles by focusing on customers’ active, participatory roles in creating their own experiences and derived value [43]. In tourism, this proves crucial as experience success often depends on tourists’ own resource integration including time, effort, and social skills [20].

While much literature focuses on firm-customer co-creation (B2C), equally important yet often overlooked is value co-created between customers themselves (C2C or T2T) [6]. These interactions—whether planned or serendipitous—significantly shape overall tourism experiences, fostering shared meaning, community sense, and lasting memories often beyond service providers’ direct control or design.

2.5.2 Dominant Models of Synchronous Social Interaction

Prevailing T2T value co-creation research overwhelmingly emphasizes synchronous, co-located social interaction. Seminal work by Rihova et al. (2015) examines visitor-visitor interactions in socially dense settings like festivals, identifying social practice level spectrums based on direct, real-time engagement:

The Communitas Level: Previously unacquainted visitors form temporary, tight-knit communities through shared togetherness, often facilitated by restricted environments like shared accommodation or group tours. These longer, more personal interactions generate deep emotional and self-actualization value [42].

The Social Bubble Level: Co-creation occurs primarily within pre-existing travel groups (families, couples) with occasional, brief outsider interactions. This typically yields practical or atmospheric value [6].

The Detached Tourist Level: Individuals or couples prioritize privacy, engaging in minimal, purely functional interactions with other tourists, resulting in only practical value [6].

These models provide valuable frameworks for understanding direct social encounters. However, their focus on physical co-presence and immediate dialogue leaves significant areas unexplored: how might value be co-created between tourists who never meet, separated by time and space?

2.5.3 Customer-Dominant Logic: Expanding the Theoretical Lens

Addressing this question requires theoretical advancement beyond Service-Dominant Logic. While S-D Logic revolutionized customer-centered co-creation perspectives, its viewpoint often remains implicitly tied to service encounters themselves. Customer-Dominant (C-D) Logic, proposed by Heinonen (2013), provides more advanced perspective addressing this limitation.

C-D Logic shifts analytical focus entirely from firms' service processes into customers' own "lifeworld" or "value-creating context" [44]. This logic argues that value formation occurs not in service encounters but within customers' own lives, practices, and experiences, where services represent just one of many integrated resources.

From this viewpoint, much value formation process remains "invisible" to service providers, occurring within customers' subjective meaning-making contexts [45]. This perspective provides crucial theoretical foundation for investigating asynchronous co-creation validity, offering "theoretical permission" to explore how value can be co-created between individuals not interacting directly.

The value creation locus shifts from interaction itself to individuals' processes of integrating interaction traces (e.g., messages on calendars) into their own experiences. An individual standing before the "Sunset Calendar", reading messages left by previous travelers, actively co-creates value with those past travelers. This process is artifact-mediated and occurs asynchronously, but value formation happens in present tourists' "lifeworld" as they connect personal experiences to larger human stories.

2.6. Identifying Gap: Asynchronous Co-Creation Within the PPP Framework

This culminating section narrows the argumentative funnel to its finest point. Having established the context, theoretical lens, and desired outcome, this section explicitly defines the research gap this thesis addresses within the established Person-Process-Place framework. Rather than introducing competing theories, it demonstrates how asynchronous Tourist-to-Tourist value co-creation fits naturally within place attachment theory, particularly targeting the collective dimension of the 'Person' component and the social characteristics of the 'Place' dimension.

2.6.1 Defining the Research Gap Within Place Attachment Theory

As the preceding analysis demonstrates, while T2T interaction is recognized as a significant source of value in tourism and a crucial pathway for place attachment formation, the vast majority of scholarly attention has been devoted to synchronous, co-present encounters [46]. Within the PPP framework, existing research on the social-communal pathway predominantly examines the collective dimension of the 'Person' component through real-time, face-to-face interactions that build group identity and shared meaning [47].

A significant research gap exists in understanding how the collective aspect of place attachment can be fostered asynchronously—particularly through intention-

ally designed, low-resource interventions that enable tourists separated by time and space to contribute to shared place experiences. This gap is especially relevant for the social characteristics of the 'Place' dimension in the PPP framework, where physical locations can serve as social arenas for community building even when visitors do not overlap temporally.

2.6.2 Asynchronous Co-Creation as PPP Framework Extension

The theoretical foundation for investigating asynchronous co-creation lies within Customer-Dominant Logic's insight that value formation occurs within customers' own "lifeworld" rather than solely during direct service encounters. This perspective provides crucial theoretical grounding for understanding how tourists can co-create value with others they never meet, as the value formation happens when individuals integrate traces of others' experiences into their own meaning-making process.

Within the PPP framework, this manifests as:

Process Dimension: The cognitive component is activated when tourists read messages or view photos left by previous visitors, integrating these traces into their own place narratives and memory formation.

Person Dimension: The collective component is engaged through connection to an imagined community of fellow travelers who have shared the same place experience.

Place Dimension: The social characteristics are enhanced as the physical location becomes a social arena for asynchronous interaction and shared ritual.

2.6.3 Physical Media as Service Design Artifact

The "Sunset Calendar" functions as a service design medium facilitating this asynchronous connection within the place attachment framework. Rather than requiring extensive theoretical justification, it serves as a practical tool anchoring social interaction to the specific physical setting of Izumozaki's sunset viewing experience. This physical installation transforms individual contemplation into collective participation, enabling tourists to contribute to and derive value from

a shared place narrative across time. This approach leverages the power of place-based ritual to foster the collective dimension of attachment without requiring simultaneous presence.

2.7. Synthesis and Conclusion

This literature review has constructed a systematic, multi-layered theoretical framework justifying the present research investigation. It demonstrates that contemporary tourism landscape, shaped by profound global shifts and unique pressures facing rural Japan, presents urgent imperative for innovative, low-resource tourism models prioritizing quality and sustainability over volume approaches.

The acute demographic crisis in rural Japan particularly necessitates solutions that are not labor-intensive but can scalably enhance visitor experiences through “software” rather than “hardware” interventions. To address this challenge, this thesis adopts human-centered paradigm viewing tourism through theoretical pipeline of Service-Dominant Logic, Experience Economy, and Service Design, providing integrated approach shifting focus from service delivery to memorable, valuable experience co-creation facilitation.

The ultimate goal, place attachment fostering, has been systematically analyzed using the Person-Process-Place (PPP) framework as the primary theoretical lens. This framework provides comprehensive structure for understanding how sensory engagement (activating the affective process), narrative construction (activating the cognitive process), and social connection (activating the collective person dimension) can be intentionally targeted through theory-driven design interventions.

Crucially, this review has identified a distinct gap within existing place attachment research: while the importance of social connection in building place attachment is established through the PPP framework’s collective dimension, existing research overwhelmingly focuses on synchronous, co-located encounters. By leveraging Customer-Dominant Logic’s insights about value formation within customers’ lifeworld, this thesis explores how the collective aspect of the Person dimension and the social characteristics of the Place dimension can be activated asynchronously.

The proposed service design for Izumozaki—comprising “My Sea Story” prompt

booklet targeting individual sensory and cognitive pathways, and the “Sunset Calendar” facilitating collective asynchronous connection—is positioned as a systematic application of the PPP framework to address identified gaps in place attachment formation mechanisms. This approach demonstrates how low-resource, place-based service design can strategically target all three dimensions of the PPP framework to foster place attachment and potential for organic destination advocacy in rural Japanese guesthouse settings.

The following chapters detail the methodology used to implement and evaluate this design intervention, building upon the robust theoretical foundation established herein.

Chapter 3

Design

3.1. Introduction

Chapter 2 established the theoretical foundations underpinning this research, positioning place attachment as the desired outcome while identifying a critical gap in understanding how asynchronous Tourist-to-Tourist value co-creation can foster meaningful human-place connections in rural tourism contexts. The literature review revealed that while established frameworks like the Person-Process-Place (PPP) model provide comprehensive theoretical understanding of place attachment formation, empirical investigation of how specific service design interventions can systematically activate these mechanisms in resource-constrained rural settings remains limited.

This chapter transitions from theoretical understanding to empirical investigation, documenting the rigorous, discovery-driven methodology employed to develop and validate practical service design interventions in Izumozaki. The research approach deliberately prioritizes deep contextual understanding over predetermined theoretical applications, allowing design insights to emerge organically from sustained field engagement before applying established frameworks for validation and interpretation.

The chapter details the comprehensive research journey from initial ethnographic fieldwork through iterative design development to final implementation and testing. This methodological approach demonstrates how sustained community engagement, collaborative stakeholder relationships, and human-centered design processes can yield interventions that intuitively target established psychological pathways for place attachment while remaining operationally feasible within rural resource constraints. The empirical findings presented here provide

the foundation for the systematic theoretical validation through the PPP framework documented in Chapter 4.

3.2. Research Methodology

3.2.1 Methodology Overview

This study employs a qualitative ethnographic approach, utilizing direct field observation, semi-structured interviews, and participatory observation to examine the complexities of rural tourism development. The research methodology is grounded in the principle that understanding local contexts requires sustained community engagement and direct experience of geographical and cultural environments. This approach aligns with established ethnographic traditions in tourism research while incorporating contemporary service design methodologies.

3.2.2 Multi-Phase Data Collection Strategy

The research employed a comprehensive qualitative data collection strategy deployed across distinct phases of design development to ensure thorough documentation and analysis of both design processes and intervention impacts.

Phase 1: Contextual Discovery and Field Immersion

Ethnographic Fieldwork: Extended field visits to Izumozaki enabled deep contextual understanding through systematic observation of daily community rhythms, existing tourism infrastructure, visitor behaviors, and local stakeholder dynamics. This immersion provided essential insights into authentic local conditions, challenges, and opportunities that informed subsequent design development.

Semi-Structured Stakeholder Interviews: In-depth conversations with key community members, including accommodation providers, local business owners, and tourism professionals, gathered diverse perspectives on tourism development aspirations, resource constraints, and visitor experience challenges. These interviews revealed local pride points, existing assets, and collaborative opportunities that became central to design development.

Environmental and Infrastructure Documentation: Comprehensive field notes and photographic documentation captured physical environment character-

istics, existing tourism touchpoints, and infrastructural constraints, providing detailed context for design intervention development.

Phase 2: Participatory Design Development and Prototype Testing

Iterative Prototype Testing: Seven participants engaged with preliminary versions of the “My Sea Story” booklet and “Sunset Calendar” concepts, providing essential feedback on usability, emotional impact, and conceptual effectiveness. This phase enabled refinement of intervention mechanisms before final implementation.

Integrated Participatory Methods: The research employed Photovoice and Cultural Probes methodologies initially as data collection tools, subsequently integrating their characteristics directly into the final service design. This novel approach demonstrates how participatory research methods can evolve from analytical tools into experiential service components that encourage visitor co-creation and meaning-making.

Collaborative Refinement Process: Ongoing dialogue with stakeholders, particularly the guesthouse owner, enabled iterative design improvement based on operational considerations, guest feedback, and local context requirements.

Phase 3: Implementation Validation and Impact Assessment

Authentic Context Testing: One participant experienced the complete service design intervention in its operational context, providing comprehensive feedback on the integrated system’s effectiveness in fostering place attachment and meaningful travel experiences. **Longitudinal Stakeholder Assessment:** Follow-up interviews with the guesthouse owner after one month of implementation provided crucial insights into operational sustainability, guest engagement patterns, and business value creation.

Systematic Impact Documentation: Comprehensive data collection during final implementation enabled systematic assessment of intervention effectiveness across multiple dimensions, providing foundation for theoretical framework validation in Chapter 4.

3.2.3 Research Participants

To ensure participant privacy and maintain consistency in qualitative data reporting, each individual contributing to the study through interviews has been as-

signed a unique participant identifier. These codes are used consistently throughout the thesis when presenting direct quotations or referencing participant feedback, maintaining anonymity while enabling clear attribution of insights.

The study engaged participants across multiple phases of design development and validation:

Prototype Testing Phase: Seven participants (P1-P7) engaged with initial design prototypes, providing crucial feedback on core intervention mechanisms and user experience elements. These participants represented diverse demographic backgrounds and travel experiences, ensuring broad perspective representation in early design validation.

Final Implementation Phase: One key participant (P8) experienced the complete service design in its authentic operational context at the guesthouse in Izumozaki, providing comprehensive insights into the fully integrated intervention's impact on place attachment formation.

Stakeholder Validation: Primary stakeholder perspectives were gathered through extended interviews with the guesthouse owner (Igarashi-san), capturing operational feasibility, business value, and community integration aspects of the intervention.

All participants provided informed consent for interview participation and data usage, with particular attention to cultural sensitivity and community relationships in the rural Japanese context.

3.2.4 Data Analysis

Data analysis employed rigorous qualitative thematic coding procedures to identify patterns, themes, and insights across all data sources and research phases. The analytical approach was structured to support both design development and subsequent theoretical validation:

Iterative Design Analysis: Initial thematic analysis of prototype testing data informed design refinements and guided development of final interventions. This analysis focused on identifying user experience patterns, emotional responses, and engagement mechanisms that demonstrated intervention effectiveness.

Systematic Pattern Identification: Affinity mapping techniques and collaborative analysis sessions enabled systematic clustering of themes and insights

across participant groups and data collection phases. Miro boards served as dynamic visualization tools facilitating pattern recognition and insight synthesis.

The comprehensive data collection and analysis strategy documented in this chapter provides the empirical foundation for the theoretical validation and impact assessment presented in Chapter 4.

3.3. Contextual Discovery: Field Investigations

3.3.1 Initial Field Visit (October 4-6, 2024): Baseline Assessment

Research Objectives

The initial field visit to Izumozaki was conducted to establish baseline understanding of the community's tourism development context, identify key stakeholders, and assess challenges and opportunities for sustainable tourism growth. Despite preliminary research, direct field experience was deemed essential for comprehensive understanding of local conditions and community dynamics.

Accommodation and Key Informants

Field research was conducted while residing at Moriyama Guesthouse, a family-operated accommodation facility. The proprietor, Moriyama-san, established the guesthouse following retirement, converting both his primary residence and an adjacent property to accommodate visitors. His extensive experience hosting travelers and comprehensive knowledge of local conditions positioned him as a valuable key informant for understanding operational challenges and visitor experiences in rural tourism contexts.

Research Participants and Activities

The initial fieldwork involved interactions across multiple stakeholder categories:

- **Local Business Operators:** Mr. and Mrs. Moriyama (Guesthouse Moriyama proprietors), Mrs. Isono (traditional paper balloon craft business owner)



Figure 3.1 The Moriama Guesthouse



Figure 3.2 The Paper Balloon Crafting Event in Local Festival

- **Visitors:** Domestic tourists residing at the guesthouse during the research period
- **Community Members:** Individuals encountered during festival participation and daily activities

Research activities included formal interviews with accommodation and business operators, systematic observation of visitor behaviors and community interactions, and active participation in local cultural events, including a traditional festival and paper balloon crafting workshop facilitated by Mrs. Isono. Additionally, the researcher conducted exploratory drives through neighboring areas including Teradomari (20 minutes away, featuring a renowned fish market) and Yahiko (30 minutes away, known for its mountain and famous shrine) to assess the regional tourism ecosystem.



Figure 3.3 A Shop in Teradomari Fish Market

3.3.2 Key Findings from Initial Assessment

Accessibility and Transportation Challenges

The research identified significant transportation barriers fundamentally constraining tourism development potential. Izumozaki's rural location results in extremely limited public transportation options, making private automobile access virtually essential for visitors. This transportation dependency creates substantial barriers for both domestic and international visitors, particularly those unfamiliar with rural Japanese transportation networks. Even visitors arriving via public transportation face mobility challenges during their stay, as local movement requires private vehicles.

Language and Communication Barriers

Language accessibility emerged as a critical constraint for international tourism development. All local services, signage, and communication operate exclusively in Japanese, while community members demonstrated limited multilingual capabilities. These conditions create substantial barriers for non-Japanese speaking visitors, potentially limiting the community's ability to expand beyond domestic tourism markets despite expressed interest in attracting international visitors.

Natural Resource Assets

Despite infrastructural challenges, the research documented exceptional natural resource assets, particularly the dramatic Sea of Japan coastal setting. Sunset

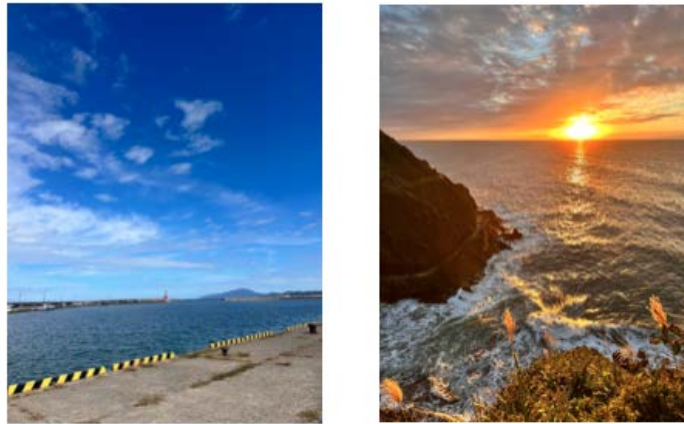


Figure 3.4 The Coastal Scene of Izumozaki and the Sunset of Sea of Japan

views over the ocean were identified as particularly remarkable, while the overall landscape experience—including the transition from mountain terrain to coastal views—provides distinctive scenic value. The driving experience itself was noted as inherently relaxing and aesthetically rewarding.

Tourism Infrastructure Limitations

While community members expressed confidence in Izumozaki’s tourism potential and demonstrated clear aspirations for increased visitation from both domestic and international markets, current infrastructure presents significant constraints. Limited accommodation options, restaurant choices, and entertainment activities restrict the community’s capacity to support expanded tourism volume or extended visitor stays.

Experiential Tourism Demand and Market Characteristics

The research identified that current visitors are primarily attracted by experiential opportunities unavailable in urban settings. Moriyama-san’s agricultural experiences—including seasonal planting and harvesting activities—demonstrate strong appeal, particularly among urban families seeking authentic rural experiences for children. Visitor origin analysis revealed that Izumozaki primarily



Figure 3.5 Mr. Moriyama and His Fruits Garden

attracts domestic tourists from inland prefectures lacking coastal access, including Gunma, Saitama, and Nagano. Family groups constitute a significant visitor segment, as evidenced by a twelve-person extended family from Saitama who selected Izumozaki specifically for seaside access to celebrate a family member's birthday. This finding suggests that coastal proximity serves as a primary motivational factor for visitor selection among inland regional populations.

3.3.3 Second Field Visit (February 25-26, 2025): Extended Stakeholder Engagement

Expanded Stakeholder Network

Following initial field observations, the research expanded to include additional key stakeholder perspectives through introductions facilitated by Naomi. The second field visit engaged with Igarashi-san, a hospitality industry veteran who has invested significantly in Izumozaki's tourism development through establishing

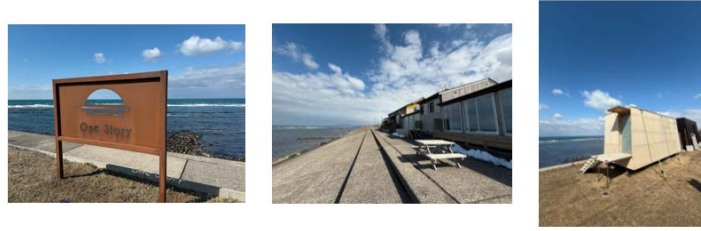


Figure 3.6 The Outside Environment of the Villa



Figure 3.7 The Room of Sunset and the Room of Sea

two coastal villas. His “OneStory 日本海ヴィラ” (OneStory Sea of Japan Villa)¹, opened in 2022 following the COVID-19 pandemic, is situated directly beside the sea and accommodates two guest groups daily in separate rooms: “the room of sea” and “the room of sunset.”

Igarashi-san represents a critical stakeholder as an active community advocate for tourism revitalization and expansion.

Seasonal Tourism Patterns and Market Analysis

Extended interviews with Igarashi-san revealed distinct seasonal tourism patterns significantly impacting local business viability. Peak visitation occurs during summer months (July through September), while other seasons experience substantially reduced tourism activity. This seasonal concentration creates both opportunities and challenges for sustainable tourism development.

1 The official website of the villa, <https://sunsetvilla-onestory.com/>, last accessed June 4, 2025

Analysis of Igarashi-san's villa operations over three years revealed important visitor behavior patterns. The sunset villa maintains a repeat visitation rate exceeding 50%, indicating strong visitor satisfaction and potential for sustained engagement. The accommodation facility serves exclusively single-group occupancy, creating intimate, private experiences aligning with observed visitor preferences for family-oriented or small group stays.

Market expansion aspirations include both domestic growth and international visitor attraction, with active promotion through social media platforms including Instagram and TikTok, as well as listings on international platforms such as Booking.com and Airbnb. Future plans include resort-scale development across multiple locations. However, these ambitions must be balanced against identified resource constraints and infrastructure limitations.

Institutional Perspectives and Resource Constraints

Engagement with the local tourism association (観光協会) provided institutional perspective on community tourism development efforts. While expressing shared goals of increased visitation, tourism association representatives emphasized significant resource limitations and human capital constraints restricting expanded promotional activities and service development. This institutional perspective revealed critical tension between tourism development aspirations and practical implementation capacity, highlighting the need for strategic approaches working within existing resource parameters rather than requiring substantial additional investment.

Strategic Pivot: From Volume to Experience

Based on comprehensive stakeholder input and observed constraints, the research identified a strategic pivot from volume-based tourism growth to experience-focused, niche tourism development. This approach recognizes Izumozaki's limitations while leveraging its distinctive assets, particularly coastal access and natural beauty. The strategic focus on "Sea" as the primary experiential driver emerged from visitor behavior analysis and stakeholder input. Izumozaki's position as potentially the closest Sea of Japan access point from the Tokyo metropolitan region represents a significant competitive advantage for targeted domestic tourism

markets.

3.4. Design Development

3.4.1 Design Concept and Objectives

The ultimate goal of this design intervention is to create experiences for Izumozaki visitors that trigger deeper emotional engagement with the place through storytelling and sensory experience. The intended outcome is enhanced visitor willingness for repeat visits and stronger memory formation leading to destination recommendation to friends and family. In this manner, visitors become destination promoters, creating sustainable tourism growth through quality rather than volume, resulting in a more stable tourist base and gradual awareness expansion.

3.4.2 Collaborative Design Process

Co-development with Local Stakeholders

The research transitioned from observation to participatory design through collaboration with Igarashi-san and his “OneStory Sunset Villa” operation. This partnership provided opportunities to test design interventions within authentic tourism contexts while contributing to local business development goals. The collaborative approach aligned with Igarashi-san’s vision of enabling guests to “create their own story” while incorporating research findings about sea-focused visitor motivations. This partnership model demonstrates potential pathways for academic research to contribute directly to community development objectives.

Design Challenge Analysis

Comprehensive stakeholder analysis identified core challenges facing villa operations:

Audience Insights:

- Primary market: families from nearby inland prefectures (Gunma, Nagano, Saitama)



Figure 3.8 The Proposal Analyzing the Current Challenge

- Key attraction: Sea of Japan access representing the closest coastal resort experience
- Typical behavior: short-stay visits focused on relaxation and ocean views

Barrier Analysis:

- For continued focus on regional family markets: minimal language barriers and reduced transportation access concerns
- Primary challenge: generating awareness and creating compelling visitation motivation beyond basic coastal access

Iterative Development and Feedback Integration

An initial design concept was proposed to Igarashi-san, centered on the primary element “sea” in Izumozaki, which varies in color, tides, sound, and light, alongside unique environmental elements including seasons, sky, and local cuisine. The design also incorporated the villa’s original theme “onestory,” enabling travelers to compose unique narratives during their stay. The proposed card-based craft allowed customers to document their stories with the sea and display them within the villa. The design’s primary goal was to help travelers develop deeper place connections and create meaningful memories, important for destination development as these factors contribute to repeat visitation and organic promotion.

Following presentation to Igarashi-san, he provided positive feedback, recognizing the rationale and agreeing that both villa interior spaces and guest experiences during stays could accommodate enhanced engagement opportunities. Since the



Figure 3.9 The Proposal of Izumozaki's resource and the Original Design Idea



Figure 3.10 The Proposal of Draft User Journey

villa typically operates as self-service, he saw potential for host-created experiences providing additional guest engagement. His key improvement suggestion emphasized sunset as the element he most wished to recommend to Izumozaki visitors, requesting its integration into the design.

Based on this feedback, an improved design version and initial prototype were created, followed by pilot testing to gather user feedback. Subsequently, the final prototype was developed and installed during the third field visit.

3.4.3 Initial Prototype Development: “My Sea Story”

Design Rationale

The design concept centers on “Sea Story” as a thematic framework for deepening visitor engagement with Izumozaki's coastal environment. This approach recognizes the sea as the primary attraction while creating mechanisms for more meaningful, memorable experiences encouraging repeat visitation and word-of-mouth promotion.

Design Objectives:

- Create deeper experiential connections between visitors and Izumozaki.
- Generate meaningful experiences transcending basic sightseeing.
- Facilitate visitor storytelling and sharing promoting organic marketing.
- Leverage the villa’s single-group occupancy model for intimate, personalized experiences.

Building on Igarashi-san’s identification of sunset experiences as the villa’s most distinctive offering, the design concept incorporated a collaborative sunset documentation system. This concept recognizes that sunset experiences vary daily, creating unique opportunities for each visitor group while building collective community memory.

The proposed sunset calendar would enable each visitor group to contribute their daily sunset experience, gradually creating a comprehensive annual record of Izumozaki’s changing coastal conditions and visitor experiences. This approach transforms individual visits into contributions to shared community narrative.

Prototype Components

Two complementary prototype elements were developed for preliminary testing:

Sea Story Booklet: An eight-page interactive booklet using sensory prompts to engage participants with sea-related memories, incorporating questions about sounds, colors, and tastes associated with ocean experiences.

Sunset Board: A digital platform (via Miro) enabling participants to upload sunset photographs with associated temporal, geographic, and personal narrative information, creating shared experiential documentation.

3.4.4 Prototype Testing Methodology

Prototype testing utilized a modified approach where participants engaged with sea-memory recall rather than direct Izumozaki experience, allowing controlled evaluation of design mechanisms before field implementation. A4 paper printing was used for booklet creation, with postcard-size formatting mimicking the final



Figure 3.11 Photo of the Physical Prototype of “My Sea Story” Booklet

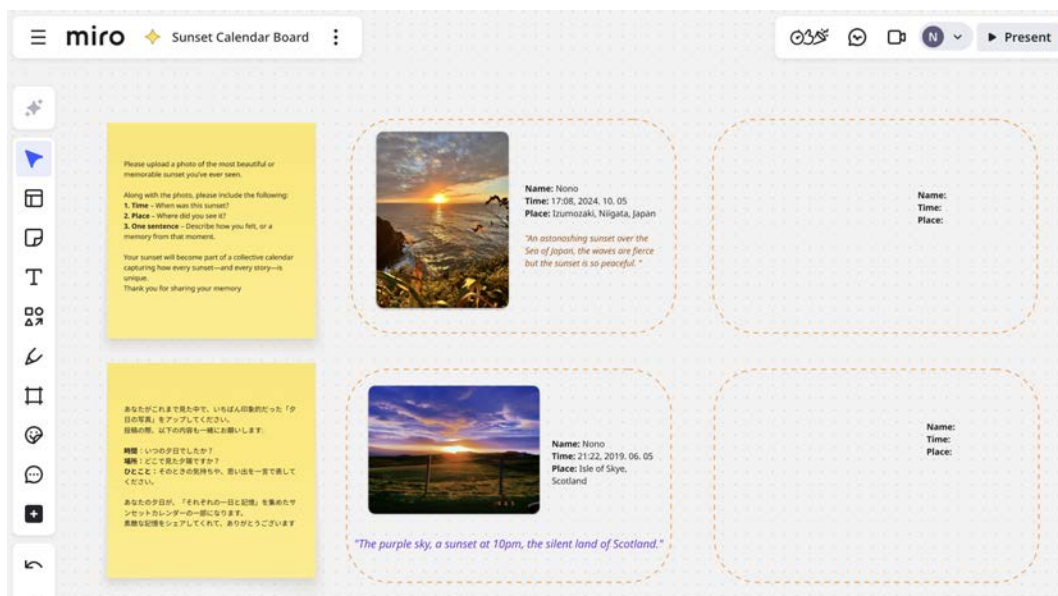


Figure 3.12 The Miro Board for Participants to Share Sunset Moments

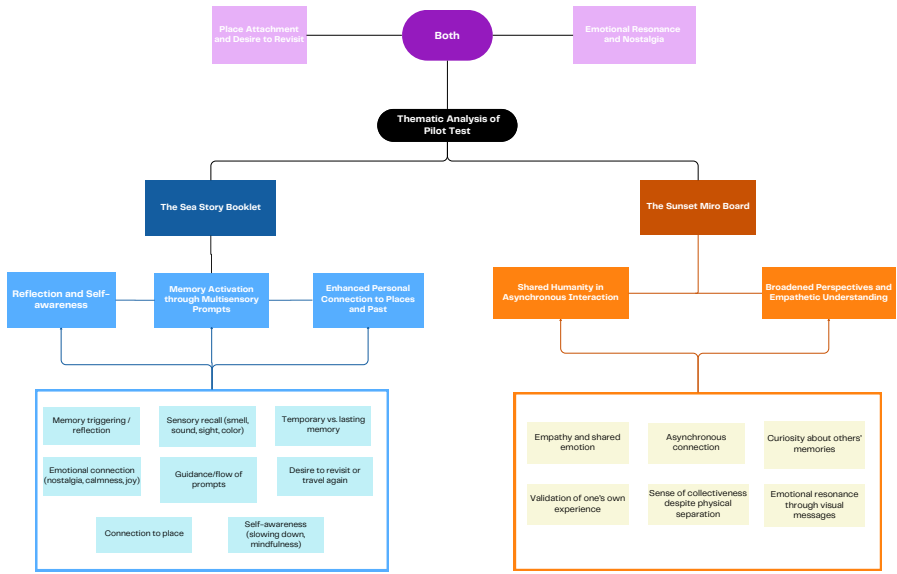


Figure 3.13 The Thematic Analysis of Prototype User Response

design. Participants accessed the digital component (Miro board) via QR code integration, testing both physical and digital interaction elements.

3.4.5 User Response Analysis:
Emergent Themes from Prototype Testing

Prototype testing data was analyzed using an inductive, bottom-up thematic analysis approach to identify patterns and insights emerging directly from participant responses. This empirical analysis revealed six distinct themes that demonstrated the design’s effectiveness and informed subsequent design iteration and refinement. Figure 3.13 illustrates the thematic structure that emerged from this analysis, showing how different design components activated specific response patterns. The following thematic framework emerged from systematic coding of user feedback, interviews, and observational data, providing crucial insights that guided the transition from prototype to final implementation.

Theme 1: Deepened Memory Activation and Sensory Re-engagement

This theme highlights how the booklet’s sensory prompts effectively guided participants to access, relive, and articulate memories with heightened sensory detail and clarity. Participants reported enhanced ability to recall specific sensory details they typically overlook during travel experiences. Supporting evidence included participants describing digging deeper into memory, achieving greater memory clarity, revisiting places mentally with enhanced detail, and responding positively to prompts for specific senses like sound and smell. The structured context aided recall and helped overcome usual neglect of sensory awareness during sightseeing. Representative feedback included:

- “Very relax, 普段自分で焦ってること気づいた” (Very relaxing, I realized things I usually rush about)
- “Don’t usually think about what it smells or sounds... but it made me remember.”
- “I looked back at my photo albums... then I could remember the feeling again.”

Theme 2: Evocation of Nostalgia and Positive Emotions

Both design components successfully stirred feelings of nostalgia and positive emotions including happiness and fulfillment. This emotional activation appeared crucial for creating meaningful connections to place experiences. Supporting evidence showed that through the booklet, sunset naturally emerged as an emotional focal point, inducing relaxation, nostalgia, and desire to revisit places, with some participants becoming visibly emotional. The Miro Board generated happiness and fulfillment while connecting participants to family memories and personal histories.

- “懐かしい... The memories with family are more precious”
- “The place where I grew up holds a special place in my heart... it’s about the memories I made with my parents there, continuity and inheritance.”

- “I’ve seen many sunsets more beautiful than this one, but this particular sunset is the most special to me. I miss the feeling of watching the sunset on my 23rd birthday, like a child, simply enjoying the moment.”

Theme 3: Fostering Connection and Shared Human Experience

The digital sharing component successfully created emotional resonance among unknown participants, with the Miro board functioning as a powerful medium for connection. Participants valued the narratives and intentions behind shared content rather than visual elements alone:

- “When I saw the board, I felt like I shared something with people I never met.”
- “Not seeing the same thing at the same time, but feel sympathy.”
- “It was a peaceful feeling to see the diversity of people standing under the same sky, each with their own memories and feelings.”

Theme 4: Reflection and Self-awareness

Participants valued the structured approach of the booklet, finding its prompts natural, clear, and effective in surfacing thoughts and feelings they wouldn’t typically consider during travel experiences. Supporting evidence revealed users praising the natural flow of prompts, clear and easy-to-follow instructions, helpfulness of specific guidance such as closing eyes, appreciation for unusual but insightful questions about sensory experience, and describing the instructions as “sensational” in enabling deeper reflection.

Theme 5: Enhanced Personal Connection to Places and Past

The booklet experience helped users develop stronger, more personal bonds with places they remembered, linking current experiences to personal history and heritage in meaningful ways. Supporting evidence demonstrated participants describing places holding special meaning, developing sense of continuity and inheritance, and feeling more connected or familiar to places through the guided reflection process.

Theme 6: Broadened Perspectives and Empathetic Understanding

The Miro board enabled participants to appreciate diverse experiences and viewpoints of others, fostering empathy and interest in their stories beyond their own immediate experience. Supporting evidence included participants expressing interest in understanding the motivations behind others' posts, appreciating different ways of experiencing places such as the colorblind participant's unique perspective, and demonstrating genuine curiosity about others' stories and scenery interpretations.

These empirically-derived themes revealed that the prototype successfully activated multiple psychological and social mechanisms that contribute to meaningful place experiences. The insights from this thematic analysis directly informed design refinement and final prototype development, particularly in strengthening the sensory prompt structure and enhancing the shared experience platform.

Notably, these bottom-up findings demonstrated strong correspondence with established theoretical frameworks for human-environment interaction and social connection. The observed patterns of enhanced sensory awareness, personal meaning-making, and asynchronous community formation suggested the design had intuitively targeted key psychological pathways identified in place attachment literature. These initial themes highlighted phenomena that would later be rigorously explored and formally validated through the comprehensive Person-Process-Place framework analysis in Chapter 4, providing robust theoretical grounding for the observed empirical outcomes and creating a seamless bridge between empirical discovery and theoretical validation.

3.4.6 Design Iteration and Refinement

Based on testing outcomes, design refinements focused on adapting prompts from memory recall to present-moment experience, tailoring language and activities for on-site engagement rather than retrospective reflection. The positive emotional responses validated the core approach while highlighting opportunities for site-specific customization.

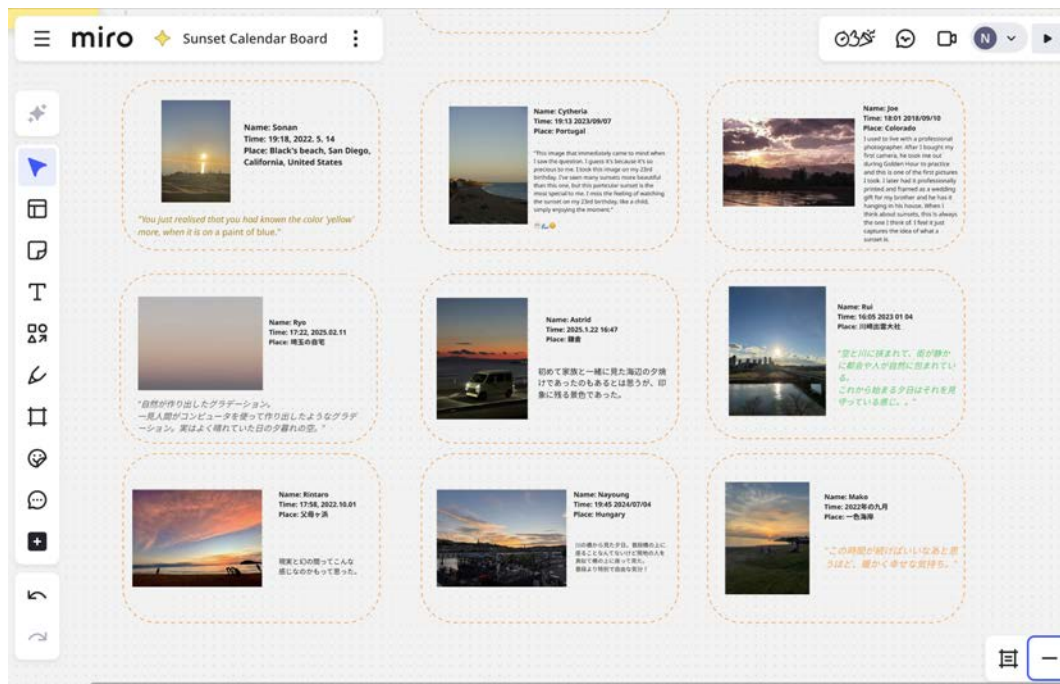


Figure 3.14 The Miro Board with Participants' Reponse

Theoretical Implications

Testing results support two key design principles for rural tourism enhancement:

Sensory Storytelling as Emotional Catalyst: The SeaStory booklet demonstrated capacity to evoke deep emotional engagement through sensory-focused prompting, suggesting pathways for creating memorable visitor experiences transcending basic sightseeing.

Asynchronous Social Connection: The sunset board concept successfully created emotional resonance between strangers through shared experience documentation, indicating potential for building visitor community and encouraging return engagement without requiring simultaneous presence.

The prototype reflects a hybridization of research and design, where methods such as Photovoice and Cultural Probes evolved from data-gathering tools into experiential features within the service concept.

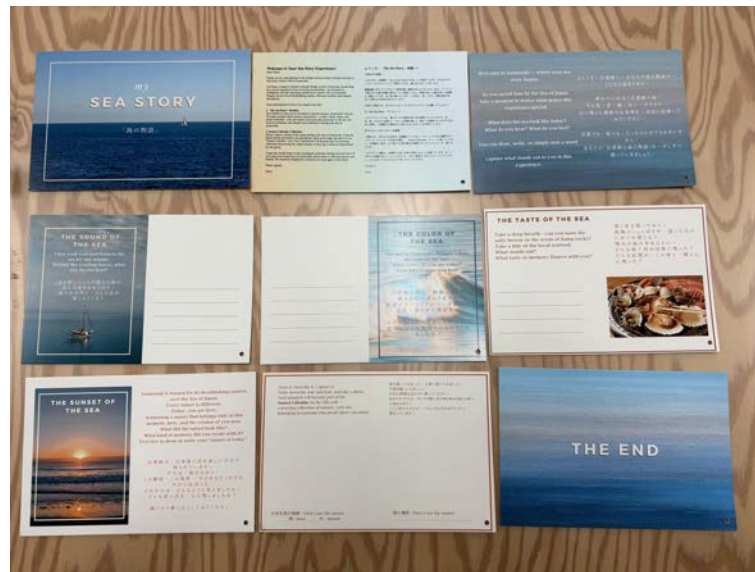


Figure 3.15 The Final Booklet's Pages with Refined Prompts

3.4.7 Final Prototype Development

My Sea Story Booklet Refinements

The final booklet design incorporated significant modifications based on pilot testing feedback. The prompts were revised from retrospective memory recall to present-moment experience documentation, with the introduction stating: “Welcome to Izumozaki, where your sea story begins. As you spend time with the Sea of Japan...” This reframing shifted the focus from generic sea memories to location-specific engagement with Izumozaki’s coastal environment.

The refined prompts encourage travelers to document their feelings and thoughts during their stay, specifically designed to deepen the traveler’s connection to Izumozaki and the Sea of Japan through sensory experiences. The eight-page booklet structure includes: cover, introduction, sound of the sea, color of the sea, taste of the sea, sunset of the sea, a blank drawing page with prompts to interact with the Sunset Calendar, and back cover. An additional instruction letter explains the project context, researcher background, collaboration rationale with Izumozaki, and expresses gratitude for participant engagement.



Figure 3.16 The Final Booklet with the Binder Ring

Material Considerations and Design Solutions

Anticipating that travelers would complete the booklet during their trip and potentially use it outside the villa, postcard-weight paper was selected for durability against travel wear and moisture exposure. The booklet design incorporated a binder ring system inspired by adjustable notebooks, with pages hole-punched at the corner and connected via a color-coated snap-lock binder ring. This mechanism allows easy page manipulation while maintaining structural integrity. Colored pens were provided in the villa to facilitate completion.

Sunset Calendar Physical Implementation

The most significant modification from the prototype involved transitioning from digital to physical format for the Sunset Calendar. This decision prioritized integration with the villa's interior design while maintaining aesthetic appeal and practical functionality. Following consultation with Igarashi-san, a wall-hanging photo display with tassels was selected, featuring a boho-inspired design in blue and white tones complementing the villa's sea and sunset theme. The display consists of vertical strings attached to a horizontal rope, with mini clothespins



Figure 3.17 The Title Board Design, Making and Implementation

positioned along the length to hold photographs and tassels at the bottom for decorative effect. A cardboard title reading “Sunset Calendar” provides clear identification of the installation’s purpose.

Photo Documentation Technology

Initial consideration of an Instax camera for in-villa sunset photography was rejected due to guest mobility limitations, as many visitors explore the area during sunset hours. Instead, an Instax photo printer by FUJIFILM was selected for its superior flexibility, enabling guests to select their preferred sunset photographs regardless of capture location. The accompanying mobile application allows photo filtering and design customization before printing. An instructional display board explaining app download and printing procedures was designed for visual integration with the calendar installation.

3.5. Implementation and Service Integration

3.5.1 Field Installation and Real-World Testing (May 15-16, 2025)

Installation Process and Stakeholder Collaboration

The third field visit was conducted to implement the finalized design interventions and conduct real-world testing with an authentic user. The installation process began with presenting the My Sea Story Booklet to Igarashi-san, who approved the quality and design execution. Collaborative space planning identi-

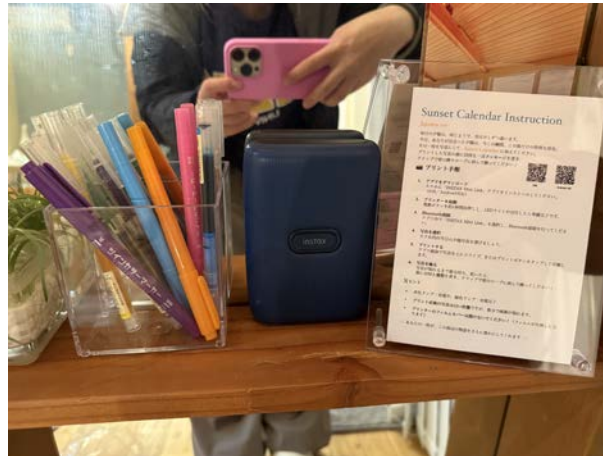


Figure 3.18 The Setting of Instax Printer and Instruction Board

fied an appropriate location for the Sunset Calendar: a previously blank wall in the living room positioned to provide simultaneous views of the installation and sunset through the villa's panoramic windows.

The wall-hanging photo display was mounted, with the title board positioned adjacently, and supporting materials (pens, markers, photo printer, and instruction board) arranged for optimal accessibility. To provide guidance for future guests, sample materials were created: a photograph previously captured in Izumozaki was printed and displayed, Igarashi-san contributed his own sunset photograph as an example, and a completed booklet was filled out and positioned nearby for reference.

Iterative Design Implementation

During installation, a collaborative refinement emerged when a visiting friend suggested that photographs alone provided insufficient information and messaging. The recommendation to incorporate drawing pages from the booklet onto the sunset calendar was immediately evaluated, discussed, and implemented, demonstrating real-time design iteration. A sample drawing page was added to the calendar display, expanding the range of participant expression modalities and message complexity.



Figure 3.19 The Wall Before and After Implemented with Hanging Display and Titleboard



Figure 3.20 A Finished Booklet Sample and Message Card Sample on Display

3.5.2 Service Experience Analysis: The Interaction Flow Storyboard

Participant Interaction Framework

This section analyzes the interactive journey of guests within the “My Sea Story” service ecosystem at OneStory Villa, focusing on key touchpoints and participant actions. The analysis examines front-stage interactions and participant experiences across four distinct phases of engagement.

Primary Actors:

- **Guest:** Primary participant experiencing the villa stay and engaging with the service design
- **Igarashi-san (Villa Owner):** Service provider facilitating guest experience and maintaining service components

Phase 1: Arrival and Service Introduction

Upon arrival at OneStory Villa, guests receive a welcoming reception from Igarashi-san, including essential villa instructions and safety information. Critical service touchpoints include direct verbal communication establishing personal connection, presentation of the “My Sea Story” booklet with usage explanation, and guided introduction to the “Sunset Calendar” wall with participation invitation. The objective centers on onboarding guests into the villa experience while introducing core components of the service initiative and setting engagement expectations.

Phase 2: In-Stay Documentation and Engagement

Throughout their stay and Izumozaki exploration, guests engage with the “My Sea Story” booklet, utilizing sensory prompts to document emotional responses and experiences. Emphasis is placed on recording daily sunset observations while reviewing existing contributions on the “Sunset Calendar” wall. Key touchpoints include the booklet as a personal journaling tool, the calendar wall as a shared public display, and cognitive/emotional engagement through guided reflection. The objective facilitates deeper, more reflective guest experiences through guided documentation while encouraging engagement with shared community artifacts.

Phase 3: Creative Contribution and Memory Sharing

Guests utilize the provided Instax photo printer to select and print photographs capturing sunset experiences or significant personal memories. These photos are physically affixed to the “Sunset Calendar” wall with accompanying temporal information and personalized messages. Touchpoints include the photo printer device, physical materials (photo paper, writing implements), and the shared display wall. The objective enables guests to contribute tangibly to the villa’s collective memory and aesthetic while transforming personal experiences into shared artifacts.

Phase 4: Post-Stay Resonance and Advocacy

Following departure, guests retain the “My Sea Story” booklet as a memento potentially catalyzing organic promotion through social media sharing or word-of-mouth recommendations. Guests may experience asynchronous social connection with past and future visitors through shared calendar engagement. Igarashi-san maintains responsibility for documenting the evolving “Sunset Calendar” and leveraging it as promotional material. The objective extends guest experience beyond physical stay duration, transforms guests into destination advocates, and establishes the calendar as a dynamic public relations asset.

3.6. Service Blueprint and Design Integration

3.6.1 Service Blueprint Development and Purpose

The development of a comprehensive service blueprint synthesizes the customer journey, multi-actor interactions, and supporting systems into a coherent visualization of the designed service experience. This blueprint serves as a critical bridge between conceptual design intentions and operational implementation at OneStory Sunset Villa in Izumozaki, providing both an analytical framework and a practical implementation guide. The service blueprint methodology was selected for its capacity to map both visible and invisible service processes while clearly delineating the roles and responsibilities of multiple actors throughout the service delivery. This approach enables systematic understanding of complex service



Figure 3.21 The Story Board of Interaction Flow

interactions while identifying potential failure points and optimization opportunities.

3.6.2 Blueprint Architecture and Components

The service blueprint delineates the guest experience across four distinct phases—Arrival and Introduction, In-Stay Engagement, Creative Contribution, and Post-Stay Resonance—each mapped across multiple operational layers:

Customer Actions Layer: Documents guest behaviors and decisions throughout their journey, from initial villa arrival through post-departure advocacy activities.

Frontstage Interactions: Captures visible service encounters including booklet presentation, sunset calendar introduction, and guided participation in documentation activities.

Backstage Operations: Maps invisible support activities including material preparation, wall maintenance, content curation, and ongoing system refinement performed by the villa owner and designer.

Supporting Systems and Artifacts: Identifies technological and physical infrastructure enabling service delivery, including the Instax printer system, social media platforms, villa space configuration, and material supply chains.

The blueprint explicitly acknowledges three primary actors: **the guest** as service recipient and co-creator, **Igarashi-san (villa owner)** as service provider and local facilitator, and **the designer** as system architect and value co-creation enabler. This multiactor approach recognizes the collaborative nature of the service experience while clarifying distinct role responsibilities.

3.7. Chapter Conclusion: From Research to Design

Chapter 3 has documented the comprehensive journey from ethnographic field research through iterative design development to operational service implementation. The progression from initial contextual discovery through prototype testing to final blueprint development demonstrates how academic research methodologies

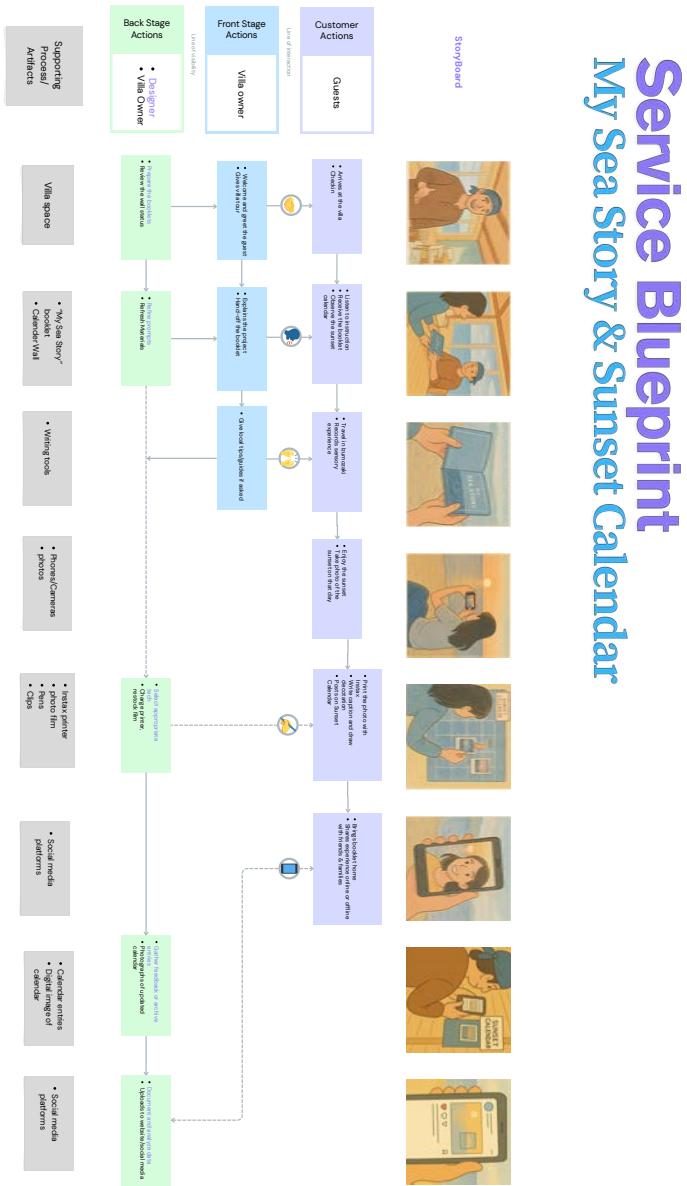


Figure 3.22 The Service Blueprint

can directly contribute to practical tourism development solutions.

The service blueprint marks the culmination of the design process, operationalizing the previously abstract concept of “emotional engagement through storytelling and shared sunset experiences” into a structured system of interactions, touchpoints, and supporting infrastructure. This systematic approach transforms theoretical insights about place attachment and community building into tangible service experiences.

The documented methodology—combining ethnographic observation, participatory design, and service blueprint development—provides a replicable framework for addressing rural tourism challenges through design intervention. The emphasis on working within existing resource constraints while leveraging distinctive local assets offers a sustainable approach to destination development that prioritizes quality of experience over volume of visitors.

The empirical validation through real-world testing and user feedback confirms the effectiveness of the design approach while highlighting areas for continued refinement and adaptation. The positive user responses to sensory storytelling prompts and asynchronous social connection mechanisms validate the theoretical foundation while suggesting broader applications for rural destination enhancement.

This foundation provides the analytical framework for Chapter 4’s comprehensive evaluation of design impact, stakeholder perspectives, and implications for rural tourism development policy and practice. The service blueprint serves not only as an implementation guide but as an evaluative framework for assessing the success of design interventions in achieving their intended outcomes of enhanced visitor engagement, repeat visitation, and organic destination advocacy.

Chapter 4

Design Validation and Impact Assessment

4.1. Introduction

This chapter presents the empirical validation of the developed service design interventions—“My Sea Story” prompt booklet and the “Sunset Calendar”—implemented at OneStory Sunset Villa in Izumozaki. The primary research aim is to explore how low-resource, place-based service design can foster place attachment through sensory engagement, emotional resonance, and asynchronous social connection, ultimately encouraging repeat visitation and organic destination advocacy in rural Japanese tourism contexts.

The validation employs a multi-faceted qualitative approach, incorporating traveler experience data from both prototype testing and final implementation phases, alongside critical stakeholder perspectives from the guesthouse owner. To interpret these findings systematically, this chapter explicitly employs the Person-Process-Place (PPP) framework developed by Scannell and Gifford (2010) [5] as the primary theoretical lens, enabling comprehensive analysis of how the design interventions activate the individual, psychological, and spatial dimensions of place attachment.

This approach bridges the empirical discovery process documented in Chapter 3 with formal theoretical validation, demonstrating how the bottom-up design insights align with established place attachment mechanisms and contribute to broader understanding of service design effectiveness in rural tourism contexts.

4.2. Validation Methodology

The validation strategy employed qualitative methods to capture rich insights into user experiences and stakeholder perceptions. Data collection occurred through semi-structured interviews with seven participants during prototype testing (P1-P7) and one key participant (P8) during final implementation in the authentic guesthouse setting. Additionally, stakeholder perspectives were gathered through interviews with the guesthouse owner, Igarashi-san, following one month of active implementation.

Qualitative thematic analysis was employed to identify recurring patterns, themes, and insights across these diverse data sources. The PPP framework guided interpretation and categorization of findings related to traveler experiences, ensuring systematic analysis of how design interventions influenced various facets of place attachment. This theoretical lens provided structure for understanding the complex relationships between design elements and psychological outcomes while maintaining connection to established academic frameworks.

4.3. Traveler Experience Validation Through the PPP Framework

This section analyzes qualitative data from travelers who engaged with the “My Sea Story” and “Sunset Calendar”, interpreting their experiences through the three core dimensions of the PPP framework. The analysis primarily draws from final implementation data, representing the complete service ecosystem in its intended context, with prototype insights referenced to demonstrate consistency and evolution across development phases.

4.3.1 The “Person” Dimension: Individual and Collective Connection

The “Person” dimension examines who becomes attached to places, distinguishing between individually and collectively determined meanings. Findings demonstrate

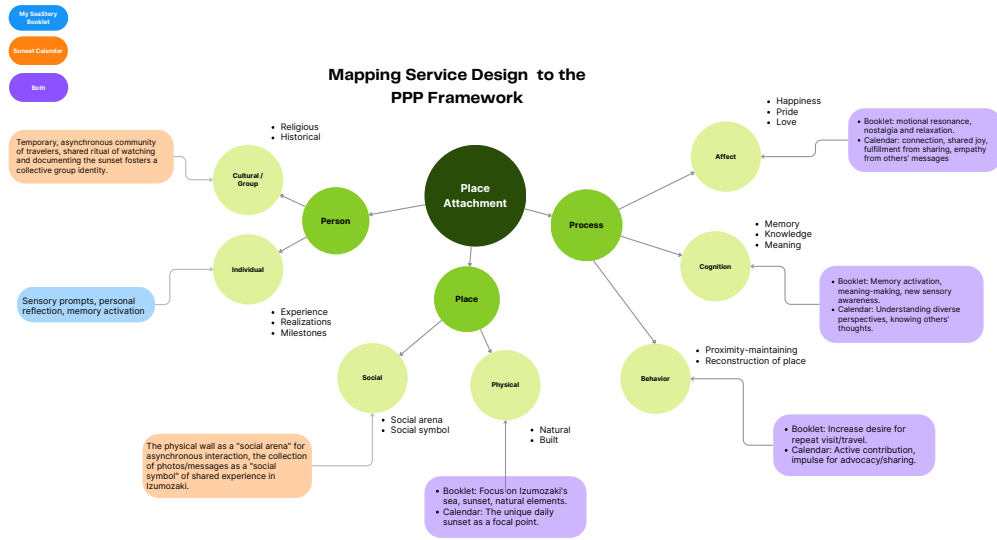


Figure 4.1 Mapping Traveler Experience to the PPP Framework

that the design successfully fostered both profound personal connections and significant collective identity among travelers.

Individual Connection Formation

The “My Sea Story” booklet’s sensory prompts effectively guided participants toward deep personal reflection and memory activation. P1 noted the cognitive engagement required: “need to dig into memory, cannot just simply fill it... but the memory came out clearly after the thinking,” indicating profound personal engagement. P2 realized, “If I had that mindset usually, I would be able to relax back more,” demonstrating personal mental state transformation through guided reflection.

P5 articulated how the booklet “guided me into my memories” and enabled her to “re-feel those moments,” exemplifying strong personal re-engagement. This aligns with the PPP framework’s emphasis on places becoming meaningful through “personally important experiences, realizations, and personal growth.” P8, the final implementation participant, reinforced this by stating that “writing it down gives a different feeling and makes the trip more memorable,” demonstrating the

individual benefit of guided documentation for enhancing personal place memories.

Collective Connection and Shared Humanity

The “Sunset Calendar” installation fostered significant collective connection among participants despite asynchronous interaction. P3 described feeling “connected to other participants” and experienced “a peaceful feeling to see the diversity of people standing under the same sky, each with their own memories and feelings.” P5 felt “sympathy” with others, “not seeing the same things with them at the same time, but feel sympathy with them.”

P8 powerfully articulated this collective dimension: “Generally strangers don’t talk, but by writing and sharing, they feel there’s a connection about this, ‘love is sharing’.” He further expressed appreciation for “seeing strangers’ thoughts, everyone has different ideas when looking at the same thing, this is very happy.” This demonstrates successful Tourist-to-Tourist (T2T) value co-creation, where shared experiences generate collective value among travelers, exemplifying the PPP framework’s “group-framed place attachment” where symbolic meanings are shared among community members.

4.3.2 The “Process” Dimension: Affective, Cognitive, and Behavioral Manifestations

The “Process” dimension deconstructs attachment into affective, cognitive, and behavioral components. Findings demonstrate the design’s comprehensive impact across all three psychological processes.

Affective Process Activation

The design consistently elicited positive emotional responses including relaxation, happiness, and nostalgia. P2 expressed feeling “very relax, I realized that I usually get impatient with a lot of things.” P3 experienced “sense of nostalgia” and noted how “the sound of waves was particularly memorable, as it could instantly transport me back to the past.” P8 vividly described mood changes while reflect-

ing: “writing the changes of sea’s color, I could feel my mood changing... Gray—a bit depressed, Red—a bit excited.”

These emotional responses corroborate Kastenholz et al.’s (2020) [36] findings that sensory experiences trigger positive emotions essential for attachment formation, exemplifying the PPP framework’s affective component encompassing feelings of happiness, pride, and place-based love.

Cognitive Process Activation

The design actively engaged participants’ cognitive processes, stimulating memory recall and deeper meaning-making. P1 noted that prompts required him to “really focus and think about it” for clear memory recall. P4 observed that sensory prompts helped him realize, “Oh, I do remember those. Not normally how I reflect on that.” P5 mentioned how prompts guided her to “retrospective my memories” through photo album review.

P8 found that documentation “gives a different feeling and makes the trip more memorable” and discovered that listening prompts initially yielded only “sea waves” but then revealed “many other sounds, like friends chatting, car sounds.” This demonstrates the PPP framework’s cognitive component involving memory, knowledge, and place meaning construction, encouraging deeper “place identity” as individuals connect personal values to specific settings.

Behavioral Process Evidence

The design fostered clear behavioral intentions linked to place attachment, particularly desires for repeat visitation and destination promotion. P2 stated, “After finish this, think about want to go to that place again.” P7 expressed desire to “wanna go there again... Same sunset, but place different, culture different, wanna experience it in that place again.”

P8’s engagement with the shared calendar—wanting to “choose one of my good photos, and let others see it” and enjoying “knowing why people choose those pictures”—indicates proactive promotional behavior. The guesthouse owner observed high participation rates of “80%-90% people do it,” representing direct “reconstruction of place” behavior where visitors tangibly contribute to the location’s evolving narrative, consistent with proximity-maintaining behaviors and

destination advocacy.

4.3.3 The “Place” Dimension: Physical and Social Elements

The “Place” dimension examines characteristics of locations to which people become attached, distinguishing between physical and social attributes. The service design effectively leveraged both aspects of Izumozaki.

Physical Place Attachment Enhancement

The design’s focus on the sea and sunset connected travelers directly to Izumozaki’s physical attributes. P8, despite initially perceiving Izumozaki as “dilapidated,” immediately noted that “the sea view is very beautiful.” P1 stated the sunset “become a piece of the holistic picture, so that part is really impressive.” P5 struggled to describe ocean color as words were “not enough,” indicating profound sensory engagement.

The design’s deliberate use of natural illumination for the “Sunset Calendar”, relying solely on sunlight rather than artificial lighting, respects the inherent power of the natural environment while minimizing energy consumption. The choice of physical Instax prints over digital displays grounds the experience in tangibility, offering an authentic connection to the physical place while aligning with visitors’ desires for digital detox in rural settings.

Social Place Attachment Creation

The “Sunset Calendar” fostered social place attachment by creating a shared interaction arena and symbolic representation of collective experience. This aligns with the PPP framework’s conceptualization of place as “social arena” and “social symbol.” P4 enjoyed “knowing why people choose those pictures... the emotion behind and the connection behind are more interesting.” P8 expressed ability to “feel others’ moods” and “very much enjoy looking at others’ messages.”

This co-creation of collective memory on the physical wall transforms the place into a symbol of shared human experience, deepening social bonds to Izumozaki



Figure 4.2 Igarashi-san's SNS Post After the Design Implementation

itself and demonstrating how T2T co-creation contributes to collective value formation within specific place contexts.

4.4. Stakeholder Validation

This section presents findings from guesthouse owner Igarashi-san, providing crucial operational and business perspectives on the design's value and feasibility within authentic rural tourism contexts.

Igarashi-san provided overwhelmingly positive feedback, validating both the design's guest value and operational sustainability. He affirmed that "Guests are really making story with the OneStory," recognizing the design's effectiveness in facilitating unique guest narratives. The high participation rate of "80%-90% of people" suggests strong inherent value proposition alignment with guest expectations.

He intuitively linked high participation to guest satisfaction: "If the guests are not satisfied with the stay, they probably won't participate in. But they participate, which means they must had a good time and had some good moment." This insight validates the design's effectiveness as both experience enhancer and satisfaction indicator.

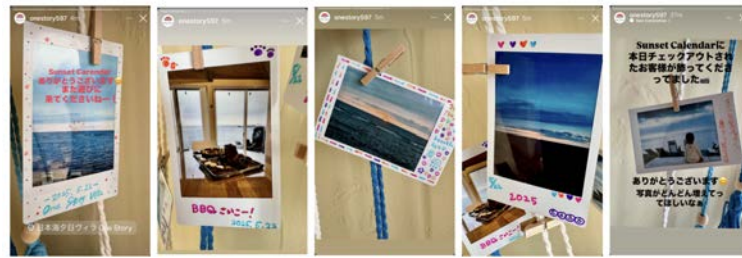


Figure 4.3 Igarashi-san's SNS Post of Guests' Participation on Sunset Calendar

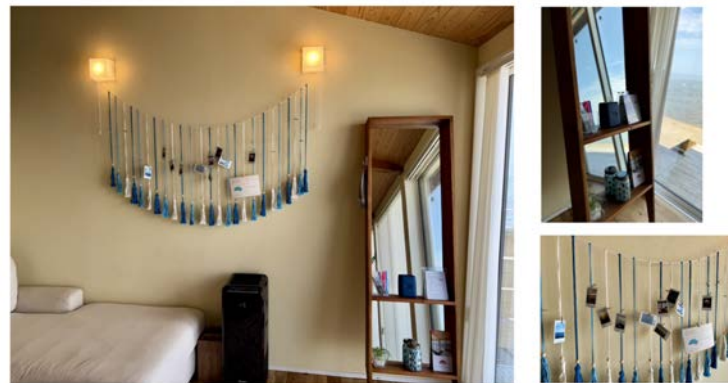


Figure 4.4 Sunset Calendar Situation after One Month

4.4.1 Perceived Value and Operational Integration

Operationally, the design proved “very easy” to manage with simple instructions and straightforward material restocking. Visual integration with villa aesthetics was successful, “matching the interior, and matching the ocean’s theme.” Minor practical issues like wind displacement were easily addressable without deterring participation. The owner explicitly recognized that the design helps “deepen the emotion, especially reading other people’s photo” and contributes to “いい物語になる” (makes a good story).

4.4.2 Strategic Business Integration

Igarashi-san’s perspective aligns with sustainable, quality-focused tourism development goals. His intention to “put it on the website too” and “make it really as



Figure 4.5 Igarashi-san Filing Application to Funding

part of the villa” indicates strategic long-term integration and organic promotion approach. The design’s success in encouraging guests to “leave a part and make the story here” represents shift toward cultivating loyal, engaged travelers who contribute to destination narrative.

Over one month of implementation, he actively shared calendar updates on social media as promotional content and planned to leverage the design for “地域観光魅力向上事業(Regional Tourism Appeal Enhancement Project)” funding applications by Japan Tourism Agency. This demonstrates recognition of the design’s value as both guest experience enhancement and marketing asset that communicates unique, co-created experiences beyond standard amenities.

4.5. Discussion

4.5.1 Research Aim Achievement

The empirical findings collectively demonstrate the efficacy of the “My Sea Story” service design intervention in fostering place attachment within rural Japanese guesthouse settings. The thematic analysis, structured through the PPP framework, consistently revealed that the design effectively engaged travelers through sensory-rich prompts, facilitated profound emotional resonance, and uniquely enabled asynchronous social connection and co-created value.

The intervention successfully addresses the research question by illustrating how specific design components influence travelers' emotional and cognitive connections, and in what ways asynchronous co-creation fosters social bonds and place attachment, ultimately generating potential for repeat visitation and organic destination advocacy. The documented co-created value, encompassing both personal meaning-making and shared social connections, represents a central achievement of the intervention.

4.5.2 Defense Discussion

Rural Revitalization Through Accessible Design

The research addresses a fundamental challenge in rural revitalization: how to generate meaningful impact in far-to-reach places with limited resources. While physical presence remains necessary to experience the design intervention, the strategic focus on repeat visitation and organic word-of-mouth advocacy creates a multiplier effect that extends beyond immediate visitor experiences. Towns like Izumozaki, facing demographic decline and resource constraints, require tourism development strategies that prioritize quality engagement over volume metrics. The intervention's success in generating stated intentions for return visits and spontaneous advocacy represents a sustainable approach to rural revitalization that leverages authentic local assets rather than requiring substantial infrastructure investment.

This approach directly contributes to rural revitalization by creating a foundation for sustained visitor engagement that can generate long-term economic benefits and community awareness without overwhelming local capacity or compromising authentic character.

Dual Design Rationale and Framework Alignment

The evolution from a single design concept to the dual intervention of "My Sea Story" booklet and "Sunset Calendar" emerged through iterative stakeholder validation. Initial prototype testing revealed that while the individual reflection component (booklet) successfully activated personal dimensions of place attachment, stakeholders identified a missing element—specifically, the integration of

Izumozaki's distinctive sunset experience that represents deep local pride.

The dual design structure strategically aligns with different dimensions of the PPP framework: the "My Sea Story" booklet primarily targets individual person dimensions through private reflection and sensory memory activation, while the "Sunset Calendar" focuses on social place dimensions through shared experience documentation and asynchronous community building. This differentiated approach enables comprehensive activation of the framework's multiple dimensions, as empirically validated through participant responses and stakeholder feedback.

The post-implementation observation that one design component demonstrated stronger engagement patterns suggests potential for future research into integrated design approaches, while the current dual structure provides flexibility for adaptation across diverse rural contexts with varying local assets and visitor characteristics.

Methodological Novelty and Theoretical Contribution

The research addresses a significant gap in place attachment literature, which has predominantly focused on synchronous, face-to-face interactions as prerequisites for meaningful social connection in destination contexts. The empirical validation of asynchronous Tourist-to-Tourist (T2T) value co-creation represents the study's primary theoretical contribution, demonstrating that place attachment can be fostered through carefully designed physical artifacts that enable time-shifted community formation.

While sunset viewing and visitor booklets exist across numerous Japanese destinations, this research's novelty lies in the systematic application of place attachment theory through the PPP framework to rural tourism contexts, providing empirical evidence for design approaches that create social connection without requiring co-located interactions. This theoretical advancement offers practical guidance for resource-constrained destinations seeking to enhance visitor engagement through accessible, low-technology interventions.

Stakeholder Engagement and Implementation Constraints

The focused collaboration with OneStory Villa, rather than broader municipal engagement, reflects pragmatic realities of rural tourism development. Initial stake-

holder consultations with local government tourism departments and restaurant operators revealed enthusiasm (“いいですね”) without corresponding commitment to active collaboration (“一緒にやる気がない”). This dynamic, common in resource-constrained rural contexts, necessitated strategic partnership selection with empowered stakeholders possessing clear implementation authority and genuine investment in project outcomes.

The concentrated stakeholder approach enabled rapid iteration and validation while establishing proof-of-concept for broader application. Future research can leverage these validated outcomes to engage additional community stakeholders, as demonstrated by Igarashi-san’s subsequent integration of the design into regional tourism funding applications.

Data Collection Limitations and Validation Approach

The constraint of single-day visitor capacity at the research site inherently limited direct user interviews, with comprehensive feedback obtained from one primary participant supplemented by observational data from multiple prototype interactions. While this sample size presents limitations for statistical generalizability, the validation approach prioritized depth over breadth, consistent with qualitative research methodologies focused on understanding complex experiential phenomena.

The stakeholder perspective provided crucial operational validation, demonstrating that guest engagement behaviors observable to business owners serve as valuable indicators of intervention effectiveness. The documented increase in guest interaction duration and spontaneous sharing behaviors represents meaningful evidence of design impact, while expressed stakeholder satisfaction confirms practical viability.

Future research should incorporate extended data collection periods and larger participant samples to strengthen empirical foundations, while the current findings establish sufficient validation for theoretical contribution and practical application guidance.

4.5.3 Study Limitations

Several limitations must be acknowledged:

Methodological Scope: The qualitative approach provides deep insights but limits statistical generalizability. Findings represent specific participant experiences and require broader validation for universal applicability.

Contextual Constraints: The study focuses on a single guesthouse in a specific Japanese region, potentially limiting transferability to other cultural and geographical contexts. The small sample size, particularly for final implementation testing, constrains generalization scope.

Temporal Limitations: While strong emotional connections and revisit intentions were observed, long-term behavioral tracking was not possible. Whether stated intentions translate into sustained advocacy and actual repeat visitation over extended periods remains unverified.

4.5.4 Future Research Directions

Based on findings and limitations, several research avenues emerge:

Longitudinal Impact Studies: Extended research tracking participants to verify whether stated intentions for repeat visitation and advocacy translate into actual behaviors over multiple years.

Cross-Cultural Validation: Implementation of the design framework in diverse rural contexts, both within Japan and internationally, to test transferability and cultural adaptability of the approach.

Quantitative Measurement: Large-scale studies measuring statistical impact on metrics including revisit intention, satisfaction scores, online reviews, and actual booking behaviors.

Asynchronous Connection Mechanisms: Further exploration of asynchronous social interaction in physical spaces, investigating different media types and artifacts for community fostering, and developing frameworks for optimizing these connections.

Scalability: Assessment Research into scaling these approaches across multiple rural destinations while maintaining authenticity and local character, investigating potential for regional tourism network development.

4.6. Chapter Conclusion

This chapter has provided comprehensive empirical validation of the service design intervention through systematic application of the Person-Process-Place framework. The findings demonstrate successful activation of all three PPP dimensions, confirming the design's effectiveness in fostering place attachment through low-resource, experientially-focused approaches.

The convergence of traveler experience evidence and stakeholder validation provides robust support for the design's dual achievement: enhancing individual guest experiences while creating operationally sustainable business value. The documented success of asynchronous T2T value co-creation represents a novel contribution to service design theory, while the practical implementation model offers transferable insights for rural tourism development.

These validated outcomes establish a foundation for the broader theoretical and practical implications explored in the concluding chapter, demonstrating how empirically-grounded design interventions can address complex challenges in rural tourism through theoretically-informed, human-centered approaches.

Chapter 5

Conclusion and Design Guidelines

5.1. Introduction

This concluding chapter synthesizes the core achievements and implications of the research presented. It articulates the significant contributions made to both academic understanding and practical application in the field of rural tourism service design. The chapter begins by highlighting the research’s overarching success factors and then elaborates on its theoretical and practical contributions. Following this, it presents a set of actionable design guidelines derived from the study’s empirical insights, complete with considerations for their transferability and adaptation. The chapter concludes with a final reflection on the broader implications of fostering authentic connections in rural tourism.

5.2. Research Contributions and Success Factors

This research makes several distinct contributions to academic understanding and practical application, underpinned by key success factors inherent in its methodology and philosophy. The project’s triumph in developing and validating the “My Sea Story” and “Sunset Calendar” service design is attributed to a convergence of methodological, collaborative, and contextual factors that enabled authentic service design innovation in a resource-constrained rural setting.

Theoretical Contributions

Place Attachment Theory: This research provides the first comprehensive empirical validation of the Person-Process-Place (PPP) framework through deliberate service design interventions. By systematically demonstrating how specific de-

sign elements activate individual-collective person dimensions, affective-cognitive-behavioral processes, and physical-social place characteristics, the study moves beyond theoretical description to practical application guidance.

Service Design Theory & Value Co-creation: The validation of asynchronous Tourist-to-Tourist (T2T) value co-creation represents a significant extension of existing co-creation models, which have predominantly focused on synchronous, co-located interactions. The research demonstrates that meaningful social connection and shared value creation can occur through carefully designed physical artifacts that enable time-shifted community formation. Furthermore, the study contributes to service design theory by providing a robust case study of the “software over hardware” approach, proving that effective interventions can arise from deep local insights rather than costly technological overhauls.

Rural Tourism Development: The successful implementation of a low-resource, experience-focused intervention provides crucial empirical evidence for sustainable destination development models, particularly relevant for demographically challenged rural areas requiring quality-focused tourism strategies. This directly addresses the need for context-sensitive approaches that value authenticity over volume growth.

Practical Contributions

For Visitors: The design demonstrated significant emotional resonance, heightened sensory memory activation, and meaningful social connection that collectively fostered stronger place attachment. This collectively fostered stronger place attachment and resulted in expressed intentions for repeat visitation and organic advocacy among travelers.

For Business Operations: Achieved new operational possibilities through low-cost, easily integrated materials enhanced guest engagement that serves as satisfaction indicator, improved differentiation through unique experiences, and deeper alignment with authentic business identity and sustainable growth aspirations.

For Academic-Community Collaboration: The study illustrates effective techniques for building trust and collaboration with local stakeholders in rural settings, providing practical guidance for partnerships that generate mutually

beneficial outcomes. This highlights how empirical, discovery-driven research can lead to interventions that intuitively target established psychological mechanisms, offering valuable guidance for design researchers working in complex, context-dependent environments.

Methodological Success Factors

Discovery-Driven Design Research: The bottom-up, discovery-driven approach, rooted in extended ethnographic immersion, allowed empirical insights to emerge naturally before formal theoretical frameworks were applied for validation. This process revealed nuanced local dynamics and visitor needs, enabling the development of contextually appropriate interventions that intuitively targeted established psychological pathways for place attachment.

Collaborative Authenticity: Partnership with a passionate local stakeholder (Igarashi-san) who deeply understood and articulated his community's unique value proposition ensured the design resonated with authentic local identity rather than external assumptions about rural tourism needs, fostering both ownership and long-term sustainability.

5.3. Design Guidelines for Rural Tourism Service Development

Drawing from empirical findings and implementation insights, the following **Five Design Principles** provide practical direction for designers and tourism professionals developing service interventions in rural contexts. These principles prioritize authenticity, sustainability, and meaningful engagement over conventional resource-intensive approaches.

- **Start from the Field, Not the Desk**

Guideline: Conduct extended ethnographic immersion in local contexts. Observe daily rhythms, engage in genuine conversations with residents and visitors, and participate in community activities before developing any interventions.

Rationale: Design rooted in deep contextual understanding ensures solutions address authentic needs rather than external assumptions, as demonstrated through initial Izumozaki fieldwork revealing transportation barriers, language constraints, and sunset viewing opportunities.

- **Respect Local Pride and Vision**

Guideline: Identify what locals are genuinely passionate about and proud of. Design interventions that amplify these existing strengths rather than introducing foreign concepts.

Rationale: Interventions that resonate with local identity foster stronger collaboration, ensure long-term sustainability, and create authentic experiences that differentiate destinations, as exemplified by Igarashi-san's pride in Izumozaki's distinctive sunset views.

- **Design with Existing Resources**

Guideline: Prioritize utilization of available local, shared, or natural resources. Choose low-tech, tangible, maintainable solutions that minimize investment requirements while maximizing authenticity.

Rationale: This approach proves essential for resource-constrained rural areas while enhancing authenticity, minimizing operational burden, and addressing visitors' desires for urban escape, as demonstrated by the use of sunset as a shared resource and physical Instax prints over digital displays.

- **Keep Scope Manageable and Strong Partnerships**

Guideline: Establish committed partnerships with empowered local stakeholders. Define manageable project scope for initial implementation rather than attempting comprehensive transformations.

Rationale: Streamlined collaboration with clear ownership facilitates rapid iteration, reduces bureaucratic complications, and increases likelihood of successful implementation in complex rural settings, as evidenced by focused partnership with OneStory Villa.

- **Aim for Deep Engagement not Volume Metrics**

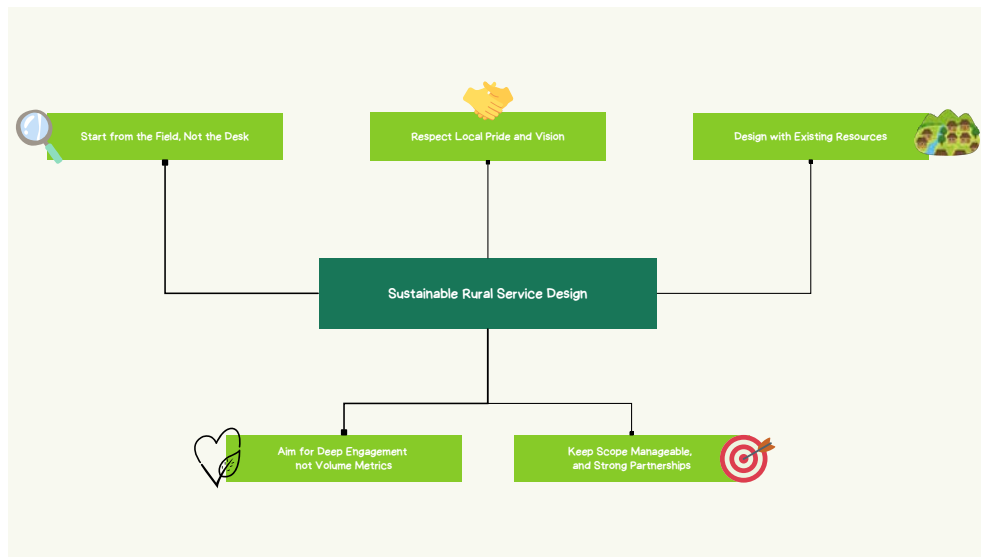


Figure 5.1 The Five Design Principles for Sustainable Rural Service Design

Guideline: Design for emotional resonance, place attachment, and authentic experiences rather than maximizing visitor numbers. Focus on qualitative outcomes encouraging repeat visitation and organic advocacy.

Rationale: This strategy promotes sustainable tourism growth, builds loyal traveler communities, and ensures long-term destination viability without overwhelming resources or diluting local authenticity, as validated by high participation rates and expressed revisit intentions.

5.4. Transferability and Adaptation Guidance

While this research focused on a single guesthouse implementation in a specific Japanese context, the underlying principles and methodological approach offer broader applicability with appropriate adaptations.

Transferability Framework

These guidelines apply most effectively in contexts characterized by:

Stakeholder Readiness: Local champions with clear vision and implementation authority

Distinctive Assets: Unique natural, cultural, or experiential resources that cannot be easily replicated

Resource Constraints: Limited financial and human resources requiring creative, low-cost solutions.

Sustainability Goals: Commitment to quality-focused rather than volume-driven tourism development

Warning Indicators suggesting different approaches may be needed include: lack of local engagement or vision, absence of distinctive assets, pressure for rapid volume growth, or preference for high-tech solutions over authentic experiences.

Contextual Adaptation Requirements

Cultural Sensitivity: The asynchronous community-building concept may require modification in cultures with different social interaction norms or privacy expectations. Physical sharing mechanisms should be adapted to local comfort levels and cultural practices.

Resource Availability: Implementation requires access to basic materials (printing capabilities, display space, writing materials) and stakeholder capacity for simple maintenance. Adaptations may be needed for locations with different infrastructure constraints.

Tourism Market Characteristics: The approach works best for destinations attracting visitors seeking authentic, contemplative experiences rather than activity-intensive or luxury tourism segments. Assessment of visitor motivations should guide intervention design.

5.5. Concluding Reflections: Authentic Connection in Rural Tourism

This research embarked on exploring how service design could address the complex challenges of fostering meaningful traveler engagement and sustainable development in resource-constrained rural Japanese tourism contexts. Through the

development and validation of the “My Sea Story” booklet and “Sunset Calendar” installation, this thesis has demonstrated a novel and effective approach to cultivating deeper person-place bonds that transcend conventional tourism transactions.

The study has rigorously demonstrated that low-resource, place-based service design can significantly contribute to place attachment development by strategically leveraging sensory-rich experiences, facilitating emotional resonance, and enabling asynchronous social connection and co-created value. These findings provide empirical evidence from a unique rural setting while offering substantial theoretical contributions to place attachment understanding, service design practice, and rural tourism development approaches.

Ultimately, this thesis underscores the enduring power of authentic connection in an increasingly fast-paced and digitally mediated world. By fostering deep emotional and social ties to places through carefully designed, low-resource interventions, we can enrich individual travel experiences while contributing to the long-term vitality and preservation of rural landscapes and cultures. The “My Sea Story” booklet and “Sunset Calendar” installation stands as evidence that profound impact can be achieved through subtle, thoughtful design interventions rooted in deep understanding of human needs, local assets, and the unique spirit of place. This approach offers hope for rural communities worldwide seeking sustainable tourism development approaches that honor local character while creating meaningful connections between visitors and destinations. As rural areas globally face similar challenges of demographic change, resource constraints, and tourism development pressures, this research provides both theoretical insights and practical guidance for addressing these challenges through human-centered, collaborative design approaches that prioritize authentic connection over superficial engagement.

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