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Master's Thesis
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Your Secret Spot: Designing an Experience-Dominant Blind Box Service for Memorable Tourism Experiences

Keio University
Graduate School of Media Design

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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 2022

Your Secret Spot: Designing an Experience-Dominant Blind Box Service for Memorable Tourism Experiences

Category: Design

Summary

Travel enables individuals to temporarily leave their daily routines and visit a desirable place for relaxation. A Memorable Tourism Experience (MTE) fulfills psychological needs that cannot be satisfied in everyday life, thus contributing to individuals' well-being. To facilitate MTE, experience designers identified cultural contact and co-creation experience as the approaches to engage tourists.

Adopting Service-Dominant Logic as a theoretical foundation, this research designs a service that exchanges people's place-related stories through a cultural box, involving previous and prospective visitors to the place to co-create values. Past visitors provide genuine experiences in their favorite places to the operator of this service. Based on the story, the service operator curates the box contents and sends them to receivers who want to know about a good place. Receivers of the box develop MTEs by examining the box at home and generating memories on site. Their post-travel experiences are shared with the provider, thereby completing the service exchange.

Through multiple iterations in design and user tests, it is validated that the provider's stories contribute to the formation of the receiver's MTEs, while the receiver's feedback generates new emotions for the provider. The resources of the users were integrated into the service process. Participants who completed the user experience reported the willingness to take a different role in the future, validating the sustainability of the service. This research contributed to the enrichment of people's leisure time activity. It proposed an innovative experience-dominant blind box design, which could be further utilized in fields other than the tourism industry.

Keywords:

service exchange, Memorable Tourism Experience, experience design, innovation

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Chapter 1
Introduction

1.1. Background

People have a variety of ways to spend their free time, one of which is to travel in search of relaxing and entertaining spots in the city. During the excursion, the city explorers take a break from their bustling everyday lives and have a pleasant time. A good place could be a port in a nearby city, where the individuals can converse with friends while enjoying ice cream. It may also be a coffee shop in the explorer's town, where he or she could read a book peacefully during the afternoon. In this design, the destination where individuals encounter positive, meaningful experiences is defined as a "Secret Spot".

Such encounters contribute to the well-being of individuals. Early research in tourism suggested that travel has an impressive nature, as it relieves people from their daily routine and fulfills their psychological needs that cannot be met in daily life, including demands for relaxation, socializing, personal development, exploration, and hedonism, [1].

A positive and impressive tourist experience could not only satisfy the tourists psychologically but also benefit the tourism operators. The highly competitive tourist market places a high value on providing tourists with memorable tourism experiences (MTEs) [2]. According to previous studies, MTEs greatly influence people's post-travel activities. They are positively correlated with people's intention to revisit, as the decision for a destination is largely based on previous experiences [1]. MTEs also act as a motivation for recommending the destination [3].

However, not all tourism experiences are memorable. A scale measuring MTE developed a decade ago indicates that it comprises seven domains: hedonism, refreshment, local culture, meaningfulness, knowledge, involvement, and novelty

[4]. Later research emphasized that novelty, engagement, and social interaction are psychological factors that favorably influence recollection of travel experiences [5]. The multiple dimensions comprising MTE posed a challenging topic for user experience designers.

As efforts in leveraging visitor engagement could contribute to the establishment of MTEs [3], the designers are searching for ways to provide tourists with innovative and engaging experiences. Involving tourists in co-creating the experience is the most direct method to engage them. By enabling travelers to get more physically and emotionally involved, the operator may co-create an experience with the tourists [6]. Co-creation also arises between tourists as they interact with one another on-site. The intense focus on other social actors and the long and personal social interactions contribute to complex and multilayered co-created perceived value [7]. Another strategy considered for visitor engagement is building an environment for cultural tourism, which refers to the trip that the appreciation of a place's culture that plays a significant role [8]. The appreciation activities include enjoying local cuisine, interacting with local people, and visiting attractions representing the place's history and heritage. Participating in cultural activities could enhance the visitors' sense of engagement, favoringly affecting the formation of MTEs [3].

The story is an element to engage the tourists with the travel experience. Telling a place's story is crucial to place-based product development and promotion in cultural tourism [8]. As stories are a basic and universal form of human communication and learning, they can facilitate mutual comprehension of the experience [9], supporting individuals in understanding local cultures and establishing the image that motivates a visit. Stories also contribute to the intention of revisiting in the way of presenting the vivid MTEs. The story parts of authentic messages and joyful emotion enhanced the individuals' perceived recollection of the story and their visit intent [10]. Storytelling is not limited to oral. With the support of other media, such as printed photos, it could be used as a tool to retrieve the MTEs [11]. Acting as the heart of tourist experiences, the role of stories shifted from building knowledge of the experience to working as a framework for guiding the design of tourist experience opportunities [12] [13].

However, it is a pity that the current definition of co-creation and cultural

tourism has limitations. In today's society of information overload, tourism operators and tourists are not the only parties involved in co-creation, nor is the interaction between tourists confined to the place. Nowadays, the travel experience starts when individuals begin their research for a vacation destination. There are numerous sources of destination information, such as travel review websites and mobile applications. The previous visitor's review contributes to the impression that a new visitor forms before going. This impression is known as the destination image (DI), typically comprising three dimensions: cognitive, affective, and unique [14]. In the case of cultural tourism, current designs focus only on the culture that refers to art and history, ignoring the meaning of everyday lifestyles in culture. The limitation in the definitions of co-creation and culture restricted the usage of the story. It is used only to present the previous MTEs or the event-dominant cultural experiences, while it has the potential to deliver rich values.

1.2. Proposing a new approach to enhance MTEs

Building on the Service-Dominant Logic (S-D Logic), this study seeks to design a co-created experience based on service exchange. In S-D logic, actors are defined as those who participate in economic and social exchanges. In order to accomplish their goals, actors exchange their tangible and intangible resources with others. The service exchange process is to co-create values by integrating the resources to achieve the actors' beneficiary [15].

Co-creation of MTE could benefit two actors. The first actor is the provider who brings their previous MTEs as the resource. By telling the story of their previous experiences, they exchange for the reinforcement of the pleasant memories and the sense of satisfaction brought by sharing their lifestyle. The second actor is the receiver who longs for a place to spend their leisure time. By integrating the provider's resource and transforming it into their own experiences, they establish the destination's image. The familiarity with the place is built indirectly before the visit and serves as the motivation for a visit [16]. Receivers will then visit the place to collect their own memories. The newly generated MTE enables the receivers to take on the role of provider and sustainably benefit the other receivers.

In addition, when receivers share their new experiences with the provider, the provider gains insights about the place, thereby enhancing their connection with the place.

This study creates a cultural blind box to deliver the MTE. The box includes a letter, the location information, a photo of the secret spot, and several selected goods. The components present the provider's stories of their experiences in the secret spots through various media, of which receivers could draw inference at home and then visit the secret spot to create new experiences. The service operator acts as an intermediary between the provider and receiver, curating and distributing the box. The box content is kept secret until the receiver opens it.

Purchasing unknown items in a box is not novel. Thematic blind boxes or surprise boxes are common retail marketing strategies. A traditional blind box first appears in the beauty industry and then gradually spreads to the clothing, food, and toy industries [17]. By curating the items in the box, merchants offer users a degree of surprise in an effort to encourage repeat purchases. The traditional blind boxes are goods-dominant, as the manufacturer determines the content, and the user experience is short and ends as soon as the box is opened.

This study proposes an original experience-dominant blind box design that centers on extending the user's experience. The tangible box contents can not only create a sense of surprise to the receivers as the traditional blind box, but also give rise to new experiences in the secret spot. This design adheres to the design thinking process. By creating prototypes and testing them, the researcher is able to examine how users interact with the prototype and the values they gain from the test. The analysis of each user test results in design refinement. Interviews and surveys are the two most common data collection methods.

This paper will follow the time sequence to explain the design process and evaluation. Chapter two reviews the related works on four topics relevant to this service's value proposition: MTE, experience design approaches for tourist engagement, destination image and surprise box economy. Identifying the research gap develops the questions to be answered in the following design process. Chapter three introduced how this design went through five stages, from scratch to the final version. The design process started with ethnography, extracting the mental models of people who spend their leisure time in public places, from which the re-

searcher generated the design idea of sharing people's experiences in their favorite places. The preliminary stage tested the feasibility of exchanging the secret spot with others through a box and developed design criteria. The updated prototype test validated the indirect exchange's value and identified randomness-related negative experiences. Therefore, in the refined prototype stage, researchers designed a pairing algorithm to provide positive experiences. At the end of chapter three, the final design is proposed by explaining the artifact and user experience design and the value proposition. Chapter four validated the value offering through two phases. Phase 1 collected 103 people's opinions on the final artifact design and its value offering. Phase 2 tested the entire user experience, gaining insights from the user's perspective into how this service design builds MTE and destination images and how the indirect exchange co-created the experience for both sides. At last, chapter 5 provides an overview of this study, identifies limitations, and suggests possible future research directions.

Chapter 2
Related Works

This chapter examines four relevant topics to this design. It begins by examining the relationship between MTE and well-being and the factors that have a decisive effect on MTE. Experience designers engage the user in their travel experiences to enhance MTE. Thus, the second section reviews previous looks into two design approaches that improve engaging experiences: providing cultural contact and a co-creation experience. It is also essential that users have a good impression of the location in order to create positive memories. The establishment of the destination image is reviewed in the third section. Finally, the researcher examined studies on the blind box and surprise box services, as the blind box is the tool to provide the experience in this design.

2.1. Memorable Tourism Experience

2.1.1 MTE and well-being

As experience becomes a hot topic in marketing, the tourism field, regarded as the marketplace for experience, has an urgent need to identify the factors of a memorable experience to improve the understanding and designing of such experiences [18].

Memorable Tourism Experience is defined as a "tourism experience remembered and recalled after the event has occurred" [4]. Scholars studied MTE to understand traveler behavior by evaluating whether it is an essential factor influencing the tourists' motivation to revisit the place [19] [20] [21]. These researches contribute to leveraging the attractiveness of the destination for management purposes.

As for individuals, MTEs have a positive correlation with their well-being. Vada

et al. suggested that an MTE significantly influences place attachment and well-being, and both hedonic well-being and eudaimonic well-being work as a mediator between MTE and place attachment [22]. Place attachment is people's affective bond with specific places where they choose to stay and feel comfortable and secure [23]. In the previous studies, researchers considered place attachment as a cause of well-being [24]. Vada's study adds perspective to the relationship between the three concepts closely related to people's personal memories, experiences and emotions.

2.1.2 MTE formation

In earlier studies, the objective of understanding the formation of MTE was to identify the factors influencing consumer decisions. Chandralal et al. conducted a qualitative analysis of travel blogs from online communities, which provide rich information and insights into people's memorable experiences. Seven themes were generalized; six arose from the cognitive domain, and one arose from an affective domain. Cognitive themes include authentic local experiences, personally significant experiences, shared experiences, perceived novelty, perceived serendipity, and professional guides and tour operators [25]. The classification emphasized the events or activities influenced the formation of MTE.

Similarly, Kim's studies set the framework for MTE formation over the years by summarizing the factors from multiple dimensions. In 2010, he stated that the correlation between the experiential factors and traveler's behavior of recalling the previous experience and retrieving information remains unclear. He proposed seven experiential factors (hedonism, involvement, novelty, meaningfulness, refreshment, local culture, and knowledge) as the determinants of MTE, and recollection and vividness are considered to define whether an experience is qualified as an MTE [1]. Kim developed items that measure nine latent variables. The measurement scale was further validated and explained in his later study [4]. Involvement, refreshment, and local culture were found to have an influence on one's MTE formation. Later on, Kim's study in 2014 classified the influencing factors of MTE into two categories: tourists' psychological factors and tourism destination facilities or services. He identified ten destination attributes that influenced MTE (local culture, the variety of activities, hospitality, infrastructure, environment

management, accessibility, the quality of service, physiography, place attachment, and superstructure), factors [2].

Adopting Kim's categorization, Wei et al. noticed a limitation in the study of the psychological factors of MTE. The authors chose a sample of urban residents who visited multiple locations for their study, rather than a specific location, to objectively reflect the complex factors that influence MTE while avoiding a one-sided destination [5]. Their findings show that novelty, involvement, and social interaction strongly impact remembering MTE for a long time. However, serendipity and meaningfulness do not influence MTE.

Their finding was inconsistent with previous research, which indicates that serendipity and meaningfulness are influencing factors to MTE [25] [19]. The inconsistency may be because their subject, Chinese travelers, tend to plan their entire journeys meticulously [5]. The disparity caused by cultural context demonstrates the significance of individual-related psychological factors, as opposed to location-related psychological factors, in forming MTE. Gradually, incorporating personal affective factors into designs intended to elicit MTE is a topic of interest to numerous other researchers.

Researchers examined individuals' emotions in MTEs. Knobloch et al. stated that the feeling of those who participated in the same activity varied. Emotions and personal meanings vary, despite the shared factors that make the experience memorable [18]. There is a correlation between emotion and eudaimonic well-being, demonstrating that the tourists' life experiences substantially impact their pre-and post-tourism experiences. The emotions involved in the tourism experience are too complex to assume that tourists only seek a positive mood. Thereby it is impossible to predict the effects of the experience. MTE and whether tourists achieved hedonic or eudaimonic outcomes should be determined by the individuals instead of the tourism service providers

Volo provided a similar insight that tourists' emotions should not be squeezed into a set of predefined categories in tourism design and proposed that the breadth and depth of emotions should have opportunities to be extended and modulated. It is necessary to design encounters that form and interpret the tourism experience and the related emotions before and after the trip [26].

Studies have shown that the formation of an MTE is related to both an indi-

vidual's emotions and their level of cognition. With this correlation, it has been determined that the design of a travel experience can no longer be a decision made solely by the service provider; rather, it should involve the participation of the traveler throughout the entire journey.

2.2. Approaches in design for tourist engagement

The increasing demand for more participatory and interactive experiences has drawn the researcher's attention to the application of engaging experiences and co-creation experiences in tourist design. Previous research stated that involving the tourists create meaningful personal narratives [27].

2.2.1 Cultural contact and visitor engagement

Researchers have realized that it is necessary to engage the visitors physically and emotionally with the destinations [28]. They drew on agreement about the interrelation between cultural contact, engagement, and MTE. Cultural contact through the consumption of local cuisine positively influences tourists' MTEs and mediates the relationship between visitor engagement and MTEs [19]. Similarly, culinary experiences were confirmed to have an influence on the destination image, which is the impression of the destination that will be reviewed in the next section [29]. Efforts in leveraging visitor engagement could contribute to the formation of MTEs [3]. Therefore, tourist designers attempted to increase the chances of being exposed to culturally relevant activities.

However, the researcher's definition of cultural contact varies in design for cultural contact. As culture is such a broad concept, researchers have examined cultural encounters in travel from various angles. According to Tsai, local cuisine consumption has been identified as a cultural touchpoint that evokes memories [19]. In Kim's scale, the variables of cultural contact focus on the impressions of local people [4]. On the other hand, Smith defines cultural contact from the perspective of a sense of place, pointing out that the place has sophisticated and complex nature in terms of its strong link to culture. Through visiting cultural sites, art places, and town landscapes, building contact with the authentic culture distinguishes the place from others [8].

According to the review, from the perspective of cultural contact, there are untapped design opportunities in the current design. The current cultural contact is restricted to cultural events, cultural sites, and limited contact with locals. Developing a deepen contact with the local culture in terms of the lifestyle is a topic worthy of investigation.

2.2.2 Co-creation experience

Focusing on the trend of engaging experience, Campos et al. conceptualize co-creation in the field of tourism, concluding the dimensions of previous research through a bibliographic study covering four research areas, including tourism experience design. They propose a definition of on-site co-creation experience, which is the sum of the psychological experiences that a tourist goes through while actively participating in activities and interacting with other subjects in the experience environment through physical or mental participation. With the external factors acting on the on-site experience, it leads to a memorable experience [6].

The co-creation experience is a concept that departs from the traditional view of the travel service provider as the only creator of the experience by recognizing both the travel service provider and the tourists as co-creators of the experience. The concept is in line with the S-D Logic proposed by Lusch and Vargo in 2004. In S-D Logic, actors engaged in the service process are co-creators of the value [15]. Researchers frequently adopt S-D Logic in co-creating experiences [30] [31] [32].

Utilizing S-D Logic as the theoretical background, Mathis et al. conducted research that looked deeper into the impact that co-creation experience has on the service provider. They identified that tourists bring their time, effort, money, and other resources to co-create the trip [28], exchanging the perception of their experience and the service that better fits their needs. In return, the co-creation experience contributes to the service provider's satisfaction. On the other hand, Dekhili and Hallem looked into the co-creation experience's influence on tourists. They found it positively impacts the tourist's subjective well-being, with empowerment as the mediator [33].

Although there has been a growing awareness of travel as a co-creation experience, existing research still has limitations. First, travel experiences can encompass pre-travel, on-site, and post-travel activities. The current focus is restricted

to on-site interactions; less attention is paid to the pre-travel experience compared to users' on-site and post-travel behavior. Second, co-creation design needs to extend the scope of interactions between visitors. As co-creation of experiences may be a non-linear process — those visitors who have an emotional connection to the place may recommend it to others, and interactions arising between visitors who are not on-site at the same time may also co-create experiences.

2.3. Destination Image

The tourists' experience of the place could also be examined in the study of the destination image. It is a tourist's overall impression of a particular place that is composed of three dimensions — cognition image, affective image, and unique image [14] [34]. The cognitive dimension summarizes the impression and knowledge about the destination's physical attributes [16], it consists of the natural attractions, cultural attractions, tourism infrastructure, and general infrastructure [21]. The affective image is related to the emotions and feelings that a person holds about a place [35], and it incorporates the positive, negative, and neutral emotions [36]. The unique image is the features, events, or auras that differentiate this destination from other places [37].

2.3.1 A pre-visit perception

In earlier studies, the destination image was considered to be a post-visit impression [38]. Therefore, the discussion around the impact of destination image overlaps highly with the discussion of the role of MTE. Similar to MTE, it is considered to be the factor that influences travelers' decisions when choosing destinations, deciding on revisits, and recommending them to others [39] [14]. The points of view were divided among the limited studies that discussed the correlation between destination image and MTE. Some scholars believe that MTE is the basis for the establishment of the destination image [10]. In contrast, others argue that the destination image contributes to the formation of MTEs [33], with findings showing that MTEs act as the mediator between destination image and the motivation for a revisit [20].

However, with the rise of co-creation experiences, travelers participating in pre-trip planning have more opportunities to shape the destination's image. Familiarity was identified as one of the most critical factors in forming the destination image because it enables consumers to predict potential outcomes, thereby reducing the level of uncertainty or risk [16]. Kim et al. suggest that in-direct familiarity forms visitors' destination image and leads to the intention to visit [16]. Their findings indicate that familiarity with the location can be established prior to the actual visit.

Based on this finding, researchers developed methods that could build visitors' sense of familiarity with the destination before the trip, thereby building their positive destination image and engaging them with the place.

2.3.2 Story as a tool to form destination image

Storytelling is a tool frequently used in destination marketing to engage tourists. Stories play an important role because they are a universal and fundamental structure in interpersonal communication and shared perceptions [9]. It could evoke imagination, record people's experiences, and create empathy between people.

Researchers examine the role of storytelling in tourism. Good cultural stories can help visitors visualize their perception of a location, distinguish it from other destinations, and establish a connection with it. It facilitates cultural tourism that has a lasting effect on both the visitor and the destination [8]. Kim et al. added to this viewpoint that authentic cues and positive affective elements increased the perceived memory and intention to visit among listeners [10].

The function of storytelling in travel is not limited to generating interest in a destination. Different types of narratives may be used throughout the entire tourism experience. Moscardo argues that storytelling can be employed on two levels of travel experience design: the design of specific destination experiences and the design of experiences that consider travel as a whole process [12]. Her later work revealed that depending on the traveler's experience stage, the stories could be divided into pre-experience stories, emerging experience stories, and post-experience stories. For each stage, stories have different core elements, including the tourist's life story, destination storyworld, and tourism provider's storyworlds [40].

Smith and Moscardo concurred that it is essential to investigate the anecdotes of visitors who have visited specific locations and to delve deeply into the anecdotes of locals. Therefore, assisting a previous visitor in telling the story becomes a challenge. Little research had been conducted on post-experience storytelling of the memorable and meaningful on-site experience. To fill this gap, Wan explored how oral narrative and visual narrative differ in the effect of storytelling for a memorable, meaningful experience. They first compared the oral and visual narration and then used a tangible travel journal as a prop, requiring the participants to create a paper-based journal based on the digital images they shared online as materials. As a result, the oral narration was more comprehensive, whereas the visual narration focused on the story's highlights and turning points [41]. The combination of multiple channels provides more comprehensive coverage of the key factors in storytelling [11]. Their research also applies to post-experience storytelling in Moscardo's framework.

2.4. Surprise Box Economy

In search of additional tools to support the traveler's narrative, we investigated the merchandise industry. The concept of the blind box is well-suited as a tool for experience delivery.

The blind box economy has become a boom since the year 2019. Originated in the Japanese gashapon culture in the 1980s[1], the blind boxes nowadays have attracted small grocery stores to luxury brands to provide consumers with unknown products at a fixed price. The blind box iteration is extremely rapid, and the manufacturer continually designs and produces new collections to attract repeat customers. Often, blind boxes are designed by themes. The consumer knows they can get one good from the collection but does not know which one exactly they can get.

Targeting people with relatively high incomes and the Z-Generation, the blind boxes do big business with a handful-sized box. A report issued by MobTech, a

1 Chi. 2021. "Why China's Blind Box Economy Is A Good Bet For Brands". The Drum. https://www.thedrum.com/opinion/2021/10/20/why-china-s-blind-box-economy-good-bet-brands.

data intelligence technology platform, suggests that by 2024, blind box culture could be worth more than 3 billion yuan (about $4.59 billion) in China, where it is most popular[2]. The data revealed that although this form of consumption has been prevalent, it attracted limited interest in academic research. Research interpreted the consumer psychology when purchasing the blind box. It brings customers instant gratification and a sense of thrill, which urges repeated purchase [42]. Pursuing newer items with various designs in this fast-paced era brings instant gratification. However, consumers' repeated consumption behavior shows that the satisfaction brought by the box is short-lived and unsustainable.

2.4.1 Subscription-based surprise box

While the blind box iterates itself by the renewal of the design, there is a service in a similar format that curates the box contents, providing consumers with more experience. The subscription-based e-commerce, which has been popular in the broader market since a decade ago, provides opportunities for experiential consumption. The consumers of subscription boxes receive one or more products on a particular subject at a predetermined pace and price [17]. This retail strategy has expanded the target from fashion and cosmetics to various kinds of online sales areas. Depending on the research perspective, this business model has various definitions such as a subscription-based online service (SOS) [43], a subscription box [44] [45], curated subscription commerce [46] and surprise box [47].

In contrast to blind boxes, which typically contain a single item, surprise boxes organize multiple products based on a theme. The service provider curates the products to meet the users' expectations. Although surprises are not usually used as a mechanism in retailing, when purchasing a curated surprise box, customers have already established expectations for positive and negative surprises. The box controls the surprise from two dimensions: one is whether the user can personalize it to make the box fit their taste, and the other is who decides the content of the box [46]). Either way, curation acts as a filter to wipe off the noise and brings quality and clarity to the user, saving them from feeling overwhelmed in the ocean

2 China Daily Hongkong. 2020. "Business Of Surprise: China's Emerging Blind Box Economy". Chinadailyhk. https://www.chinadailyhk.com/article/153361.

of data, [48].

Providing goods that meet the consumer's needs could be an approach to enhancing the users' assessment of the product and services, which was defined as the perceived value in the experience design [49]. Users feel valued from both practical and psychological perspectives when consuming the products. They have positive feedback on the high-quality boxes and the items that fit their aesthetics [17]. The result of the research, together with Tao's findings [50], is in accordance with the four dimensions of perceived value proposed by Sweeney and Soutar [49]. The four dimensions, including "emotional value, social value (enhancement of social self-concept), functional value (price/value for money), and functional value (performance/quality)" [49] are frequently examined in the subsequent research. Analysis of the consumer's review shows that consumers are motivated not only by the functional, tangible, and intangible products but also by the positive and negative emotions that the service generates [47]. Studies also looked unidimensionally to validate the value the surprise box brings to the user. For example, quality is the most influential functional factor in consumers' favor of the subscription service [44].

2.4.2 Goods-dominant surprise boxes

Whereas previous research has highly focused on the fashion or cosmetics area [51], the variety of surprise boxes has expanded significantly in the decade of rapid development of the business model. Lifestyle-related or culturally relevant surprise boxes have emerged. However, for both blind boxes and the subscription surprise boxes, due to the fact that the service providers are the retailers or manufacturers, the primary purpose of the service is to promote the goods and increase the user's loyalty to the brand. With the different themes, the core of the boxes is the goods inside.

When attempting to develop a new service, Goods-Dominant Logic typically views innovation as the output and the company as the primary actor [52]). In G-D logic, the production and exchange of goods are viewed as the most important aspect of economic activities [15]. The current blind box and surprise box services are primarily dominated by goods, with manufacturers determining and updating the contents.

A few studies have identified the potential value that surprise boxes could offer users by providing more than just the goods but also by triggering experiences. For instance, when a user subscribes to a meal-kit delivery service, the participation required in cooking increases the perceived value [53]. The actors and artifacts involved in the service are promising factors that may positively impact the service's innovation. It requires a mind shift in designing surprise boxes to adopt S-D logic instead of G-D logic.

2.4.3 Memento of the experience

One possible approach in adopting S-D Logic is to design the surprise box as a memento of life experiences. According to Petrelli et al., artifacts are mementos of life, which are kept as a reminder of an individual's person, place, or event by an individual. Both digital and physical items can serve as mementos. A photograph is a typical example of a digital memento, whereas a physical memento is an object that the owner has invested with emotion. It does not necessarily depict important events or have an arresting appearance [54]. The irreplaceability of the artifact strengthened the emotional bonding between people and the artifact.

Mementos are the cues of memories of certain aspects of everyday life, which are valued because people desire storytelling or reflect identity and personality [55]. The reflection of meaningful autobiographical memories arouses the emotion of nostalgia, a common and important emotion that facilitates the maintenance of psychological well-being across the adult lifespan [56]. In tourism, design approaches note that the visitor's experience at a certain destination is unique to that individual. A personalized souvenir created through a collage of the selfies and photos taken by the visitor concludes and comprises a memorable tourism experience [57]. Therefore, by delivering the memento of one's memorable tourist experience to others, the items inside the box could act as the artifact to trigger a visitor's perception of the place.

Therefore, by delivering the memento of one's memorable tourist experience to others, the items inside the box could act as the artifact to trigger a visitor's perception of the place.

2.5. Research Contribution

It is evident from the review that designing an engaging tourist experience could positively influence the memorable tourism experience, thereby contributing to the well-being of individuals. Approaches in experience design have touched upon fostering cultural contact and proposing opportunities for tourists' participation in co-creating their travel experience.

However, there are research gaps in the current design methods. Researchers in the field of cultural tourism have adopted definitions that are limited to events or activities, and the co-creation experience is confined to the site itself. Current research seems to indicate that the ordinary side of culture, the everyday experience, becomes too mundane to be discussed in the context of a travel story. How ordinary life stories can influence the tourism experience is a topic worthy of in-depth investigation. Moreover, the relationship between the destination image and MTE needs to be explored. As the co-creation of the experience is designed to take the formation of the destination image one step forward, the impression established prior to the visit, particularly the affective dimension, has the potential to impact the MTE positively.

To fill the gap, this research proposes a design that deepens and widens tourists' contact with local culture to provide an engaging experience. This design will adopt the UNESCO definition of creative tourism, which is to "provide a connection with those who reside in a place and create this living culture" [58] [59], in order to expand the interaction between tourists from on-site to pre-visit and post-visit in the design of tourists' experiences.

Building on the theoretical background of S-D Logic, this research aims to examine whether the experience could be co-created between the visitors without the on-site interaction. The design expands the range of the actors involved in the co-creative experience by bridging the gap between previous visitors to the place and the new visitor through the shared cultural stories about the experience. The researcher also explores whether daily life stories could establish the destination image, thus having a positive impact on people's memorable experiences. Utilizing blind boxes as the media to deliver the story, this design aims to contribute to the innovation of surprise box services.

Chapter 3
Design

The literature review demonstrates the need for an inclusive approach to reviewing an individual's MTE and producing new impressive experiences. It contributes to their emotional well-being. This service proposes an experience exchange via a blind box in order to accomplish the goal. It is based on the S-D logic mindset, which integrates actors' resources. Former and future visitors can co-create experiences through this service's exchange that involves multiple parties. Traditional blind boxes innovate through the changes in the goods design, as manufacturers or retailers and the consumers are the only counterparties who exchange their resources, which are goods and currency, in this service process. In this service, MTE related to places becomes the subject of the blind box. The renewal of the experience replaces the renewal of the goods, incorporating new resources in a sustainable manner for the development of the blind box. This chapter explains the service concept and describes in detail how the researcher developed the design.

3.1. Design Concept

3.1.1 Define a secret spot

City residents choose their destinations when planning how to spend their leisure time. Some people do not hesitate in thinking and can come up with a suitable destination for relaxation or their own amusement. For example, university student Wendy spent a relaxing afternoon having an enjoyable picnic with her friends in a park in the city center. This park was an optimal choice for a picnic because she and her friends had easy access to it, it has pleasant scenery, and there happened to be a large lawn perfect for picnics. Wendy and her friends took

many pictures and had a lovely conversation. Her experience at the place was so excellent that the next time she happens to have a half-day free on a sunny Saturday and wants to have a picnic with her family, this park is likely to be her first choice. The destination choice could base on a positive and impressive experience in the place in the past, which was defined as a MTE. Studies have shown that MTE has a positive effect on people's intention to revisit and that MTE also influences a place's Word of Mouth [3], meaning that the visitors will actively recommend locations to others.

In this design, the place where people create their own enjoyable experiences during leisure time is a "secret spot." Not only a stunning location that one seldomly visits can be a secret spot, but also a place near one's resident community that one keeps visiting as a part of daily routine counts. The potential choice of a secret spot could be a place people prefer to remain and feel comfortable and safe, which is the place people have an emotional attachment [23]. An example is a gentleman who enjoys coming to the same park at the same time every day during the ethnography the researcher conducted in April 2021. The male in his 60s spends his whole afternoon sitting at the same place near the Shinobazu-ike Pond (Tokyo), accompanied by his bike, a footstool, and a guitar. He occasionally picks up the guitar and plays it for self-amusement, seemingly not caring about the other's attention. As a regular visitor to this park, his relaxed status reflects a positive mood. This mood can be a factor when people build up an attachment to the place.

As explained by the examples, the criteria for choosing a secret spot to enjoy leisure time is personal. People involved in the same activity will have different emotions about a location [18]. In the park where the researcher conducted ethnography, some people spent their lunchtime enjoying the scenery while dining. Even if the aim of these people is similar, that is, to eat in an open-air place, different people will choose to sit in various places in the park, which brings them diverse views. The diversity in the experience makes an individual's stories important as a factor in forming a secret spot, as they are unique.

3.1.2 Build up the impression through a cultural box

Scholar's research on tourism revealed that MTEs could act as the stimuli for recommendations. Sharing the stories at the secret spot reinforces the visitor's MTEs. This service designs a tangible box that includes a story and items as a medium to share the experience at the secret spot.

Previous visitors to a place are the content providers. They are encouraged to share their experiences related to a secret spot with the service operator (the researchers). Experience stories may include how they discovered the place, what they like about the place, the atmosphere, and what activities people can do in the place. As part of the storytelling, the provider needs to include a photograph. In addition, they can recommend several items that relate to this experience. Based on that, the service operator curates the contents, creates a cultural box, and sends them to a receiver. The story and the photo are made into cards, and the story-related items are placed in the box.

As stories and objects are incorporated, the cultural box supports the provider and the receiver to build up the impression of the place from two dimensions, the external perception and the internal emotional feelings. The combination of stories and items enriches the perspective of storytelling. The relatively objective items such as the photos and location information build the general impression of the place, while stories and objects foster the imagination of the experience and establish an emotional connection with the place. In tourism research, cognitive image (evaluation) and affective image (feelings) are considered the elements that form the destination image [14], which leverages the motivation to visit.

In addition, the tangible cultural box expands the scope of the co-creation experience. The box visualizes the experience and makes the experience physically transportable. Although there is no physical interaction between the provider and the receiver, they are connected through the medium — the box. The delivery of the tangible box breaks through the limits of space and engages more actors in the co-creation experience. By delivering the box, the MTEs of previous visitors become fodder for future visitors to build their impressions of the destination, and thus previous visitors participate in creating the prospective visitor's experiences.

3.1.3 Define the actors

Three actors are involved in this service to accomplish the indirect service exchange. The actor who shares the experience about the secret spot is called a provider, and the actor who curates the provider's experience into a box is the service operator, who is also responsible for sending the box to the other actor, the receiver. This section will elaborate on the target actors of this service according to their various motivations.

Content provider

Providers of experience are people who feel attached to a secret spot. They may be regular visitors to a location or people who had MTEs at that place. Previous research suggested that people who have a positive impression of a place tend to share it with others. An example of this behavior is the sharing of travelogues on travel websites. Providers gain satisfaction by sharing their lifestyle with others and discovering niche places worth going.

Receivers

People who would like to entertain themselves by finding a favorable place are the potential receivers of this service. The receivers could be diverse based on their motivations for using this service. For example, busy workers want to know about a place through the box to relax during the day off; people who just moved to a neighborhood want to have a deep insight into the surrounding areas by receiving a secret spot nearby; or those who would like to know the daily lifestyle of a specific travel destination through the box, just like reading travelogues on the website. Whatever their purpose, the receivers are expected to generate knowledge and create their own experience related to the secret spot through the service.

Service operator

A service operator supports the experience exchange between the provider and the receiver as a medium. Depending on the context, various institutions could be the potential subject who runs the service. Currently, the research team operates the service to study the value this service can propose. In the future, possible

service operators could include tourism or regional economic revitalization-related organizations. They could curate the box's content to promote the region to people unfamiliar with the area and attract visitors. Another possible service operator is the community manager, such as a school or interest group. By exchanging boxes related to the community, the community members could deepen their understanding of each other.

Overall, this service aims to build bridges between actors who want to share their experience of the secret spot and those who would like to know about a secret spot. Through the exchange of experiences, the provider's experience supports the receiver in creating new memories related to a place.

3.1.4 Co-create memorable experiences through visit

When handed to the receiver, the cultural box is a blind box that will not reveal its contents until it is opened. However, the receiver gains more than a sense of surprise through this service. In the traditional consumption process, the exchange between consumer and producer ends after exchanging money and goods. However, for the receivers of this service, opening the box is the beginning of the exchange because the box serves as an opportunity to stimulate new experiences, just like a ticket, providing the receivers with the options to find their own secret spot.

If the receiver is interested in the secret spot in the box, a visit to the place leads them to their own memorable experience. By immersing themselves in the local atmosphere, the indirect cognition of the place learned from the box turns into a direct experience. The receiver has the initiative to decide how to explore the place. They can go alone or with others; do something to entertain themselves or participate in activities to interact with local regulars; follow the provider's recommendations, or regard the visit as a whole new adventure. As mentioned earlier, people perceive a place differently even when attending the same event. Although the receiver learns the previous person's story through the box before a visit, his own experience at the place is an entirely new story, which could form his exclusive MTE. When the receiver returns home from the secret spot, the new experience attaches meaning to the box and turns it into a memento of the new experience.

In this way, the formation of the new MTE fosters new stories and new secret spots. They are the resource that enables the service to continually renew itself and achieve sustainable growth.

3.1.5 Service process and service exchange

Your Secret Spot involves both the content provider and the box receiver in co-creating experiences. The service flow is shown in figure 3.1 and is explained as follows:

1. The content provider shares their secret spot and their experience with the service operator.
2. The service operator curates the content of the box.
3. The service operator sends the box to the receivers, who are looking for new experiences at a secret spot.
4. The receiver creates his own experience.
5. The receiver shares the experiences with the service operator.
6. The service operator selects and sends the review to the provider.
7. (Potential) The role of the receiver and the provider could exchange.

Through this process, the counterparties exchange their resources. The content provider swaps their stories related to secret spots for feedback from others, which reinforces the old memories; the box receiver exchanges currencies with another person's stories, which fosters memorable experiences. The service is exchanged indirectly with the support of the service operator, who protects the two sides' privacy and controls the box's quality. They organize and manage the resources to run the service flow sustainably.

Once the contents of a box have been curated, they can be reproduced multiple times, thereby contributing to the service's sustainability. One secret spot can be produced into multiple boxes and sent to various receivers. In contrast to a one-to-one exchange, the receiver is guaranteed to get a box even if the number

of providers and receivers is unequal. In order to provide the users with a sense of surprise, the receivers will not get the same secret spot if they are repeated users of the service.

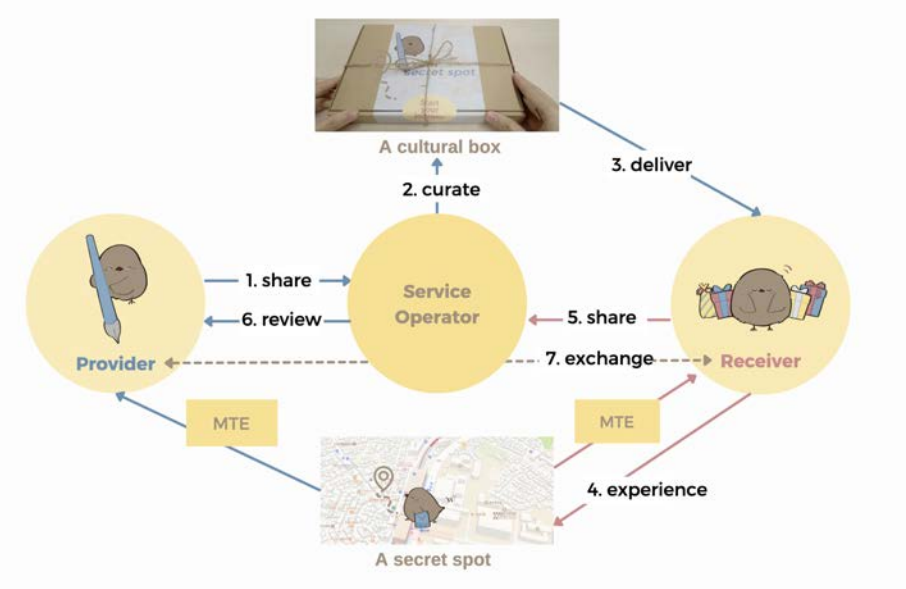


Figure 3.1 Service flow

3.2. Design Process

The design follows a design thinking approach, extracting people's mental models from ethnographic surveys and exploring whether the service can achieve the user's goals by creating prototypes and testing. The researcher uncovered critical appropriations and breakdowns of each prototype, gaining insight into value in context from the test, and modified it to create the next version of the prototype. This process ran for three rounds to achieve the final design. The research started with an initial idea in April 2021 and continued until June 2022. Table 3.2 briefly concludes the design iteration, and the next section describes the process in detail.

Timeline → 2021.4 → 2021.5 → 2021.6 → 2021.9-11 → 2022.2-6

		Design Iteration				
		Low-resolution Prototype	Preliminary Prototype	Updated Prototype	Refined Prototype	Final Design
Vital Elements	Artifact	Snack Notebook	Items related to the secret spot Letter Photo Map	Items related to the secret spot Box content list Letter Photo Map	Items related to the secret spot Box content list Letter Photo Map Classification sticker Service freebies	Items related to the secret spot Box content list Letter Photo Map Think sheet Nearby spots info Photography prop Classification package Service freebies
	User Experience	On-site experience	Recall memories Face to face exchange On-site experience	Recall memories Indirect exchange At-home experience On-site experience	Recall memories Indirect exchange Optional customization At-home experience On-site experience Optional feedback	Recall memories Indirect exchange Optional customization At-home experience On-site experience Optional feedback Sharing on SNS
Testing	User Test Scale	Auto ethnography	Research team members	Research community members	Reachable participants in the campus	Reachable participants through SNS who are strangers
	Test Method	Self test	Physical test	Physical test	Physical test	Online simulation & Physical test
	Service Sustainability	N/A	N/A	Cost estimation	Cost control & Charging fees	Cost control & Charging fees

Figure 3.2 Design process

3.3. Ethnography and Low-Resolution Prototype

3.3.1 Extract mental models from ethnography

The researcher conducted the ethnographic observation from April 3rd to April 6th in 2021 at Shinobazu-ike Pond, Tokyo. Ethnography aims to identify the actions of the relaxing visitors in a public space and extract their mental models.

Located on the side of Ueno Park, Shinobazu-ike Pond is a place people visit for leisure. The pond is home to many wild birds. A walking path surrounds the pond with cherry blossom trees. The environment attracts people strolling or sitting and chatting along the pond. The researcher went to the lake at the same time every day for three days. Each time observed the visitors for about half an hour, writing detailed notes on their actions. The researcher extracted mental models common to people who spend their leisure time in the part from the notes.

Two common mental models are identified depending on how long people stay at a specific spot. The mental model of the short-stay visitor is "see a nice scenery and record it". When they encounter an ideal view, they use mobile phones to take pictures, while those who have accompanies verbally say that they think it is beautiful. Short-stay visitors' primary purpose is to walk or move on to the next destination, and the view is an unexpected discovery in the process. On the other hand, the mental model for long-stay visitors is "have something to do in the park and find a place with a beautiful view to do their business". When the researcher conducted the ethnography, the cherry blossoms were blooming, and many visitors came with professional-looking cameras to take pictures. They took a picture of the flower or themselves, staying in one place for a long period. Other goals were dining and self-entertainment. Some visitors bought food from the nearby food stall and wanted to sit down and enjoy it. Some visitors brought books and drinks and sat on the benches under the cherry blossom trees early in the afternoon. The long-stay visitors share the common point that they had a primary purpose other than sightseeing, such as taking photos, reading, and eating. And to fulfill this purpose more comfortably, they wanted to find a suitable place to stay.

3.3.2 Cope the wicked problem with low-resolution prototype

As a result of the ethnographic observations, the researcher has found that long-stay visitors' goals could bring more needs than short-stay visitors.

One of the needs was choosing the right place to be. Determining a spot to stay was the result of several evaluations. Some long-stay visitors wandered between two or three locations and eventually decided on one of them. They have various purposes, a unique perspective for those who take photos, a relatively clean platform for those who eat, or shade for those who read. Among the long-stay visitors, regular visitors used their previous experiences and prepared objects to support themselves in achieving their goals. For example, the gentleman in his 60s whom I mentioned in the design concept section chose his own place to stay and brought his bike, stool, and a guitar to enjoy the afternoon leisurely. The choice of place and the objects are the optimal solutions he determined for self-entertainment. On the other hand, the short-stay visitors are satisfied with the occasional discovery of the beauty in daily life.

Therefore, for those who are less experienced in the place and those who seek an exact place to spend their leisure time, inconvenience and discomfort could be caused by lacking experience. For people who want to relax, it becomes a "wicked problem" [60], an obstacle that needs to be improved through innovative resolutions that the design intends to contribute.

A low-resolution prototype (figure 3.3) was made to respond to the needs. The researcher prepared a bag containing paper (as a prototype of a seat mat), sanitizing tissues, a pencil, a notebook, chocolates, and drinks. Bringing the bag, the researcher acted as a long-stay visitor and spent 30 minutes by Shinobazu-ike pond. All the objects were intended to be used on-site, with several of them aimed to recall the experiences afterward. The notebook functions to record anything impressive, and the food was prepared in multiple portions so that when eating this food later at home, it could remind me of the experience of being on-site.

Figure 3.3 Low resolution prototype

3.3.3 Findings

There were three main findings from the low-resolution prototype test. First, the objects brought to the site were helpful, but the food and drink did not stimulate memories afterward. Second, the knowledge the researcher gained on-site was the most memorable part of the experience. For example, the researcher saw a little girl learning to ride a bicycle and wild birds never seen before. In addition to using notes, the researcher took photographs. Both the notes and the photos were valid, as the notes recorded people's interactions and the pictures recorded the scenery. Combining the two methods enabled me to recall the day's experiences when I returned home clearly. Third, providing aid to the activities in a particular place does not solve the problem of people not knowing where to go for leisure.

3.4. Preliminary Prototype

A Low-resolution prototype test identified that by using a set of items, this service could suggest ways for people to spend leisure time in a place and build a memory. However, how this service could support users in exploring secret spots needs to be improved.

3.4.1 Provide knowledge of a secret spot through the box

Back in 2001, Baloglu suggested that a traveler's impression of a place is a blend of what they knew before the trip and the direct experience of the journey [61]. When people choose a travel destination, searching and looking up information beforehand is natural.

With two other researchers joining this project, we created a second prototype to explore whether accessing information about a secret spot before going there could be a valuable proposal to users. Based on Baloglu's theory, we created the preliminary prototype, which introduces the secret spot to another person by exchanging the cultural boxes. Three researchers agreed in advance on the items to be included in the box. The box (figure 3.4) had the address of the secret spot, a letter, photos, and objects that the researchers thought would fit into the box. The main difference between the low-resolution prototype and the preliminary prototype is that the newer one intends to support someone in building an impression of a place. To achieve this goal, we add stories and photographs to the box to provide more details to the receivers and help them imagine the destination.

Figure 3.4 Preliminary prototype

I made the box based on my previous experience at Shinobazu-ike pond when testing the low-resolution prototype. The other two researchers made a box based on their favorite secret spot in Tokyo. In May 2021, we met and exchanged boxes. Data was collected by recording each person's unboxing process and conducting

semi-structured interviews. After the meetup on May 9th, I went to the secret spot I received for the test.

3.4.2 Findings

The preliminary prototype tested the process of making a box by oneself, exchanging it with others, and experiencing the secret spot. This process revealed three positive findings and one negative finding.

First, making a box enhanced the memories of the content provider. Two researchers mentioned that making the box stimulated happy memories, especially when looking back at the photographs. They recalled the details of their visit to the place by writing down the experience because it enabled them to reinforce their memories. The letter was a written memory of their favorite places. The fondness for the secret spot led two of the three researchers to report having a sense of anticipation. They expected the receiver would likewise build fond memories in this place. One of the researchers noted that she would like to keep copies of the letters and photographs in this box as a time capsule. Another researcher wanted to get feedback from the receiver that describes their experiences. The box extended the providers' authentic travel experience.

Second, the way of enjoying a secret spot expanded from the previous low-resolution prototype in this test. There was one box that recommended a private route to Tokyo Tower. The provider wrote how she found and enjoyed this place in the letter. It was identical to the mental model of the short-stay visitor that she came across the impressive view and recorded it. The researcher wrote in the letter that the short stay became a fond memory for her, illustrating that what one sees when passing through a place can be the experience shared in this service.

Third, the receiver co-created the experience with the provider through the box. As a test receiver, I went to the secret spot near Tokyo Tower recommended by another researcher in the team. During the visit, I felt a sense of anticipation and satisfaction and gained new memories. I took the photo, the letter, and some snacks and deliberately followed the route suggested by the referrer to the secret location. Surprisingly, knowing what I was about to experience from the box in advance did not cut into the excitement of the live experience. On the contrary, a sense of excitement and satisfaction emerged when seeing the same scenery as

in the recommender's photos. The photo in the box I carried to the secret spot was useful because I held it and took a shot at the same angle as a memento (figure 3.5). The fact that this place was meaningful to someone else became the reason it was special to me. It was a refreshing visit to experience something from someone else's perspective by following the recommended route.

In addition, I gained new memories of my own on my way home. As the provider's story only touched upon how to get to the secret spot and did not suggest a route to take on the way out, I chose an alternative path on the way home. I saw traditional seasonal decorations named Koinobori Flags on the other side of the Tokyo Tower. The view became a part of my memory of the visit. The visit triggered an authentic experience, which was not directly related to the provider's story.

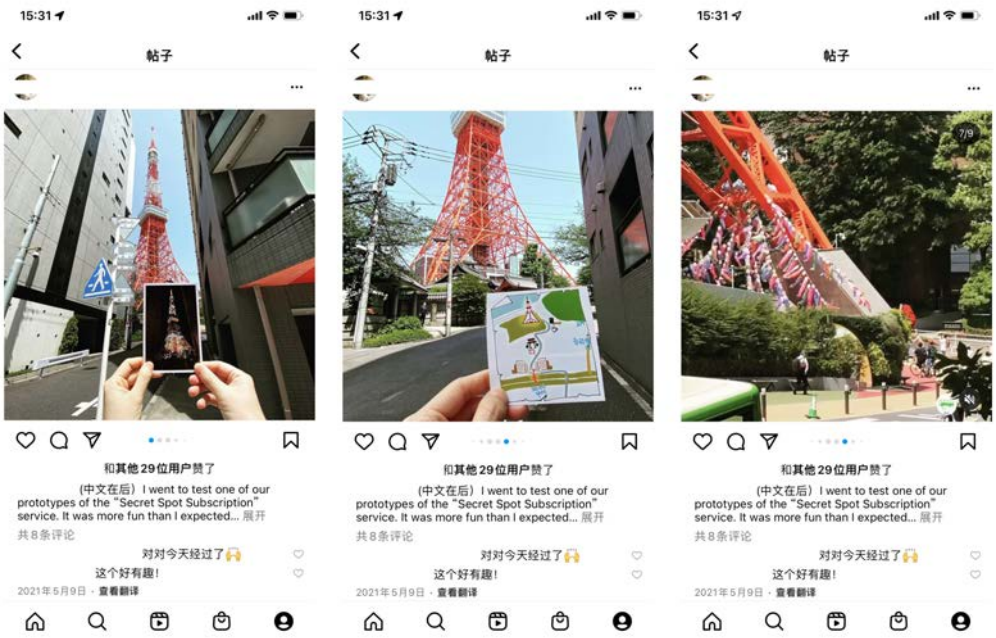


Figure 3.5 Photos taken during the visit

The process simulation was relatively smooth and initially demonstrated some of the hypothetical values that could be realized. The provider's recollection could be diverse, and making the box enhanced their memories. In addition,

the exchanged box allows the receiver to experience emotions and create new memories. However, the provider's interview revealed some difficulties in design.

The negative finding was that all three researchers reported difficulty choosing the objects when curating the box in interviews. One researcher went to the shops with no plan to search for suitable items and found it challenging to find the relevance of the items to the story. Another researcher had a shopping list but changed her plan because she saw more suitable objects at the store. The other researcher's concern was whether her chosen items were ideal for the box receiver's preferences. We were confused because there were no set criteria for selecting the things to be placed in the box. Choosing a secret spot and storytelling is another procedure that triggered similar concerns about preferences. Researchers deliberated the storytelling order, worrying whether the receiver could be engaged. The providers were unsure whether the place was special enough for the receiver to generate good memories, and this concern extended to the unboxing session, where one researcher's facial expression was relieved to see the receiver's expression of favor.

Feedback from receivers suggests that the provider's selection was quite good. From the receiver's perspective, it was not the item itself but how it related to the provider's story or how to use it was necessary. Some objects confused receivers because they did not know precisely why they were a part of the box.

3.4.3 Develop design criteria

The preliminary prototype demonstrates the positive values that the service can bring through exchanging the secret spot with others. These values include the co-created experience and positive emotions that come with the cultural box, such as a sense of surprise, satisfaction, and nostalgia. At the same time, the lack of clarity in the criteria for curating the box caused difficulties for the provider. Based on the findings, four design criteria were developed for this design.

- Design Criterion 1: The cultural box should include the following items:
  1) A list of the contents of the box.
  2) A postcard that shows a photo of the secret spot.
  3) A letter to the receiver.

4) The address of the secret spot.

5) Recommended goods.

- Design Criterion 2: When collecting secret spots, the service operator should provide the questions to trigger the content provider's memories and help them to clarify the items they would like to recommend.
- Design Criterion 3: The service operator should provide a real and reachable secret spot to the receiver and guide the receivers to follow a sequence when going through the items in the box.
- Design Criterion 4: There should be a set budget to control the total price of the items.

Developing the design criteria was to prepare for the further implementation of the user study on a larger scale. When people who know little about the service want to participate as providers or receivers, it is necessary to explain the design concept and process clearly. The preliminary prototype test was carried out by the research team. Therefore it ran smoothly because all the participants were familiar with the service idea, having less chance of misunderstanding the design concept when choosing and experiencing the secret spot. Even with a shared understanding of the design concept, we encountered obstacles due to the unclear criteria when creating the props. As the service needs to expand in the future, design criteria could standardize the artifact provided by this service, thus allowing more participants unaware of Your Secret Spot to be engaged efficiently.

3.5. Updated Prototype

The preliminary prototype test proved the positive value proposed by the experience exchange. Based on the results, in June 2021, the prototype was updated according to the established design criteria, and we invited users who were not very familiar with the design concept to participate in the test to get more objective feedback, aiming to answer the following questions:

1. Do the design criteria support collecting the secret spot stories and creating the boxes?

2. Would the blind box bring a sense of surprise to the participants?

3. How does the shared experience influence the way that the receiver experiences the secret spot?

3.5.1 Update the prototype

The updated prototype optimized the preliminary prototype based on the design criteria.

Secret spot providers were required to fill out a Provider's sheet (figure 3.6) that included five questions, presenting the address of the secret spot, photos, stories, items that they recommended to put in the box, and any additional information they wanted to append. The research team curated the culture box based on the form as the service operator. The box consisted of postcard-sized cards designed according to the same theme - a list of contents, a letter card, a map card, and a photo card (figure 3.6). Each box has no less than five items. Objects recommended by the provider were procured without a strict budget constraint to test the average cost of each box.

In addition, one researcher in the team designed a mascot and developed brand guidelines as a branding strategy to arouse cognition of the service. It was used in the box's packaging, and the mascot was drawn in the photo to stimulate the receiver's imagination of the secret spot. A notebook to record the visit and a bookmark with a seasonal greeting message was put into the box as a complimentary gift from the service operator.

3.5.2 Test in a community

Participants and implementation

There were seven participants in the updated prototype test who were all members within the confines of the research seminar, with one male and six females. All participants were content providers who offered a secret spot of theirs, and six of them were box receivers. Of the six receivers, all but one live in China and the others in Japan.

Figure 3.6 Updated prototype

However, different from the previous test, not all secret spots were made into boxes for exchange. I selected three from the seven collected secret spots and made them into boxes. The three chosen spots are all located in Japan, accessible to most receivers. The vibe of those places fits with the design concept, as they are places suitable for people to stay for a while and enjoy a relaxing time. Two of them intended to motivate long-stay visitors, and the other enabled the visitor to enjoy the place when they passed by. Furthermore, the stories associated with these three secret spots have more detail than the locations that were not selected.

No explicit recommendation mechanism was established for this test. However, for some of the participants, the researchers were able to select boxes that might match their tastes based on their preferences. For example, one participant likes to post photos of flowers on social media, and the chosen secret spot was a home gardening vending center. There was no charge to participants. Five out of the six receivers experienced the service by visiting the secret spot.

Data

The updated prototype test used two methods to collect data. A one-on-one semi-structured interview asked participants' views on four topics, the visiting experience, the way of exchange, and the overall service concept. Participants were required to draw an emotional journey map of their emotional fluctuations for their experience. The emotional journey map references the customer journey map. The customer journey map emphasizes the visualization of events during the service process [62], while the emotional journey map describes the user's emotions and helps to observe whether the service brings satisfaction or positive emotions [63]. All the box receivers accepted the interview and drew the emotional journey map.

3.5.3 Findings

Consistency in box making

Compared to the preliminary prototype in which the provider made the box, having the service operator make each box better ensures that the box has consistency in design.

From the service operator's point of view, the design criteria simplified the production. The essential information to produce a cultural box was collected through the provider's sheet, which assured each box contains the coordinative vital elements. The service provider could easily design the cards and purchase the objects specified by the provider. The package, freebies, the usage of the mascot, and the style of the cards conveyed brand consistency to the receiver. Several participants mentioned that in the interview.

"...design of the box, and the small elements inside the book and the sort of the consistency, like the image, and a thank you card and the other stuff. I think it is branding. Its consistent image can be delivered." — Participant 3, updated prototype test.

"...in the photo, there's the small crow (the mascot), and then it's carrying a paper bag with Keio's logo. I think it is adorable, and you put much effort into the details. I think it's well designed." — Participant 5, updated prototype test.

The participants approved that the service should be provided through a physical box because *"in this age where everything is digital, it is nice to receive something tangible" (Participant 3, Updated prototype test).* Another advantage of the physical box acts as a reminder for the user. Participant 6 stated that if someone told her a good place orally, she might forget it soon, but this service kept the place in her mind.

Having the service provider design the box based on design criteria and referring to the brand guideline build up a positive impression of the service for the receiver.

Incoordinate interpretation of goods

While the participants were optimistic about the consistency in the brand image, the counterparties involved in the service had an incoordinate understanding of the design concept.

The provider found it hard to think of a proper secret spot quickly, even though there were examples in the provider's sheet. Although there were examples and illustrations in the provider's sheet, there was no precise regulation to help them select a secret spot. For instance, they were unsure whether the secret spot had to be a free place to enter or whether they could define a restaurant as a secret spot. This uncertainty extended to the recommendation of items, where they were

unsure how the items should relate to the place, which makes the recommendations diverse. One provider had a secret spot that reminded her past life experience in Europe. Therefore she recommended things that could not directly be used at the secret spot but connected to the memories in Europe. Another provider recommended local snacks that could not be put into the box but could be bought at the secret spot.

The diversity creates differences in the receiver's understanding of using the items. Some receivers expressed difficulty understanding the intent of things in the interview. For example, the receiver who got the European postcards did not realize they were related to the provider's letter and thought they were the photos of the secret spot. The freebies from the service operator exacerbated the confusion in understanding the intention of goods. Participant 5 did not realize the drink in the box was the provider's recommendation. In addition to misunderstandings, some receivers indicated that using the items was an experience apart from visiting the secret spot. When a secret spot was not suitable for carrying the food provided in the box (e.g., a place ideal for a short-stay visit), the receiver visited the site and used the objects at home.

Therefore the first question raised for this round test could be answered. The design criteria supported the users to collect the secret spot stories. However, the issue identified for improvement was that the service lacked a clear explanation of the role of the objects inside the box in the design concept, resulting in the item not being able to successfully support some receivers' on-site experiences nor build their impression of the secret spot. Such an explanation would inform participants of the service process and convey the design concept. Therefore, in addition to the original four design criteria, a design criterion was added.

- Design criteria 5: When collecting secret spots and making boxes, the purpose of the objects in the box needs to be clarified.

Positive and negative surprises

In this test, I explored whether receiving a completely unknown cultural box could provide surprising experiences to the users. The result was that the blind box brought both positive surprises and negative surprises.

The coding of the interview text reveals that five factors surprised the receivers, including unknown contents of the box, excellent packaging, having more objects in the box than expected, and receiving unexpected things. The positive surprises came mainly from the novelty of the box. As mentioned in the previous section, although some participants were confused about the intention of the box's contents, they were still pleased to receive a tangible package.

On the other hand, whether the secret spot met the receiver's expectations was the leading cause of negative surprise. After reviewing the box contents, the users assessed the secret spot before the on-site experience. They evaluated whether the location was far from their residence, the activities that could be performed on-site, and, most importantly, whether the secret spot was to their liking. This assessment led to various emotions, which further determined whether they would visit the location or not. A typical example of this was when participant 1 and participant 3, who had utterly different preferences, received each other's secret spot. Participant 1 recommended a rarely visited riverbank as his secret spot, while participant 3's secret spot was a gardening center. The following statement described how they thought about this secret spot after receiving the box.

"It seems to be a quiet place... The problem is that it doesn't really appeal to me, it's not bad, it's good, but it's not my style." — Participant 1, updated prototype test

"I think it was different from my taste, the secret spot. I don't think I'm that kind of person who lights up fireworks near the river. ... it was, I would say, more of an adventure. But like you don't know what to expect. So, I had more worries." — Participant 3, updated prototype test

Participant 1 did not visit the secret spot. As the secret spot was not attractive to him, he revealed that going to the place had low priority in his leisure activities. On the contrary, despite the expectation that this place did not fit her taste well, participant 3 visited the site. On her way to the secret spot, the unfamiliarity with the provider's proposed activities made the experience unimaginable and caused relatively negative emotions. Her feeling could also be interpreted from the emotional journey map. When preparing for the visit, her curve for the affective changes was the lowest position on the figure 3.7.

The emotional journey map shows how pre-visit perceptions affect the emotions

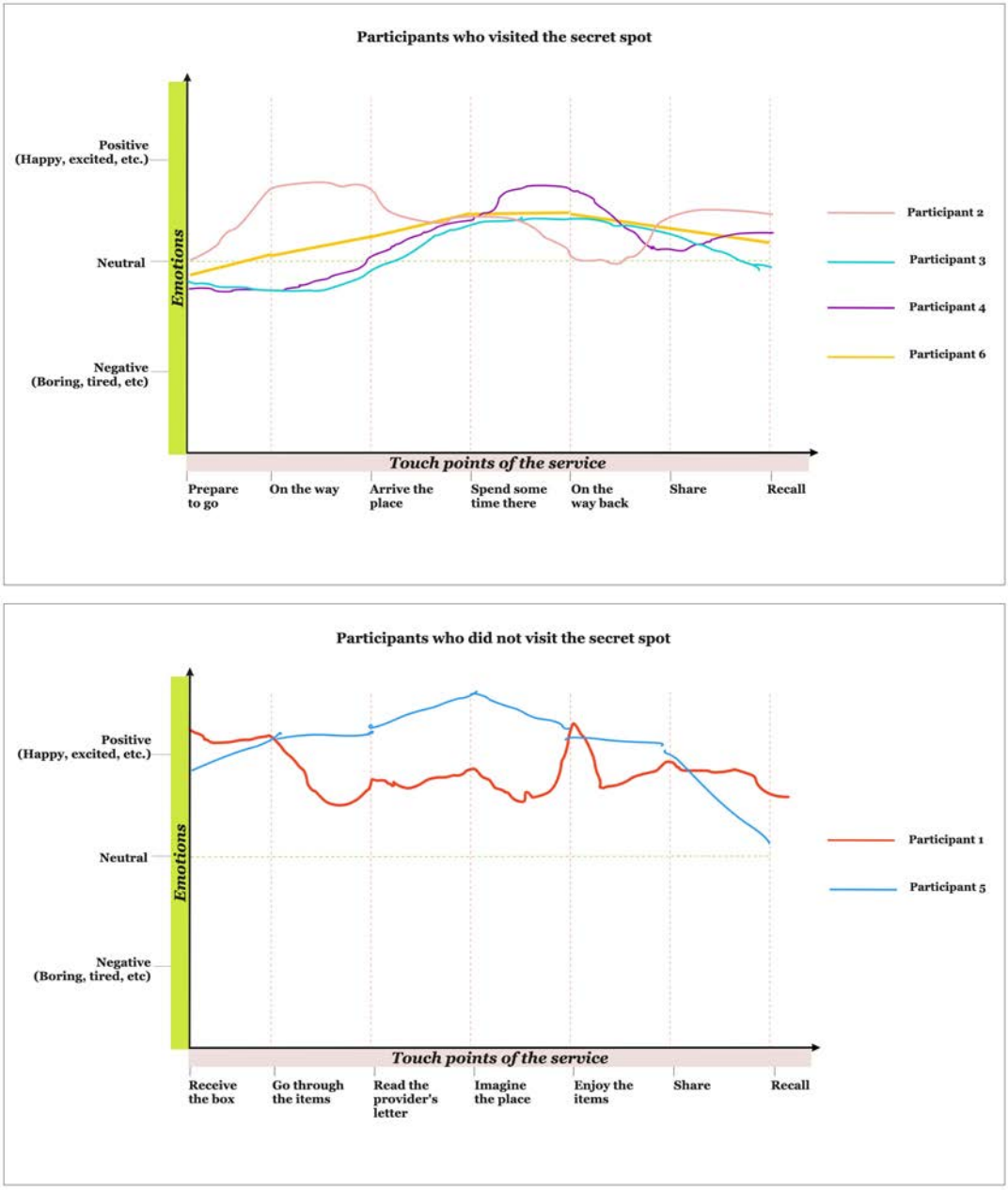


Figure 3.7 Emotional journey maps drew by the participants

of other participants as well. Three of the four people who went to the secret spot (participants 3, 4, and 6) felt some negative emotions when they prepared to visit. These three participants received the secret spot in a place they had never been before. Their mood curves gradually increased and peaked when they arrived at the location and spent some time there. The change in their feelings suggests that when the travelers cannot predict their future experience, they feel uncertain until they arrive at the site. Travel distance is another important factor influencing the expectation, with participants revealing in the interview that travel distance acts as a mediator in their experience. As users spend more time on the way, they value the experience upon arrival. If the on-site experience exceeds expectations, it is worth the travel time; if the on-site experience is mediocre, it reduces satisfaction. The mood curve of participant 2, on the other hand, confirms that building pre-visit expectations help users create positive emotions. She enjoyed finding the location more than the other participants because the secret spot was located on her campus. Although she did not know the exact location, she had previous knowledge of the campus. Therefore, her description of finding this secret spot is *"fun to explore whether I am taking the right train or heading towards the right direction."*

It answers the second question raised for this test: the tangible blind box generally provided positive surprises for the user, but whether the secret spot met the user's expectations influenced the user's mood curve and may have provided negative surprises. When the participants were not able to build up sufficient perceptions of their future experience at the secret spot, or when such expectations are not aligned with their preferences, the users may feel a sense of uncertainty. The users proposed advice based on their experiences. Participants 3 and 4 suggested that they would like to have a secret spot close to their interests, and participants 1 and 6 stated that they would like the secret spot to be relevant to their personal experiences. Therefore, in the subsequent design, I aim to improve the matching of the box to the user's preferences while retaining the tangible blind box that creates positive surprises for the user.

Perceived values

The update prototype test invited participants who were part of the same research group but not involved in the project's design. The purpose was to observe how users who did not know the design concept of the service would experience the secret spot and how the service would propose value to the participants. Participants provided insights into various values. Exploring the value perceived by the participants aims to refine the design and further improve the participants' experience. In consumer behavior, perceived value refers to the consumer's evaluation of a product or service, which has multiple dimensions, including "emotional value, social value, functional value (price/value for money), functional value (performance/quality)" [49]. In tourism research, Chen et al. stated that perceived value moderates the trip quality and satisfaction [39].

First, the indirect exchange links the provider and the receiver. The anonymous sender fostered imagination. For example, Participant 6 mentioned in the interview, *"When I visited there...the area was a residential district, and I thought about what it would be like for the recommender's family to live here and what their house would be like."* Participant 3 looked at the photos and imagined the provider even though the place did not fit her quite well. *"...because I imagine that this person enjoyed being in a group like drinking, chatting loudly."* However, the participants' imagination was based on the premise that they probably knew each other. Participant 6 argued that if the recommendation came from a stranger, the box's content was not enough for her to imagine the other person, and she needed more information, such as describing some characteristics of the recommender. In addition to arousing imagination, the fact that the participants are in the same community makes this service valuable during the COVID-19 pandemic for members who cannot physically join the community. Different from the preliminary prototype test in which all the participants were living in Japan, participant 5 in this test was living in China and could not travel to Japan because of the pandemic. She received a secret spot that was highly relevant to the community, which was a place at the back of a building on the university campus. Participant 5 stated that this secret spot was very appropriate for her because she felt community inclusive under particular circumstances.

In addition, the indirect exchange enabled *"the secretness adds a little bit more*

different flavor to the place" (Participant 3). The "flavor" included some negative feelings, such as the uncertainty mentioned in the previous section, and positive emotions, such as the experience of participant 3. She said she would not have known about the place if it were not for the provider, so she felt a *"weak"* and *"a little bit interesting connection to the recommender"*.

Second, the provider's experience attached meanings to the secret spot for the receivers, yet the receivers did not necessarily replicate the provider's experiences. The secret spots selected were all located in places familiar to the provider. However, the receivers other than participant 2 did not know about the secret spot, nor had they been familiar with the area nearby. Therefore, the provider's story and photo are the only way for them to know about this place. The stories and photos in the box helped them build an initial impression and plan how they would experience the location. For example, three participants (participants 3, 4 and 6) invited someone to accompany them to visit the secret spot. They considered the companions based on the box contents.

" I guess after I received a box, I thought about whom I'm going to hang out with." — Participant 3, updated prototype test.

"...the recommended spot attracts me because my mom likes gardening, she actually wanted to go somewhere like that." — Participant 4, updated.

In addition to inviting people to travel with them, one other common action of the receiver was the desire to find the exact same scene on-site as in the provider's photos, and none of them succeeded because of the different views over time. Instead, the receivers enjoyed the location in their own way. Participant 4 spent at least two hours and described the place as *"impressive"*. She and Participant 6 bought something on-site to take home. As for participant 6, the secret spot became *"the place I bought my chili"*. Both of them shared their travel experience after the visit. The receiver's mood curves (figure 3.7) indicate that even though they were not in a very high mood at departure, the on-site experience brought a positive mood. In this test, the providers' knowledge helped the receivers establish their perception of the place, thus participating in co-creating the receiver's experience. The receivers created their own experience based on the provider's shared experience.

Third, a common finding was that both the provider and the receiver require a

channel for restricted communication. Similar to the preliminary prototype test results, the providers had concerns when recommending the secret spot since they wondered if the receiver liked the place. It aroused their curiosity to know the receiver's experience was at the secret spot. However, participant 3, as the provider, said that she wanted to be able to choose whether or not to check the feedback from the receiver and felt that she only needed to know positive feedback. On the other hand, the receivers said that they wanted a way to express their gratitude or share their experience with the provider if they wanted to know. It did not represent that they wanted to know the provider directly. There was a need for both the counterparties to avoid possible negative interactions while both of them would like to bring positive emotions to the other side. Thus the presence of an intermediary was necessary in this case.

Overall, the participants' perceived value shows that indirect exchange inside the community adds value to the users, which answers the last question for this stage. The imagination and speculation established a weak connection between the users. Despite this being a valuable finding, instead of limiting the scope of the target user to the community, the service would like to continue exploring the values of exchanging experiences between strangers in the next step. In this test, the researchers validated that the stories and photos from the provider are an essential part of the co-creation experience because they build the initial impression for the receiver. The most crucial component of the co-creation experience remains the receiver's own experience. In the next step, a channel for post-experience communication would be established as both parties need a way to communicate the on-site experience.

3.6. Refined Prototype

The previous user test exposed the value that the blind boxes exchanged inside the community brought a sense of surprise to the users. The provider's experience at the secret spot had an emotional impact on the receiver in terms of adding meaning to the place for the receiver to motivate their visit and create new experiences. On the other hand, the design is deficient in that the receiver's different preferences

from the provider lead to certain negative emotions so that they were not being able or want to go to enjoy the secret spot. The usefulness of the objects in the box lacks sufficient explanation, resulting in the separate experience of using the things and visiting the secret spot.

Therefore, the researcher refined the prototype intending to explore the following issues.

1. Does a certain degree of customization to the user using a pairing mechanism enhance the user experience?

2. Does the description of the items' usefulness help the user build an image of the destination?

3. What value does this service propose when exchanging the boxes between strangers rather than community members?

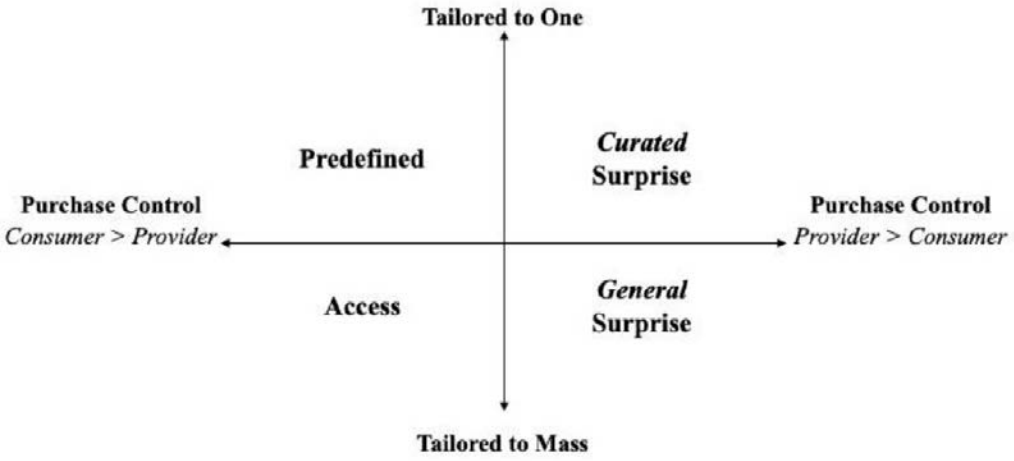
3.6.1 Refine the prototype

Building on the updated prototype, the refined prototype has four improvements. The receiver could actively decide whether they want a random box; the purpose of the items in the box are labeled; the service operator determines the items in the box; a channel is designed to collect feedback from the receivers.

Design a pairing survey

As Your Secret Spot intended to use a tangible blind box to deliver the experience, it is essential to define the degree to which the content is surprising. Bischof et al. proposed a four dimension framework (figure 3.8) for subscription commerce, combining personalization (low vs. high) and degree of surprise (low vs. high control over the subscription's products) [46]. According to the framework, surprise-based commerce could be divided into general surprise and curated surprise, based on the user's level of customization. General surprise provides content that the user has no control over, while curated surprise applies the item to the user. Both archetypes indulge the user's urge for discovery [46]. The updated prototype uses the general surprise approach, but while some users recognize the positive sur-

prise, it creates a negative surprise for another part of the users. Therefore the refined prototype will explore the other way to propose curated surprises to users.



(Source: Bischof et al. [46])

Figure 3.8 A framework on the four archetypes of consumer goods subscriptions

Consumers have foreseen certain risks when purchasing surprise boxes as they know there could be content that they do not like. These risks are regarded as the perceived risks [46]. The previous tests have shown that users' acceptance of perceived risk varies, with some accepting it gladly and others having a negative experience. To meet the different needs, I designed a pairing survey that enables the receivers to decide the extent of customization. In the pairing survey, participants choose if they want a random box or one that matches their tastes. A negative answer presumes that the actor is comfortable with the risk brought by randomness. Furthermore, the survey includes options about the accessibility of the location. The receivers can choose from a secret spot in the city they live in or a place located outside the city. The former option implies that the secret spot is accessible to the users in terms of transportation. These two questions aim to build certain expectations according to the receivers' preference of risks.

For the participants who chose to customize their boxes, a pairing algorithm designed based on a Content-based Recommendation System was implemented. A Content-based Recommendation System matches the user's preference with the content object's attributes and generates recommendations relevant to the

user based on the matching results [34]. A fully functioned Content-based Recommendation System should learn the user's intention from the user's behavior that shows their interest, e.g., their preference rating to a particular movie, and the analysis of the attributes of the contents, e.g., the keywords that describes a movie. It should also amend the recommendation based on learning from the user's feedback. It can recommend things that the users did not rate before.

In this design, the pairing algorithm draws on but simplifies the recommendation process[1]. Thirty-two attributes, classified into four categories (appendix A), were created to match the secret spot's features and the user's preferences. The providers check the tags that describe the location, while the receivers select the tags that fit their preferences. Figure 3.9 gives an example of calculation. When the provider and the receiver check the same tag, one point is added to the score representing the user's preference, defined as a Preference Score (PS). To avoid the interfering impact caused by the number of tags checked by the provider, PS was divided by the total number of tags checked by the provider to get the final Recommendation Degree (RD).

When selecting boxes for the participants, the secret spot with the highest RD has the priority. If two or more places share the same RD, the receiver will get the place with the higher PS. In addition to the RD and PS, two additional preference conditions were also considered.

1) Whether the receiver wants to receive locations from abroad.

2) Whether the receiver wants to receive locations outside their city.

If the result with the highest RD is contrary to the above two preferences of the user, the current highest place is filtered out, and the place with the next highest RD is selected.

Classify the items

Lacking proper explanations for the items inside the box resulted in the goods not supporting the receiver's experience related to the secret spot. When refining the prototype, objects are labeled to indicate how they relate to the secret spot, aiming to foster the imagination of the secret spot. Based on the information

1 https://developers.google.com/machine-learning/recommendation/content-based/basics

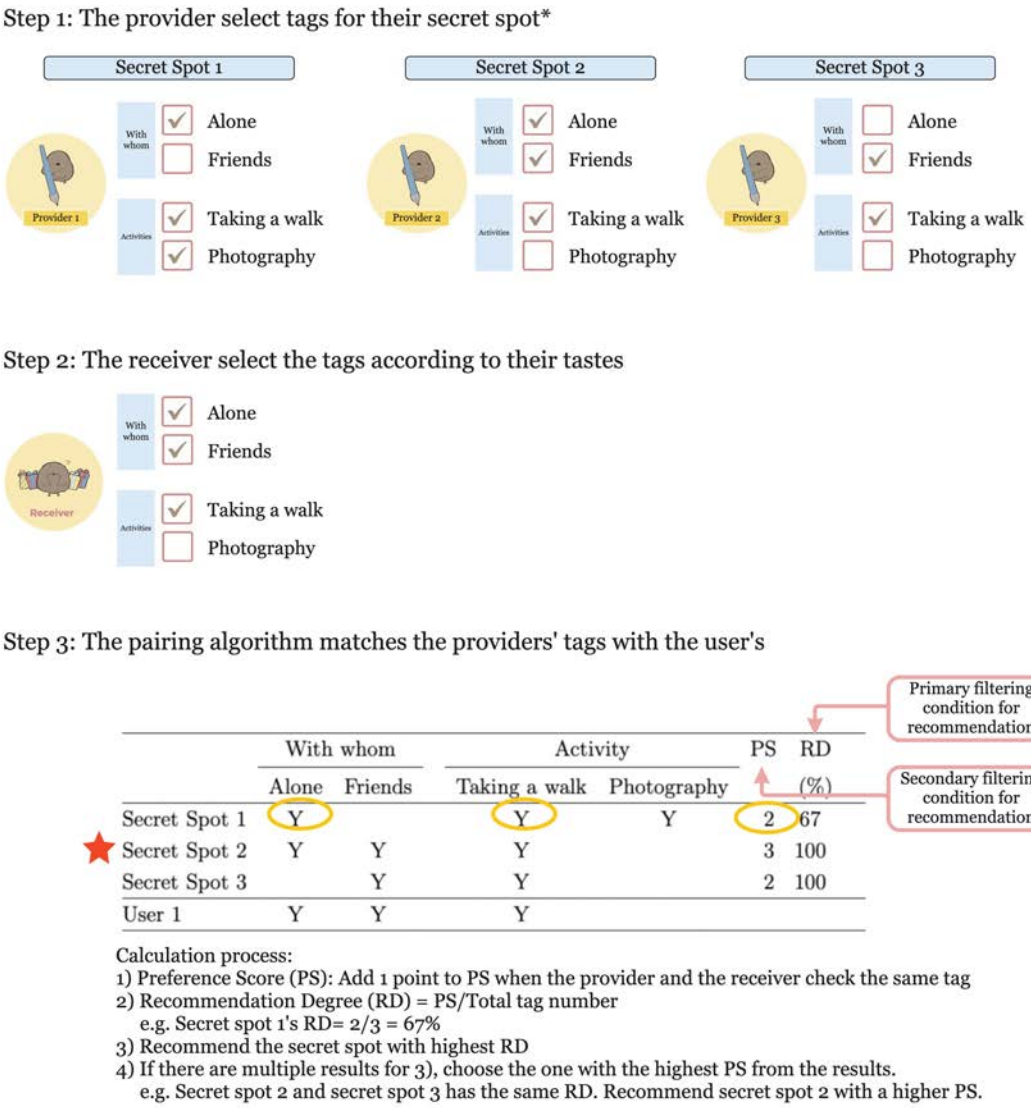


Figure 3.9 The pairing process

collected in the previous round, seven meanings or uses for the items recommended by the provider were further grouped into three categories. Table 3.1 shows the classification of the items. One is related to the provider's experience, one is associated with the secret spot, and one is related to the provider himself. The three categories were printed on the stickers. The items belonging to the same category are wrapped and sealed with a labeling sticker (figure 3.10).

Table 3.1 The categorization of the items

Labels of the item	**Meanings of the item**
Goods that help you enjoy the story of the secret spot	Culturally related local snacks
	Goods that mentioned in the provider's story
	Goods that the provider bought or used at the spot
Goods that best fit the vibe of the spot	Goods that best fit the season
	Goods that help to enjoy the vibe of the spot
	Goods that help to enjoy the possible activities at the spot
Spot provider's personal favorites	Goods that appointed by the provider

Figure 3.10 Item categorization

This classification is used to control the quality of the items in the box as well. In the previous version of the prototype, the service operator purchased the items according to the provider's designation, which caused difficulties in two aspects. One is to control the cost. The average price of the items in the box exceeded 1000 JPY, but the price that users were willing to pay, as learned in the interview,

could not cover the cost. The second is the provider's inability to suggest suitable items when recommending. Therefore, in this refined prototype, the provider no longer needs to specify particular items but can choose from the eight types of items (table 3.1) in the pairing survey. It is up to the service operator to decide what things to place in each box.

Provide a channel for reviews

The previous design created a way for the provider to share their experience with the receiver. However, it was a one-way process in which receivers found no place to share their thoughts in return. Aiming to accomplish the co-creation experience, a channel for receivers to share their experience with the provider was built in the refined prototype.

After receiving the box and experiencing the secret spot, receivers were required to fill out a feedback survey. The survey's primary purpose was to investigate how satisfied receivers were with each element of this service. The final question of the feedback survey asked the receivers to write a note to the provider. It could be a story of their on-site experience or simple words to express their feelings. The service operator collected the reviews and forwarded them to the provider via email. The indirect sharing process through the service operator aims to reduce the risk of privacy exposure and filter out negative comments. In addition, the service operator designs the user feedback into a card that fits the secret spot theme to give the provider a better visual experience.

In a word, the refined prototype was intended to reduce perceived risk by adding optional customization while improving the exchange of experience between provider and receiver about the secret spot through item classification and sending feedback.

3.6.2 Exchange the experience between strangers

A user test was conducted by sending physical boxes to test the refined prototype. Unlike the previous round of tests run within the community, this round aimed to explore how participants who did not know each other would experience ex-

changing the cultural boxes. Table 3.2 compares the differences between the two tests. The implementation is described in this section in detail.

Table 3.2 Comparing the updated prototype test and the refined prototype test

	Updated prototype test	Refined prototype test
Participants	7	15
Story Provider	7	4
Box Receiver	6	14
Participation Fee	Free	500 JPY/30 RMB
Scope of Recruitment	Internal (research seminar)	General (SNS and physical stall)
Recommendation	Random	Pairing algorithm
Items	Recommended by providers	Selected by the service operator
Data Collection	Interview and emotional journey map	Interview and feedback survey

Participants and implementation

The recruiting message was released through the research group members' SNS platforms to reach the participants outside of the research community. We also set up a booth in a public classroom for one week to recruit participants on site. This test recruited fifteen participants, with six males and nine females, of which five provided secret spots and fourteen became box receivers. One participant was living in China, and the other participants were all living in Japan.

The newly designed pairing survey took the place of the provider's sheet in the previous test. Content providers were required to fill out a pairing survey consisting of ten questions to collect place information, among which there are four questions intended to help the providers to recall their memories. The answers to these questions were regarded as tags of the place for subsequent calculations in the pairing algorithm. Receivers filled out a six-questions pairing survey, and the answers to four of these questions were used as the labels that indicate the user's preference for matching the place. The test charged them 500 JPY as a participation fee for testing the proper price range. Correspondingly, the researcher procured the items at a cost restriction of 500 JPY.

The matching of secret spots with receivers followed the pairing algorithm introduced in the previous section. Based on the data collected by the pairing survey, each one received the box that matches their need for randomness. Those who

requested a random box receive a random box. Those who wanted a partially curated box received the box with the highest RD or PS score among the secret spots matching their location demand.

Data

Data was collected from a one-on-one semi-structured interview and a feedback survey. The feedback survey, which aimed to quantify user satisfaction with both the box and the experience, tackled four topics: the design concept, indirect exchange, proposed values, and business model. In the feedback survey, the receivers answered the same questions related to the secret spot's attributes, which were the same questions in the pairing survey that were asked to the providers, to validate the effectiveness of the pairing algorithm. Twelve out of fifteen participants answered the feedback survey, and eight accepted the interview.

3.6.3 Findings

Customization and sense of satisfaction

Before the refined prototype test, the researcher raised three research questions. The first one was whether the optional customization could enhance the users' experiences. The feedback survey provided insights into this question from two aspects.

One aspect was that the overall user satisfaction with the box was relatively high. Table 3.3 shows the responses on whether users were satisfied with the critical elements in the cultural box. The overall satisfaction of the cultural box reached 78.57%. The medians of satisfaction degree for the contents were all above 70%. The fact that the users were most satisfied with the packaging and the letter validates the findings in the updated prototype test, which are that the consistency of the packaging allows users to build an impression of this service and the provider's experience is the core of the box.

The other aspect was the users' opinions on whether the box matched their taste in the feedback survey. The majority of the participants who requested about a secret spot that fit their taste agreed that they enjoyed the secret spot.

Table 3.3 Box satisfaction in the feedback survey

	Mean value of user's satisfaction (%)	Median of user's satisfaction (%)
Secret Spot Box	78.57	78.57
Package	88.10	85.71
Content list	80.95	78.57
Provider's letter	85.71	85.71
Map	69.05	71.43
Item classification	79.76	85.71
Items	82.14	85.71
Complimentary gift	79.76	78.57

Note: The values are converted to percentages from the results of a 1-7 point Likert Scale.

Figure 3.11 compares the Recommendation Degree[2] (RD) with the user's satisfaction score. The median value of RD is applied to reflect the participant's behavior when choosing the preference tags. Lower RD medians stand for more cautious choices. The Preference Matching Satisfaction[3] (PMS) value reflects whether the box matches the receiver's taste, and the Experience Satisfaction[4] (ES) value is users' feedback on whether they are satisfied with the overall experience. Participants 4, 11, and 12 did not answer the feedback survey. The null RD indicates that the participant (1, 2, and 13) has chosen to receive a random box.

The PMS median was 5.5, indicating that most receivers gave positive feedback about the preference match result. Among the nine users who received secret spots recommended by the pairing algorithm, seven had PMS above 50%, reflecting that they gave positive evaluations on whether the boxes met their tastes. For six participants, the RD, PMS, and ES values showed a gradual upward trend, and the scores after experiencing the service (PMS and ES) were rated higher than the predicted value by the algorithm (RD), implying that the users are positively surprised by the experience because it exceeded their expectation. The

2 Recommendation Degree: Calculation result of the pairing algorithm. An N/A indicates the user chose a random box.

3 Preference Matching Satisfaction: Results of participants' answers to "How does this box fit your interest" in the feedback survey.

4 Experience Satisfactions: Results of participants' answers to"Did you enjoy your visit/at-home experience" in the feedback survey.

two users with lower PMS scores (participants 3 and 8) corroborate the finding from another perspective. For these two participants, the researcher sent them the secret spot with RD lower than their RD median, which means they received a place that did not fit their preferences very well. The reason was that the location conditions filtered out the secret spots with the top RD values. It demonstrates that the influence of geographic location is a weaker factor than the preference when it comes to producing negative surprises. The three participants who chose a random box gave relatively high PS and ES ratings. It validated the hypothesis that these actors are open to the uncertainty brought by randomness.

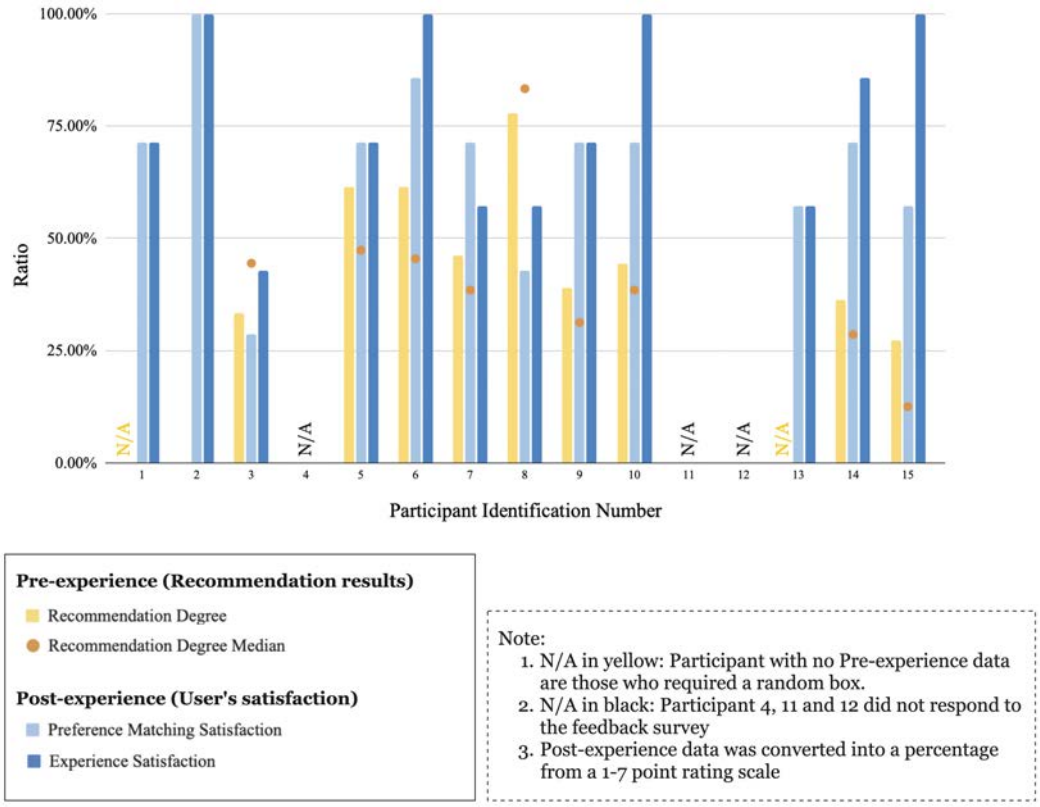


Figure 3.11 Comparison of the recommendation and user's satisfaction

In addition, the test revealed an unexpected source of positive experience besides the befitting preference. Participant 15, who had the lowest RD median, acted cautiously in choosing her preference tags yet gave the highest score in her feedback on the experience. Her interpretation was that the recommended secret spot showed how this service interprets her image. The matching result acted as a user portrait. A correct understanding turned into a positive experience.

"When waiting for the box, I also expected what kind of image you have for me... Then after opening the box, there was the feeling of 'so this is what you guys think of me', and I was very happy." — Participant 15, refined prototype test.

To answer the first research question for this test, enabling the receivers to take the initiative in deciding the extent of customization leads to positive experiences. Those who requested a random box were tolerant of the perceived risks, and those who required a partially customized box were relatively satisfied with the results. Their responses to the feedback survey also evaluated that the pairing algorithm was effective in this test.

Sources of destination images

The second purpose of this test was to explore whether the categorization of items could help users build their impressions of the destination. User feedback reflected that receivers' impressions of the destination were, to some extent, consistent with the provider. However, the objective facts that receivers built the understanding of the secret spot did not precisely match their subjective perceptions.

As explained in the previous section, the recommender chose labels they felt appropriate to describe the secret spot in the pairing survey. On the other hand, receivers selected labels that match their impressions of the secret spot from the same label sets when filling out the feedback survey after experiencing the service. Table 3.4 shows whether the labels selected by the provider and the receiver overlap to determine if the counterparty has an accordant impression of the place. A Corresponding Rate (CR) counts the overlap tags between the provider and the receiver for the same place. The relevantly high CR indicates that the receivers acquainted themselves with the place. The median value reaches 75.00%, showing that the receiver's impression of the secret spot, to some extent, corresponds with the provider's description. Although the receiver's overall destination impression

matches the provider's, only two out of twelve receivers agreed with the "I know the place better" statement in the questionnaire.

Table 3.4 Corresponding rate of tags[5]

	Provider's tag	User's tag	Correspondent tag	Corresponding rate (%)
User 1	18	4	4	100.00
User 2	19	18	15	83.33
User 3	18	4	3	75.00
User 4	N/A	N/A	N/A	N/A
User 5	13	8	6	75.00
User 6	12	9	5	55.56
User 7	12	8	4	50.00
User 8	18	17	12	70.59
User 9	18	6	5	83.33
User 10	18	7	6	85.71
User 11	11	N/A	N/A	N/A
User 12	11	N/A	N/A	N/A
User 13	8	4	3	75.00
User 14	11	5	5	100.00
User 15	11	6	3	50.00

The interview revealed the reasons for this objective and subjective perception gap. The users had divided opinions about the role of item classification. Based on the usefulness, the stickers (figure 3.10) were used for classifying the items as an improvement in the refined prototype. The user who noticed the sticker felt a sense of exploratory. Participant 10 who sent an unboxing video as a feedback carefully read the stickers when he noticed the items were wrapped separately (figure 3.12). Participant 2 stated that the classification sticker guided her and made her look forward to what was the next item when exploring the box. However, for more users, the stickers did not work as expected. The reasons include that the other

5 Provider's tag: the number of tags that providers choose from a set of tags that describe the place.
User's tag: the number of tags that users chose from a set of tags that describe the place.
Overlap tag: the number of overlapped tags in both Provider's tag and User's tag.
Corresponding rate = Overlap tag/User's tag *100%.
Corresponding rate mean = 75.00%; Corresponding rate median = 75.00%

contents distracted them (participants 14 and 15), the notification on the sticker was not in their native language (participant 7), and they simply ignored the sticker (participants 1 and 6).

Figure 3.12 Participant 10 read the classification stickers when unboxing

The classification sticker did not notify the users well does not mean that the objects had no use in helping users build their impressions of the destination. There were several examples of how the items supported the users in developing their destination image. Participant 15 tasted the snacks in the box to get a sense of the local atmosphere of the secret spot, while participant 2 imagined how to use the objects in the box in the secret spot. And participant 7 was surprised that the objects were closely connected with the letter.

"I first read the letter, and then I was surprised that the letter was about going to a barbecue or something, and then you sent me many things like a lighter. ... Initially I thought I could only get the place information. I didn't expect there is stuff that matches the place is in the box, so it feels pretty special." — Participant 7, refined user test.

In the case of the users above, the objects succeeded in establishing their impressions of the destination. The commonality was that the impression of the

destination built was an affective image linked to the local atmosphere, the referrer's story, and the receiver's emotions.

In addition to objects, there are two other ways to build users' impressions of a destination. One is to use story cards for imaginative thinking. The coding of the interviews showed that users understood the secret spot through stories, they imagined the scenario of the provider visiting the secret spot, some participants guessed the personality of the provider through the choice of the secret spot, and they used the story card as a prop to empathize with the provider. The second way is the former experience. Participants 2 and 15 received a secret spot that they had visited before, and they both stated that this secret spot reminded them of their past memories in this place, and in this experience, they revived the local atmosphere. The provider's experience did not change their perceptions but added new content to their perceptions of the local area.

The answer to research question two is that attempts to enhance users' impressions of place through item classification are of limited use. When exploring the box, the users built their impressions of the secret spot through imagination with the support of the provider's story. The items highly relevant to the story and past visit experiences can also assist in building the destination image.

Novel yet reliable exchange between strangers

The third goal of this test was to observe how exchanging secret spots between strangers differed from the exchange between community members in the previous test. The results showed that participants endorsed the experience exchange between strangers in several ways.

Table 3.5 shows the results of interview text coding on this topic. It was a novel experience that brought a sense of expectation and surprise. At the same time, respondents perceived the recommendation as objective since it was a recommendation from an expert in the location. Getting a secret spot from this service is a different experience than getting a recommendation from an acquaintance.

"Friends know what I do every day, and I probably have an idea of what a friend will recommend to me because I know what places he has been to, so it will be revealed from our conversations. If a stranger recommends me something, it is a world of the unknown." — Participant 15, refined prototype test.

Table 3.5 Text coding of interviews about the indirect exchange between strangers

Theme	Codes
Novel experience	Increased expectation
	New experience of receiving things from an unknown person
	Exposure to novel contextual information
	Interesting feeling add by the secretness
	Receive/send something out of the existing social circle
	Sense of romance
	Increase curiosity towards the exchanging community
Obtain objective recommendation	Receive recommendation from an expert of recommending
	Can have objective opinion towards the recommendation
Maintain proper social distance	Indirect exchange reduces awkwardness
	Indirect exchange creates relaxation
	Don't need to be too considerate of others (preference)

Participant 6 mentioned that the location now became *"a place I knew through Your Secret Spot"*, which differed from the other places she found online. Both she and user 7 agreed that receiving a secret spot that matched their preferences aroused their curiosity about the provider. If the recommender is willing to, they would like to get to know them, and the experience in the secret spot served as an opportunity to start a conversation. Contrary to the need to get to know each other, some participants stated that indirect exchange maintains an appropriate social distance between strangers. Users do not need to be too considerate of others' preferences, which further enhances the objectivity of recommendations.

In accordance with the result of the last test, the participants positively confirmed the value of exchanging experiences through a tangible box. Participant 1's view was representative, *"I need to see what's there before I believe it's worth going"*. Participant 7 considered the box informative enough to support him in planning the trip. In addition, the physical box allowed people to value the information they received and keep in mind to visit the secret spot. For example, participant 10 kept the entire box at home as a reminder to visit the secret spot.

Hence the test clarified the answer to the third research question. The indirect exchange between strangers through a tangible box brings the receivers a sense of novelty and objective recommendation. The receivers valued the proper distance between the counterparties and the reliability brought by the tangible box.

Various ways to experience the secret spot

In this test, users who visited the secret spot showed different ways of experiencing the location. The timing they chose for the trip and their actions on-site provide insights into how the service could be improved to propose more value to the experiencers.

First, some visitors went to the secret spot soon after receiving the box, while others saved it for future visits. Participant 14 went on the day of delivery, while Participant 10 went two months after. Participant 10's actions was likely to represent the majority of the receivers in this round of testing. A desirability bias in user visit behavior existed in the previous testing as it was conducted within the research community. Participants 4 and 6 in the updated prototype test stated in the interviews that they would not have traveled to the secret spot so quickly if not for the user test. Instead, they would choose a more appropriate time. In this round of testing, the vast majority of users did not visit this secret spot immediately. In the feedback survey, seven of the twelve respondents stated that they would go to the secret spot in the future, which may be a more objective result than the previous round of testing.

The reason that caused the receivers to visit at different times was distance. Participant 14 received a box that was relatively close to her residence. *"At first, I looked up, far or near. I receive it around 2:00 pm on weekdays. If it's near, if I can go, I will go immediately"*. On the other hand, participant 10's motivation for visiting the location was the need to have the right amount of free time since the secret spot was not in the city where he lived. On the day of the visit, he traveled an hour from his home to Tokyo for business and decided to take a look at the secret spot. *"Since I had already spent a long time traveling to Tokyo, and I had some free time after finishing my work, I should go."* Their ways of thinking are consistent with the results of the previous round of testing, that is, the route and the time spent on transportation are the factors that influence the decision making for the visit to the secret spot.

Second, the ways of building impressions of the destination before visiting differ. Before receiving the box, participant 14 had often passed by the area, so she knew the surroundings. Her image of the secret spot was not that relevant to the provider's story. Whatsmore, she intended not to be influenced by the story. *"I*

tend not to pay a lot of attention because it's my own experience. so I want to try it myself in a different way."

On the contrary, participant 10 had not been to that area before. The provider's story helped him build a strong impression of the destination. *"This letter and photo are the two things enjoyable to read and look at, more than the items...the picture and the way the provider spent the time...I could get into one scene of this story. I can think of the atmosphere."* It revealed that the provider's role in the receiver's experience might vary from person to person. Some receivers appreciate the physical location offered by the provider more, while others tend to capture the emotional value in the provider's experience.

Finally, the visitors used the items in various ways. Participant 14 discarded the box package upon receipt and took only her favorite candy inside the box to the secret spot, even though the other items in the box were closely related to the story and could be used on site. Neither did she use the map inside the box. By exploring the surrounding, she *"found the store on her own and felt a sense of accomplishment."* Participant 10, on the other hand, kept the entire box at home as a memento of the experience. During the visit, he brought the photograph to the site, and tried to find the exact same scene in the picture. The two visitors, familiar or unfamiliar with the area, used different approaches to make the trip an opportunity to discover the place.

Despite the many differences in their experience, the two visitors had one thing in common: the impressions they built of the destination at the beginning were different from the feelings they had during the visit. Participant 14 did prior research on google before going to the secret spot. She expected to feel uncomfortable at the place because the secret spot was a tiny restaurant where she did not usually go. But the provider's story prompted her to go because she thought the recommendation in terms of food and wine was reliable. Although it took some courage to enter the store, she felt satisfied after enjoying the food. Participant 10's impression gap was that the provider's story and the items in the box built the impression that the secret spot was a quaint place, while upon arrival, he found the landscape to be relatively modern. It was not until he took out the provider's photo for comparison and walked to the stairs where the provider took that photo that he felt the atmosphere described in the story. In both cases, the

provider's experience played a role in expanding their scope of actions.

Both visitors gave positive comments about the on-site experience, and they both enjoyed their time in the secret spot. Their actions provided insights into the multiple roles that the provider's experience might play in the receiver's creation of their own travel experience. Many factors affect the user's on-site experience, including the physical and emotional values that the box can provide and the user's personal choices derived from it. In future improvements to the design, it is necessary to provide users with multiple ways to enjoy the trip, rather than being limited to the initial design assumptions.

Provider's met and unmet expectations

The receivers wrote notes to the providers in the feedback survey. They were sent to the participants who were providers as electronic postcards. Participant 4, who got the email, said she was surprised initially but then realized that the feedback did not meet her expectations.

The interview with the providers revealed that they considered several factors when they made recommendations. On the one hand, they are happy to share their lifestyle and enjoy sharing their treasured places with others; on the other hand, they spend a vast amount of energy choosing the secret spots. They recalled precious memories and deliberated on the experience to write about to provide a practical reference to the receiver. That was the reason they would like their secret spot to be cherished by the receivers. Participant 4 said she was expecting personal experiences, for example, how the receiver spent the day in the secret spot, rather than the note with a short sentence that she got.

Although the shared review did not meet their expectations, the provider approved the box's design. Participant 4 was happy to see that the music she recommended was designed into the photo card and sent to the receiver. And participant 7 thought the items that the service operator curated were useful for his secret spot. In addition, after receiving the box, some receivers expressed their desire to become the provider in the future as the provider's story evoked their memories.

The providers' point of view revealed that the value proposed by the service to the service provider did not meet their expectations. More modifications should

be implemented to encourage users to recommend their secret spot, thus ensuring the sustainability of the service.

The learnings for further improvement

The most significant gap found in this test was that although the spot visitors enjoyed their trip, most users were not motivated enough to go to the secret spot and chose to experience the box at home. It was necessary to identify whether there were deficiencies in design that limited the participants' choices. In the interviews, users who had not yet traveled to the site described how they would like to experience the secret spot. Based on the comments, the researcher identified several possible improvements for future design.

- Users who held a favorable impression of the secret spot recognized that the provider's story attached meaning to a niche place. Therefore, the provider's experience will remain at the core content of the box.
- Users who acquired a relatively far secret spot wanted to consider it the center of their itinerary and explore the surrounding area. Thus, the subsequent design will provide more specific location information and other places around the secret spot worth a visit.
- Participants wanted to take photos of secret locations. Therefore, the subsequent design will provide props to encourage users to take and share pictures.

To conclude the refined prototype test, it varified that optional customization establishes the expectation and reduces perceived values for the receivers. The pairing algorithm was applicable for users who want a curated box. In curation, the provider's experience proved again to be the box's core. Still, how to plan the items in the box needed further exploration, as item classification did not work as expected for some receivers. The receivers have developed various ways to create their own secret spot experiences, and more support must be provided to users to choose whether to experience this service at home or on-site. The indirect, stranger-to-stranger exchanges were evaluated in this test, yet the exchange did not meet the provider's expectations regarding the content of the reviews.

3.7. Finalized Design

Based on the learning from the previous prototype tests, the researcher finalized the design with refinements in the artifact and the user's experience. In the last prototype test, users unfolded various ways to experience the secret spot box. Some users went to the secret spot, while others experienced it at home. Therefore, the final design considered ways to enrich the user experience at home and in the field, providing them with a variety of options. The artifact design focused on better illustrating the provider's experience through artifacts to create a destination image for the receivers. The user experience design focuses on encouraging users to create memorable memories of secret locations. This section details the final design of Your Secret Spot, demonstrating the artifact design and the user experience, and describes the expected values proposed by the service.

3.7.1 Finalize the artifact design

A book-size box

In the final design, the research team decided to change the size of the box. A 50 size box (20cm x 17.5cm x 10cm) was used for the package in previous tests. The final design changed the container into an A5 size box (15.7cm x 22.3cm x 2.2cm) for two reasons: lessening the items and cost control.

Previous tests found that too many items interfered with the user's process of exploring the box. The receivers tended not to follow the designed sequence because the goods were attractive. It caused misunderstanding about the usefulness of items or ignoring the explanation of the items. These did not help the receiver build an impression of the secret spot, nor did they help them understand the provider's story. On the other hand, the items' presence enriched the box's content, and part of the item triggered the user's imagination of the secret spot. Therefore, the final design reduced the number of items from five to three. The reduced goods allowed the service operator to pack all the contents into a smaller box, which also reduced the cost of operation. In previous tests, postage costs exceeded the cost of the boxes, which was not conducive to the sustainable operation of the service. The book-sized box in the final design (figure 3.13) enables mailbox delivery and significantly saves postage costs.

Figure 3.13 Final box design

Thematic design of the story cards

As evaluated in the previous tests, the provider's experience at the secret spot is the core of the service. In the box, the set of story cards presents critical information such as the provider's letter, photo, and address of the secret spot. This set of story cards is the first item users get in the box and a vital props for building their first impression of the location.

Therefore, the researcher designed the story cards of each secret spot with a theme. I referred to the provider's stories and the attributes of the secret spot collected from the pairing survey and used different color schemes and decorative elements in the typography to distinguish the style of each secret spot. Figure 3.14 shows the thematic story card in the final design. The story card set includes the following items. An example demonstrates the details of each card is in the appendix B.

- **For receivers**

  a. A list of the box contents: providing the user has an overall view of the box's contents.

Figure 3.14 Thematic design of the story cards

b. A letter from the provider: establishing the impression of the secret spot through text.

c. A photo of the secret spot: building up a visual impression.

d. Map and address: showing geographic location information of the secret spot for the receiver to look up through other channels to learn about the location and route.

e. Think sheet: stimulating the imaginary thinking about the secret spot and the recommender according to the box's contents.

f. nearby spot info: offering other places worth going in the surrounding area for the receivers to extend their on-site experiences.

- **For providers**

g. The review cards: sending the receiver's review to the provider.

Additional story cards

In the finalized design, in addition to the essential elements (letter, photo, and map) previously proposed in the design criteria, two new elements were added to the story card set.

One is the think sheet (figure 3.15), divided into a question card and an answer card. It utilized the descriptive attributes of the secret spot collected by the pairing survey to stimulate the imagination of the users when they experience the service at home. The question cards consisted of four questions.

Q1: How do you think the items relate to the story? - Guiding the receivers and reminding them that the objects in the box are closely linked to the story.

Q2: What do you imagine the sender to be like? - Stimulating the imagination about the provider based on the box contents.

Q3: What activities would fit this place? - The answers of this question are the label that the provider chose for the secret spot in the pairing survey. The labels help the receivers understand what activities could be done in the secret spot, thus building expectations while avoiding negative surprises.

Q4: What do you think would be the best time to visit the place? - As with Q3, the answers are the tags that the provider chose in the pairing survey to trigger the imagination.

In the answer sheet, besides the labels chosen by the secret spot provider, I designed blank spaces for receivers to record their own experiences.

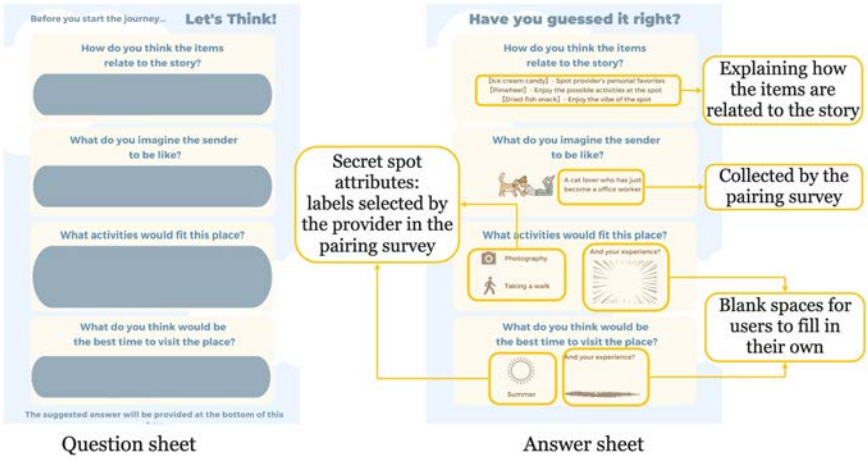


Figure 3.15 Explanation of the think sheet

The second item added to the finalized design is the nearby spot card (figure 3.16). Adding peripheral location information builds users' impressions of the surrounding area, thus enhancing the motivation to visit the site. In previous tests, users' feedback indicated that they wanted a trip centering on the secret spot, but *"looking up the surrounding locations was a hassle" (participant 7, refined prototype test)*, so *"being fed with the knowledge of the place passively" (participant 15, refined prototype test)* is a good choice. On the other hand, as found in the updated prototype, they weighed the time spent on transportation and the actual on-site experience for some secret spots far from the receiver's residence. If a place is too far, visiting only the secret spot may not be worth a long-time journey. Providing more locations that are likely to capture the user's attention proposes a richer experience at the site, and the researcher expect this design to improve the user's motivation to travel to the secret spot.

The card was designed with consideration of both place variety and distance. The researcher selected locations within a 30-minute walking distance from the

secret spot in Google Maps that were rated relatively high (visitors scored four or more). Each card includes at least one dining-related place, e.g., a cafe or restaurant, and one sightseeing location, such as a museum or historical site.

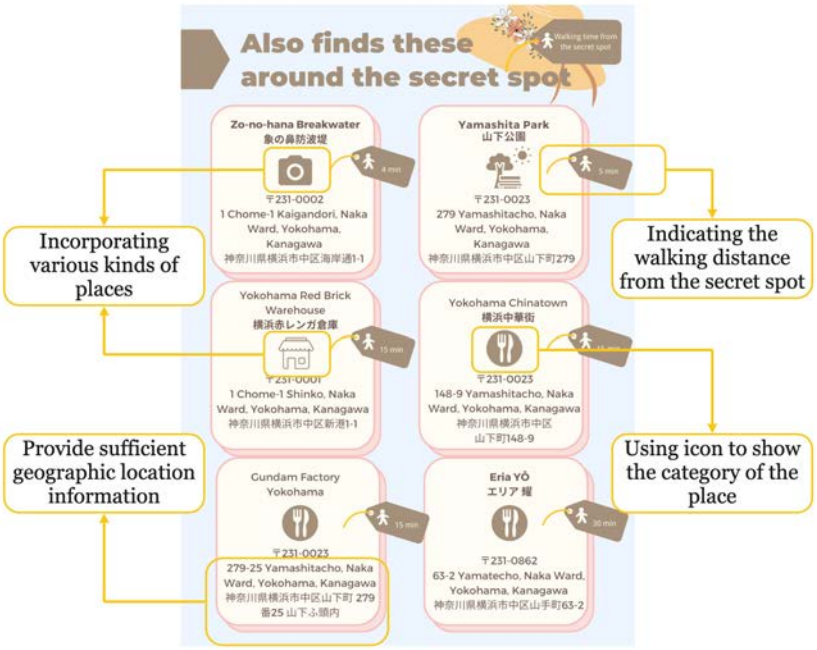


Figure 3.16 Explanation of the nearby spot card

To conclude for the story card set design, the researcher made the thematic cards building on the provider's experiences. The story card set intended to enrich the imagination of the secret spot. The cards guide the receivers to associate the objects in the box with the secret spot to provide the user with a comprehensive impression of the destination.

On-site kit and At-home kit

The previous tests revealed various ways to enjoy the box. Both the at-home and on-site experience are essential elements in this design. To better support the different stages in the user's experience, the box contents were divided into an on-site kit and an at-home kit (figure 3.17). An at-home kit supports users to use the items at home for imaginary thinking and then build an impression of the

secret spot. The on-site kit assists users in expanding the experience to the site and enjoying the time of exploring the secret spot.

The new story cards mentioned in the previous section are placed in different kits. The at-home kit includes the think sheet answer card that allows receivers to imagine the provider and secret spot before heading to the destination. The on-site kit includes a nearby spot information card that motivates users to explore the secret spot. In addition, my teammate designed a photo prop, which is a transparent card in the shape of a picture frame for each on-site kit. They are the memento to remind users to visit the secret spot and make a good memory. The two kits are packaged separately to guide the users and to improve the problem of unclear descriptions of the items in the previous prototype tests.

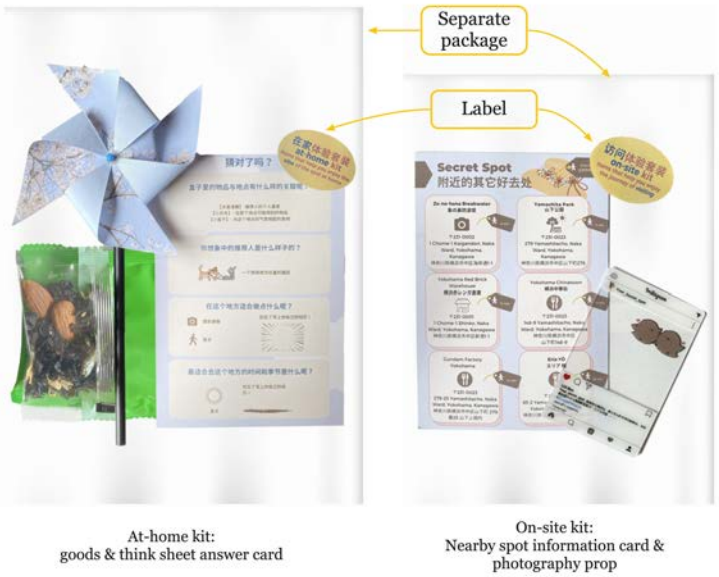


Figure 3.17 Example of the on-site and at-home kits

Other elements

Besides the items related to the secret spot, there are chocolates and stickers as giveaways in the box. A brochure and a thank you card are enclosed to build a brand image (figure 3.18).

Figure 3.18 Example of other elements in the box

3.7.2 Experience design

Optional customization

The final design retains the option for optional customization because it brought users a generally positive experience in the previous test. Users could make customization choices in two aspects.

First, users could choose the role of their participation in this activity, being a provider, a receiver, or experiencing both. The secret spots collected in previous tests ensure the service operator has a certain number of locations available to the user and, therefore, being a spot provider is not a mandatory requirement when participating.

Second, the receivers can choose whether or not they want a random box. A questionnaire will collect data and recommend a secret spot to those who want a customized secret spot. The receivers can choose whether they want a box in their place of residence. They can also select the labels from the spot attributes that match their preferences to get recommendations from the pairing algorithm. The options of the questionnaire and the recommendation algorithm are kept consistent with those of the refined prototype. If a user participates in this service multiple times, they will not be assigned the same box. The service operator keeps the previous records and thus sends a different box to the receiver.

User's experience

Users of this service go through a four-stage experience fostered by the artifacts in the cultural surprise box. Figure 3.19 demonstrates the user's experience.

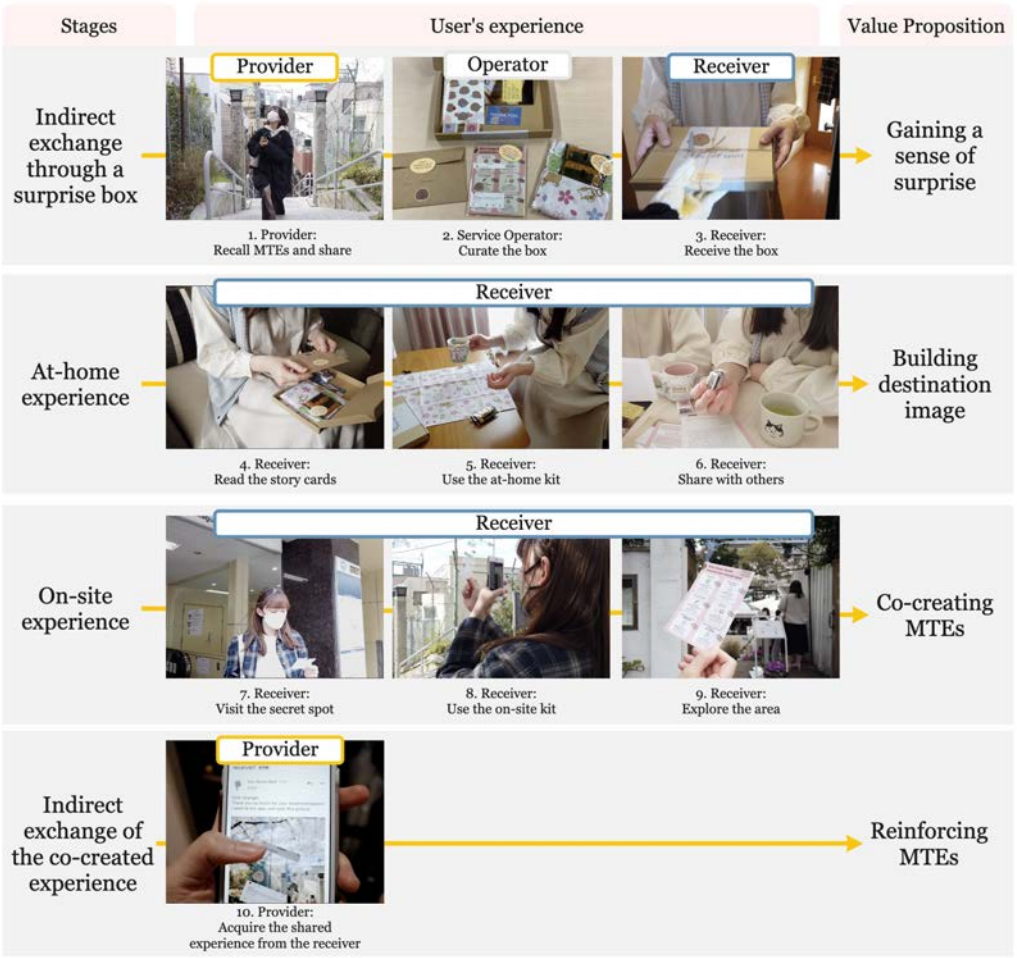


Figure 3.19 Users experience and value proposition

The first stage is the indirect blind box exchange, where the provider recalls the experience in the secret spot. The service operator curates a box based on this experience and sends the surprise box to the receiver. The second stage is the at-home experience. Receivers read story cards and use the goods and think sheets to imagine and build their knowledge of the secret spot. Some receivers

may also share stories about the box with family or friends during this stage. The third stage is the on-site experience, where the receiver travels to the secret spot and enjoys the place. They could refer to the provider's experience or use props in the on-site kit to explore the surrounding area and build their own Memorable Tourism Experience. The last stage is the indirect experience exchange, where the receiver can share the experience about the secret spot with the provider through the service operator.

Through the four stages of experience, this service intends to propose several fundamental values to users, which will be further interpreted in the next section.

3.7.3 Value proposition

Through the interaction with the artifact and the user's experience fostered by the artifact, this service provides users with the opportunity to build and reinforce their MTEs. Generating good memories related to the secret spot aims to contribute to people's well-being in their leisure time. As figure 3.19 shows, values are proposed to the two sides along with their experience in the four stages. The following values are proposed to the provider and receiver.

Providers

Providers participate in the initial and concluding phases of the user experience. They serve as both the starting and ending points of the exchange.

First, they review previous MTEs to determine a suitable place when searching for a secret spot to recommend. Thus, their previous MTEs were reinforced.

Secondly, the provider narrates their stories about the secret spot to the service provider, inspired by the questions in a survey. It prompts the provider to recall details of past experiences and fosters a sense of nostalgia.

Thirdly, during the second and third stages, when receivers explore the secret spot, providers await the contribution of their shared messages. It will evoke feelings of anticipation as they imagine the receiver's experiences.

In the last stage, after waiting, the provider is surprised to receive feedback unexpectedly one day. Completing the sharing and exchanging experiences will provide the provider with a sense of fulfillment. Depending on the extent to which

the receivers describe their experience, the provider may be able to reinforce their impressions of the secret spot, thereby boosting their MTE.

Receivers

For the receiver, the proposed values are based on their entire user experience as they proceed through all four stages.

In the first stage, receiving an unknown box will evoke a sense of surprise. In the second stage, receivers explore the box at home. The story stimulates their imagination regarding the provider and secret spot. In addition, receivers make inferences as they use the items following the guidance. The receivers construct a cognitive and affective image of the destination based on their imaginings and deductions.

In the third stage, receivers' MTEs are co-created during their visit to the secret spot. They can associate the provider's narrative, and encounter new experiences by exploring the surrounding area. The visit reinforces the destination image established in the previous phase.

In the final stage, sending feedback messages allows the customer to reflect on their experience, thereby reinforcing the MTE and fostering a sense of satisfaction from sharing with the provider.

The preceding value propositions are summarized based on theoretical context and prior user testing. According to the S-D Logic, successful value offerings are those that are recognized by users in the service context. User tests will validate whether the final design successfully delivers these values to users. The validation will be elaborated on in the following chapter.

Chapter 4
Evaluation

In the previous chapter, the design process answered the research questions at each stage through the iteration and testing of the prototypes. It determines the final artifact and user experience design of the service. This service exchanges MTE-based experiences between strangers. Through the indirect exchanges, the provider's MTE becomes an opportunity for receivers to create their own MTE.

This chapter elaborates on the evaluation of the value proposition. The following research questions were raised in accordance with the value proposition, of which the answers unfold the values that users accept in the service process.

- RQ1: Whether the blind box brings about extended experiences?
- RQ2: Whether the contents of the cultural blind box build a destination image for receivers?
- RQ3: Whether users generate MTEs through on-site experience?
- RQ4: Whether the provider's experiences co-create the receiver's MTEs through indirect exchange?

The evaluation went through two phases. The first phase aimed to obtain a large number of users' general opinions about the artifact design through an online simulation test and to recruit users interested in the design concept to participate in the second validation phase. The second phase was a physical user test to gain insights from the actual user experience. This chapter will specify the methodology, the user test implementation, the results, and the reflection.

4.1. Research Design

4.1.1 Props

Different props were used for the two phases of evaluation. Phase 1 used video for testing online, and phase 2 used a tangible box to simulate the actual service process.

The reason for conducting an online simulation test in phase 1 was to invite a wide range of users, regardless of limitations in their physical location. The simulation consisted of two videos - a concept video and an unboxing video, followed by a survey (figure 4.1). The concept video demonstrates the user experience, as shown in figure 3.19, with the captions stating the proposed values. The second video is a first-person perspective unboxing video that simulates the at-home experience stage in the user experience, showing the participant all the box contents in a designed sequential order. After watching both videos, the user fills out a two-part survey.

In phase 2, users received the tangible box presented in the final design section (figure 3.13). The service operator curated the box contents, matched it according to the receiver's requirement in customization, and sent it with the letter pack service of Japan Post to create the environment for testing. By receiving the box, participants could experience the whole service process. After that, the box includes a thank-you card with the feedback survey QR code to collect participants' feedback.

Figure 4.1 Simulation test process

4.1.2 Sample selection

The target samples of the evaluation were spontaneous participants. Anyone with access to a poster explaining the design concept could attend the simulation test. Attending the tests was a filter to recognize people interested in this service concept.

In phase 1, posters and QR codes for the simulation test were distributed through multiple channels, including the research team members' SNS, the graduate school's Slack (an online workspace) channel, and unofficial chat groups. The mock test was open from April 14 until April 29, lasting 15 days. The target number of respondents was a hundred. Due to the networking of the research team, we expect participants mainly to come from Japan and China.

The participants of the phase 2 user test were recruited from those who attended the simulation test. This way, it is more likely to recruit people who had learned about the service concept from the simulation test and are interested in the design concept rather than a random passerby. At the end of the survey in phase 1, users could sign up for the follow-up physical user test. Only those living in Japan and China could sign up for the physical test because of the researcher's resource constraints that mailing to the other countries would result in unmanageable test length and cost. The target number of participants is thirty, which doubled the number in the refined prototype test.

4.1.3 Data

The evaluation primarily used quantitative research methods, with a simulation survey and a feedback survey designed for two evaluation phases to collect data online. In addition, two qualitative methods, interview and participant observation, were also used in the second phase to understand the insights of the participants with different roles in the test. This section will explain the survey design and other qualitative data collection methods in detail.

Survey

The main part of the simulation test feedback survey included questions related to three topics. The first topic was whether the box content provokes imagination.

These questions were intended to confirm whether the final artifact design could drive participants' imagination. The second topic was whether the box helped the user build an impression of the destination, which was intended to know the user's tendency regarding the RQ1. Questions on these two topics were mainly measured by a 1 to 7 Likert Scale. The third topic asked users how to use the box at home and on-site through multiple choice. The options were statements drawn from the previous prototype test interviews. In addition, there was an open-ended question to collect users' opinions on the possible application scenarios of this service.

The survey questions in phase 2 touched upon four topics: the ways of experience, agreement with the value propositions, the measurement of MTE and destination image, and the feedback to the provider. The options or statements for the questions on the first two topics were extracted from the previous interview coding. In the third topic, the MTE measurement refers to variables from Kim's study [1], of which I chose two factors (novelty and meaningfulness) and one dimension (recollection) from the original study, as these three factors are closely related to the value that this service can provide. The items of each variable are in reference to the research of Wei et al. [5]. Destination image is measured using three variables (affective, cognitive, and unique image). Affective image items referred to the study of Marques et al. [14]. The items of cognitive image and unique image were extracted from the definition of these two dimensions in the previous study [16] [37], combining the context of this service. The users score the items on a 1 to 7 Likert scale. Last but not least, at the end of the main body, questions collected feedback from the receivers. Users could choose their own way to express their feelings, including a multiple-choice question with pre-set notes of thanks, open-ended questions, and uploading images or photos.

In addition to the primary surveys, two extra tests were designed to explore the sustainable operation of this service. The first one charged the participant to investigate the appropriate price of the service. Participants could voluntarily transfer the amount they are willing to pay to the researcher team with knowing the cost of the box. The second one aims to find the potential service operator in the tourism field. The short survey is distributed to the travel promotion-related institutions through public contacts. The main body of the questionnaire consisted of scale questions on the value proposition. The statements were extracted

from the "possible application scenarios" answers in the simulation test survey.

Qualitative data

Interviews were the primary method to obtain qualitative data during the evaluation. Three participants were invited for interviews: two on-site visitors who experienced the designed user experience by visiting the secret spot and the participant who was both the provider and the receiver in this test.

The participatory observation was conducted as one of the on-site visitors was a family member of the researcher, who invited me to visit the secret spot with him. He had no knowledge of the evaluation process, and the decision to visit the secret spot was spontaneous. During the visit, no extra information was given to the participant to avoid influencing his decision-making. I participated as a travel companion, took photos, and observed the user's actions during the visit.

In addition, many participants took photos and videos of themselves receiving or opening the boxes and shared them with the research team or on SNS platforms. These unanticipated quantitative data reveal users' emotions and actions when receiving the box.

4.2. Phase 1: Unboxing simulations

4.2.1 Participants

A hundred and three participants attended the simulation test. Figure 4.2 shows the participants' demographic information.

The age of the participants covered a range from minors to seniors, with the largest age segment being 18-25 years old. Female participants made up the majority of participants. Students and full-time employees were the primary respondents. In terms of place of residence, twelve participants from other countries and regions, in addition to China and Japan, took part in the simulation test.

As the sample selection section mentioned, the participants spontaneously attended the simulation test. Hence the demographic information collected recognizes a general portrait of the target users who show interest in the service. However, the survey distribution may have causes possible bias. The limited in-

terpersonal networking of the researcher's team did not reach a broad enough age group, and the test was distributed online, which could not reach people who usually have less internet exposure.

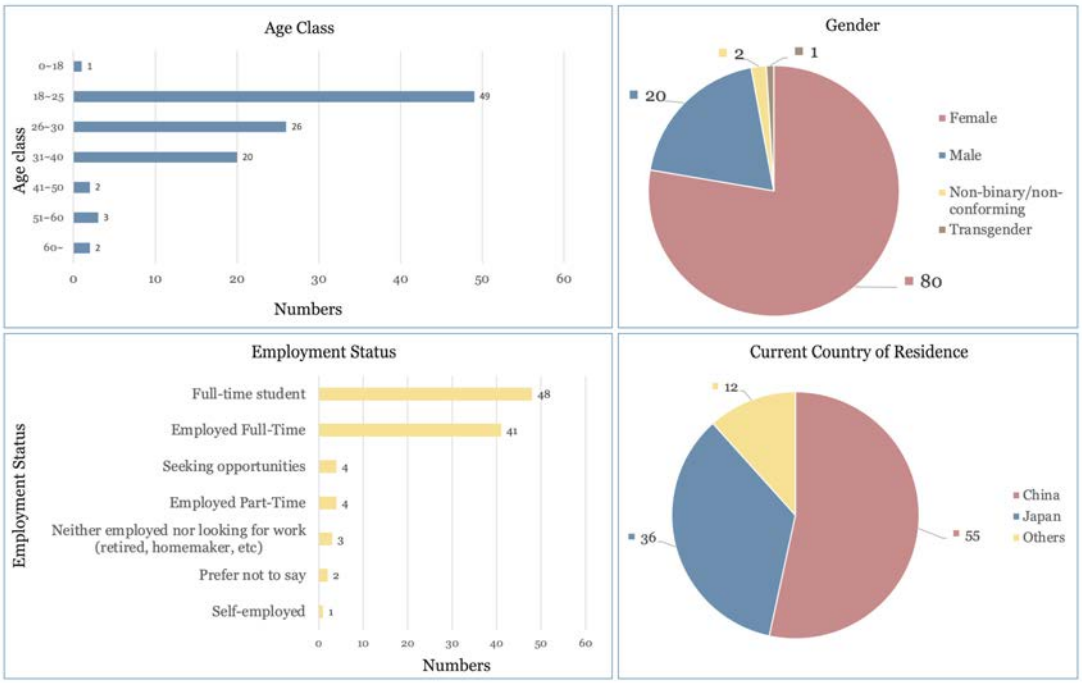


Figure 4.2 Participants of the simulation test

4.2.2 Artifacts that fosters imagination

The items in the box were designed as imaginative stimuli. The simulation test results showed that this value offering was accepted by users, who considered that the items in the box aroused their imagination about the destination.

The statistics show that 86% of respondents agree with the statement that "It arouses my imagination towards the spot." In the survey, participants rated how each item triggered their imagination. Figure 4.3 visualizes the users' scores on a Likert Scale. This table's primary axis (horizontal axis at the bottom) shows the percentage of participants' scores. Each color in a bar represents the segment of users who rated that score. The length of each color indicates the segment's percentage of the whole respondent. The primary axis has positive and negative

values to distinguish between positive and negative opinions. The secondary axis (upper horizontal axis) shows the original Likert scale (1 to 7), and the dots show the average score given by users for each item.

The bars lean to the right show that users are optimistic about whether the items in the box stimulate their imagination. The photo is the most inspiring object, with 54.49% rated 7, and 89.32% of the participants gave a positive rating (score higher than 4). The letter followed, with 23.30% of the respondent rated 7 and 69.90% of the respondent giving a positive rating. In contrast, think sheets and maps have less stimulation to users' imagination. The positive rating for the think sheet is 49.51%, less than a half, and there were 4.85% of respondents (5 people) rated 1, which represents that the item did not trigger their imagination at all. This result is consistent with the previous refined prototype test when the user satisfaction scores for the box item showed that the artifacts related to the provider's experience were the box's core while the other items played a supporting role.

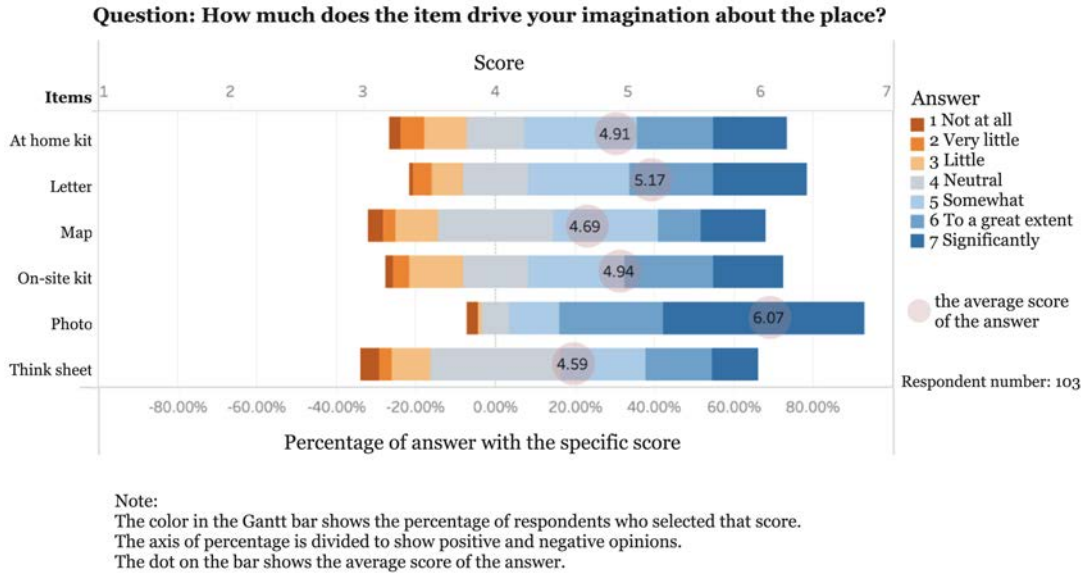


Figure 4.3 Participants' opinions on artifacts as stimuli of imagination

4.2.3 Positive destination impression

The secret spot sample chosen for the simulation test was a shrine in Kagurazaka, Tokyo. The survey results partially answered RQ1, which is that the content of the blind box created a positive impression about the place for the users.

Participants' familiarity with the place varies. Some are familiar with the place as residents, while some not have heard of the place at all. Figure 4.4 shows the variation of impressions among participants with different levels of familiarity with the location beforehand. The vast majority of opinions lean toward establishing a positive impression. For 80.58% of the participants, the box created certain positive impressions, regardless of whether they were familiar with the location before seeing the box.

The participants who were most familiar with the place scored highest, with 80% scoring over 6, indicating that they established a positive impression the most. For users who had been there, the extent of building positive impressions was not as great, with 31.25% stating neutral and 6.25% stating a negative change. Therefore, there seems to be no positive correlation between familiarity and building a positive impression. It is not necessarily the case that the more familiar the participant is with a place, the service positively changes their impression. Nevertheless, which dimension of the destination image was built is to be validated through phase two.

4.2.4 Negative feedback

Only one user gave a negative opinion (scored 2, negatively changed) for impression formation (graph 4.3). In the "participants' opinion on artifacts work as stimuli" mentioned in the previous section, unlike most of the respondents' opinions, this user gave an average score of 3.5, with the lowest score being 1 for the photo and the highest score being 5 for the letter, map, and think sheet. The rating indicates that the contextual items performed better on this participant than the visual elements.

There was another participant who showed a negative attitude to this service. For both the imagination stimuli question and the value proposition question, this respondent gave straight 1s in her answer. In the open-ended question, she stated

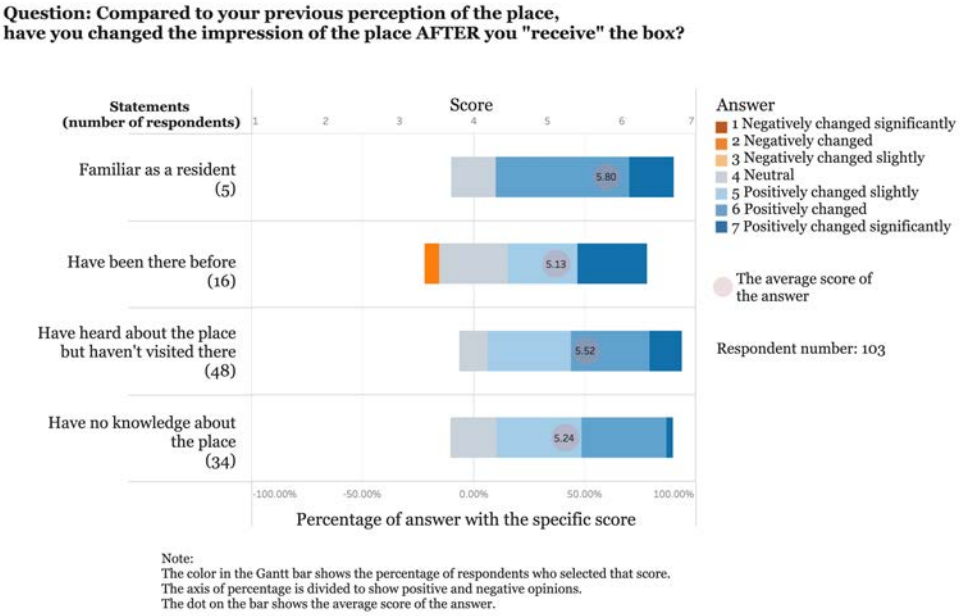


Figure 4.4 Changes in participants' impressions of the destination

that *"I think the service is very boring and the video does not interest me even a little bit,"* and specifically mentioned that she would *"just throw the box in the drawer" (participant 14, simulation test).*

The two users who held relatively passive opinions about this service have one thing in common: they both checked the option "I have always been interested in this area/site" in the question about their motivation for visiting the secret spot. Their negative comments suggest that the service does not meet the expectations.

4.2.5 Value delivery

The unboxing video simulated the user experience of the first two stages of the service for the receiver, receiving the box and exploring the contents associated with this secret spot at home. As described at the end of Chapter 3, the values proposed in these two stages are gaining a sense of surprise and establishing a destination image. Survey results of a value proposition question initially validated that users accepted these two values (figure 4.5).

Of the 103 respondents, 37.86% strongly agreed that they felt surprised after

watching the video, and 33.98% strongly agreed that they imagined the location. The percentages of people who scored positively on these two statements were both over 80%. However, it is worth noting that users who disagreed with the sense of surprise (scoring less than 4) also accounted for 7.76%.

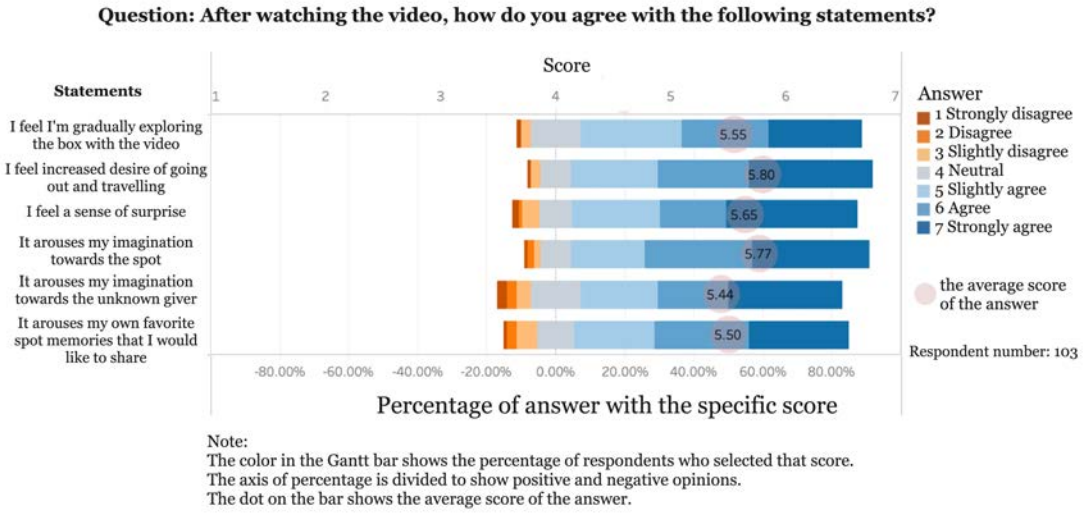


Figure 4.5 Participants' opinion on value proposition

In addition, from the previous interviews, other values were extracted as statements in the question for users to score. Of these statements, users agreed the most that the service evokes the desire to travel. It seems that participants easily associated this service with the tourism field. An open-ended question asked participants what possible scenarios this service could be used. The 30 valid responses were grouped into three categories: tourism, memento, and social networking (figure 4.6). The potential values in tourism were further divided into two themes with the common denominator of exposing a location's culture to the user and creating a cultural contact between the user and a destination.

Memento was also a significant potential value proposed by the users. In addition to commemorating special events, three participants suggested that the box could serve as a memorial to everyday life. Mols et al. noted that mundane everyday life becomes difficult to commemorate because of the lack of adequate media, such as photographs or objects. Participants' answers implied that the cultural

box could serve as a medium for recording daily experiences. Moreover, a few participants suggested that the box had value as a trigger for social networking, and two proposed that the service could be a medium for building interpersonal relationships.

Category	Theme	Participants' answers
Tourism	Destination promotion	Holiday planning
		Travel promotion
		Can use it for restaurant recommendations
		Promote niche destinations
		advertising
		Use it for travel related
		Add fun to your trip and inspire you to explore the next site
	Share the local's lifestyle with others	Get to know a new shopping street, neighbourhood or school
		Experience the daily life of locals
		Send to a stranger as an exchange of virtual tour
		Share the personal experience as a tour guide
Mementos	Memory of daily life	Use it to record everyday memories with friends and family, or as a travel memento/inspiration
		With family, as a family memento
		Memories of the alma mater, or a former travel destination
	Memorize personal special event (e.g. MTE, wedding, graduation, etc.)	Graduation ceremony
		Personal travel mementoes, lists of travel items / tips
		Feels good as a wedding favor. Can be used as an invitation
		Wedding
		You can replicate the same process and make your own time capsule to relive the memories of someone and something special
	Treasure the prescious memory in a time capsule	Time capsule of past memories
		Treasure the memories
		Keeping own memory
		A box made with specific time and place. When you see it later you can remember the experience at that time
	Trigger memorable experience with friends through visit	A little surprise for a date with a friend. You can separate the item of the same place into two boxes. Friends go to the same place together to explore each other's memories and learn more interesting things through the exploration.
Social networking	To know people share the same interest	Make friends with common interests
		Like dating apps. People with similar interests may have the same memory
	Send out as a present	Give it as a gift
	Share memory with friends	Recommend great memories to friends

Figure 4.6 Potential scenarios to utilize this service

To summarize the first phase of the evaluation, it validated that the final design triggered the imagination of the box receivers and build a positive impression of the secret spot, with the photo as the most influential item. Users recognized that the box brought a sense of surprise while suggesting other potential values, such as the box acting as a touch point of contact with local culture and users or as a

memento of life. While most users' opinions on the service were on the positive side, it is essential to note that the survey received responses of dislike for the service.

4.3. Phase 2: Final user test

The physical test in evaluation phase 2 simulates the entire process of this service, and users can decide their own way to experience this service once they receive the box. This section analyzes the data to answer the four research questions posed at this chapter's beginning and validate whether users accepted the value proposition. The evaluation also unfolds the values that emerged from the practice.

4.3.1 Participants

To ensure that the user test participants were interested in the concept of the service and not just random users who wanted free giveaways, the research team recruited participants from the simulation test respondents. We sent tangible boxes to 36 people who completed the sign-up by answering the pairing survey. The box contained a research feedback survey QR code and a price test payment QR code, which the users answer voluntarily.

Thirty-five of the 36 participants took the price test, and 34 people answered the survey. The demographic information (figure 4.7) collected through the questionnaire showed that the users participating in the test were mainly the young generation, female, full-time students, and full-time employees, with half of them living in China and half in Japan. All of them took the role of the receiver, and 2 of them offered their secret spots as providers.

The reliability test of the survey results shows that the Cronbach alpha coefficient[1] calculated for the 55 non-open-ended options in the main body of the survey was 0.847. A coefficient of more than 0.8 is usually considered to have high reliability of the data, and therefore the feedback given by the test participants is credible.

1 Calculated by an online SPSS analysis platform SPSSAU: https://spssau.com/indexs.html

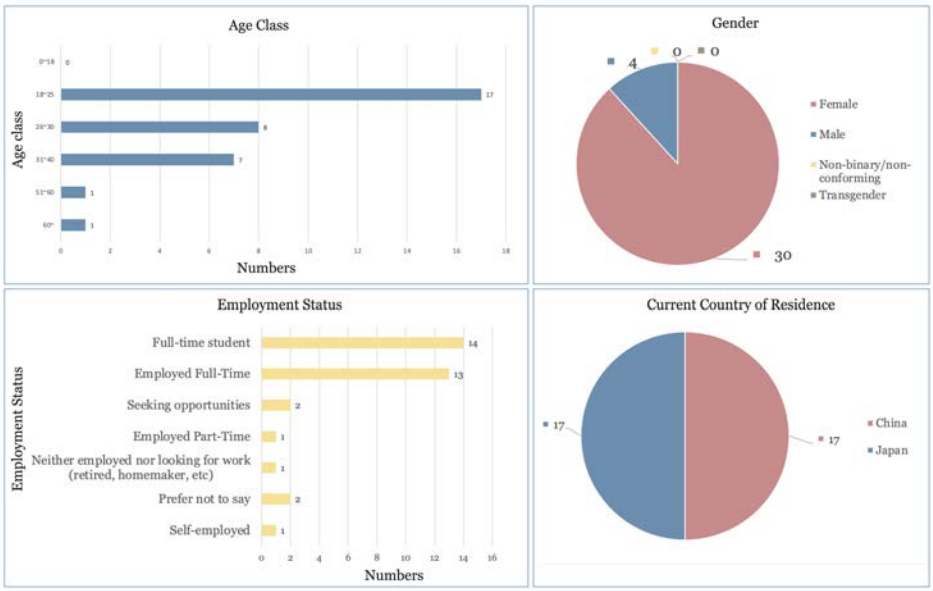


Figure 4.7 Participants of the final user test

4.3.2 An experience dominant blind box

The first evaluated value is related to the artifact design. This service aims to design an experience-dominant blind box that offers a unique experience compared to conventional blind boxes. Users acknowledged that the blind box was novel and the items inside the box derived user's experience that was worth sharing. In addition, they disclosed that the blind box helped them to determine their travel destinations.

A novel blind box

According to previous user tests, the curated blind box provides the user with a sense of novelty, with receivers expressing *"anticipation before arrival" (Participant 35)* and *"a sense of surprise when I received the box" (Participant 9)*. Additionally, users provided positive feedback regarding the matching outcomes of the pairing algorithm. Participant 21 stated that the location corresponded to her intended destination.

The feedback survey asked users the extent they concur with the blind box's value. All respondents agreed that the box were distinguished from a traditional

blind box (figure 4.8). Most users (82.29%) identified the provider's experience as the source of its uniqueness. Multiple participants stated that they believed the recommendation to be genuine. For example, participant 12 reported sensing the recommender's sincerity. Participant 19 found the experience to be heartwarming. Participant 5's opinion summed up as he believed the recommendation was comprehensive, allowing the user to use the multiple senses to empathize with the provider's experience using multi-mediums. The provider's willingness to offer such detailed information suggests that their experience is genuine and reliable.

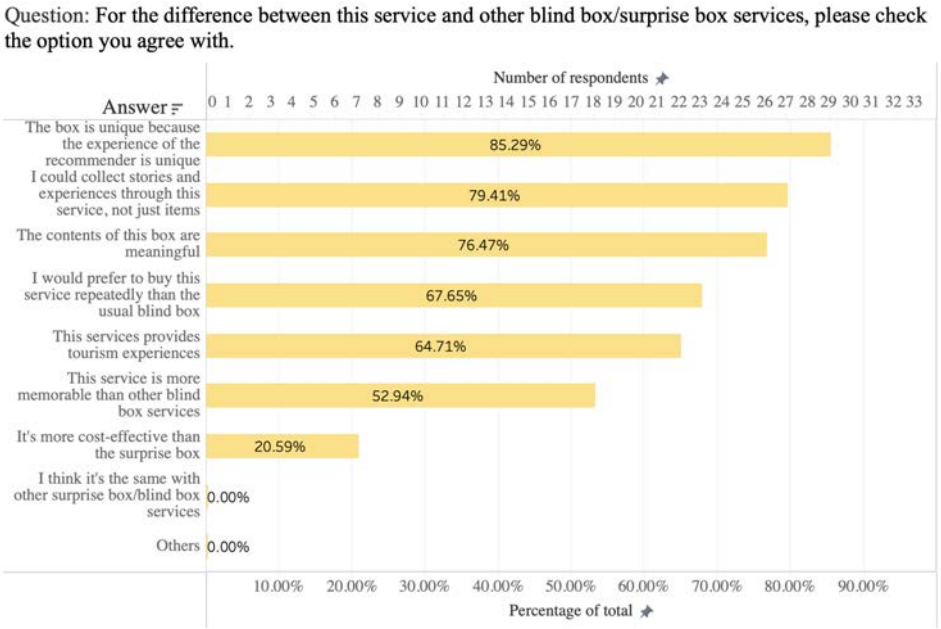


Figure 4.8 Participants' opinions on the values of the blind box

The tangible box allowed users to read the text inside the box more carefully than in the simulation test. Among the items, the letter was the most imaginative object (figure 4.9). All participants agreed that letters stimulated imagination, with 88% of people scoring higher than "agree" (15 strongly agree and 15 agree), and no one choosing a neutral answer. This result surpasses the score of photos from the simulation test. The letter is a medium of storytelling in the box that involves the participants. Through storytelling, even if the receiver and provider come from different cultural backgrounds, there is an opportunity to build empathy by sharing similar life experiences. Participant 10 in China, who received a

secret spot from a provider in Japan, stated in her survey, *"I could not help to be misty-eyed during the exploration.....Or maybe the place and recommender's words reminded me of the short but happy study abroad life."* The test results are consistent with Smith's study that storytelling could surpass the boundary of cultural and demographic differences to create vivid impressions [8].

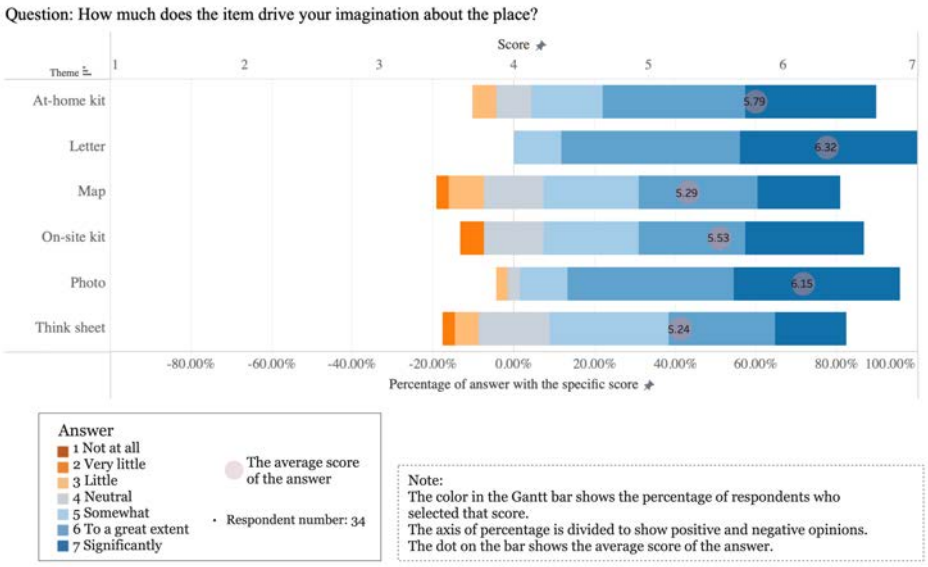


Figure 4.9 Participants' opinions on artifacts as stimuli of imagination (final)

Therefore, although only a minority (20.59%) of users believed this blind box to be more cost-effective than the standard blind box (figure 4.8), the originality of this service is to deliver a genuinely positive experience to the users rather than a cost-effective assortment of small goods.

A worthy experience to share

The unboxing experience worked well with the support of the components in the final design.

First, 70.59% of users (figure 4.10) felt that the tag for classification and text guided them to draw an inference. Second, the new on-site kit in the box has been frequently mentioned by users. Not only do the users who visit secret spot take

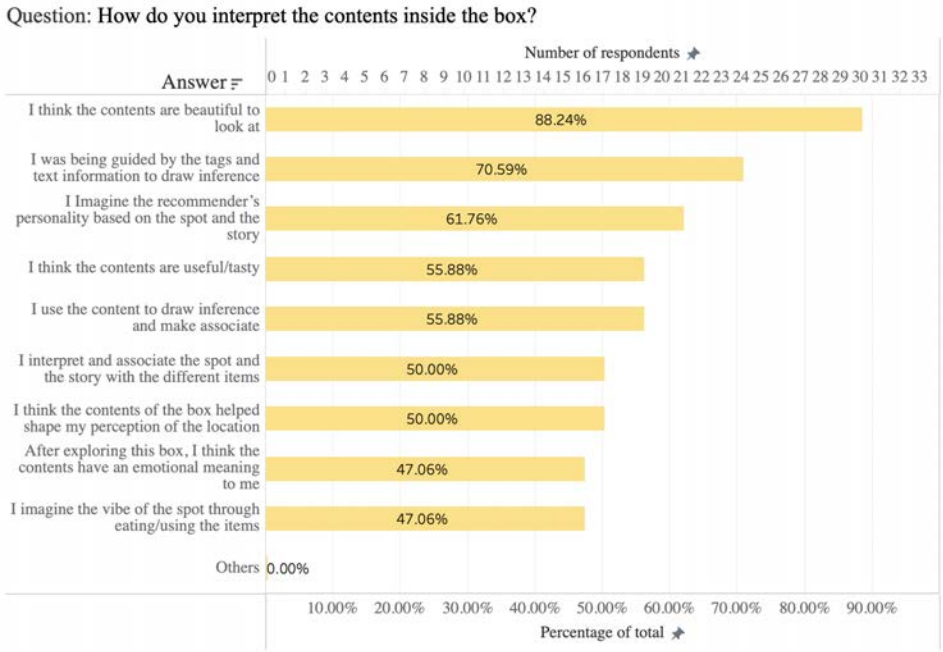


Figure 4.10 Participants' interpretation of the box contents

it to the site, but also the users at home show interest in this kit. The nearby spot information card played different roles for the visitors and those who enjoyed the box at home. The two visitors mentioned using the card to learn about the surrounding area because *"I'm out anyway, so I can stop by and look around." (Participant 5, final user test)* The at-home experiencers used it to build the destination image, which will be discussed in the next section. The frame-shaped photo prop seems attractive, and many participants highlighted the card in their feedback photos sent to the service operator (figure 4.11). Some users took it outside, and although it was not the recommended secret spot, they used it as a prop to record a street scene. This photo prop extended the user's experience with this service, while another user achieved the same goal with different props. Participant 3 decorated the paper package box with stickers from the at-home kit. She felt this *"prolonged the experience"* and hoped that future boxes would consider this a design factor. Their behaviors validate the service's value proposition that the cultural blind box extended the user's experience.

The unboxing experiences attracted receivers to record and tell a story about it,

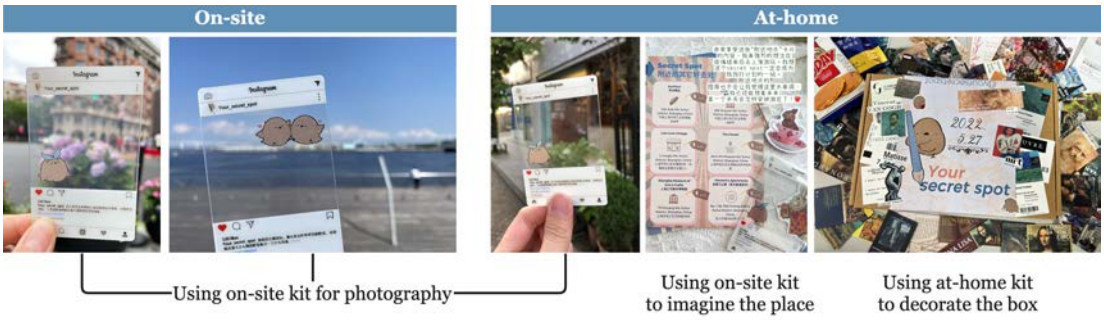


Figure 4.11 Participants' usage of box contents

which demonstrated that they regarded it a memorable experience. Eighteen users captured images or videos while exploring the box. Some posted it on social media, while others shared it directly with the service provider (figure 4.12). Many users added narrative comments, revealing their thoughts or emotions when opening the box. According to Wan et al., using digital footprints, such as photographs and videos, can materialize the narratives of individuals when recording MTEs [11]. According to the users' narratives, some receivers view the at-home experience as a journey (participants 2 and 8), whereas others view it as the start of a new journey (participant 4). The receivers used the photos and videos as mementos to commemorate a small event in daily life.

A solution for destination choice

The blind box extends the indoor user experience to the outdoors. Whether or not the user chooses to visit the secret spot immediately, the blind box presents the user with a destination option. Both two on-site visitors mentioned that the presence of the blind box helped them save time in finding a travel destination when they had a specific visit in mind, such as hanging out with close friends and taking photos. For users who have only experienced the at-home stage to date, establishing a destination image, which will be further discussed in the next section, influences their decision-making in choosing a destination, thereby validating the service's value in assisting users' travel decisions.

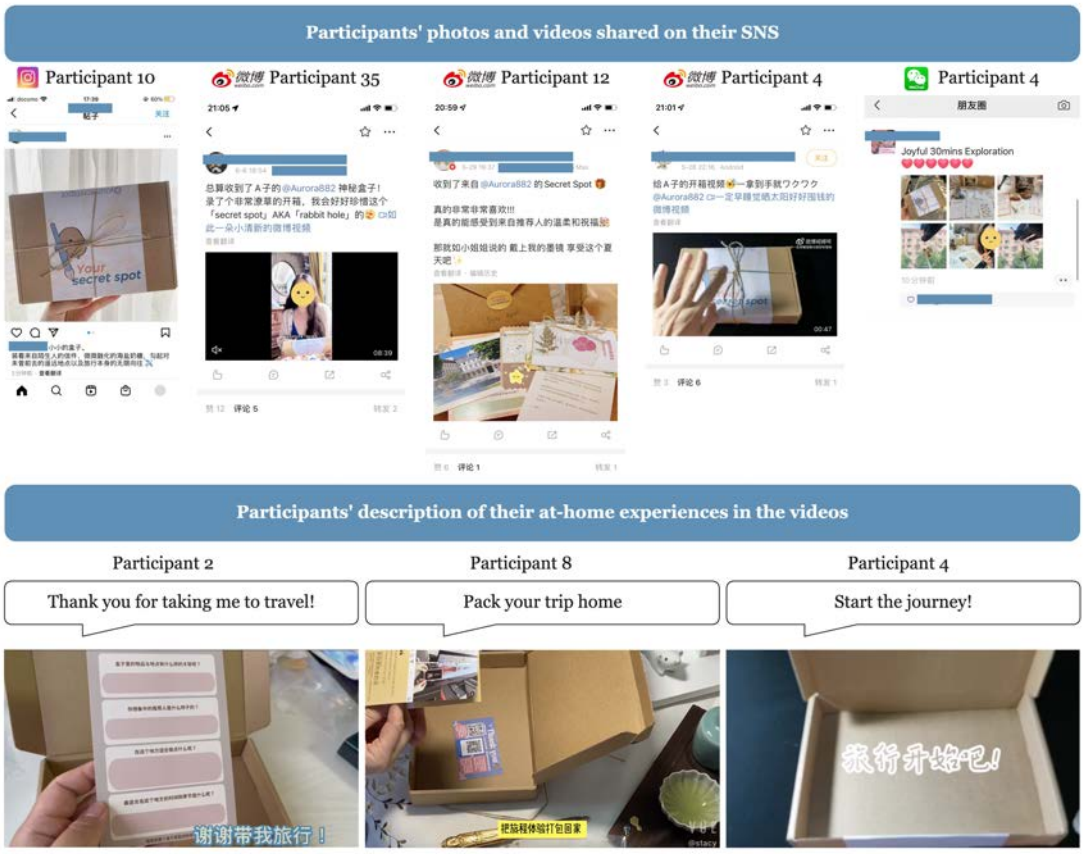


Figure 4.12 Photos and videos shared by the receivers

Summary

Thus RQ 1 is answered by the validated value. Users extended their unboxing experience by being involved into the at-home exploration and enjoying the secret spot on-site. The blind box not only brought a sense of surprise to the users but also created an extended experience, more than an ephemeral moment of excitement, and differs significantly from existing goods-dominated blind boxes. The foundation of this blind box is a personal experience that cannot be replicated or mass-produced.

4.3.3 Formation of destination image

In stage 2 of the user experience, this service proposes that users build a destination image through the at-home experience. In the actual test, providers were fond of choosing their secret spot by the destination image, which drives the at-home experiencer to build an affective image more than a cognitive image.

Providers

Providers select a secret spot to propose to others by assessing the destination's image to determine whether it is worthy of recommendation. As stated in Chapter 2, the destination image consists of three dimensions: affective, cognitive, and unique [34] [14]. The provider's interview script (table 4.1) showed that her reasons for selecting the secret spot encompassed all three dimensions. The unique image was the first and most important requirement. Because *"the secret spot is about proposing places people don't know about" (participant 18, final user test).* Following is the cognitive image, in which other sites in the surrounding region should have a similar style to the secret spot so that the receivers can experience the activity that occurs in the secret spot in this area rather than only in one set location. Participant 24 expressed similar sentiments in her letter, pointing out that the areas surrounding the secret spot are also worth exploring.

Surprisingly, the affective dimension indicated the provider's motivation in terms of the emotional bond between people and locations. Participant 18 expressed a desire to promote the ambiance of a city she appreciated from a local's perspective, as well as the emotion she experienced in that atmosphere. She stated that her *"mission as a provider"* would be fulfilled if the other person could identify with it. This was a common objective of the providers. Fourteen of the 19 secret spots discovered during the five rounds of testing were frequented places, such as neighborhoods, schools, and workplaces. Providers instinctively sought secret spots that made them feel mentally at ease and calm. It is customary for them to provide receivers with a local perspective on the emotional state of relaxation. People create positive ties with places [64], which is defined as "the emotional attachment that people have with specific places where they choose to stay and feel comfortable and secure" [23] in to environmental psychology.

Table 4.1 Interview script coding about the provider's criteria in recommendation

Theme	Codes	Dimension of DI
Evaluate based on destination image	Place with special features	Unique
	Want to recommend a niche place	Unique
	Think about the surrounding area when recommend	Cognitive
	Recommend an area has places with similar features	Cognitive
	Recommend from a local's perspective	Affective
	Desire to deliver the emotion of that time	Affective
	Desire to deliver the atmosphere of the place	Cognitive & affective

Receivers

The survey findings (figure 4.13) indicate the scores of the receivers on the three dimensions of destination image variables. The majority of participants constructed destination images to some degree, with the affective image earning the highest level of approval (mean value of the five variables is 6.06). Regarding knowledge of local weather and cuisine, the cognitive image is weak. The scores for the unique dimension indicate that the service is the main way to build up an impression for participants.

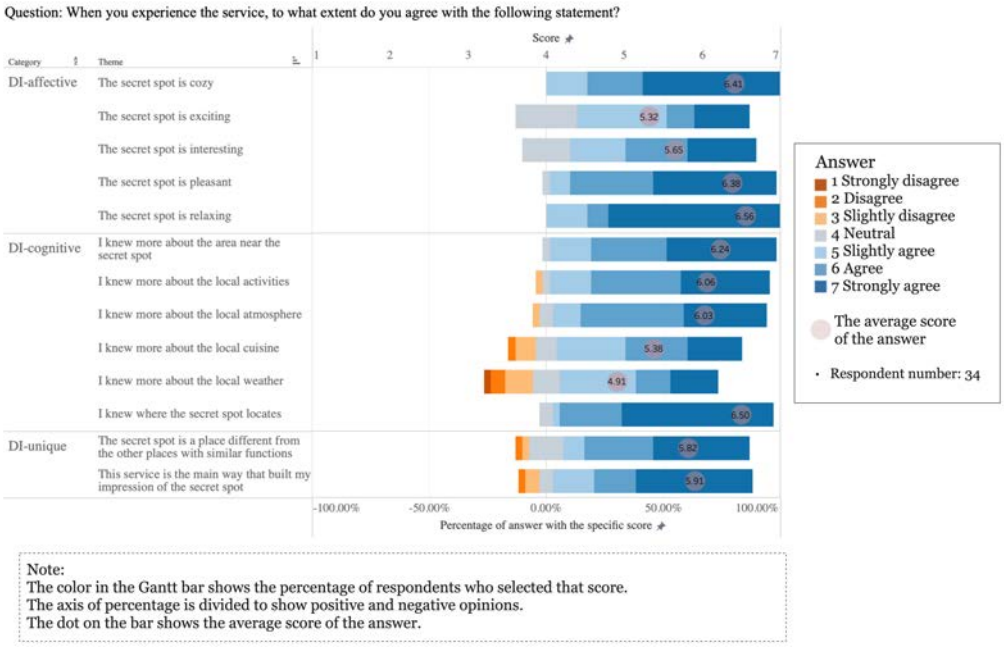


Figure 4.13 Participants' scores on dimensions of destination image

The user test also confirmed that the box's contents generated several approaches to construct the destination image (table 4.2). The first approach was that the box evoked the experience of the participants' previous visits to the city where the location was located. For example, participant 35 said, *"I think this secret spot is in Shanghai. I have a good impression of Shanghai,"* and participant 31 said, *"when I saw the photo, I recalled the feeling of the sea breeze on my face in Yokohama."* For these users, the service invokes and enhances the previous image of the destination. Second, the information inspires the user's imagination regarding the objective environment of the site. For instance, user 5 stated, *"The map tells me that this place is by the sea"*; and several people envisioned the weather conditions of the site; yet, their understanding of the destination's climate received the lowest score on the feedback survey. The other way of constructing a destination image was that the users initiatively looked for more information through other channels. User 36, for example, looked for a first-view virtual tour video on YouTube and *"referred to other information sources"* to discover more about this secret spot. Last but not least, the most straightforward method is visiting the site to obtain a first-hand impression of the destination.

Table 4.2 Interview script coding on receivers' formation of DI

Theme	Codes
Building up destination image	Recall the impression of the destination city
	Trigger old memories
	Imagine the physical atmosphere (whether) in the secret spot
	Gain cognitive impression from the map
	Find a virtual tour
	Be motivated to search more information about this place
	Sense the local atmosphere on-site
	Sense the same atmosphere described in the box

Summary

To briefly summarize the delivery of the destination image and respond to RQ2, the provider in this service incorporates three dimensions of the destination image as a metric for determining their secret spot, although this may be an unconscious behavior. A significant majority of the providers recommended the secret spot

from a local perspective, communicating the relaxed and comfortable emotional state of someone who knows the region well. The receivers constructed the destination image of the place by reviewing past perceptions, fostering imagination, actively pursuing additional information, and gaining experience in the field. The highest level of agreement among the three dimensions was attained by constructing an affective image. The proposed values were accepted by the users, just as participant 8 concluded her at-home experience, *"I know about the place, and then get familiar with it, and at last be fond of it"*.

4.3.4 Formation of MTE

The third phase of the designed user experience consisted of users gaining access to the secret spot to collect MTEs. User testing confirmed that participants who visited the place developed their own MTEs. Nonetheless, it was surprising to learn that this service enabled at-home experiencers to enhance their existing MTEs and acquire new ones as well.

The service proposes to users meaningful, novel, and memorable experiences. Three relevant dimensions from Kim's scale for measuring MTE were adopted for evaluation. User feedback (figure 4.14) indicates that the majority of users agree with the MTE statements, validating that the service builds MTE for users, with novelty receiving the most approval. Users consider the service to be distinct (62% strongly agree) and novel (59% strongly agree) compared to other travel experiences, and they encountered new things during the experience (44% strongly agree). On the meaningfulness dimension, users were more likely to agree that the experience was meaningful, whereas 19% disagreed that the experience was relevant to helping them better understand themselves.

On-site visitors

The interviews of the two receivers (table 4.3) who visited the secret spot revealed that the experience associated with the context was the component of the visit they recall most vividly. Even in the same secret spot, encountering random events can vary from visit to visit. Participant 4 witnessed a dragon boat race at the pier in Yokohama because he visited the secret spot during the Chinese

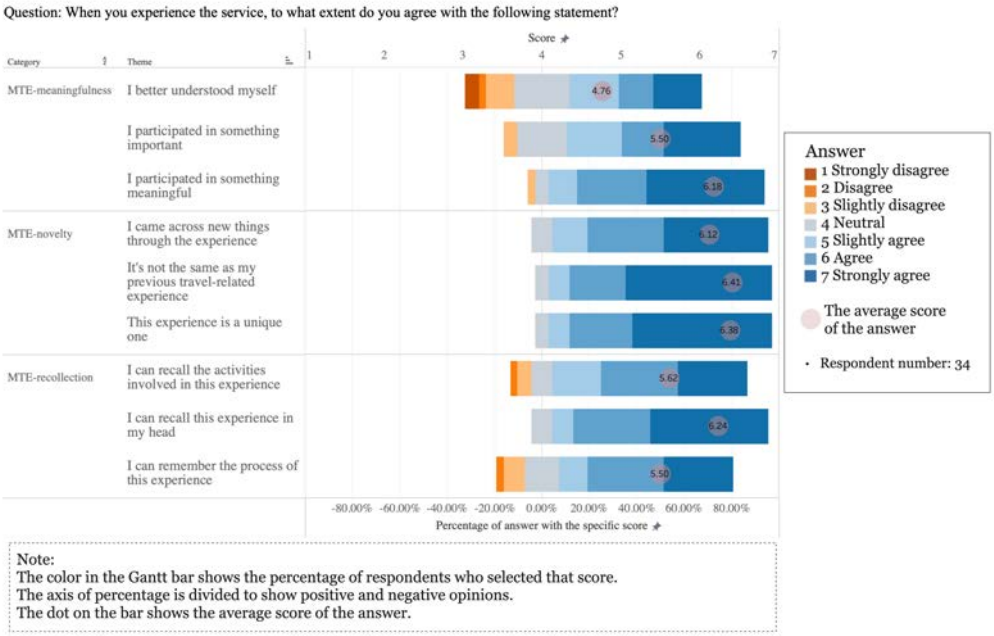


Figure 4.14 Participants' scores on dimensions of MTE

Dragon Boat Festival. Participant 1 went out for the first time following a three-month lockdown in Shanghai to visit the secret spot, and she was impressed by a coffee shop that had been redecorated with a lockdown theme. These visitors' experiences related to seasons, public events, and festivals exceed the expectations established by the destination's image. A special case was that during the user test, participant 18 revisited her recommended secret spot. Her last visit was five or six years ago, and she remarked that the street's atmosphere had remained the same. However, new elements made her feel differently, which enriched her MTE.

All of the visitors to the site were accompanied by family or friends. They mentioned that there were enjoyable moments when they did something with their companions that made the trip memorable and gave meaning to their visit. In addition to unanticipated events, extra meanings contribute to the development of the visitors' MTEs, which may explain why, when interviewed, site visitors rarely express empathy for the provider.

Table 4.3 Interview script coding on visitor's MTEs

Theme	Codes
Novelty of the service	Unique service that haven't seen before
	Tangible box as a novel thing in the current society
	Just like opening a blind box
	A sense of novelty and surprise to get recommendation from strangers
	Imaginate using multiple senses triggered by the artifacts
	Want a random box for next time
Memorable experience on-site (recollection)	Explored an undiscovered place in a familiar area
	Did something special
	Encountered special experience relevent to the lockdown
	Encountered seasonal events
	Remembered Impressive happenings
	Did things that don't usually do
Meaningfulness	The place is connected with fun memories
	Meaningful experience with family member

At-home experiencers

In contrast to the visitor, the at-home experiencer's MTEs are generated through empathy with the provider. Exploring the box became an MTE for the at-home experiencers based on the provider's narrative. Participant 18 repeatedly examined the box's contents and reported that she *"remembered all the information about that place."* Participant 19 remarked the at-home experience as an *"joyful 30mins exploration."* In addition, their at-home experience stimulated them to recall previous MTEs. Participant 35 recalled her previous visit to Shanghai and remembered the particular dress she wore at that time. And participant 31 sent the provider the most impressive photograph from her previous visit to this secret spot as a response. By connecting the provider to their own experience, the at-home experiencer managed to give the destination's image meaning and reinforced previous MTEs.

In the final test, the number of visitors to the site was still low. From the 36 boxes sent, 13 users received a secret spot accessible (within 1.5 hours via public transportation), yet two users visited the site and completed the entire user experience. There are two possible explanations for this: one is that there was a time limit on the user test, and the users did not have the leisure time to go within the time limit but instead planned to go afterward. 61.76% of respondents indicated that they had saved the location for a future visit. Another probability

is that participants felt their experience at home was adequate and did not ask for on-site practice. While the on-site visitors' interview is convincing that gaining personal MTE through visits enhances the service experience, this service should continue investigating how to entice people to visit the site.

Summary

As a summary of the MTE development and response to RQ3, the visitors' MTE was highly correlated with the context they encountered and the personal meanings derived from shared experiences with their companions. Meanwhile, the experiential services provided by the box motivated at-home experiencers, reinforced previous MTEs, and built MTEs to the secret spot.

4.3.5 Co-creation experience

In the fourth stage of the user experience, the completion of the indirect exchange between the provider and receiver is expected to co-create their experience. User test effectively validates the value proposition and provides insights for the sustainable operation of the service.

Receiver

The receiver confirmed that the provider's experience is a significant component of their user's experience. The fact that receivers learned about the place primarily through boxes based on the provider's experience made the at-home participants felt connected to the provider when exploring the box. The connection-related codes are summarized in table 4.4 based on survey responses and unboxing videos from receivers.

Notably, the receivers actively emphasize their similarities with the provider, and as a result, some users develop a desire to become acquainted with the provider. Participant 35 directly expressed that she wanted to be a friend with the provider in the unboxing video and post it on her social media. Participant 18 suggested that he would like to know the provider's contact information if he got the box from the same person more than three times. Meanwhile, participants who would like to enjoy the secret spot on their own without interaction with the

providers highlighted the comfort brought by this service, as they were not forced to comment on the recommendation.

In addition, figure 4.15 demonstrates that all users agree (with 53.00% of them strongly agree) that they would experience the secret spot in the way suggested by the provider, indicating that they would like to gain empathy on-site by imitating the provider's way of enjoying the secret spot. The response to this question also demonstrates that repeating the provider's experience is compatible with users' desire to explore the secret spot in their own way.

Table 4.4 Interview and feedback coding on the theme of connection

Theme	Codes
Connection with the provider	Imagine the provider according to the box contents
	Build positive image of the provider
	Empathize with the provider
	Empathize with the scenario in the letter
	Empathize through eating the snacks
	Desire of making friends with provider
	Find common point with the provider
	Desire to know provider who shares the common point
	Feel connect to the provider
	Sense the warmness from the provider
	Receive the shared the memory from stranger

Provider

Providers have different needs for interaction with receivers, just as receivers have different needs. Providers who want more interaction will use this service to find receivers who resonate with them, and they will be satisfied when they receive feedback from receivers. The message of the receiver created an experience for the provider. Table 4.5 demonstrates the value felt by the provider when it receives feedback. The result does not support the proposed value that the receiver's message should reinforce the provider's MTE. Instead, the messages tested the effect of sharing. Through the message, the provider gains insight into the receiver's thoughts and determines whether they successfully communicated the message

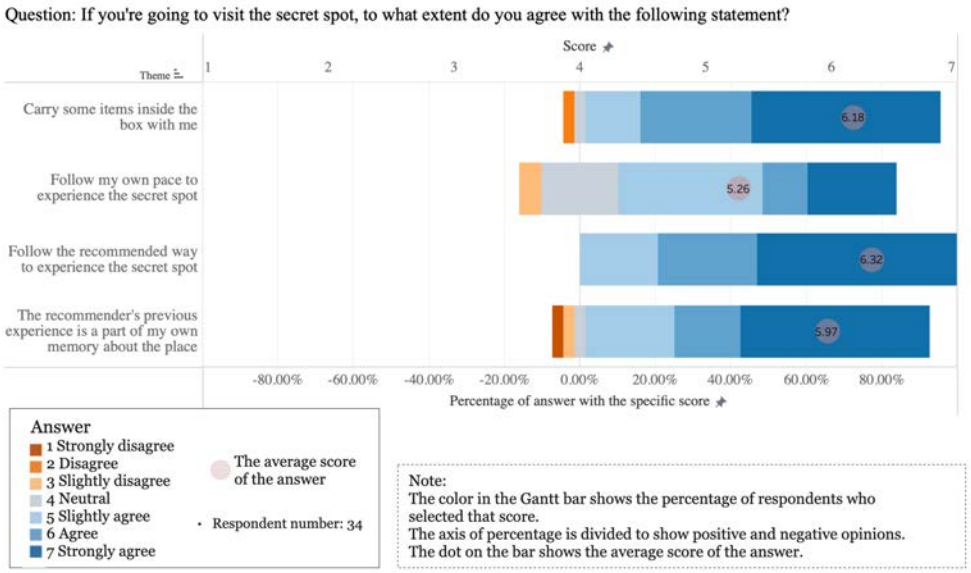


Figure 4.15 Participants' ways to experience on-site

they intended to convey. If the feedback indicates that the receiver can empathize with the provider, the provider feels satisfied. By assessing empathy, the provider proactively identifies the counterparty with whom they share a similar characteristic. From the provider's perspective, the indirect exchange created a new experience of seeking empathy with the receivers.

Table 4.5 Provider's interview coding on the theme of connection

Theme	Codes
Provider's mission	Regard evoking receiver's interest of the place as a mission of the provider
	Find common point with other providers
	Feel delight with the feedback that "we share something in common"
	Find people with similar souls through the service
Ways of using the review cards	Read every feedback card
	Imagine the receiver
	Differentiate each receiver
Gains from the indirect exchange	The delivered message being accepted
	Find common points from the feedback
	Desire of making friends with the receiver
	Take the initiative to contact the receiver who want to know the provider
	Trigger conversation between online aquaintance

Co-creation fostered the opportunity for those who wished to build direct con-

nections. Triggered by the indirect exchange, the two participants (18 and 35) became each other's SNS followers. The receiver posted a video of her unboxing on social media and expressed a desire to become friends with the sender. The provider observed the video forwarded by the service provider, took the initiative to contact the receiver, and they established an online social connection. In fact, socialization and friendship were not the original values intended to be promoted by this service. While some users establish social relationships, others (e.g., participant 1) strongly identify with the comfortable social distance granted by the indirect exchange. The user test validated that participants can actively decide how best to co-create experiences with one another in a manner with which they are comfortable. This co-creation of experiences can be unilateral, where one party influences the experience of the other, or bilateral, where both parties interact.

Role shift

After completing their user experience, two on-site visitors expressed an interest in becoming a provider. Participant 1 realized, *"At first, I didn't consider recommending, but after experiencing this myself, I understood that it's not bad to tell others that there is a place like this, just to amaze others,"* and participant 5 assumed, *"It's better to share the fun with others than to keep it for myself."*

This feedback is consistent with the provider's description of the initial rationale for recommending the secret spot. The motivation for the recommendation is a positive experience. Participant 15 said, *"as the provider, I want to convey the good place, as well as some of the emotions I felt when I first saw it, and the vibe, to the receiver."* It is important to note that in this service, the referee is a stranger, so the provider consciously chooses to highlight the positive aspects of the location when describing it to the recipient. This is distinct from recommending to a friend. If the recommendation is made to a friend, the provider is more likely to accompany the friend directly to the secret spot.

The potential role reversal prompted by the on-site experience indicated that the service is sustainable. As stated in 4.3.3, the provider recommends the secret spot based on the positive destination image, and the receiver elevates the destination image through the on-site experience and obtains the MTE. If the receiver has a positive experience, the destination image they acquire will be used as resource

when they become a provider and offer others the opportunity to create new experiences. Thus, in this service ecosystem (figure 4.16), the resources of one actor (the provider) contribute to the acquisition of resources by another actor (the receiver). The receiver's newly acquired resources can continue to serve as the foundation for the subsequent person's experience. This exchange and derivation of resources contribute to the sustainability of the service as an ecosystem.

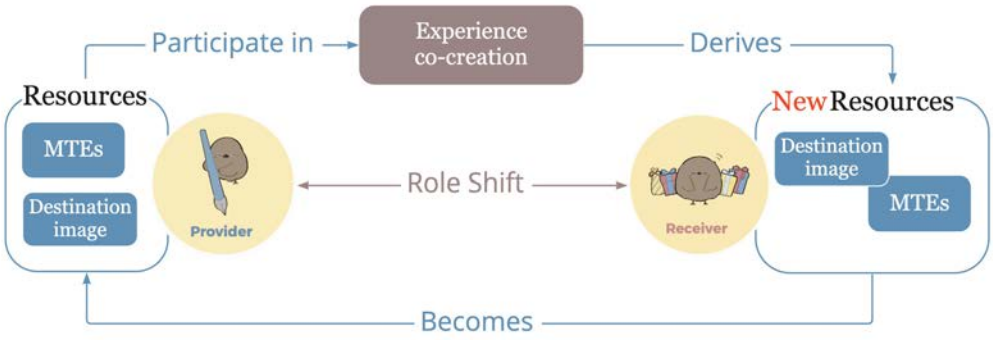


Figure 4.16 The resource derivation in the service

Summary

To summarize experience co-creation and respond to RQ4, providers participated in the resource acquisition process of receivers through indirect exchange by providing their existing resources. And the receiver's response creates new insight for the provider. The sharing and regeneration of resources among actors enable the continuous operation of the service.

4.3.6 Sustainable offering

The research team acted as a service provider to facilitate the indirect exchange between the provider and the receiver, ensuring that both the provider and the receiver achieved their desired user experience. Curating the box provides artifacts for the receiver to trigger destination images and MTEs while collecting feedback provides material for the provider to evaluate the outcome of sharing and gain new experiences. Therefore, the presence of the service operator is required for both parties to exchange and acquire resources.

The operation incurs operational costs, such as the cost of the box's contents, postage, and labor. To operate this service in a sustainable manner, participants in the service exchange should cover this cost. Two potential business models were proposed by the researchers. One is that end-users, who are the receivers, cover the cost. The other is to involve a stakeholder in investing human resources for operation. Both ways were explored in the final user test.

There was a pricing test that participants could participate voluntarily. Thirty-five participants took part in the price test. Their payment was converted into Japanese yen for analysis. Users were informed that the cost for box contents and delivery was 500 JPY and then paid the amount they deemed appropriate via a QR code. The median amount that users were willing to pay was 775 JPY (the average is 795 JPY), which covers the box's contents and shipping cost. However, the amount was insufficient to cover the operator's human resource costs.

Therefore, to enable this service's ecosystem to function, it is necessary to identify the potential stakeholder's willingness to invest in human resources. The potential stakeholder's motivation is to benefit from the service in exchange. According to the simulation test survey results, the participant believed the service could be utilized in the travel and tourism industry as a destination promotion. Institutions in the tourism field may benefit from attracting more visitors through this service. The research team sent a survey to 8 Japanese travel and tourism promotion organizations, including tourism bureaus, tourism exchange centers, and tourism culture promotion associations. One incorporated public interest foundation responded to the survey (figure 4.17). In general, the respondent had a favorable opinion of the service. Consistent with the service's primary purpose, the respondent agreed that the service enables users to share their experiences in a particular location with others. The respondent also slightly agreed with the four value propositions regarding enhancing the travel experience for individuals. However, the respondent provided a neutral response to the statement that the service facilitates communication between cultures and individuals of diverse cultural backgrounds.

According to the results of these two surveys, the service's target users are willing to pay more than the service's cost in exchange for the experience. However, stakeholders should be involved in future service operations. Unfortunately, the

sample size for the potential stakeholder survey is small. Although the respondent has a generally positive attitude towards the service, further exploration is still required for finding service operators.

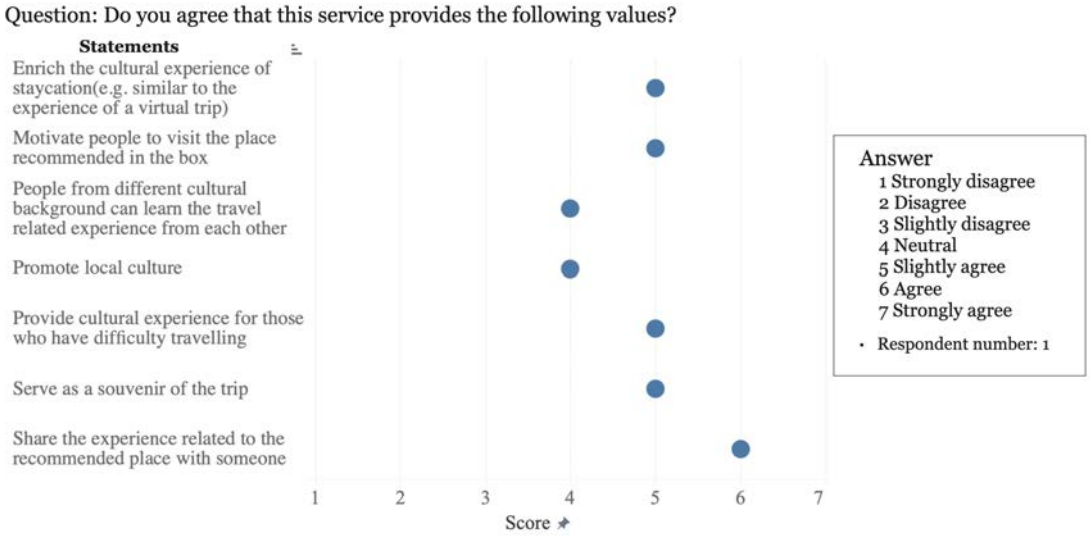


Figure 4.17 The result of the survey sent to the potential stakeholders

4.4. Value in Context

Two user testing phases confirmed the values that users accepted. Phase 1 enrolled 103 participants and used an online simulation test to imitate the first two stages of the user experience. The participants' responses to the artifact design were positive, and they confirmed the box can establish a certain level of the destination image. Phase 2 involved 36 users participating in a physical test that simulated the entire service process. Figure 4.18 illustrates the value-in-context at each stage. Compared to the value proposition in the final design (figure 3.19), the perceived values are more abundant and diverse.

For the receivers, at-home experiencers used the artifacts in the box in various ways to extend their experience by triggering imagination and empathy in the receivers. They turned their process of exploring the box at home into the

Stages	User's experience (in brief)	Value in context	
		Provider	Receiver
Indirect exchange through a surprise box		1. Recall destination's image 2. Recall MTEs 3. Revive place attachment from a local's perspective	Both 1. Gain a sense of expectation 2. Gain a sense of surprise 3. Know genuine experience of other individual 4. Gain events in daily life that worth sharing 5. Learn a solution of destination choice
At-home experience		N/A	Both Build up destination image 1. Build stronger affective image than the other two dimensions 2. Evoke previous impression of the destination 3. Imagine to build cognitive impression 4. Proactively look for virtual experience 5. Gain destination image on-site At-home experiencer Generate MTEs based on provider's narrative
On-site experience		N/A	On-site visitor Generate MTEs of their own 1. Memorize meaningful experience and seasonal encountering 2. Shared memory with companions add meanings to the trip △Insufficiency: low number of on-site visitor
Indirect exchange of the co-created experience		1. Compose the receiver's experience 2. Satisfied with the delivery of their thoughts 3. Gain new experience by receiving reviews 4. (Optional) Establish direct connection 5. (Optional) Be motivated to shift the role	Both 1. Reinforce MTEs 2. Feel connected to the provider 3. (Optional) Establish direct connection 4. (Optional) Conclude the destination image and MTEs to shift the role

Figure 4.18 The values validated in the final user test

MTE. Meanwhile, on-site visitors developed their MTE by gaining meaningful experiences relevant to the context.

As for the providers, rather than looking at the MTEs, the providers evaluated the destination image to see if a place is worth recommending. The tests also revealed that providers unconsciously reviewed their attachment to places to determine a secret spot. When they received feedback, providers perceive a value different from the value proposition. They gained a new experience by learning the receivers' thoughts or experiences rather than consolidating the original MTEs. Furthermore, the providers felt a sense of satisfaction from the indirect exchange when their messages are successfully delivered to the receiver.

Thus, the four research question are answered by the value validation.

RQ1: The secret spot blind box differs from a traditional blind box in terms of extending the user's experience. The box is explored at-home, and it fosters experiences on-site. It delivers experiences that influence the users in a long term.

RQ2: This service enables receivers to construct a destination image in various ways, with the affective image being constructed most from the three dimensions that consist of the destination image.

RQ3: Not only on-site visitors but also at-home experiencers acquired MTEs.

RQ4: Instead of passing on their knowledge, users co-generate new resources and ensures the service's long-term viability. The provider's stories influence the receiver's MTEs. In return, the receiver's feedback contributes to the provider's new experience. Furthermore, the receivers obtain the resources (DI and MTEs) that qualify them to become a provider, allowing them to switch roles in the future and ensure the service's sustainability.

This design contributed to individuals' recreational activities. The site visitors acknowledged that this service offered them a specific and dependable weekend option. Compared to the recommendations of the acquaintance, the hidden location offers a sense of novelty (participant 1). It also contributed to a moment of relaxation in people's daily lives. Those who were located in the city during the lockdown emphasized this fact in particular. Even though they were unable to travel physically, their journey with the box had a similar effect in that it drew people out of their daily routine and allowed them to relax for a moment. The feedback provided by the recipient allowed the provider to ascertain the outcome

of the recommendation, bringing psychological satisfaction.

There are also potential contributions that the service is unable to provide at this stage, but which users of the simulation test believe have potential. This service could be used to promote travel destinations and introduce international visitors to authentic lifestyles (participant 8). It has the potential to be used as a memento for a person's significant experiences, such as remembering daily life with family (participant 17), wedding (participants 50 and 60), and graduation (participant 63).

Chapter 5
Conclusion

This design has investigated the possibility of enhancing and generating MTE for users by facilitating the exchange of place-related experiences. The evaluation identified both the proposed values and unexpected value-in-context. This chapter will summarize the research, discuss its limitations, and offer new directions for future research.

5.1. Summary of the research

This research is an S-D logic-based service design that incorporates users' MTEs about places as a resource to generate new values.

Travelers' memorable tourist experiences about places satisfy their psychological needs that cannot be met in their daily routines. A review of prior research indicates that the construction of MTEs contributes positively to the well-being of individuals. Moreover, novel and engaging travel experiences contribute to the formation of MTE. However, the present design approach for engaging tourism experiences has two limitations: the resources of previous and prospective visitors to the place are not adequately integrated, and the daily lifestyle is not acknowledged as an integral component of the culture.

This study sought to fill the gap by delivering a box containing an individual's experience in the place. Past visitors of the location are the story providers, and they share their ordinary but genuine anecdotes with the service operator. The service operator curates the contents of the box based on the story and sends it to the receiver, who desires to build an MTE and is curious about such a place. The receiver explores the box's contents, forms an impression of the site, and subsequently generates the MTE by visiting. The new MTE can be handed to

the provider via the service operator, thereby completing the exchange. In this process, the provider contributes to developing the receiver's experience, which generates new emotional values for the provider.

In order to determine the optimal method for converting experiences into box contents, this study improved the artifact design and user experience by creating and evaluating four prototypes to build the final design. In the final design, the box included story cards, an at-home experience kit, and an on-site experience kit. Exploring and using the content items allowed the receiver to enjoy four stages of user experience after receiving the box: indirect exchange of the box, at-home experience, on-site experience, and indirect exchange of the co-created experiences. The provider is involved in two stages for indirect exchange.

This research has validated the value proposition through two rounds of user testing. The story functioned as the primary content of the box, which users widely acknowledged as a vital component of the co-creation experience. The story evoked various emotions from users, such as nostalgia, surprise, and sensitivity. Users identified this design as one that may differentiate itself from previous goods-dominated blind boxes by facilitating new MTEs. Users have given positive reactions to the experience. They took the initiative to share photos and videos of their exploration of the box, stating the positive emotions the service brought to them as a joyful event in their mundane daily lives. Participants who completed the user experience reported that they would take a different role (provider/receiver) in the future, validating that the resources are integrated sustainably.

The evaluation also confirmed that the service achieved its intended purpose of constructing and consolidating MTEs for users. Beyond what was anticipated, the participants generated value in diverse ways based on their roles, which are briefed below.

On-site visitors and at-home experiencers

The on-site visitor, as expected, has acquired his or her own MTE by visiting the spot, and the components of the new MTE were the occasional encountering and the shared memories with travel companions.

Unexpectedly, the at-home experiencer participants skipped the third step of the designed user experience, but they established an MTE via the cultural blind

box. Elements of their MTE included imagining the box's contents and building empathy with the provider. Exploring the box was a virtual trip for them. The formation of the at-home experiencer's MTE was in line with Kim's research that the familiarity with the place can be established indirectly before the visit [16].

Providers and Receivers

For providers, telling their stories did remind them of MTE. However, their satisfaction from indirect exchanges was not correlated with MTE. In recommending a secret spot, providers evaluated the location based on its destination image. When they have acquired the feedback from the receiver, the provider examined not their original MTE but whether the message of the destination image was accepted by the receiver completely. The provider was satisfied as the destination image had been approved.

On the other hand, the receivers strengthened the MTEs through the indirect exchange. Some receivers obtained the secret spot they had previously visited, triggering the recollection of old memories. Others recalled the MTEs of other places with similar atmospheres or functions through empathy and imagination, despite not having visited the secret spot in their box.

In conclusion, this study validated that this blind box design based on experience exchange accomplished service exchange between actors. Through the user experience, participants created and strengthened MTEs. Thus, the new resources that support users to shift their roles in the service were generated, which enabled the service to operate sustainably. Participants found the service effectively enriched their leisure time and created impressive travel experiences in their daily lives, thus contributing to psychological relaxation. However, due to the length of the research, several values identified during the process have not yet been verified. The following section will describe the limitation of this study.

5.2. Limitation

This study has two limitations: the duration of the user test and the potential stakeholders.

The duration of the user's test restricted the researcher from gaining insights

from participants with long-term experience. A complete user experience for this service comprised both the at-home and on-site stages. The instant participants received the box, they opened it and completed their at-home experience; nevertheless, the on-site experience requires the user's leisure time. Relatively few users visited the secret spot during the tests. The participants reported that they did not have time to travel to the secret spot during the test or that their secret spot was far and required a vacation for leisurely enjoyment. The refined prototype test was in winter, and several participants wanted to visit the secret spot during a more comfortable season, and one of them did in spring. The user's experience was designed to be flexible, where they should not be limited in when to visit the place. However, due to the constraints of the research schedule, there were only three weeks from the box distribution to the data collection for both the refined prototype and the final user test. This study could not trace the participants visiting this place at a specific time after the test, even though the final user test verified the users' intentions to visit.

Second, this research attempted to validate the anticipated future service provider but was insufficient. The service operated by the research team highlighted the importance of having a third party function as an intermediary between providers and receivers. In order to provide a favorable experience for both sides, the third party should be able to adequately interpret both the provider and the receiver's experiences through the curated box. From the perspective of service exchange, the operator should be able to benefit from the service in exchange for the human resources they are contributing. The researcher sent a survey to organizations in the field of tourism promotion in search of possible stakeholders and only received one data sample. The minimal sample size and scope resulted in a limited depth and breadth of data to validate the potential service operator. During phase one of the refined prototype test, users proposed scenarios to which they considered the service could apply. Their opinions cover a wide range of scenarios in a variety of fields such as healthcare, socialization, and cross-cultural exchange. However, due to limited resources in connecting with the potential service operators, the research team was unable to collect feedback from actors in other fields or industries.

5.3. Future Works

As stated in the preceding section, the user-accepted values exceed the value proposition in the design phase. The researcher hopes to inspire designers who are similarly interested in building user experiences regarding a place or those who are exploring new designs of blind boxes. Based on the values discovered in the user tests and the limitations of this study, the directions for future works are discussed in the last section.

First, for future designs that aim to elevate the indirect exchange between users through artifacts, there is potential for innovation in terms of box contents and expanding the user's imagination about the individual with whom they indirectly exchanged experiences. In the final user test, the research team presented a brief description of the provider in the final design through the think sheet. The receiver gave this primary user portrait a great deal of positive feedback. Therefore, it could be feasible to provide the user with a more concrete basis for their imagination by enriching the user's profile and including it in the box. It is important to note that the rich contents of the user profile should secure the user's personal information to safeguard the privacy and maintain the proper social distance between the two sides.

Developing the provider's experience by offering them a more in-depth review could be a way to balance the value that provider and receiver gained, which is crucial for the service's sustainability. It is worthwhile to consider constructing a receiver's portrait and sending it to the provider. The current design enables the receiver to be more involved in the service process than the provider because they could experience four stages of the user experience and are able to gain MTEs at home and on-site. On the contrary, the provider only takes part in the two stages of the user's experience. Therefore, delivering the receiver's MTEs back to the provider is the key to achieving the balance of the values that the two sides gained from this service. As validated in the final user test, the receiver's feedback could be a vital resource that builds a valuable experience for the provider.

Second, a potential research direction for future studies adopting this design is exploring the value of long-term user experience. Researchers could investigate whether those users who have demonstrated a strong willingness to visit the secret spot when receiving the box go to the site at a particular time in the future

and complete the entire user experience. Identifying the determinants of users' motivation for a visit would not only help refine the artifact design of this service but also help the managers of destination promotions, product designers, or UX designers who scheme leisure time experiences to obtain insightful opinions from users.

Another possible research question is whether the on-site visitor develops a strong emotional connection to the place as a result of the user's experience. Multiple visits are likely to foster the development of an emotional bond between people and locations. The potential research method could involve following the user over time to know if they revisit the secret spot or how they recall their experience there some time after their initial visit. This contributes to the study of the relationship between individuals and places by allowing the identification of the key factors that lead users from knowing a place to developing an emotional connection with it.

Last but not least, service designers could extend this design to the field of social communication in the future, which was an inspiring perspective proposed by the participants in this research. One possibility is to offer this service to members of the same community to improve their connection. Compared to the exchange between strangers, the indirect interaction between community members was likely to trigger the imagination of each other more. The provider's shared experience is like a puzzle, constructing the receiver's understanding of the provider. The receivers could enjoy the fun of linking their existing knowledge of the community member with the shard stories.

In addition, a secret spot related to the community has the potential to bring about empathy. This service could be utilized to trigger conversations or activities such as going on-site with another member. Since community members share a specific set of knowledge of their residence place, working place, or places related to their interests, the secret spot is more likely to be a place that is accessible to the majority of the members.

Overall, this study proposed a service design as an experimental attempt to prompt the user's MTEs with the secret spot through a blind box. It aimed to enrich people's leisure time activity by providing them a meaningful place to

visit. It also contributed to the tourism field by proposing a sustainable method that engages the tourists via sharing their memorable experiences related to the destination. This paper describes the design process and evaluation results in an effort to inspire future researchers. By deriving this design, additional values may be proposed to users in the future.

References

[1] Jong-Hyeong Kim. Determining the factors affecting the memorable nature of travel experiences. *Journal of Travel & Tourism Marketing*, 27(8):780–796, 2010.

[2] Jong-Hyeong Kim. The antecedents of memorable tourism experiences: The development of a scale to measure the destination attributes associated with memorable experiences. *Tourism management*, 44:34–45, 2014.

[3] Han Chen and Imran Rahman. Cultural tourism: An analysis of engagement, cultural contact, memorable tourism experience and destination loyalty. *Tourism management perspectives*, 26:153–163, 2018.

[4] Jong-Hyeong Kim, JR Brent Ritchie, and Bryan McCormick. Development of a scale to measure memorable tourism experiences. *Journal of Travel research*, 51(1):12–25, 2012.

[5] Chao Wei, Weiyan Zhao, Chaozhi Zhang, and Keji Huang. Psychological factors affecting memorable tourism experiences. *Asia Pacific Journal of Tourism Research*, 24(7):619–632, 2019.

[6] Ana Cláudia Campos, Júlio Mendes, Patrícia Oom do Valle, and Noel Scott. Co-creation of tourist experiences: A literature review. *Current Issues in Tourism*, 21(4):369–400, 2018.

[7] Ina Reichenberger. C2c value co-creation through social interactions in tourism. *International Journal of Tourism Research*, 19(6):629–638, 2017.

[8] Stephen Smith. A sense of place: Place, culture and tourism. *Tourism Recreation Research*, 40(2):220–233, 2015.

[9] Jerome Bruner. Narrative, culture, and mind. *Telling stories: Language, narrative, and social life*, pages 45–49, 2010.

[10] Jong-Hyeong Kim and Hyewon Youn. How to design and deliver stories about tourism destinations. *Journal of Travel Research*, 56(6):808–820, 2017.

[11] CK Wan, Kenny KN Chow, Cees JPM de Bont, and Paul Hekkert. Finding synergy between oral and visual narratives on memorable and meaningful tourism experiences. *Information Technology & Tourism*, 22(1):107–130, 2020.

[12] Gianna Moscardo. Stories as a tourist experience design tool. In *Design science in tourism*, pages 97–124. Springer, 2017.

[13] Gianna Moscardo. Tourist experience design. In *Quality services and experiences in hospitality and tourism*, volume 9, pages 93–107. Emerald Publishing Limited, 2018.

[14] Catarina Marques, Rui Vinhas da Silva, and Stanislava Antova. Image, satisfaction, destination and product post-visit behaviours: How do they relate in emerging destinations? *Tourism Management*, 85:104293, 2021.

[15] Robert F Lusch and Stephen L Vargo. *Service-dominant logic: Premises, perspectives, possibilities*. Cambridge University Press, 2014.

[16] Soyeon Kim, Xinran Lehto, and Jay Kandampully. The role of familiarity in consumer destination image formation. *Tourism Review*, 2019.

[17] Mohamed Slim Ben Mimoun, Marion Garnier, Delphine Depledt, et al. My little box, oh my little box a video-netnographic study on the expression of values in subscription-based e-commerce. *Journal of Applied Business Research (JABR)*, 31(3):1159–1166, 2015.

[18] Uli Knobloch, Kirsten Robertson, and Rob Aitken. Experience, emotion, and eudaimonia: A consideration of tourist experiences and well-being. *Journal of Travel Research*, 56(5):651–662, 2017.

[19] Chen-Tsang Tsai. Memorable tourist experiences and place attachment when consuming local food. *International Journal of Tourism Research*, 18(6):536–548, 2016.

[20] Yadi Ernawadi and Hariyadi Triwahyu Putra. Antecedents and consequences of memorable tourism experience. *Dinasti International Journal of Management Science*, 1(5):676–684, 2020.

[21] Didem Kutlu and Hasan Ayyıldız. The role of the destination image in creating memorable tourism experience. *Journal of Tourism and Services*, 12(23):199–216, 2021.

[22] Sera Vada, Catherine Prentice, and Aaron Hsiao. The influence of tourism experience and well-being on place attachment. *Journal of Retailing and Consumer Services*, 47:322–330, 2019.

[23] Bernardo Hernández, M Carmen Hidalgo, M Esther Salazar-Laplace, and Stephany Hess. Place attachment and place identity in natives and non-natives. *Journal of environmental psychology*, 27(4):310–319, 2007.

[24] Leila Scannell and Robert Gifford. Place attachment enhances psychological need satisfaction. *Environment and Behavior*, 49(4):359–389, 2017.

[25] Lalith Chandralal, Jennifer Rindfleish, and Fredy Valenzuela. An application of travel blog narratives to explore memorable tourism experiences. *Asia Pacific Journal of Tourism Research*, 20(6):680–693, 2014.

[26] Serena Volo. The experience of emotion: Directions for tourism design. *Annals of Tourism Research*, 86:103097, 2021.

[27] Ulrike Gretzel, Daniel R Fesenmaier, and Joseph T O'leary. The transformation of consumer behaviour. *Tourism business frontiers: Consumers, products and industry*, 9:18, 2006.

[28] Elaine F Mathis, Hyelin Lina Kim, Muzaffer Uysal, Joseph M Sirgy, and Nina K Prebensen. The effect of co-creation experience on outcome variable. *Annals of tourism research*, 57:62–75, 2016.

[29] Matthew J. Stone, Steven Migacz, and Erik Wolf. Beyond the journey: the lasting impact of culinary tourism activities. *Current Issues in Tourism*, 22(2):147–152, 2019.

[30] Wenkai Wang, Peihua Hsieh, and Hsiuju Rebecca Yen. Engaging customers in value co-creation: The emergence of customer readiness. In *2011 International Joint Conference on Service Sciences*, pages 135–139. IEEE, 2011.

[31] Prakash Chathoth, Levent Altinay, Robert James Harrington, Fevzi Okumus, and Eric SW Chan. Co-production versus co-creation: A process based continuum in the hotel service context. *International Journal of Hospitality Management*, 32:11–20, 2013.

[32] Ivana Rihova, Dimitrios Buhalis, Miguel Moital, and Mary-Beth Gouthro. Conceptualising customer-to-customer value co-creation in tourism. *International Journal of Tourism Research*, 17(4):356–363, 2015.

[33] Sihem Dekhili and Yousra Hallem. An examination of the relationship between co-creation and well-being: An application in the case of tourism. *Journal of Travel & Tourism Marketing*, 37(1):33–47, 2020.

[34] Sérgio Dominique Ferreira Lopes et al. Destination image: Origins, developments and implications. *PASOS. Revista de Turismo y Patrimonio Cultural*, 9(2):305–315, 2011.

[35] Seyhmus Baloglu, Tony Leonard Henthorne, and Safak Sahin. Destination image and brand personality of jamaica: A model of tourist behavior. *Journal of Travel & Tourism Marketing*, 31(8):1057–1070, 2014.

[36] Liliya Arslanova, Dora Agapito, and Patrícia Pinto. Tourism destination image of russia in the perspective of the portuguese market. *Journal of Spatial and Organizational Dynamics*, 5(2):146–158, 2017.

[37] Charlotte M Echtner, JR Brent Ritchie, et al. The meaning and measurement of destination image. *Journal of tourism studies*, 2(2):2–12, 1991.

[38] Asuncion Beerli and Josefa D Martin. Factors influencing destination image. *Annals of tourism research*, 31(3):657–681, 2004.

[39] Ching-Fu Chen and DungChun Tsai. How destination image and evaluative factors affect behavioral intentions? *Tourism management*, 28(4):1115–1122, 2007.

[40] Gianna Moscardo. Stories and design in tourism. *Annals of Tourism Research*, 83:102950, 2020.

[41] Chi Kwong Bruce Wan. Exploring a travel diary that promotes wellbeing–synergy between oral and visual narratives of memorable and meaningful experiences. In *Information and communication technologies in tourism 2019*, pages 187–199. Springer, 2019.

[42] Ziwei Zhang. Research on blind box and its marketing strategy. In *Proceedings of the 2021 International Conference on Economic Development and Business Culture (ICEDBC 2021)*, pages 115–118. Atlantis Press, 2021.

[43] Hongjoo Woo and Bharath Ramkumar. Who seeks a surprise box? predictors of consumers' use of fashion and beauty subscription-based online services (sos). *Journal of Retailing and Consumer Services*, 41:121–130, 2018.

[44] Jong-Geun Lee, Amrut Sadachar, and Srikant Manchiraju. What's in the box? investigation of beauty subscription box retail services. *Family and Consumer Sciences Research Journal*, 48(1):85–102, 2019.

[45] Rachel Noorda. The element of surprise: a study of children's book subscription boxes in the usa. *Publishing Research Quarterly*, 35(2):223–235, 2019.

[46] Severin Friedrich Bischof, Tim M Boettger, and Thomas Rudolph. Curated subscription commerce: A theoretical conceptualization. *Journal of Retailing and Consumer Services*, 54:101822, 2020.

[47] Xun Xu. Examining the role of emotion in online consumer reviews of various attributes in the surprise box shopping model. *Decision Support Systems*, 136:113344, 2020.

[48] Steven C Rosenbaum. *Curation nation*. McGraw-Hill, 2011.

[49] Jillian C Sweeney and Geoffrey N Soutar. Consumer perceived value: The development of a multiple item scale. *Journal of retailing*, 77(2):203–220, 2001.

[50] Qiong Tao and Yingjiao Xu. Fashion subscription retailing: an exploratory study of consumer perceptions. *Journal of Fashion Marketing and Management: An International Journal*, 2018.

[51] J Bray, M De Silva Kanakaratne, Mina Dragouni, and J Douglas. Thinking inside the box: An empirical exploration of subscription retailing. *Journal of Retailing and Consumer Services*, 58:102333, 2021.

[52] Cristina Mele, Maria Colurcio, and Tiziana Russo-Spena. Research traditions of innovation: Goods-dominant logic, the resource-based approach, and service-dominant logic. *Managing Service Quality*, 24(6):612–642, 2014.

[53] Tyron Roy Sharnock et al. *Factors that influence the consumer purchase decision to subscribe to a meal-kit delivery service*. PhD thesis, University of Pretoria, 2018.

[54] Daniela Petrelli, Steve Whittaker, and Jens Brockmeier. Autotopography: what can physical mementos tell us about digital memories? In *Proceedings of the SIGCHI conference on Human Factors in computing systems*, pages 53–62, 2008.

[55] Ine Mols, Elise van den Hoven, and Berry Eggen. Making memories: a cultural probe study into the remembering of everyday life. In *Proceedings of the 8th Nordic Conference on Human-Computer Interaction: Fun, Fast, Foundational*, pages 256–265, 2014.

[56] Erica G Hepper, Tim Wildschut, Constantine Sedikides, Sara Robertson, and Clay D Routledge. Time capsule: Nostalgia shields psychological wellbeing from limited time horizons. *Emotion*, 21(3):644, 2021.

[57] Panagiotis Mantas, Zafeiria-Marina Ioannou, Emmanouil Viennas, George Pavlidis, and Evangelos Sakkopoulos. Digital gifts and tourism mementos: A sustainable approach. *Sustainability*, 14(1):98, 2021.

[58] Greg Richards. Creativity and tourism: The state of the art. *Annals of tourism research*, 38(4):1225–1253, 2011.

[59] Siow-Kian Tan, Ding-Bang Luh, and Shiann-Far Kung. A taxonomy of creative tourists in creative tourism. *Tourism Management*, 42:248–259, 2014.

[60] Horst WJ Rittel and Melvin M Webber. Dilemmas in a general theory of planning. *Policy sciences*, 4(2):155–169, 1973.

[61] Seyhmus Baloglu. Image variations of turkey by familiarity index: Informational and experiential dimensions. *Tourism management*, 22(2):127–133, 2001.

[62] Mark S Rosenbaum, Mauricio Losada Otalora, and Germán Contreras Ramírez. How to create a realistic customer journey map. *Business horizons*, 60(1):143–150, 2017.

[63] Ching Lee, Qiye Li, Yu-Chi Lee, and Chih-Wen Shih. Service design for intelligent exhibition guidance service based on dynamic customer experience. *Industrial Management Data Systems*, 12 2020.

[64] Irwin Altman and Setha M Low. *Place attachment*, volume 12. Springer Science & Business Media, 2012.

Appendices

A. Attributes used in the pairing algorithm

Category	Attributes
Activity	Party
	Picnic
	Reading
	Photography
	Sightseeing
	Exercising
	Encountering adorable animals
	Daydreaming
	Painting
	Enjoying delicious food
	Working
	Chatting
	Sitting in the sun
	Taking a walk
	Meeting new people
Time duration	Leisurely, unhurriedly enjoy
	Drop by a short visit
With whom	Alone
	First date
	Classmate or colleagues
	Friends
	Partner
	Family

Atmosphere	Vibrant energy
	Romance
	Natural scenery
	Grand sight
	Peaceful place
	Exotic
	Local characteristics
	Refreshing
	Modern city

B. An example of the stories card set designed for a secret spot

Figure B.1 A list of the box contents

Figure B.2 A letter from the provider

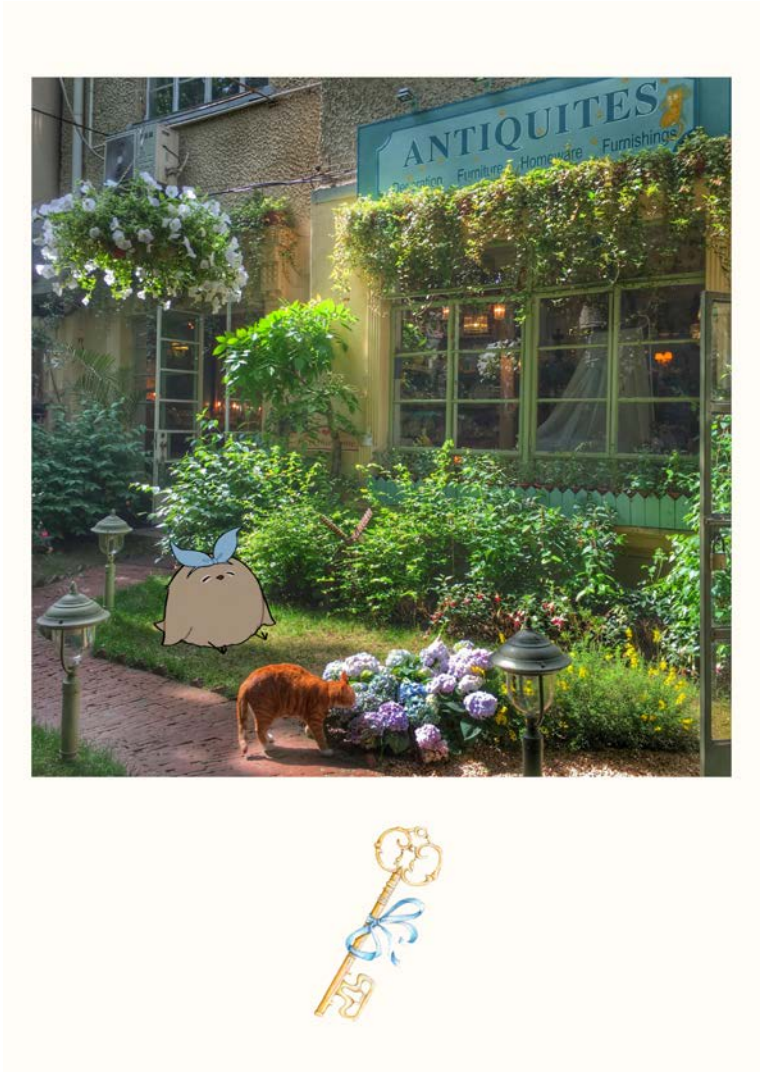


Figure B.3 A photo of the secret spot

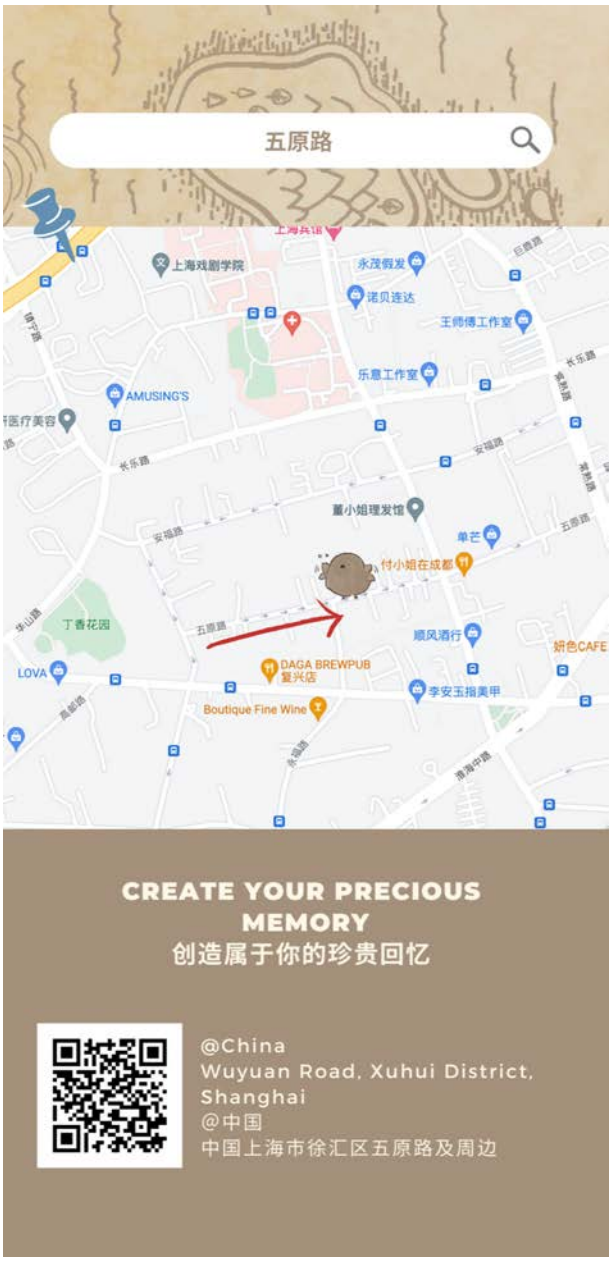


Figure B.4 Map and address

Figure B.5 Think sheet: question

Figure B.6 Think sheet: answer

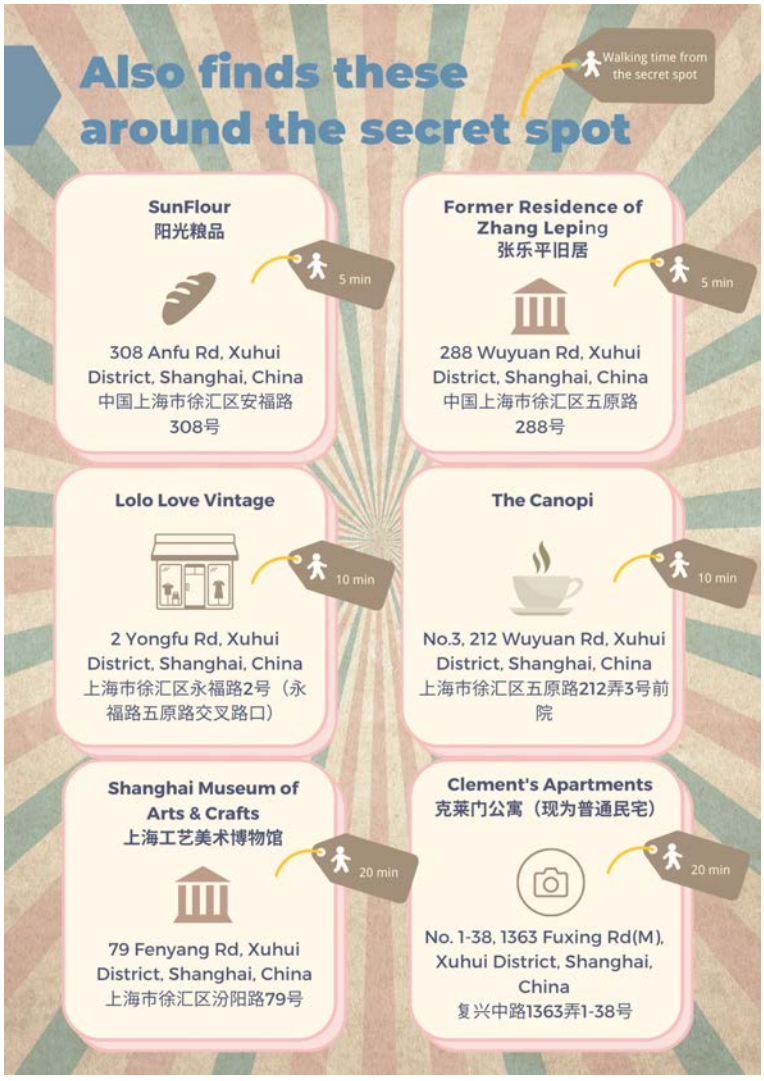


Figure B.7 Surrounding area

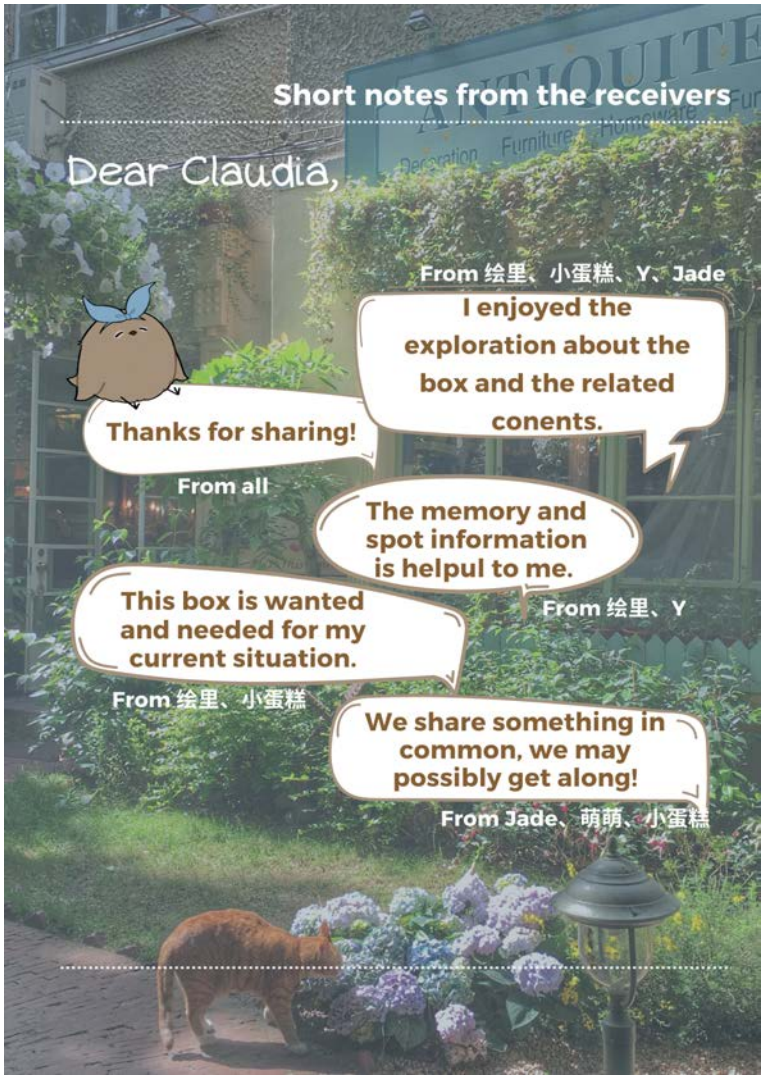


Figure B.8 The review cards: a collection of the short feedback

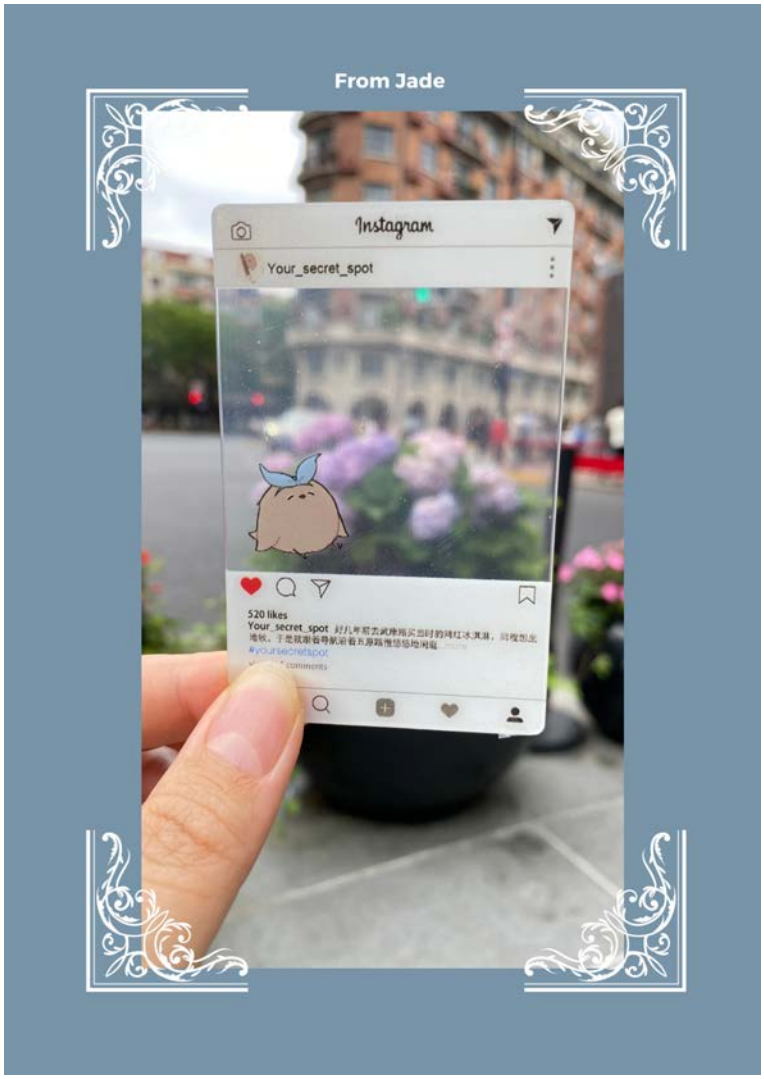


Figure B.9 The review cards: photo

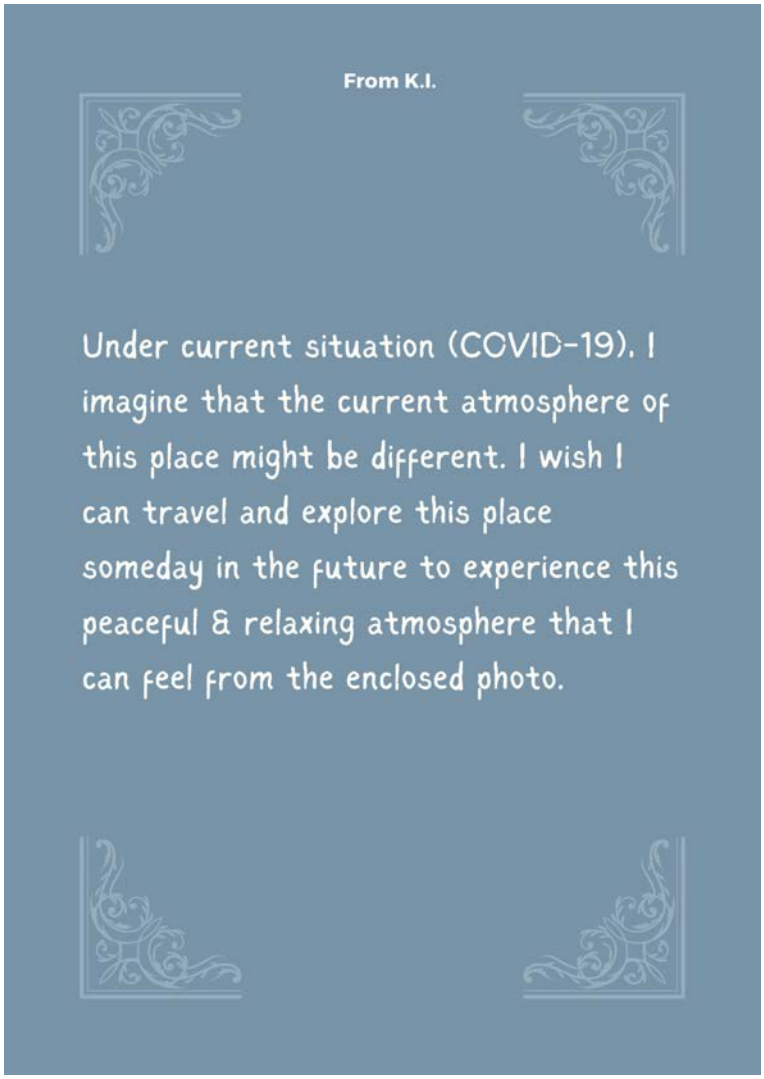


Figure B.10 The review cards: note