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Master's Thesis  
Academic Year 2020

Yambaru Style: Toward a New Virtual Tourism  
Concept for Regional Tourism  
in New Normal Life



Keio University  
Graduate School of Media Design

Xiwen Xian

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

Xiwen Xian

Master's Thesis Advisory Committee:

Professor Hiro Kishi	(Main Research Supervisor)
Professor Keiko Okawa	(Sub Research Supervisor)

Master's Thesis Review Committee:

Professor Hiro Kishi	(Chair)
Professor Keiko Okawa	(Co-Reviewer)
Professor Akira Kato	(Co-Reviewer)

Abstract of Master's Thesis of Academic Year 2020

Yambaru Style: Toward a New Virtual Tourism Concept  
for Regional Tourism  
in New Normal Life

Category: Design

Summary

We face significant challenges for our health and life; many industries ask for changes, especially the tourism industry, due to the global pandemic outbreak, Covid-19 since December 2019 in Wuhan. Under a challenging and difficult situation, a new concept about traveling to destinations like local places is necessary. There is a lack of conceptual clarity and study surrounding virtual tourism or how to market it.

This paper introduces a new concept of virtual tourism, “Yambaru Style,” for Japan’s regional tourism market to adapt new normal life. The author design a sample virtual tourism experience and determine the feasibility at a specified area, Yambaru National Park, in Okinawa, Japan, by diving into different target user types on different timelines based on the service design process. A new way of traveling in a new normal life can be defined. It can also provide new opportunities for local businesses with the approach to this new virtual tourism concept.

Keywords:

concept design, virtual tourism, regional revitalization, tourism industry, Okinawa, COVID-19

Keio University Graduate School of Media Design

Xiwen Xian

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I hope everyone can stay safe and healthy.

Thank you very much.

# Chapter 1

## Introduction

### 1.1. Background

We are facing significant challenges to our health and life this year. Many industries ask for changes due to the global pandemic outbreak, COVID-19, since December 2019 in Wuhan, China. People started to spend more time at home since many countries and cities have partially shut their borders, and most places for social activities such as restaurants, shopping malls, theatres have been closed for such a long time. The airline industry, hospitality industry, and most industries related to the tourism market worldwide are experiencing the most challenging time in this century. Everyone's lifestyle has been transformed into a "New Normal Life" like working from home, online gathering. Most of us prefer domestic trips though the authorities have loosened the lock-down, and most countries still have restrictions for foreign travelers at this moment. Brian Chesky, the CEO of Airbnb, also said, "Travel will become more intimate and more local" due to pandemic" during an interview on the "Today" show in May 2020.

Japan, always known as a fantastic tourist destination with unique experience and culture, has been much shocked by COVID-19. Tokyo, the capital of Japan, was supposed to have the Olympics Games in summer 2020. The Olympics were postponed to 2021. The central government declared a state of emergency from April to June. Japan is refusing entry to non-Japanese people in over 100 designated countries across the world. On the other hand, we can see the possibility of online activities while the pandemic is making significant impacts on our mobility. More and more platforms such as Airbnb, HIS, Trip Advisor provide ways like virtual tours and online experience to let people have some meaningful time, do some activities, and travel virtually with some communities online from home. "Virtual Tourism," a new tourism style, is coming to people's life indeed in

2020. People start to share a global experience online. However, there is still little research to show how to understand and design virtual tourism, define the targets of virtual tourism, and how virtual tourism can contribute to industries and business.

This research selects a target area, the Yambaru region in Japan. The Yambaru region makes up the northern part of Okinawa Main Island. Compared to the urbanized, the southern part of the island, Yambaru is significantly less developed and more rural. (Source:<https://www.japan-guide.com/e/e7131.html>) The author introduced a new virtual tourism concept and proposed a new virtual tourism experience for this area, “Yambaru Style.” “Yambaru Style” is designed based on the service design process in a new normal life. The author will show the design process for “Yambaru Style” and conduct user tests to discuss the feasibility about “Yambaru Style.” Target users of “Yambaru Style” will be tested individually and in a few groups. The author will gain feedback through interviews with target users for qualitative analysis; Questionnaires will be collected for quantitative analysis. The author will conclude how the “Yambaru Style” can positively impact regional tourism in Japan and even the whole tourism industry based on analysis results.

## 1.2. About Yambaru and Related Local Areas

Yambaru area is located in Kunigami village, a large administrative unit and the northernmost village on the Okinawan island. Has been dubbed the “Galapagos of Okinawa” due to its wealth of rare creatures. Yambaru is a place with many precious species, a natural landscape, long history, and sufficient culture. However, there are some problems with this place, and the tourism business cannot develop very well though Japan has some famous tourist places like Kyoto and Tokyo. Yambaru area is very much behind in some fields compared to other local areas in Japan. First, there are literally no very famous spots like Tokyo tower, Kiyomizudera that remain in people’s minds. Second, every industry is separate, and there is no such combination like agriculture and tourism can create a new business model. For example, there is a co-creation project between a hotel and a university named “MEMU EARTH HOTEL” in Taiki Town, Hiroo County,

Hokkaido (see Figure 1.1 and Figure 1.2). It provides a place for visitors to enjoy the progressive architecture and have a formative experience through the innocent nature of Tokachi. It aims to contribute to the local community and provide hints and opportunities for visitors to think about co-existence with nature and what essential wealth is.

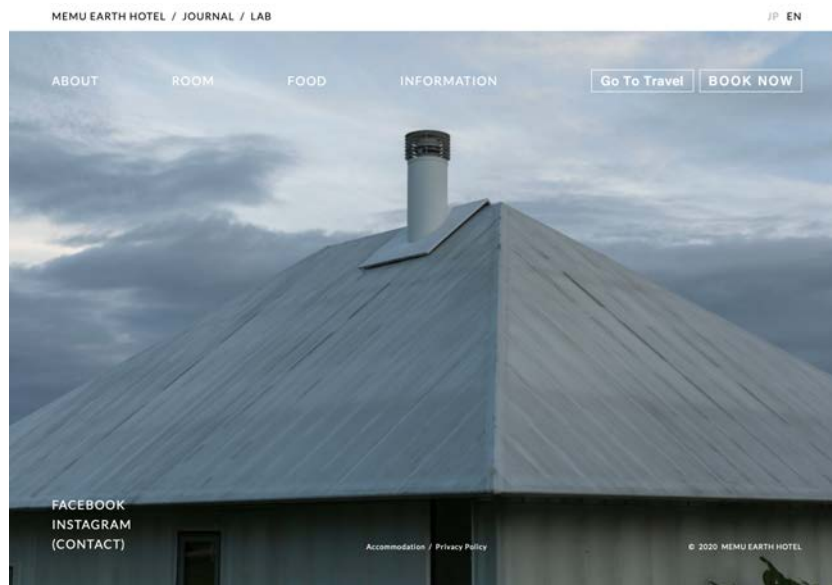


Figure 1.1 Homepage of Memu Earth Hotel

(Source: Memu Earth Hotel [1])

Third, the Yambaru area does not have enough promotion for their products and their traditional craftsmanship like pineapples, pork, and forestry. When people talk about Kyoto, they will mention Wagashi, and Kyoto makes a perfect local Wagashi business nowadays. (see Figure 1.3) Also, Sabae city in Fukui produced a project with Japan Airlines (JAL), “JAL NEW · JAPAN PROJECT FUKUI” (see Figure 1.4), to introduce their famous traditional craftsmanship, Urushi, to the world.

Yambaru area in Kunigami village is the only place in Okinawa Prefecture that the Tokyo-based Forest Therapy Society has certified as a forest therapy base among nearly 60 others in Japan. It is a good place for visitors looking for eco-accommodation, bungalows, and treehouses available in the forest park are

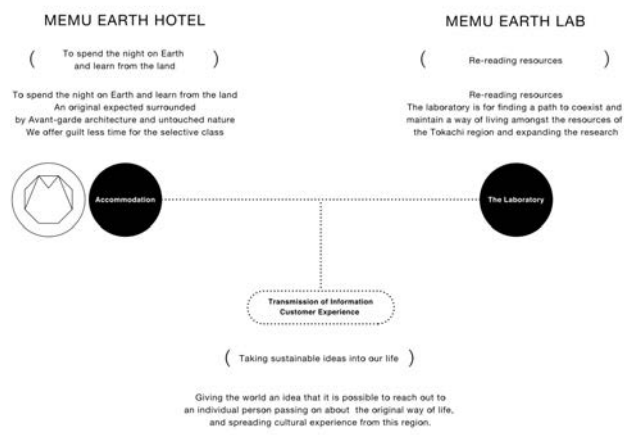


Figure 1.2 Concept of Memu Earth Hotel  
(Source: Memu Earth Hotel [2])



Figure 1.3 Wagashi in Kyoto  
(Source: Hanami Dango [3])



Figure 1.4 JAL NEW · JAPAN PROJECT FUKUI

(Source: JAL Japan New Project Fukui [4])

recommended as lodging where visitors can coexist with nature. [5] The author thinks the Yambaru area has to approach tourism business by the good use of its resources.

### 1.3. Hypothesis

The concept design of the “Yambaru Style” for the Yambaru region and testing it for target users in three timelines, before traveling to the destination, while traveling in the destination, and after traveling to the destination. “Yambaru Style” can provide a new way of thinking about virtual tourism and a new opportunity for the regional tourism industry under the situation of coronavirus. Also, “Yambaru Style” can create new contents that cannot provide from a real tour, new business opportunities for other industries in the same area. “Yambaru Style” can meet the expectation of both visitors and local people. This concept cannot only apply in Yambaru area but also other local areas in Japan. Tourism for local areas in “New Normal Life” can be defined at last.

## 1.4. Research Questions

In order to understand the concept of “Yamabru Style” on virtual tourism in the tourism industry based in the Yambaru region and find out potential use as an essential chance to support not only the tourism industry but also other industries in the future, the author asks following questions:

1. How virtual tourism connect with real tourism?
2. What are the differences in virtual tourism experiences for different target users during the design process?
3. What are visitors/travelers ’ perceptions concerning the engagement with Yambaru (local area)?
4. How can tourism associations/tourism industry use “Yambaru Style” to meet expectations from local people, support, and develop other businesses for Yambaru (local area)?

# Chapter 2

## Literature Review

This chapter will evaluate some research about virtual tourism and digital marketing in the tourism industry. The author will then go through how service design and experience design implemented for tourism research in the previous study. Finally, the author will research and discuss the impacts on the tourism industry because of coronavirus. Therefore, the author will introduce the contributions of this thesis.

### 2.1. Virtual Tourism and Digital Marketing in Tourism Industry

#### 2.1.1 Overview

Virtual tourism means tourists will travel virtually. Most tourists will use online tools to enhance their travel experiences nowadays. There is some recent research about virtual tourism and online tourism experience. Also, digital transformation, such as social media usage, has vast impacts on the tourism industry nowadays. Digital marketing showed its immense potential to bring new business opportunities. The author will review them to get some methods to discuss how virtual tourism works and how to produce content for virtual tourism in the following chapters.

#### 2.1.2 Virtual Tourism

One of the most significant changes from the “new normal lifestyle” with Coronavirus is using online tools more for meetings and interviews. Many countries had a declaration of a state of emergency. On the other hand, “traveling,” is always

an essential and normal behavior that human beings have nowadays. How can people travel without transports and moving around? How can people still have "traveling" during this challenging time? "Virtual tourism" gradually became a volatile keyword in the tourism industry since Coronavirus's situation got more and more severe in most countries in the world. Although most people had a mind about virtual tourism before the Coronavirus happened, people started to be aware of its importance, flexibility, and possibility. Virtual tourism can assist small structures in saving time and money and increasing flexibility and quality while boosting receptiveness to innovation. [6](Egger, Roman et al., 2007, 175)

Future trends in the tourism industry will be devoted to an entirely progressive 360-degree view of the visitor by building tourist destinations in the virtual world. [7] (Kevser et Daniel, 2020, p. 197). Daniel referred that virtual tourism can be used to plan, manage, and market a destination. [8](Daniel, 2010, p.637). There is also a term, "post tourism", which has a similar meaning to "virtual tourism," which showed up in the 80s. Makoto indicates experiences of "post tourism" are discussed three features, and there is one feature, "inauthentic" was defined. "Post tourism" is important to think about if the tourists participate and enjoy the trips by themselves. [9] (Yamaguchi, 2020, p. 81). Recently, Chen extracted the situation of online tourism asset construction and found the frequency of "providing services for tourists, tourism enterprises and tourism management departments" is relatively low according to the classification system of concept characteristics of online tourism. [10] (Chen, 2020)

People can also consider virtual tourism as a part of online entertainment with online tools and social media. Lis. P and Fesenmaier confirmed that online videos could be a powerful tool that can intensify the interest of potential travelers in their study. [11] (Iis P et Fesenmaier 2009, p.24)

However, the definition of virtual tourism was still unclear in the previous study, and no study shows an actual concept or guidelines of virtual tourism. The tourism industry is changing rapidly, and there are always many stakeholders will be involved differently. There is still a lack of discussion about the business model of virtual tourism.

### 2.1.3 Digital Marketing in Tourism Industry

The author thinks virtual tourism has a strong connection to digital marketing in the tourism industry since virtual tourism moves towards innovative ways to keep their consumer-base engaged despite their inability to travel. It is imperative to focus on how to market virtual tourism when the tourism style switches from real and local to virtual and remote. Although virtual tourism is a new trend for the tourism industry, people have already designed some online tourism platforms and business plans by using social media or the internet technology. Digital marketing in the tourism industry has developed a lot due to rapid technical, social, and economic changes.

Digital tourism marketing can help every party involved in the tourism industry connect with visitors worldwide more easily, show them the visual appeal of their destinations, and possibly get more exposure than traditional marketing. (see figure2.1) It also considers the advantages of information technology in the promotion of online tourism. [12](Watkins, Mark et al., 2018, p.40) Online tourism contents are inherently experiential and very engaging and, therefore, a seemingly natural fit for social media. Digital tourism marketing is a dynamic field with new technologies and new advertising models constantly emerging. [13](Gretzel, Ulrike et al., 2013, p.491) There are plenty of e-platforms for tourism showed up these years, and they can be a solution to lack of basic information and bring potential benefits to visitors. They showed that the business model canvas (BMC) could apply to design the e-platforms. [14](Roma et al, 2020, p176) Digital Marketing today is all about using internet technologies to reach out to existing and newer audiences and engage with them. [15](Kaur and Gurneet, 2017, p.72). Digital marketing in tourism is just a way to describe the experiences that potential customers can expect if they buy the respective product. [16] (Sofronov, Bogdan et al., 2019, p.117)

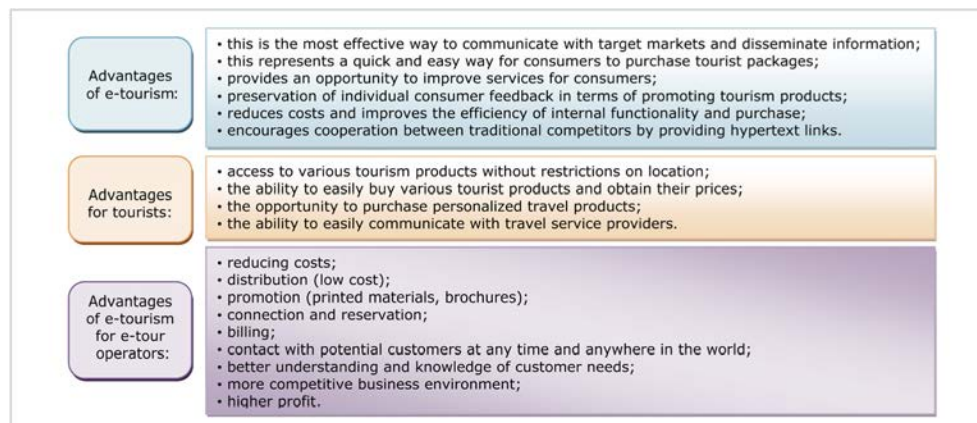


Figure 2.1 Advantages of online tourism

## 2.2. Service and Experiences Design in Tourism

### 2.2.1 Overview

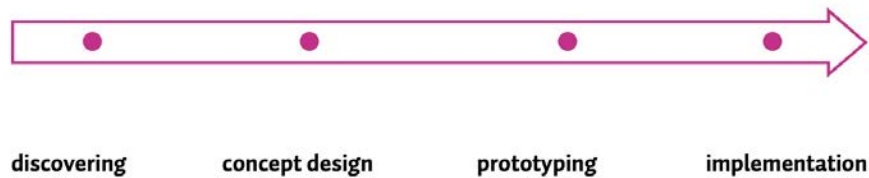
The author learned about design thinking from graduate school. Service Design and Experiences Design are becoming more important in people's high demand in society nowadays. However, there is still a lack of research about applying service design and experiences design thinking to virtual tourism at this moment. The author wants to apply design thinking and service design to the design of "Yambaru Style" in the following chapters.

### 2.2.2 Definition of Service Design

Service Design is still quite new but significant thinking in the Tourism industry. Since creative approaches dominate service design, imaginable customer descriptions such as personas are a possible starting point for a constitutive application of service design tools and methods. The service design process can be divided into four parts, discovering, concept design, prototyping, and implementation. (See figure 2.1) Tourism could be the fundamental idea of the customer journey as a service design tool be more obvious. [17](Stickdorn et Schwarzenberger, 2016, p.261)

Setting clear targets and designing a new service must seek new opportunities

### THE SERVICE DESIGN PROCESS

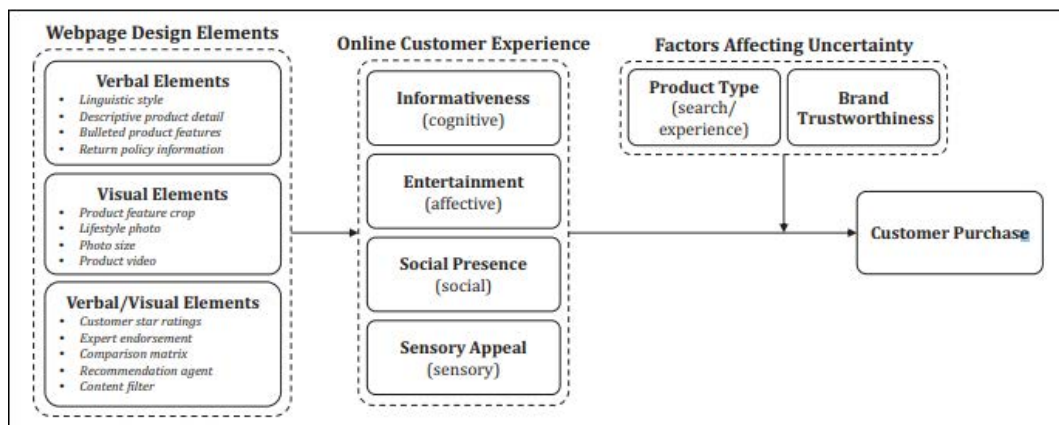


(Source:Service Design in Tourism) [18]

Figure 2.2 Service Design Process

for the tourism industry. In this thesis, the author will discover existing problems and missing points that have to focus on the case study of Airbnb and fieldwork in the Yambaru region. The author will follow the service design process and make a clear conclusion at the end.

### 2.2.3 Experiences Design



(Source: Creating effective online customer experiences) [19]

Figure 2.3 Designing the Online Customer Experience

The “experience environment” in tourism is made up of all things surrounding the human being, and “Tourism experience network” was approached. (See figure 2.4) The author wondered how willing are entrepreneurs in and outside the area of leisure and tourism on the one hand. Governmental bodies (like cities), on the other hand, to co-create the design of meaningful tourism experience environments (from tangible experience environments to virtual communities). [17] (Esther et Teun, 2009, p. 311). There are some possibilities for tourism associations to design new virtual tours and connect them to real tours based on the tourism experience network. Building virtual communities and connect every stakeholder in the virtual tour is possible. Real tourism community and virtual tourism community can also exist at the same time.

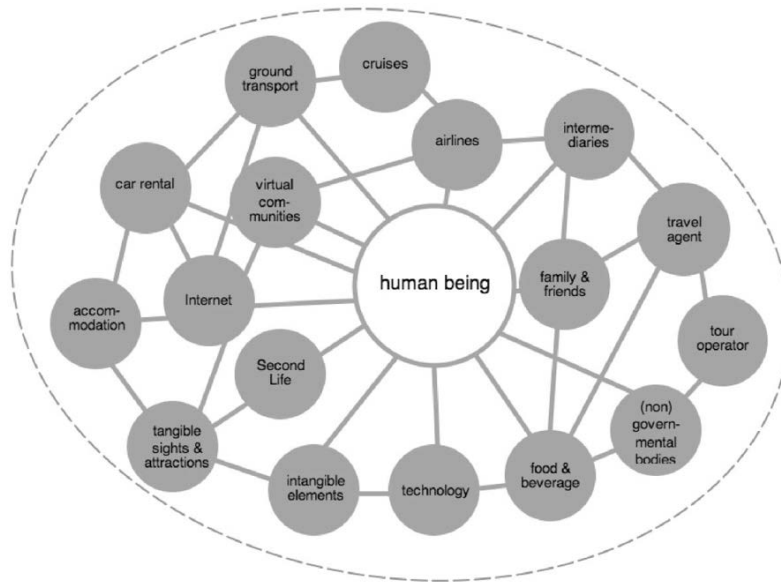


Figure 2.4 Tourism environment network

## 2.3. Tourism Industry and Coronavirus

COVID-19 provides striking lessons to the tourism industry, policymakers, and tourism researchers about the effects of global change. [20](Stefan et al., 2020, p.1) New forms of tourism, including smart tourism, may also drive future tourism activities. Such changes are likely to force businesses to reconsider their service designs and distribution channels. [21](Wen et al., 2020). Stakeholders in the tourism industry need to be resilient and consider how to overcome all the apocalyptic predictions. [22](Chebli et al., 2020, p.196) The positive effect is seen to be establishing an impact on the online traveling agencies, hotels, bars, restaurants, and other traveling agencies. [23](Hoque et al., 2020, p.52) Airbnb hosts now offer virtual experiences, social media travel influencers continue to produce contents for their audiences, and tourism providers use a multitude of online channels to maintain customer relationships and reassure future tourists. [24](Gretzel et al., 2020, p.1)

COVID-19 made an unexpected impact on the whole tourism industry and changed tourists' behaviors from a recent study. Much research discussed the traveling changes, but there is still no clear concept, an example product, or service for new tourism. Previous studies provided the author some cognition about virtual tourism and discussed the digital transformation in the tourism industry and how to market tourism in a digital environment. Some research also mentioned and applied design thinking to consider service design and experiences design for tourism business. This thesis intends to take virtual tourism as a sole concept and develop it as a novel opportunity to expand Japan's regional tourism market by using the service design process. This thesis aims to provide the whole tourism industry an exact way to develop virtual tourism for different types of visitors and create a new way to gain avenues for involved stakeholders under the problematic situation of COVID-19.

## 2.4. Contributions of this thesis

Previous studies provided the author some understandings about virtual tourism and discussed the digital transformation in the tourism industry and how to mar-

ket tourism in a digital environment. Some research also mentioned and applied design thinking to consider service design and experiences design for tourism business. This thesis intends to take virtual tourism as a sole concept and develop it as a novel opportunity to expand Japan's regional tourism market by applying the service design process. COVID-19 is a crisis but also an opportunity. This thesis aims to provide the whole tourism industry an exact way to develop virtual tourism for different types of visitors and create a new way to gain income for involved stakeholders under the problematic situation of COVID-19.

# Chapter 3

## Preliminary Study

### 3.1. Overview

When people hear about “Virtual Tour,” people may think about “Virtual Reality Tours,” which uses virtual reality technology to take people to have a tour in a virtual environment. In this thesis, the author considers “virtual tour” to be more interactive, more local, more connected, and it will become a chance to give people more information from more aspects about the destination through “virtual tourism.” The author does not think people have to purchase or borrow a machine like Google VR glasses to join a virtual tour. People can join a “virtual tour” much more accessible. They can join the tour on their phones and computers. The meaning of “tourism” is more important than “technology” when someone designs “virtual tours” for places. The author found some virtual tours provided by some companies and agencies since the COVID-19 happened. This year (2020), Airbnb and HIS have already conducted this new concept of “virtual tourism” for their business. They provide a lot of virtual tours for popular tourist spots such as Paris, London, Rome. They provide some virtual tours for cooking, magic, fitness. However, most virtual tour targets are people who have never been to those places or have never had similar experiences before. The author wants to know how to reach a broader target market for virtual tourism and design an actual virtual tourism concept for Yambaru (regional tourism markets) in Japan. The author believes that virtual tourism cannot replace real travel and cannot be conducted well if there is no real travel support. The expectations from visitors in the real tour may be different from virtual visitors. In this chapter, the author will show the case study of virtual tours on Airbnb and fieldwork in the Yamabru region to get deeper understandings of virtual tourism and real tourism in Yambaru and

observe the actions of different stakeholders in Yambaru will take before the design process. Also, this chapter shows the first step of the service process, discovering. This chapter aims to find out the existed problems about virtual tourism and focus points in the Yambaru's tourism industry.

## 3.2. Related Work

This section introduces four kinds of virtual tourism provided by four different organizations. They provide those virtual tours since the COVID-19 restricted people's real tours and try to make an innovation for tourism industry.

### 3.2.1 Airbnb

Airbnb is a vacation rental online marketplace company based in the United States, and it provides a platform for users to accommodate guests with homestays and tourism-related activities. Airbnb has been offering “a new way for people to connect, travel virtually and earn income during the COVID-19 crisis”, Online Experiences. (see Figure 3.1) Those online experiences allow hosts to generate a little extra money at a time when people cannot travel, and previously booked stays in peoples' homes have had to be cancelled. Airbnb's online experiences can consider four primary categories, field trips, cooking classes, interactive activities and performances. It also offers some themes as festive experiences for Christmas, Halloween in 2020. Airbnb has a vast number of users, and many contents from many countries were created.

### 3.2.2 H.I.S International

HIS is a travel agency based in Japan, and it has been offering virtual tours since April 17, 2020, in response to the difficulty of travelling overseas due to the spread of the new coronavirus infection. (see Figure 3.2) The philosophy of HIS's virtual tours is “Traveling tends to be one of the best ways to experience history, arts and the vibrant gradient of cultures from all around the world”. His provides virtual tours as optional add-on service to visitors, and most contents are about Japan. For example, “HIS Gakuen: Basic Japanese for Travel”, “Tokyo Online Happy

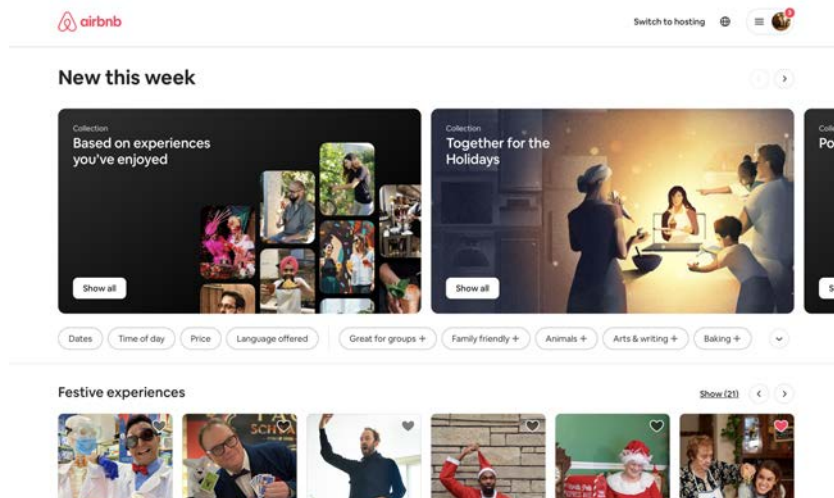


Figure 3.1 Airbnb - “Online Experiences”

Hour: Cocktail Connections”, “Tokyo Online: Green Tea Time in Japan”, most of its contents are based in Tokyo, the capital of Japan.

### 3.2.3 Nippon Travel Agency

Since travelling to Japan for sightseeing purpose is still restricted now (December 2020), Nippon Travel Agency provides an online travel experience – “Real Web Tour” to all visitors to Japan. (see Figure 3.3) Every tour only takes 500-1000 yen, and the duration for each tour is around one hour. It just announced in December 2020, and the contents are only about getting into Tokyo like “Cutting Edge TOKYO”, “TOKYO Nightlife Local Style”, “Photogenic TOKYO”. The target is international visitors out of Japan.

### 3.2.4 Yellowstone National Park

Yellowstone National Park, as the first and most volcanic national park in the United States, it erupts onto the screen in a swathe of multimedia experiences – from high-definition, zoom-able satellite photographs to rota-table, 3D models to video walk-troughs. It provides “video walk” from many angles in the park, and visitors can see the park more precise than the real tours. (see Figure 3.4)



Figure 3.2 HIS - “Virtual Tours”

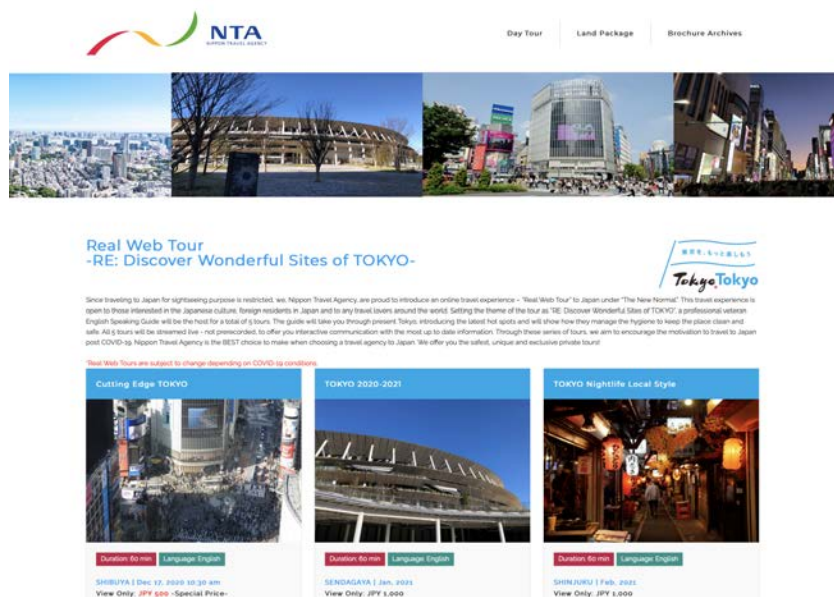


Figure 3.3 Nippon Travel Agency - “Tokyo Real Web Tour”

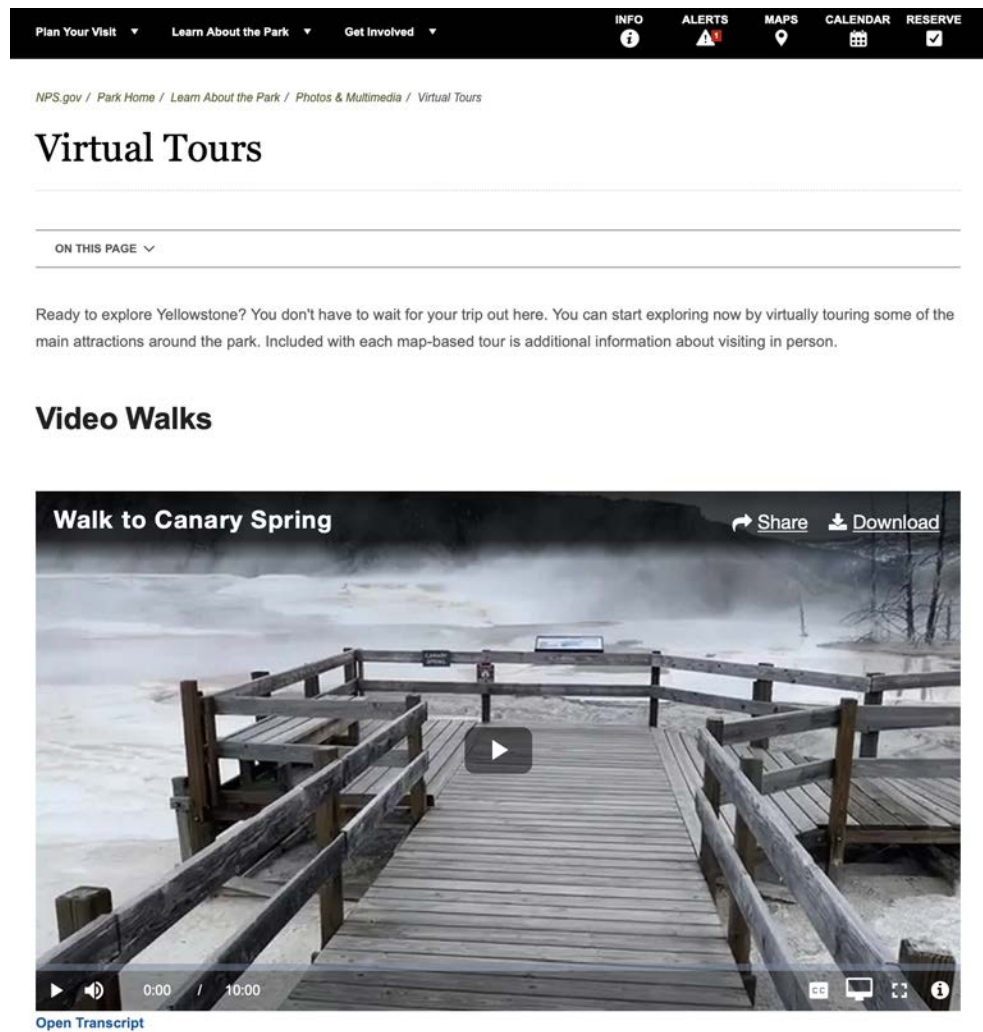


Figure 3.4 Yellowstone National Park - “Video Walk”

### 3.2.5 Findings

Four kinds of virtual tourism have their own merits and limitations, and the author found the target users on Airbnb are too wide, the contents of HIS and Nippon Travel Agency are too small and mainly about Tokyo not the local places in Japan, Yellowstone National Park gave other National Parks an example to provide virtual tours online.

## 3.3. Case Study of Virtual Tourism

The author chose Airbnb, the most popular virtual tourism platform to do a case study to get to know more in-depth about the situation of virtual tourism and how people get involved in virtual tours. Also, the author will discuss some findings from the case study in this section.

### 3.3.1 Case Study of Airbnb

Airbnb has taken its Experiences division into the virtual realm by launching “Online Experiences,” allowing it to provide a “new way for people to connect, travel virtually and earn income during the Covid-19 crisis”. [25]

All experiences are labeled as “virtual tours,” and the author has joined three virtual tours for Lisbon, London, and Beijing for her prior learning about virtual tourism design in May 2020. Three virtual tours are provided by an online communication tool, ZOOM (<https://zoom.us>). They gave the author three different experiences, and she had different interactions with hosts (guides).

**First Virtual Tour** “Sangria and Secrets with Drag Queens” in Lisbon, Portugal. (see Figure 3.5)

Three drag queens from Lisbon hosted this tour, and they offer a sangria making class and drag queen live show during the tour. Participants can decide what type of guest they would like to be during the experience, popcorn guest, or porn guest, and participants can decide what kind of interaction they want to have with those drag queens during the tour. Ingredients for Sangria have to prepare in advance by the guest’s side. They will send a list of ingredients before the tour and make sure



Figure 3.5 Virtual Tour with Drag Queens in Lisbon

if the guests can prepare them. During the tour, the hosts will ask participants to dress up and have a fun talk with them. First of all, they will introduce their drag queen business and their story in Lisbon, and then every guest will introduce themselves. Then the cooking class will start right away. During the tour, they will confirm every guest's cooking process and see if they can follow their steps. They will also have some drag queen performance when everyone makes their own Sangria. It was an exciting and unforgettable experience. However, it is more likely a cooking class than a travel experience. The author has met those drag queens (guides) in Lisbon for their real, local experience in December 2019. The author has known them before, and she also has been to the place. The author sees herself as a “real repeater” for this virtual tour.

**Second Virtual Tour** “Around the world Chinatowns” in London, United Kingdom. (see Figure 3.6)

The host Minji is based in London. She will have a brief introduction about herself at first. Then guests will introduce themselves and tell the host why they joined this tour. First of all, Minji introduced herself and gave participants an



Figure 3.6 Virtual Tour with Minji in London

overview of the tour. Minji always threw everyone some questions and arranged some quiz to make the atmosphere of the virtual tour warmer and more interactive. Minji shared exciting stories and history of Chinese immigration to 6 continents, Chinatown culture, and history focusing on London, where she currently resides, and how Chinatowns continue to evolve and thrive. Her experience included a few different sections, and they were perfectly woven together. Minji took participants to go through Chinatown and London from the past to the present. It was a fascinating tour. The author visited London, and the author went to the same Chinatown in 2018; however, this is the author's first time meeting this host. Therefore the author sees herself as a “virtual repeater” for this virtual tour.

**Third Virtual Tour** “Fun Way to Know Beijing with Mini Group” in Beijing, China. (see Figure 3.7)

Xiao was the host of this tour. She is a Beijing born, Beijing educated person. Xiao used Google Maps to start her tour by giving participants a feeling of a physical move at first. Then she explained the history of Beijing, introduced some landmarks in Beijing. Xiao also took guests to some restaurants, bars, and shops. She gave a lot of information about those places. She was able to show

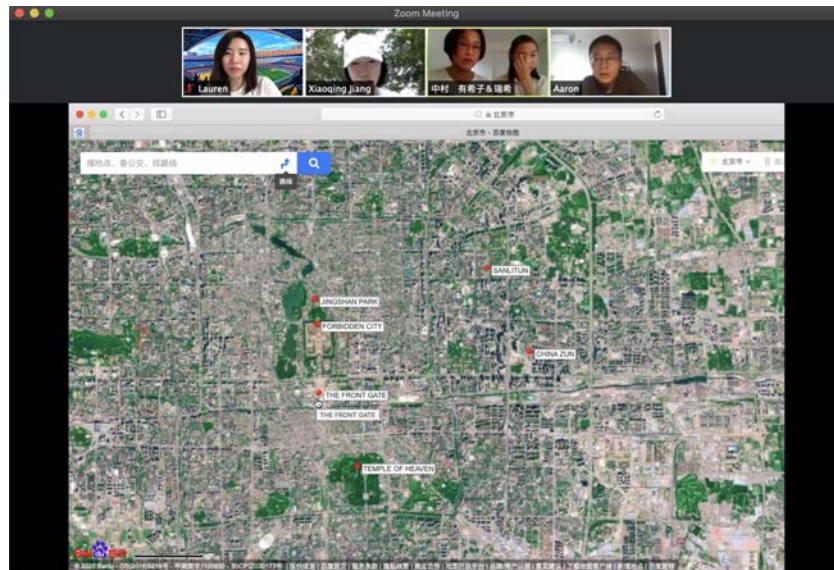


Figure 3.7 Virtual Tour with Xiao in Beijing

a lot of photos and cultural aspects of both historic and modern Beijing while providing helpful tips and recommendations in the tour. The author has never been to Beijing before. The author sees herself as a “first time visitor” for this virtual tour.

### 3.3.2 Findings

After joining multiple virtual tours on Airbnb and other platforms such as HIS, Trip advisor, the author found that the participants’ generation was usually above the 40s. Most of them did not have any experiences at places where the guides/hosts hold virtual tours. It is hard to do virtual tourism with a large group because of the limitation of online tools. Also, virtual tourism at this moment is usually provided through digital platforms or tourism agencies. Local people, government, or official authorities are barely involved inside. Hence the author introduced the business model for virtual tourism of present online platforms. (see figure 3.8) Simultaneously, virtual tourism happens worldwide is focused on “sharing and having fun together” their tours slightly cover the “learning and visiting.” The case study of Airbnb shows that though the virtual guides are very

familiar with the place, and they are willing to provide much information about the destination. It is not easy for visitors to connect with a place they can normally do on real tours. The author thinks virtual tourism in local places like the Yambaru region in Japan should involve local official tourism associations and be supported by the local government.



Figure 3.8 Business Model of Present Virtual Tours

It is rare to see the young generation get interests in virtual tours on those platforms. The author found that the minority of participants in virtual tours are the young generation. This consequence is unexpected as most people know the young ages are supposed to be keener on online actives on websites and social media. As the author mentioned the digital marketing in tourism industry in chapter 2, there are a lot of possibilities to gain young generation by using social media. According to a report from Population Pyramid.net, the millennials comprise 25.2% of the 7.7 billion total global population. It indicates that there are roughly 1.96 billion millennials around the world. Gen Z makes up 25.6%, surpassing the figure for millennials. The two generations, which make up more than half of the total world population, is a target that cannot be ignored in a global strategy. On the other hand, the combined population of millennials and Gen Z remains 33% in Japan.

The author thinks that it is more critical to gain the younger generation and pursue sustainable tourism for regional tourism in a local place such as Yambaru region. The group of young people in high school around that time was born in 1991 and, after that, are known as late Millennials, Gen Z, or “Connected Youth” for our future virtual tours. The author believes that they have more potential to be long term “repeaters” and willing to accept new ideas about virtual tourism, let virtual tourism can change from “passive” to “active.” The author wonders if virtual tourism can become an embodiment of Yambaru tourism based on its strong culture and history and leads a new normal lifestyle for the young generation through the design of “Yambaru Style.” Target users of the existed virtual tourism are still not clear and hard to involve other industries as real tourism does. Also, virtual tourism targets on multiple platforms are non-experience tourists (never been to destinations before). It is necessary to define different types of users for virtual tourism and expand the market of it. Besides, the contents about each virtual tour should more clear for each type of users.

### 3.4. Fieldworks

Fieldwork was done three times to discover questions from real tourism in the Yambaru region, as our first step in the design process. Jiahui [26] conducted ethnographic fieldwork to learn about the cognition-action pattern to design a gameful travel planning service. (Jiahui, 2016) In this chapter, the author will also apply this design thinking method into the fieldwork.

The focus points of the fieldwork are to figure out what tourists are looking forward to and how they take their action while they are travelling in the Yambaru region, how local guide conduct a tour to tourists, and what kind of experience that residents and people who work on local business in the Yambaru region want to bring to visitors. The author followed an American tourist to observe the process that he found a comfortable place to have his lunch in Yambaru during his trip to the Yambaru region. What kind of communication he had and what action he took during the whole process. The author also followed a local guide who provided a real tour in a famous tourist spot of the Yambaru region for the second fieldwork. The author observed the way he introduced the place and

Yambaru to participants and his actions during the whole real tour. Furthermore, the author followed a local designer who was in charge of event design for a local festival of Awamori, an alcoholic beverage indigenous and unique to Yamabru region. The author wanted to understand what kind of things that local people want to show to an audience who visit Yambaru area. After doing fieldwork of three fieldwork masters, the author also had interviews with some people who have connections to the tourism businesses and summarized the stakeholders of Yambaru tourism network (see figure 3.16).

### 3.4.1 Yambaru (First Fieldwork)

This fieldwork was done on June 22rd, 2019, and it was the author’s first time in Yambaru, and the author did this fieldwork from a view of a tourist.

#### Fieldwork Master (1)



**Name:** Benjamin D.J.  
**Age:** 36  
**Sex:** Male  
**Current City:** Seoul  
**Hometown:** Texas, U.S.  
**Occupation:** Designer in a Korean design agency

#### Personal and Working Profile

Benjamin was born in Dallas, the United States, in 1984. He is the second son in his family. He studied graphic design at the University of Maryland. He has worked in America for a few years. Then he decided to come to Asia to work. He has worked in Shanghai and Bangkok for a few years, and then he went to Seoul to continue his design work in 2016. He likes traveling, reading. He has traveled to over 30 countries so far. He is a vegetarian.

#### Goal(s)

He wants to do his master's degree in hospitality design in the future. He wants to travel more and know more people from different cultures. He wants to learn how to cook Asian cuisine much Better.

Figure 3.9 Fieldwork Master of First Fieldwork

This fieldwork involved an American tourist as the fieldwork master. His name is Benjamin, this was his first time in Yambaru, and the author observed his actions when he started to think about where to have his lunch until he finished his lunch and left the restaurant in Yambaru.

The fieldwork master of first fieldwork is Benjamin. D.J., an American designer at a Korean design agency in Seoul. He started to travel around frequently since he

came to work. He loves travelling can bring him inspiration, and he likes exchange thoughts through communication with people when travelling. (See figure 3.9) It was his first time in Yambaru, and he did not know about this place very much. His goal was to find a nice place to have lunch in Yambaru. He wanted to find a local place that people live in Yambaru also go often. He wanted to have the same gourmet experience as local people do during the fieldwork.



Figure 3.10 First Fieldwork

It was a cloudy day when the author conducted the fieldwork. Benjamin was driving from his hotel to Okinawa Churaumi Aquarium. It was lunchtime after he went to the aquarium and he started to think about where to eat. Firstly, Benjamin checked his phone to search for “lunch” and “restaurants” on Google M, and then also searched “lunch recommendations near me” on Google. There were plenty of choices, and he could not decide it immediately after Benjamin was looking up information and decided to go to a cafe 1.8 kilometres from the aquarium. Benjamin wanted to drive there. However, he found that the gasoline of his car is running out and he had to fuel his car. So he used the GPS of his car to search by “gas station near me” function, and the most closed gas

station is 750 meters far away, and he drove to there. A woman staff at the gas station said hello to him and led him to the right position to fuel the car. He said hello back to the staff and told the staff "I want full", as he cannot speak Japanese. The staff seems understood what he wanted and replied to him "OK". Then the staff helped him fill up the car. Benjamin found there is still some time until fill up then he dropped his car and asked the staff, "do you have any recommendations for lunch around here?" The staff did not understand what he asked and replied with "no". Benjamin thought this is a language problem, so he opened a translation app and typed the same thing he just asked in English, then he turned English into Japanese on the screen. He showed his screen to the staff, and the staff replied with "oh, yes, yes!" to him. The staff ran into a room near her and brought her phone and back. She typed something on her phone and showed Benjamin "Nago fishing harbour cafeteria" page on Google Map. However, the language of her phone was Japanese, and Benjamin did not understand very well. The staff seems she noticed this problem. She asked Benjamin, "Phone, Google Map". Benjamin opened Google Map and gave his phone to the staff, the staff typed Roma pronunciation of the restaurant, and the same place showed up on the screen. She gave Benjamin his phone back and said, "this, very good!" Benjamin seems very happy that they finally figured out the questions, and he found the perfect place. He said, "thank you very much" to the staff with a big smile. The staff seems very happy that she helped him as well. Benjamin then went to the restaurant from the gas station by car. He found a lot of Japanese customers were there and he seemed very satisfied with his choice. Then he went inside the restaurant, and he found pictures listed all the menu, and he read them very carefully. There were many choices, and he asked some Japanese next to him, he asked them which one do they recommend? Those Japanese did not know English very well, but they understood his question and pointed out some pictures and said, right! Benjamin said, "Thank you." to them, and he noticed they bought a ticket from a ticket machine and exchanged their meal at a counter. Benjamin did the same thing and went to the counter. After he received his meal from a lady at the counter, he found a table that some Japanese customers were having their meal there. Benjamin smiled at them, and they started to talk to Benjamin in Japanese. Benjamin replied to them "no Japanese" and one Japanese

customer asked him some questions in English since then. They had an engaging conversation, and Benjamin had a very delicious meal on that day. The author also created a flow model for Benjamin's fieldwork.

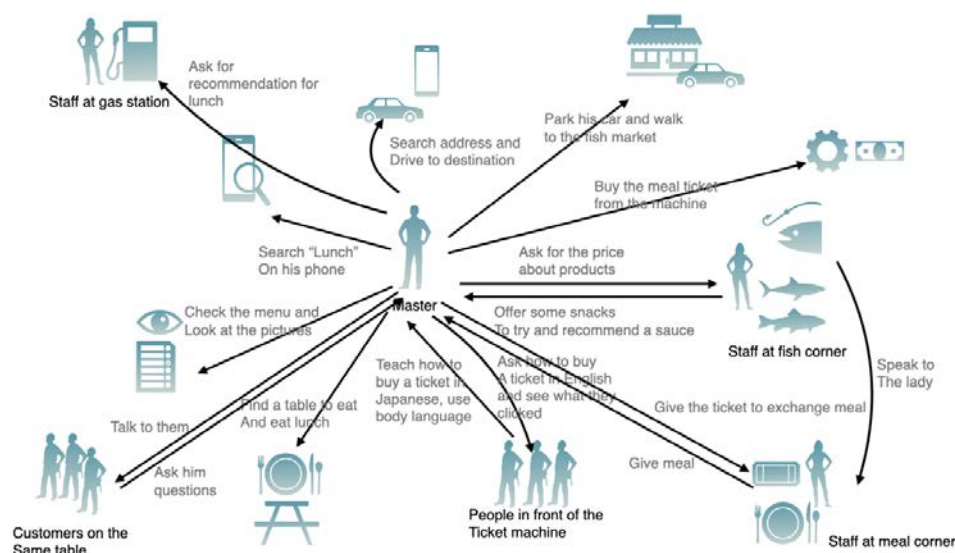


Figure 3.11 Flow Model for First Fieldwork

Benjamin enjoyed the refreshing feeling that travel can bring to him. Travelling is not only for relaxing, but also learning something new to him. He used to go to Vietnam, Thailand, a lot of Asian countries. Unlike the usual tourist, he likes to travel to some places that few tourists and get more chances to know how local people live and watch their behaviours there.

The author aimed to know what tourists are looking forward to and how they take their action while they are travelling in Yambaru. The first fieldwork showed the author that a tourist's expectations of his trip are more likely to know about the people and actual life in the Yambaru region. The tourist was trying to talk to local people and watching what they do in a local place will do during his trip. Because the tourist thinks the meaning of travelling is an experience that let both travellers and local people can communicate and feel delighted together at the same time.

### 3.4.2 Yambaru (Second Fieldwork)

This fieldwork was done on December 9th, 2019. The fieldwork was author's second time in Yambaru. This fieldwork involved a part-time local guide who guided the author's tour in Ta-Taki (Ta-Waterfall) as the fieldwork master. Atsuya K. is a university student based in Okinawa. He loves diving and marine sports. (See figure 3.12) During the fieldwork, the goal of the master is to take tourists on tour, have safe trekking, and know about the nature of Ta-waterfall and Yamabru.

#### Fieldwork Master (2)



**Name:** Atsuya K.  
**Age:** 23  
**Sex:** Male  
**Current City:** Okinawa  
**Hometown:** Fukuoka  
**Occupation:** Student in Meio University,  
 Part time guide of Yambaru Area

#### Personal and Working Profile

Atsuya was born in Fukuoka, Kyushu, in 1997. He is the only son in his family. He studies economic at Meio University. He moved into Okinawa because he loves diving, and the nature and atmosphere of Okinawa. He started to do part time guide for Yambaru Area to Inbound visitors and Japanese visitors since 2016. He wanted to go to Thailand for his guide job but he couldn't make it because of coronavirus. However, he is going to start his own guide business in late 2020.

#### Goal(s)

He wants to have his own business about diving and shooting. He wants to have his own tourism agency in Okinawa and Thailand in the future.

Figure 3.12 Fieldwork Master of Second Fieldwork

The author met this Atsuya K. at the parking lot of Ta-waterfall, he introduced himself and flow of tour briefly, and he took the group to the starting spot of trekking. When he started the trekking, Atsuya asked the author some basic questions and explained himself more to the group. Also, he started to introduce the plants and tiny animals that visitors always ignore on the route by themselves. When the group arrived in some area, he introduced them as spots for Instagram and took out his Go-pro camera to take pictures of the group members. After the group did the trekking for 20 minutes, he asked everyone if they need a break or not, and he also took water from his bag to the group. He introduced Yambaru and why Ta-waterfall so popular when everyone takes a break during the tour. When the group walked deeper into the forest, Atsuya always reminded everyone to be

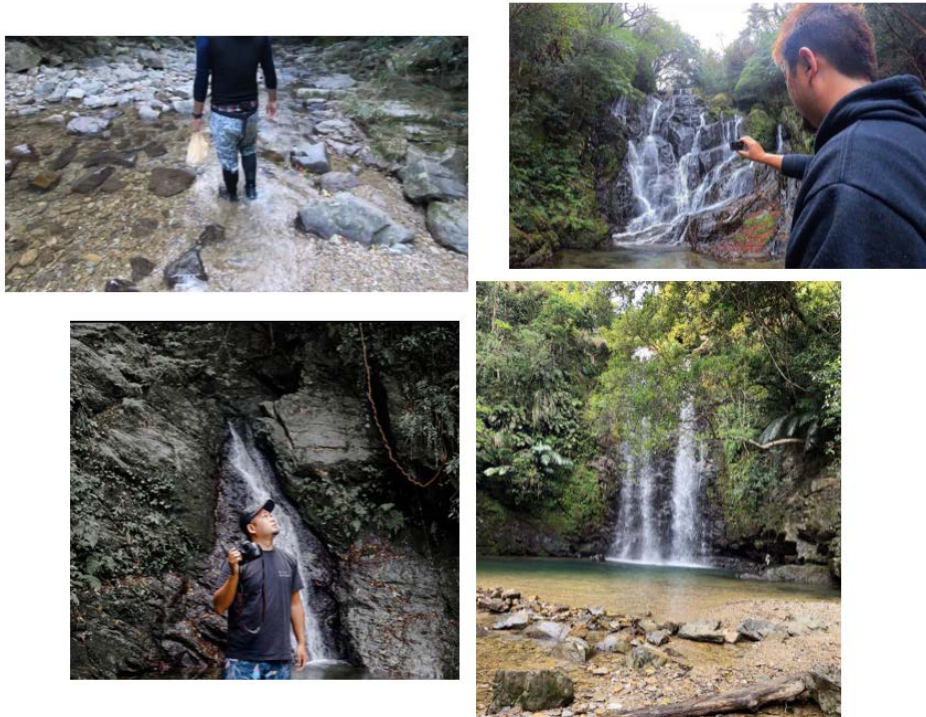


Figure 3.13 Second Fieldwork

careful and helped them cross some dangerous rocks. When the group arrived at the waterfall, Atsuya took members to the bottom of the waterfall and let everyone feel the water's temperature. Then he told the group a historical story of this area and why it became famous nowadays. The whole group stayed for 30 minutes at the waterfall, and they had some snacks and had an excellent talk there. The group started to go back to the parking lot after that, they walked the same route, and Atsuya always pointed to some plants and told them the name and are unique in the Yambaru region. He asked the group the reasons why they wanted to visit Yambaru and told everyone why he loves this place. Group members also exchanged their Instagram account; then everyone can contact easier after the tour.

Fieldwork aims to find out how local guides conduct a tour to tourists in Yambaru. The local guide is friendly and informed. He likes sharing every detail about Yambaru and also himself during the tour. This tour was full of conversation and learning about the plants, animals, and history of Yambaru. Atsuya always loved to take photos during the tour because he wanted to keep all the precious moments with visitors in Yambaru. He is more likely to become "friends" of tourists to conduct the tour smoother.

### 3.4.3 Yambaru (Third Fieldwork)

This fieldwork was done on February 1st, 2020. The fieldwork is author's third time in Yambaru. This fieldwork involved a local designer who designed a local event "Yambaru Moai" for Yambaru Shuzo Company (<https://takazatomaruta.jp>) as the fieldwork master. Shuu K. is an Okinawan graphics designer. He studied design in Tokyo when he was young, and then he went back to Yambaru to open his agency in recent years. (See figure 3.14) During the fieldwork, the goal of the master is to provide visitors with an enjoyable experience in the Yambaru region.

The author met Shuu since the author arrived at the factory of Yambaru Shuzo Company before the event. Shuu was talking to some staff about the event and made some adjustments to the venue's decoration. Then he talked to the female host of the event about some instructions about lights and music and confirmed the night show's schedule. After some adjustments and confirmation, he went

### Fieldwork Master (3)



**Name:** Shuu, K.  
**Age:** 38  
**Sex:** Male  
**Current City:** Okinawa  
**Hometown:** Okinawa  
**Occupation:** Graphics/Artdirection/Ticollab  
**Designer in "Sunsign Design"**

#### Personal and Working Profile

Shuu opened his own design agency, "Sunsign Design" in Yambaru, Okinawa. He works for graphic design and he has done with some design project with Yambaru online community store, Okinawa Cacao, to help with the local business in Yambaru area. He thinks design can help local things become more attractive and creative. He also has his own family farm in Yambaru.

#### Goal(s)

He wants to help all the little shops, the local business in Yambaru develop and be innovative with his design ideas. He wants to contribute to yambaru and make "Creative Yambaru" in the future.

Figure 3.14 Fieldwork Master of Third Fieldwork

out to the little market of selling Awamori, said hello to every visitor, and had some conversations with them. He introduced his design concept and himself to them. When the event started, Shuu was sitting next to the acoustic properties and ensuring the microphone and music sound is in a good situation. He once again confirmed the flow of the event with some leaders of the event. He talked to the staff and reminded them of some vital time to change the venue's background music and light intensity. When the day was getting darker, Shuu immediately went to the light instruments to adjust the lights. He took out some candles to light up the house instead of turning on the light to provide a warmer atmosphere to the audience. After that, he went outside and set an outdoor cinema venue. Shuu was talking to some staff at the factory and asked them to move some tables and decorations. When the host invited visitors to go outside and enjoy the performance, the host also introduced Shuu, and that was the first time Shuu talked to all visitors directly. After the outdoor cinema session, the event came to an end. Shuu started to clean up the venue with other staff and said goodbye and said hope to see them again to all visitors when they went back to their accommodations.

Fieldwork aims to find out what kind of experience local people want to bring

to visitors in Yambaru. The local designer focuses on every detail since the event started. He wanted to provide a family atmosphere and willing to talk to every visitor who joined the event. The event is about sharing famous alcohol in Yambaru and building a Yambaru community instead of joining an event only. Shuu took care of every little part, such as the sound, lights of the venue. He wanted to bring the "heart" of Yambaru people to visitors, enthusiastic but diligent.



Figure 3.15 Third Fieldwork

### 3.4.4 Findings

In addition to fieldwork, the author also interviewed some people who in charge of Yambaru tourism directly during the fieldwork. Therefore, the author understood that the Yambaru tourism network's stakeholders (see figure 3.16) could help the author design the ecosystem and the business model canvas during the design process.

The author found there are three challenging problems for Yambaru tourism networks. First, the local guide can not make a living from only working for the guide in the Yamabru area. Second, local stores are difficult to gain repeaters and gain revenue from tourists. This problem is becoming more serious because of COVID-19 situation. Third, local people would like to support the tourism industry in Yambaru, however they usually get nothing return from it. Simultaneously,

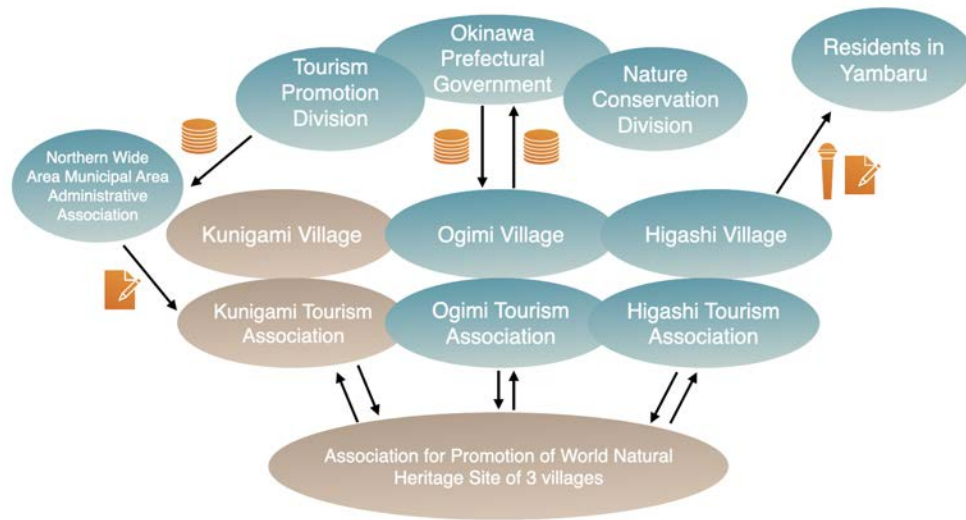


Figure 3.16 Stakeholders of Yambaru Tourism Network Created by Author

the author found three necessary points that will apply to virtual tourism from real experience in Yambaru. First, virtual tourism has to provide some information that tourists can not know about it by themselves. Let visitors feel personal and unique about this local area through virtual tourism. Such as adding history and local business of this area inside the context. Second, virtual tourism has to leave some mystery and secrets, let visitors get something new, and expect more when traveling to the place. It is essential always to let virtual tourists be curious. Third, the community has to be created by virtual tourism, then let visitors be spontaneous and feel their connection to the area and let them willing to invest their money in a local business. About ideal virtual visitors for virtual tourism, it can be concluded that three points, first, always conscious about why this area is particular when travelling, second, trying to understand the culture and history of Yambaru. Last but not least, bring their love of local businesses and residents.

The author will try to solve those problems and develop those focus points when introducing our virtual tourism design for Yambaru in the next chapter.

# Chapter 4

## Design

### 4.1. Overview

“Yambaru Style” is a new virtual tourism concept that provides virtual tourists with an alternative insight into overall Yambaru and gives them different personal experiences from real tourism. More specifically, visitors can join a virtual tour or a virtual experience before traveling to Yambaru, while traveling in Yambaru or after finishing their trips to Yambaru. On the other hand, “Yambaru Style” can suggest virtual tourists have more actions like connecting with a local guide and local people, shopping in local stores more than real tourism. Each target visitor joins “Yambaru Style” will have a different purpose and expectations. They will get different results through this concept. Five stakeholders are involved in the service ecosystem, users (visitors), local guides, residents in Yambaru, local stores/businesses, and regional tourism associations in the Yambaru region. This concept aims to let virtual tourists learn more about the Yambaru region and connect to Yambaru from different aspects, providing a sufficient, different, meaningful, and flexible regional tourism experience, hence every visitors can being prosperous, comfortable, and pleasant. “Yambaru Style” can also create more opportunities for local guides, local stores, and local people, let them make a virtual community with virtual visitors (users), and bring this community into real-life much easier. “Yambaru Style” can be an essential tool to support visitors to explore Yamabru much better. A local guide can enjoy their work. Besides, residents and local businesses in Yambaru region can also make a living from the tourism industry in Yambaru.

Design and conduct a new virtual tourism concept into the regional tourism industry for a new normal life. The author adopted the service design process, as

discussed in Chapter 2. The author needs a design process to create a concept for creating a part of the new business in the tourism industry, virtual tourism. There is also some online tourism service already applied by the service design process in the other research before. The service design process can give the author some instructions and design steps to make sure the virtual tourism concept “Yambaru Style” can help the Yambaru region catch the new opportunity for their tourism market and help more visitors enjoy the Yambaru indeed no matter when and where they join the virtual tours. The author discovered the existing problems and focus points from the preliminary study in Chapter 3 and then will show this concept’s details in this chapter. The author will also provide some examples of virtual tours’ contents and functions and conduct the monitor tours for implementation a few times to gain feedback and evaluation in Chapter 5.

## 4.2. Keywords of Virtual Tourism



Figure 4.1 Virtual tourism of “Yambaru Style”

There are four keywords (features) of virtual tourism provided by “Yambaru Style”.

- Interactive

Multiple visitors will join virtual tours and they will have many chances to communicate with each other. Every participant can also can prefer to

interact with guides who hold the virtual tours.

- Accessible

Visitors can join virtual tours by using their own devices such as laptops, smartphones and tablets and their own internet. They can join virtual tours at home or anywhere. Virtual tourism tends to provide by some online tools or application that many people are already familiar with, like ZOOM, Teams.

- Local

The virtual tourism in this research is aimed to help local areas with different features and especially “Yambaru Style” is designed based on one selected local area in Japan. ”Local” can be considered as one of the important features.

- Connected

All the stakeholders in the “Yambaru Style” are connected, the people who live in the Yambaru area and the people outside of Yambaru area are also connected. All the contents inside the virtual tours are also connected from different sides.

### 4.3. Design Concept

Through the fieldwork for a couple of times in the Yambaru. The author realized that residents, local guides, the whole stakeholders in Yamabru tourism networks hope all visitors can get interested in the history, culture, and local communities of Yambaru region more than the splendid landscape. They also provide a lot of real, local tours when people arrive at Yambaru, and what they want to bring to visitors is the understandings of overall Yambaru, the story and background about it. For the virtual tour contents for the Yambaru area, the author suggests that it can provide more experience cover history, nature study, local products,

and people. Furthermore, as the author thinks the targets of all virtual tours are not clear now, it is indispensable to arrange the virtual tours when visitors are traveling in Yambaru and returning to their original places from Yambaru. Therefore, “Yambaru Style” will provide different virtual tourism content examples for different type of target virtual visitors based on different timelines.

### 4.3.1 Concept Sketching

There are three timelines the author defined for “Yambaru Style” to help it provide different tourism experiences for different visitors to the Yamabru area. Visitors can join “Yambaru Style” at every timeline during their trip to the Yambaru area.

Three user behavior patterns of visitors are defined and conducted to the user tests. User pattern one was defined as participants before traveling to Yambaru. User pattern two was defined as participants while traveling to Yamabru. User pattern three was defined as participants after traveling to Yambaru based on their motivations for traveling to the Yamabru area, their interests in travel aspects, their participation process, and expected results after joining the whole virtual trip. Every user flow for three user patterns for “Yambaru Style” is shown in concept sketching. (see figure 4.2, figure 4.3, and figure 4.4)

For user pattern 1, visitors cannot go to Yamabru right away because of some reasons, such as coronavirus. However, they still want to have a trip to the Yamabaru now, and they are interested in actually going to the Yamabru area afterward. Their motivation can be concluded as “be curious about an unknown place.” After that, they found and joined “Yambaru Style,” they got a chance to communicate with someone who has similar thoughts and had a great conversation with each other. They also learned about some famous and hidden places of Yambaru, and then they can make their real travel plan much more smoothly.

For user pattern 2, visitors are traveling in the Yambaru area, and they are confused about where they should go during the trip, and it is not easy to search all activities and their stories on the Internet by themselves. Their motivations can be concluded as “be excited to explore a new place.” They want to take an actual local guide trip, but they are also worried about the spread of social distance and coronavirus. They have many concerns before joining an actual guide trip. So

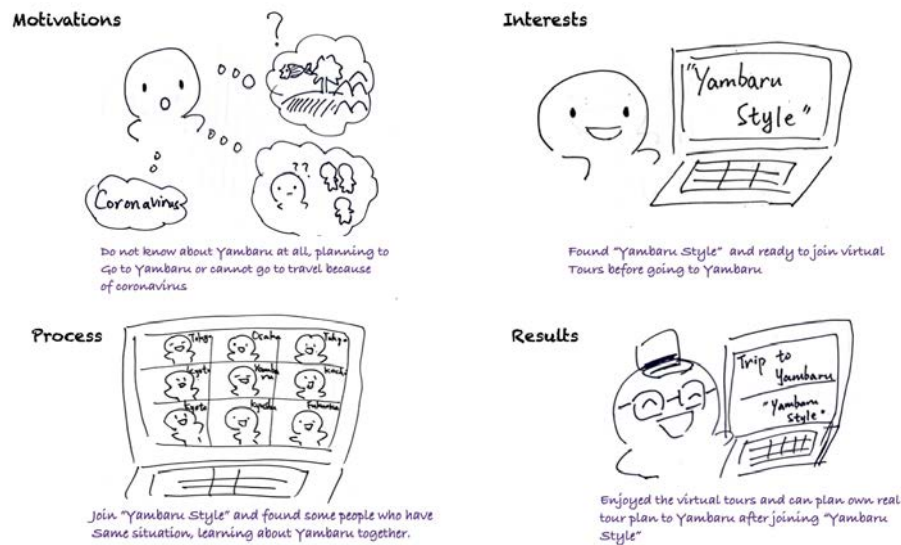


Figure 4.2 Concept Sketching of Pattern 1 Created by Author

they found and joined "Yambaru Style," they got a chance to talk with a guide located in Yamabru directly and learn about history, people's living and cultural aspect from "Yambaru Style," when they see and do the things by themselves during the trip the following days, they can memorize and feel themselves are professional and unique to Yamabru.

For user pattern 3, visitors are missing Yambaru after they were finishing their trip there. They fell in love with nature and culture there, and they do not have time to go back for a trip again now, but they want to reconnect to the Yambaru area. Their motivations can be concluded as "be nostalgic to a place." They found and joined "Yambaru Style," they got a chance to cherish and share their Yambaru stories with a local guide or local people in Yamabru. They can also get to know some local shopping information and order them online directly through "Yambaru Style." They feel connected and engaged to the Yamabaru area after joining it.

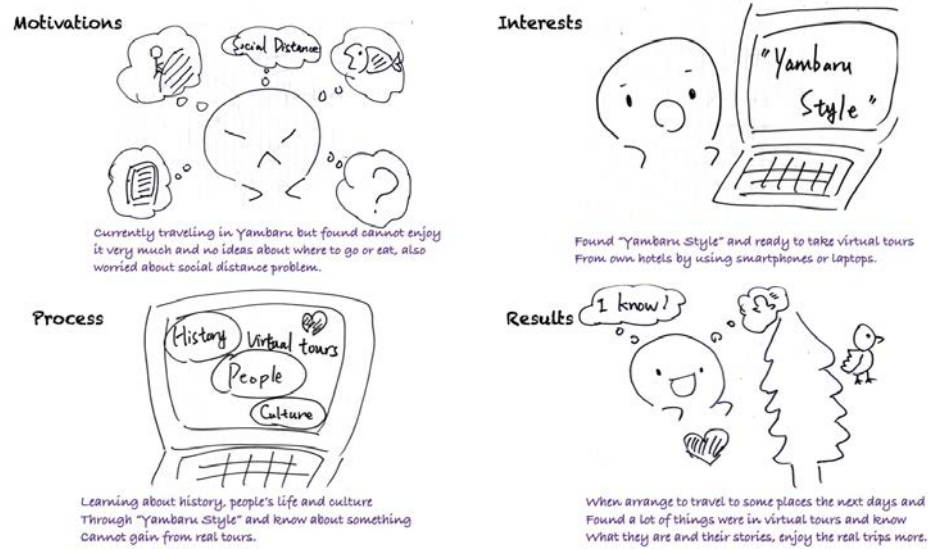


Figure 4.3 Concept Sketching of Pattern 2 Created by Author

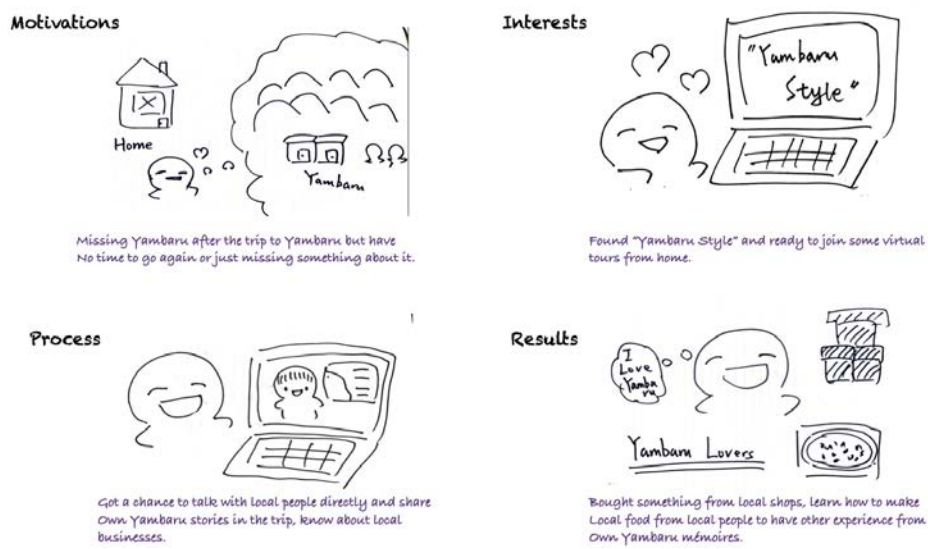


Figure 4.4 Concept Sketching of Pattern 3 Created by Author

### 4.3.2 Stakeholders

There are five stakeholders get involved into "Yambaru Style". Visitors, local guides, local people, local stores and local tourism associations. (see figure 4.5)

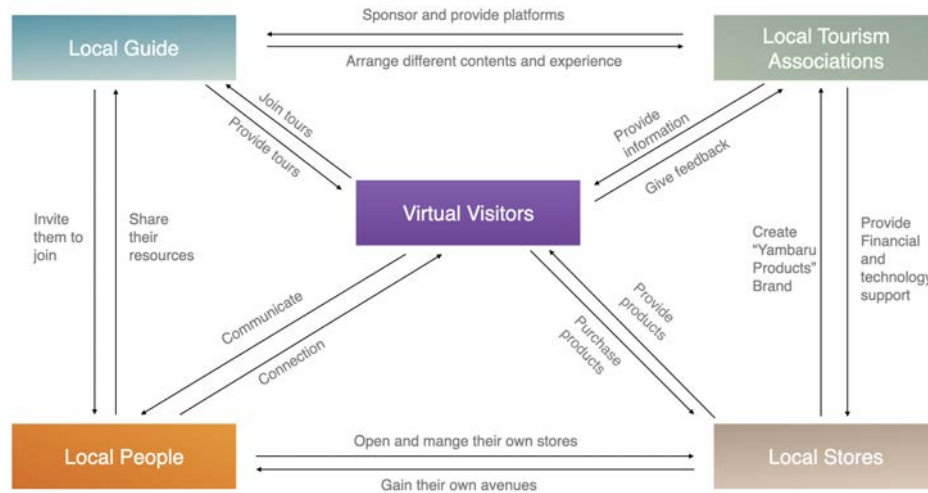


Figure 4.5 Stakeholders of "Yambaru Style"

The central stakeholder is "virtual visitors." They connect with the rest of the stakeholders in "Yambaru Style." Local tourism associations in Yambaru will provide virtual tourism platforms and provide information to local guides and visitors. Local guides will invite local people to join the Yambaru tourism community and collect their resources to create more appealing visitors' content and experience. Local people can open their businesses and stores in Yambaru and put them as a part of stories in virtual tours. Visitors can purchase their products and service by joining "Yambaru Style" and can gain revenue from it and make a living in return. Development of local businesses can be expected. Local tourism associations can provide financial support if local people open their businesses for Yambaru, and technology support if local people want to create websites for their stores. Local stores can help local tourism associations to create a series of Yambaru products and strengthen the concept of "Yambaru Style".

Local tourism associations will give sponsor included financial sponsor to local

guide and provide their contacts to virtual visitors, and virtual visitors will join “Yambaru Style” through local tourism associations, they will give the associations the virtual tour fee and feedback. Also, information and messages from local stores in Yambaru will be also provided in “Yambaru Style”, virtual visitors can also purchase all the products from local stores directly to support them. All the local stores are maintained by local people, once the visitors buy the products, they gain the avenues. And local tourism associations in Yambaru will also provide financial and technology support to local stores as local tourism associations receive money from Japanese government to do local projects every year. (see Figure 4.6)

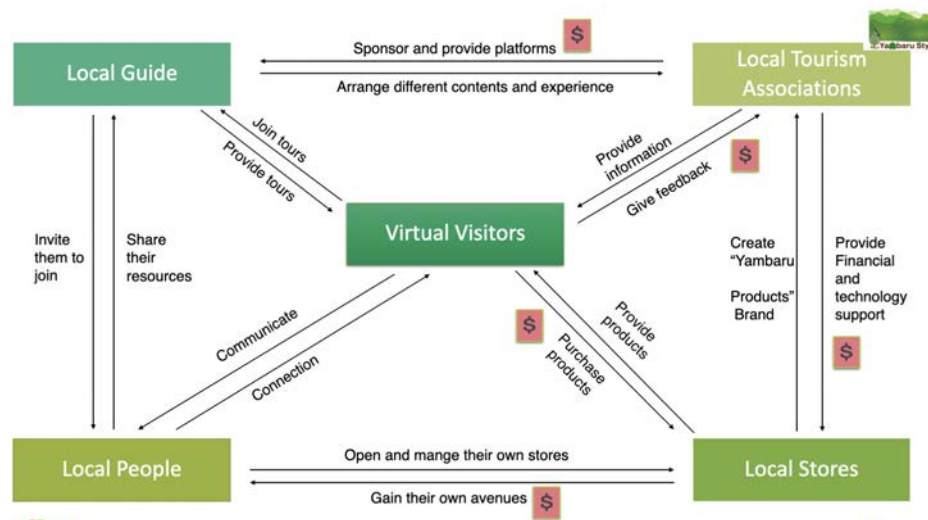


Figure 4.6 Money Flow of “Yambaru Style”

## 4.4. Target Users

### 4.4.1 User Typologies

The author defined four types of users for “Yambaru Style,” and the author wants to figure out if virtual tours should happen before travelling to the destination or happen while travelling to the destination or happen after travelling to the destination. All user types can make a cycle for “Yambaru Style”. (see figure 4.7)

*User Type 1 (New Visitors):*

Visitors who have never been to Yambaru and never heard about it before.

*User Type 2 (Potential Visitors):*

Visitors who have never been to Yambaru, however, heard about it before.

*User Type 3 (Active Visitors):*

Visitors who have been to Yambaru.

*User Type 4 (Royal Visitors):*

Visitors who are travelling in Yambaru at this moment.

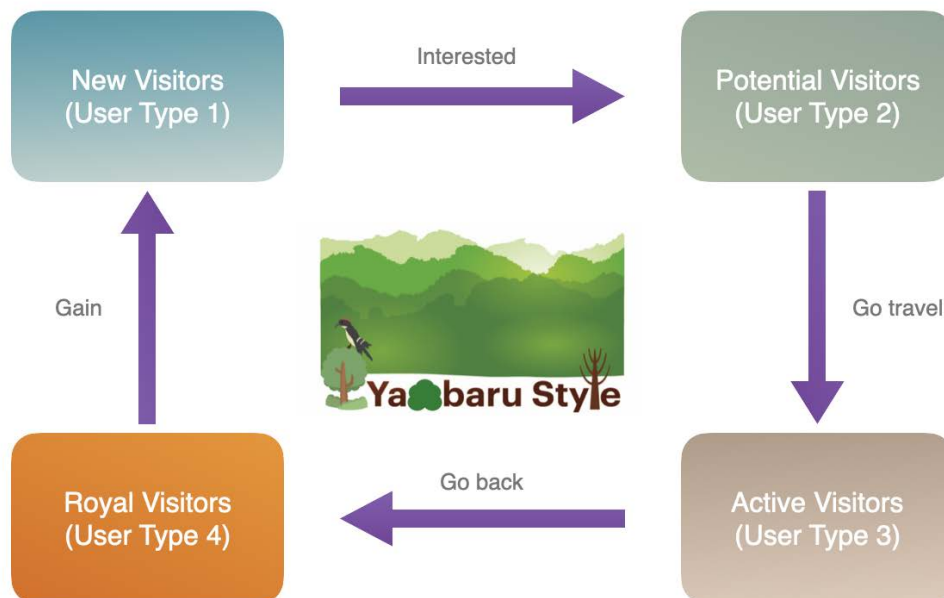


Figure 4.7 Cycle of User Types in “Yambaru Style”

## 4.5. Design Process

Three prototypes for three travel flow in “Yambaru Style” shows below.

### 4.5.1 Prototype Model 1 - “Before”

**Targets:** User Type 1 and User Type 2, new visitors and potential visitors.

Virtual travel flow of virtual tourism (before travelling) shows in figure 4.8. Virtual visitors’ motivations are searching for information of Yambaru, seeing the difference with the information already searched by themselves to adjust their plans before getting to Yambaru and meeting some residents and someone who knows about Yambaru particularly.

For the contents of virtual tourism for those target types, “Yambaru Style” will focus on providing more information that usually visitors cannot find on the internet. Local activities, non-tourist spots, and local restaurants that local people usually go to in Yambaru. Also, to create a virtual community environment for visitors before traveling to real destinations is necessary.

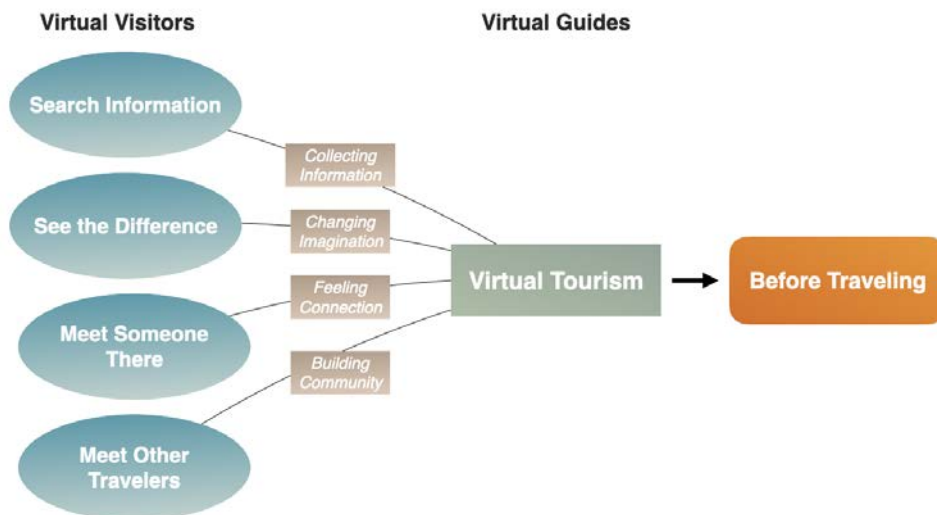


Figure 4.8 Flow of Virtual Tourism (Before Traveling) Created by Author

### 4.5.2 Prototype Model 2 - “Present”

**Target:** User Type 3, active visitors.

Virtual travel flow of virtual tourism (while travelling) shows in figure 4.9.

As they are already in Yambaru, what they expected in virtual tourism when they have the real experience there, we can conclude for four points, enjoy the storytelling about Yambaru from other persons, receiving new ways to experience Yambaru much better, getting a chance to meet residents directly as most visitors stay in hotels. It is challenging to communicate with local people. They will also want to know about tourist spots before or after they go to those destinations. Virtual tourism happens now will help them improve their tourism experience.

For the contents of virtual tourism for this target type, “Yambaru Style” will provide more information that visitors will usually not search by themselves. History of Okinawa, local guide tours information, will be provided in virtual tours for visitors while travelling to Yambaru.

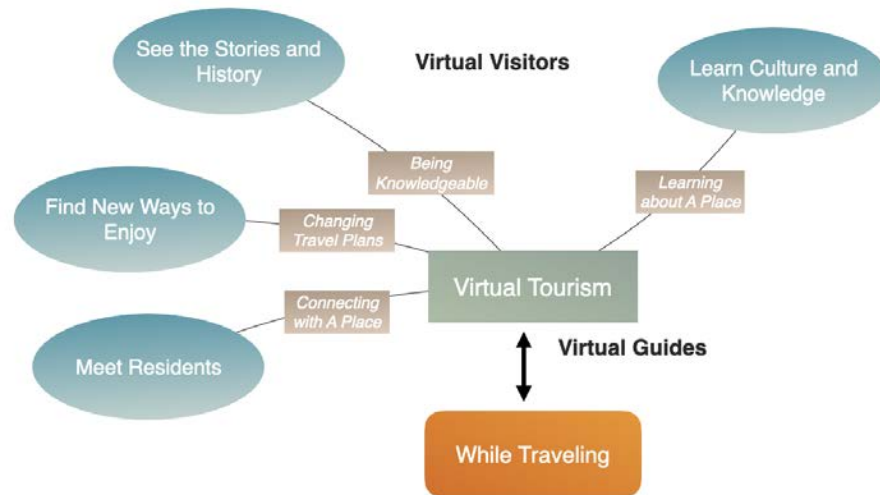


Figure 4.9 Flow of Virtual Tourism (While Traveling) Created by Author

### 4.5.3 Prototype Model 3 - “After”

**Target: User Type 4, royal visitors.**

Virtual travel flow of virtual tourism (after travelling) shows in figure 4.10.

The author believes that they had a great time in Yambaru and let them want to go back to Yambaru again. As they already have their memory about Yambaru,

they want to trip to Yamabru again because they enjoyed their real trip there. They are willing to buy products and more likely to talk to local people in the Yambaru area.

For the contents of virtual tourism for this target type, “Yambaru Style” will provide more information that visitors do not know how to search on the internet and what to do to promote the business in the Yambaru area. Local stores information, local community environment will be provided in virtual tours for visitors after travelling to Yamabru.

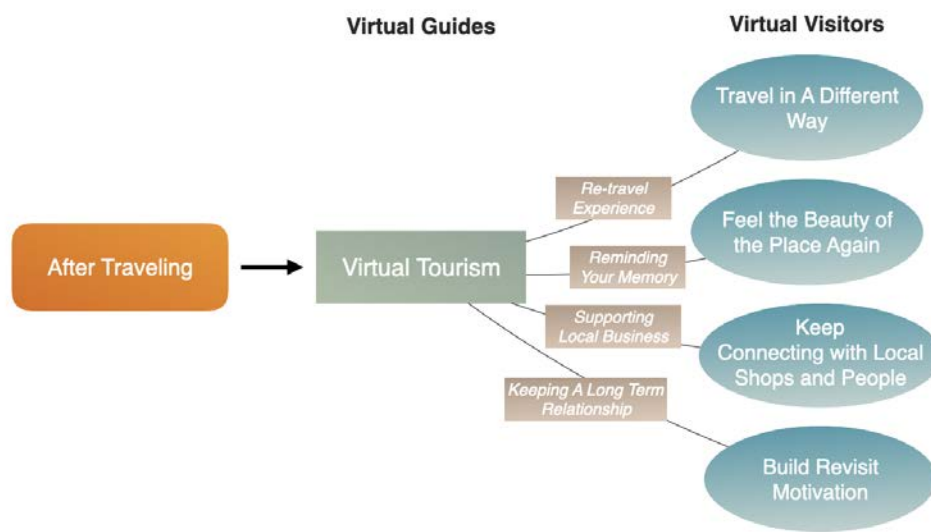


Figure 4.10 Flow of Virtual Tourism (After Traveling) Created by Author

## 4.6. Results

The author aims to provide a concept for virtual tourism for the Yambaru area through websites. Websites can be considered as the most straightforward way for users to access by electronic devices. Logo, example contents, functions and access to join a virtual tour through “Yambaru Style” will be shown below.

### 4.6.1 Logo

The logo of the “Yambaru Style” concept and service is shown in Figure 4.11. The name of “Yambaru Style” emphasized the new kind of tourism style, virtual tourism for Yamabru. The author designed it by applying the characteristics of the Yambaru area, Yamabru-kuina (*Gallirallus okinawae*), forests, and trees. Green colours are mainly used in the logo to give the audience the first impression of the Yamabru area, full of forests, green and natural. This logo was designed for the concept but also can be used for websites or applications. This logo applied colours below, Jungle colours, #3F8338, #4B9037, #53AE33 and #C7DF95. Tree colours, #AB7149, #9A643E, #71A766, #6D9454, #5B8E4E, #7FA566, #83B165 and #92C476 and font colour, #571D11. The author used Graphik font to show simple feeling about this tourism concept.



Figure 4.11 Yambaru Style Designed by Author

### 4.6.2 Contents of “Yambaru Style”

The author suggested and produced website pages for some aspects of the content of “Yamabru Style.” As the target users of “Yambaru Style” is not only for Japanese tourists but also foreigners tourists. Both English contents and Japanese

contents will be required through “Yambaru Style.” The author created some content based on a prototype for each user type and showed the content design process below. (see figure 4.12)

The following examples introduce Okinawa’s history (Ryukyu) by utilizing a timeline with easy sentences and pictures as people usually avoid and get annoyed with the history part of tourism. Besides the historical contents, Okinawan languages, local restaurant information, local products information can also provide through virtual tours of Yambaru.

Since pictures and videos can be considered a meaningful way to show some natural places for Yambaru intuitively, the author went to Yambaru a few times to take some videos and pictures to make example contents to conduct the user test for virtual monitor tour in Chapter 5. (see figure 4.13) “Yamabru Style” can provide an uncomplicated way to learn and share many aspects of information. It will meet the expectations of local people and tourists at the same time.

For user type 1, contents will focus on introducing Yambaru, Okinawa, and letting visitors learn about it deeper. For user type 2, contents will introduce different things in Yambaru and let visitors learn about Yamabru from more aspects. For user type 3, contents will introduce the real experience that visitors can do them right away after the virtual tours. For user type 4, contents will introduce the local products and help connect the visitors after their real tours in Yambaru.

### 4.6.3 Features of “Yambaru Style”

As the author mentioned before, all the examples were considered that users will access “Yambaru Style” through websites, so the example of access flow to “Before Traveling” on Yambaru Style shows below. (see figure 4.17) The author will also introduce the functions of the “Yambaru Style” in this section.

All visitors will have their own profile and user page in “Yambaru Style”. They will join the virtual tours for once for real time then their travel history will be saved as records into user pages then they can go back to see the virtual tours they joined anytime.

Users will see the top page of “Yambaru Style.” Then they will enter the page for choosing their own “Yambaru Style” to help them define their travel style

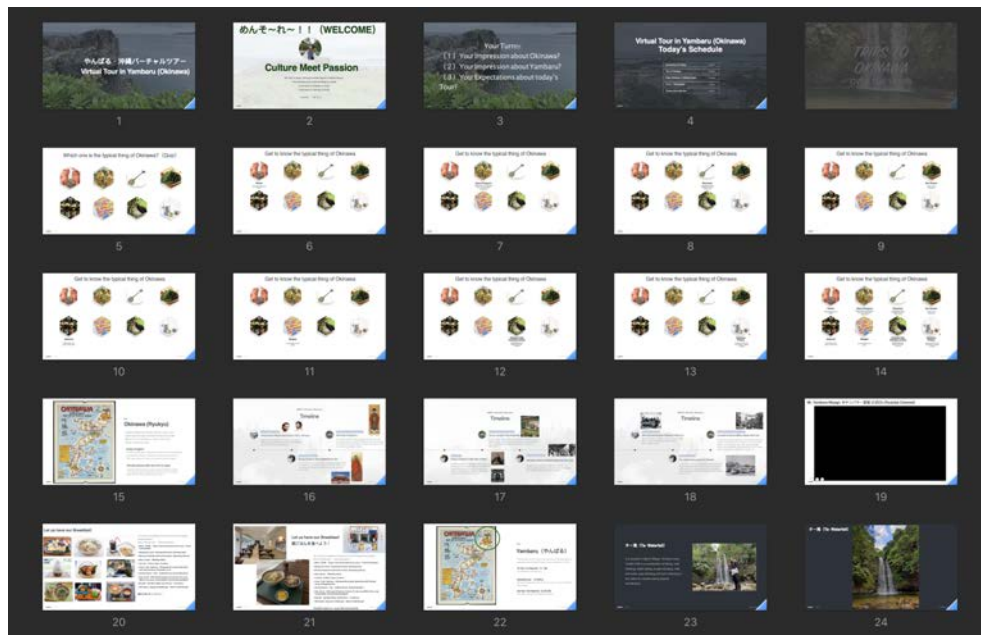


Figure 4.12 Contents Design Process by Author



Figure 4.13 Video Making Process by Author

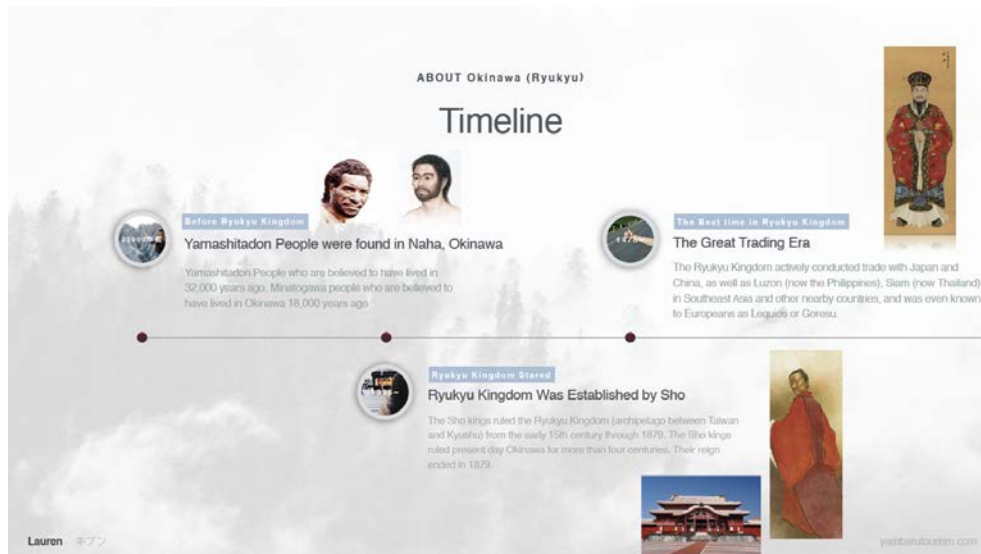


Figure 4.14 History contents by English



Figure 4.15 History contents by Japanese



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page as well. “Yambaru Style” can support Yambaru to transfer new visitors into royal visitors and manage their information easier.

The author will use the deigned contents to conduct user tests for different type of users and evaluate this concept in the next chapter.

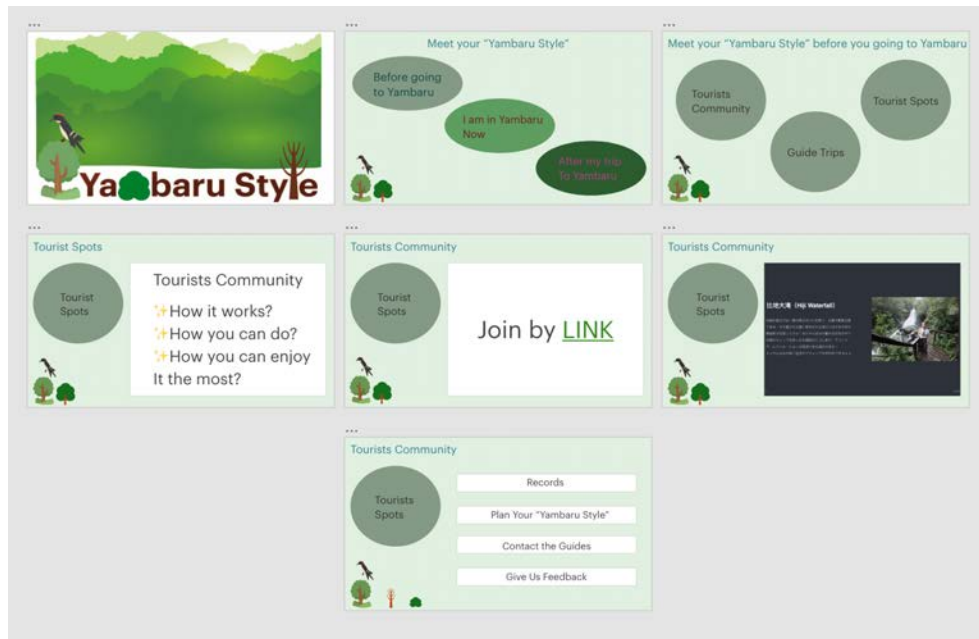


Figure 4.17 Access Flow to “Before Travelling” on Yambaru Style



Figure 4.18 Functions of “Yambaru Style”

# Chapter 5

## Evaluation and Validation

This chapter will evaluate the concept of “Yambaru Style” from the overall user tests.

### 5.1. Methodology

#### 5.1.1 Research Setting

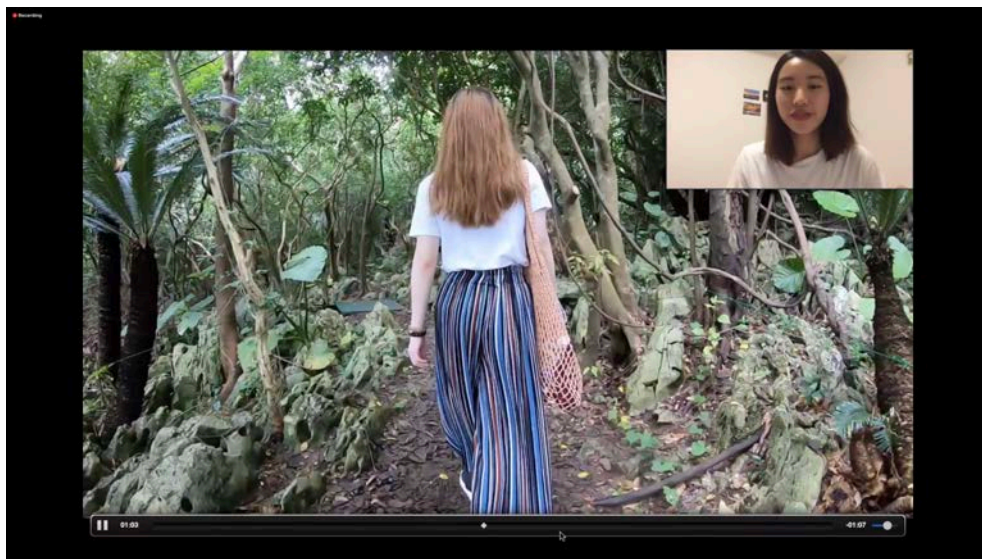


Figure 5.1 Example of testing process

All “Yambaru Style” user tests were conducted by using online meeting tools ZOOM (<https://zoom.us/meetings>) and Mmhmm (<https://www.mmhmm.app/>). The author implemented five tests to four user types from late June 2020 to late

October 2020. Feedback for “Yamabru Style” and contents on “Yambaru Style” were collected by questionnaire for multiple participants and interview for the single participant after the user tests. Since the author conducted virtual tours in Japanese, English and Chinese based on the nationalities of users, all the answers will be translated into English in this thesis. The duration of every virtual tour is around one hour.

### 5.1.2 Data Sources

The data used in this thesis were collected from questionnaires and interviews during all the virtual tours. The individual data from each target user will show in this chapter.

- *Questionnaire*

Questionnaires are used for testing target users as a group. There are four parts of questions the author prepared for evaluation and feedback from our target users.

All participants will be asked to answer the below questions after joining virtual users tests,

1. Have you ever been to Okinawa before?
2. Have you been to Yambaru before?
3. Was it your first time in Online Experience (Virtual Tour)?
4. Why you chose to join this online experience or what you expected about my online experience? (Optional)
5. Did you know “Yambaru” before you joining this tour?
6. Are there any changes that happened to your impression/imagination of Okinawa after joining this tour?
7. Are there any changes that happened to your impression/imagination of “Yambaru” after joining this tour?
8. Do you want to join other online experiences in the future?

After that, all participants will also be required to evaluate the overall virtual tour by five scales,

1. Could you let me know about your satisfaction of this tour? (From “Lowest (I didn’t enjoy it at all)” to “Highest (I enjoyed it a lot)”)
2. What do you think about the interaction with the guide in this tour? (From “Lowest (I didn’t enjoy it at all)” to “Highest (I enjoyed it a lot)”)
3. What do you think about the interaction with the other participants on this tour? (From “Lowest (I didn’t enjoy it at all)” to “Highest (I enjoyed it a lot)”)
4. Do you want to visit Yambaru / Okinawa in real after this tour? (From “Lowest (I didn’t enjoy it at all)” to “Highest (I enjoyed it a lot)”)
5. Do you think my tour provided you some information or made some influences (in the right way) for your future tour in Yambaru and Okinawa? (From “Lowest (I didn’t enjoy it at all)” to “Highest (I enjoyed it a lot)”)

For the last part of questions, all participants will be required to answer the below questions to evaluate the contents inside the virtual tour,

1. Please let me know the part(s) you like the most during my tour.
2. Which food spot do you want to try the most?
3. Which tourist spot do you want to visit the most?
4. Which REAL Guided Tour(s) do you want to try the most?
5. Which souvenir do you want to buy the most?
6. We will make other online experiences in the future. What kind of experience below would you like to join?
7. Which style will you choose to visit if you will go to Yambaru in the future?

8. Do you have any questions about Yambaru, Okinawa or Japan? (Any questions are welcome, I will reply you all the questions by messages /email )
9. Could you give me any advice or do you have any thoughts about my Yambaru (Okinawa) Online Experience? (Everything is ok!! Please give me some advice)

In addition, more personal information of users will be requested,

1. Gender.
2. Age.
3. What is your main tourism style until now?
4. What kind of information you searched the most when you make your travel plan or when you are traveling?
5. Name (Or Nickname).
6. Email Address.
7. Tour Photograph Copyright Release.

• ***Interview***

The interview is used for testing target users as an individual. There are two parts of questions for those target users after they finished the virtual tours. The author conducted questionnaires for user type 1 and 2, interviews for user type 3 and 4. There are 3 questions for users before joining the virtual tours (pre-interview),

1. Please tell me your thoughts about virtual tourism.
2. What do you expect for today's virtual tour?
3. Please tell me about your impression about Yambaru at this moment.

There are 3 questions for users after joining the virtual tours (post-interview),

1. What do you think of the contents you went through today?
2. Are there any thoughts changed about Yambaru after joining the virtual tour?
3. What do you think about virtual tourism after joining it?

## 5.2. Tests and results

### 5.2.1 User Type 1 and User Type 2

The users defined as user type 1 and user type 2 were invited by a group the author created on Meetup.com (<https://www.meetup.com/Yambaru-experience/>), and the tests were done twice in late June 2020, one was on 20, June and the other was on 23, June. Users answered a questionnaire for feedback after the online experience. The author also conducted this test with SCUAD (<https://worldscuad.com/>), an official collaboration with the Bandung city Tourism Ministry.

Eleven attendances joined the first test, nine attendances joined the second test, and there are five attendances joined the third test. There are total twenty-five participants for three tests and the author collected eighteen valid questionnaires.

### 5.2.2 Test Results of User Type 1 and Type 2

- **Demographics**

The author defined user type 1 as “New Visitors”, visitors who have never been to Yambaru and never heard about it before. User type 2 as “Potential Visitors”, visitors who have never been to Yambaru, however, heard about it before in chapter 4.

There are 18 users submitted their answers to questionnaire at last. There are 39% of users are 30s, 33% of users are 20s, 11% of users are 40s and 11% of users are 50s. 67% of users are female, 33% of users are male. There are 33% of users have experience with Okinawa, and there is 0% of users have experience with Yambaru. There are 28% of users have heard about Yambaru before, which

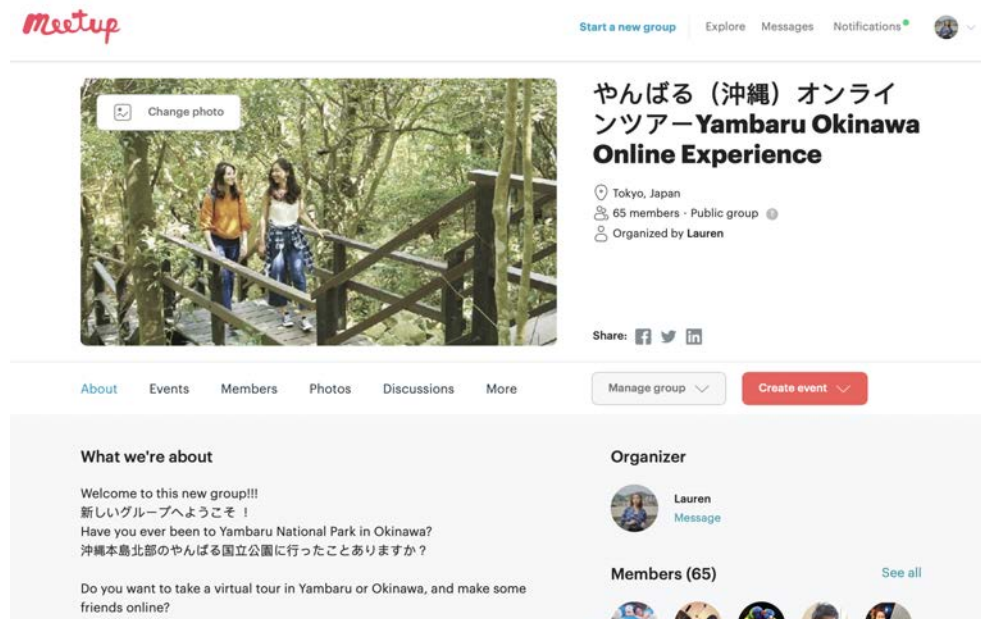


Figure 5.2 Tests Setting on Meetup.com



Figure 5.3 User test for Meetup Groups



Figure 5.4 Poster of User test with SCUAD

belongs to user type 2 (potential visitors). And there are 72% of users have never heard about Yambaru before, which belongs to user type 1 (new visitors).

The author set some 5-scales questions, and figure 5.6-figure 5.10 shows some results of them. (1 means not at all, 5 means very much) The author found the interaction with the other participants was the most challenging part during virtual tours. Furthermore, over 75% users want to visit Yamabru/Okinawa for real after the virtual tour. Virtual tours got around 89% satisfaction from the tests, and the interaction with the guide can be considered as good during the tests. Also, there are over 89% users think they can make fair use of the information they gained from the virtual tours for their real tours in Yambaru in the future.

Test 5	User1	User2	User3	User4	User5	User6	User7	User8
<b>Part 1</b>								
<b>Questions</b>								
Have you ever been to Okinawa before?	Yes	No	Yes	No	No	Yes	No	Yes
Have you been to Yambaru before?	No	No	No	No	No	No	No	No
Was it your first time in Online Experience (Virtual Tour)?	No	Yes	No	No	Yes	Yes	Yes	Yes
Why you chose to join this online experience or what you expected about my online experience? (Optional)	N/A	"I want to feel that I have been to Okinawa and Yambaru."	"I have never been to Yambaru before, so I want to have some experience for Yambaru."	"While it's difficult to go out, I'm interested in the growing variety of online events."	N/A	I learned about it on Facebook and wanted to participate.	N/A	I love to travel, and I found this event when I couldn't actually go there because of the coronavirus.
Did you know "Yambaru" before you joined this tour?	Yes	Yes	No	No	No	Yes	No	No
Are there any changes that happened to your impression/imagination of Okinawa after joining this tour?	"The same"	"It changed"	"Not only the sea, but also unique plants and animals, just like in 'Hakutsuru and Himeke Island'. I learned that Okinawa also has an abundance of greenery and mountains where you can hike."	"Yes, I have learned that there are beautiful forests as well as the river. I learned that there is not only the sea, but also a beautiful forest."	Yes, that has changed. Before, the only image I had is the sea.	I went there about six times, and I felt that Okinawa has changed a lot since then.	I was surprised to find that my previous impressions were completely different.	When I hear about people who have actually been there, I can imagine what it's like. When I went there before, I was only in the Naha area, so I thought there were serious places.
Are there any changes that happened to your impression/imagination of "Yambaru" after joining this tour?	"I didn't know Yambaru before, but I got to know it through the tour."	"It changed"	"I had no knowledge of Yambaru, so I didn't have much of a preconceived notion to begin with, but I thought it was nice and lush."	This is the first time I've heard of Yambaru.	I've never heard of Yambaru before, and after hearing about it, I have the feeling of wanting to go.	I've never been to the north, so I had completed to go.	Yes, things have changed. I was surprised that there is not an ocean or blue sky, but a mountainous province.	I didn't know the place at all, so it gave me a lot of an idea.
Do you want to join other online experience in the future?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Part 2</b>								
<b>Questions (5 scales)</b>								
Could you let me know about your satisfaction of this tour?	4	5	4	3	5	5	5	4
What do you think about the interaction with the guide in this tour?	4	5	5	3	5	5	5	4
What do you think about the interaction with the other participants in this tour?	4	4	3	2	5	4	5	3
Do you want to visit Yambaru / Okinawa in real after this tour?	4	4	5	5	5	5	5	4
Do you think my tour provided you some information or made some influences (on the right way) for your future tour in Yambaru and Okinawa?	4	5	4	4	5	4	5	4
<b>Part 3</b>								
<b>Questions</b>								
						Okinawa quiz, Introduction to Food Spots of Yambaru, Introduction to Tourist Spots of Yambaru		Okinawa quiz, Introduction to

Figure 5.5 Analysis Process of User Tests

### • Feedback from User Type 1

There are some feedback from visitors who defined user type 1 show below,

*"That was a shame that I didn't know such a beautiful place,, I'd love to go there when I have time."* (Female, 20s)

*"The tour was interesting. I think the material was well made. It would be nice if there were links to buy Yambaru's recommended products for those who want to buy and try them."* (Female, 50s)

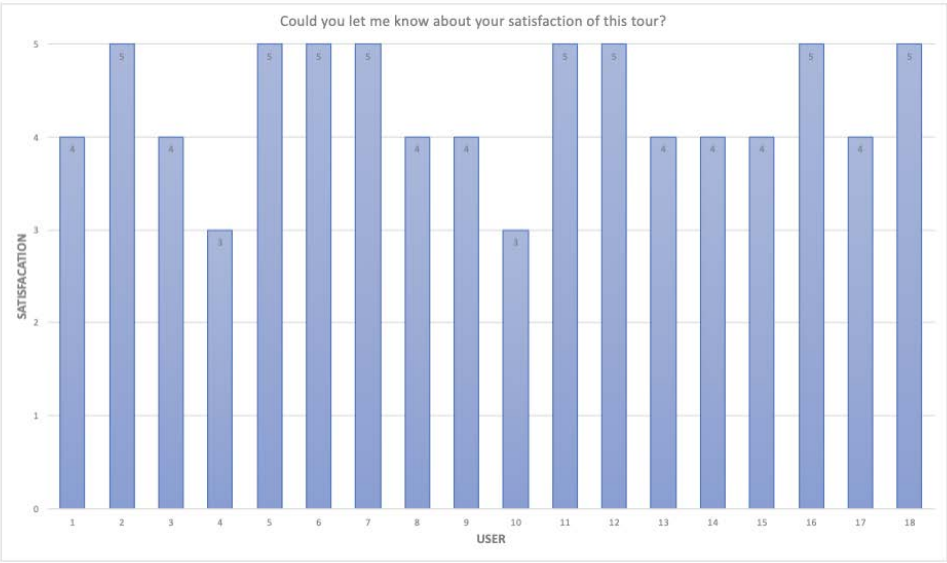


Figure 5.6 Users' Satisfaction About The Tour

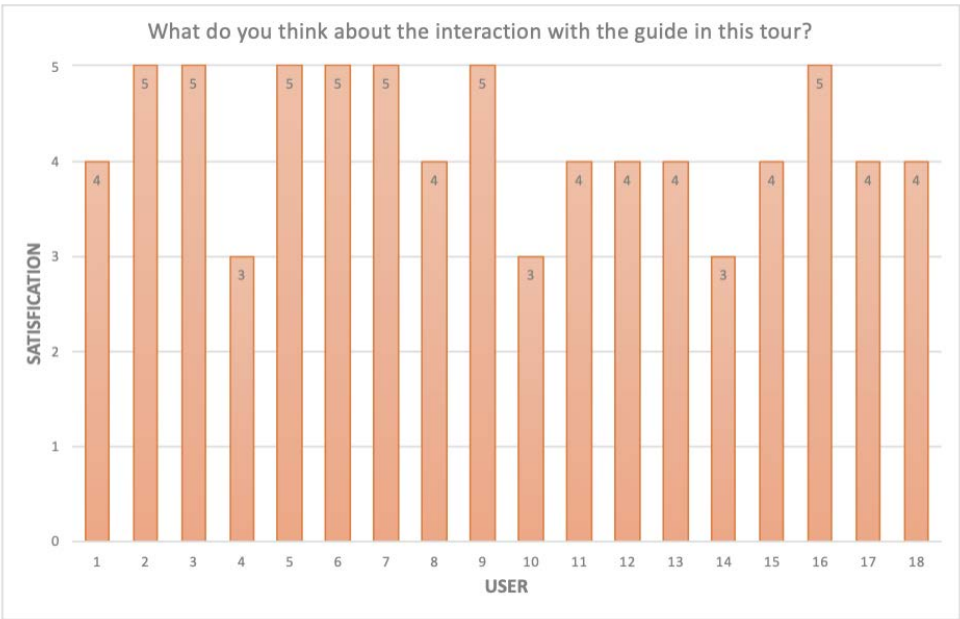


Figure 5.7 Users' Satisfaction About The Interaction With The Guide

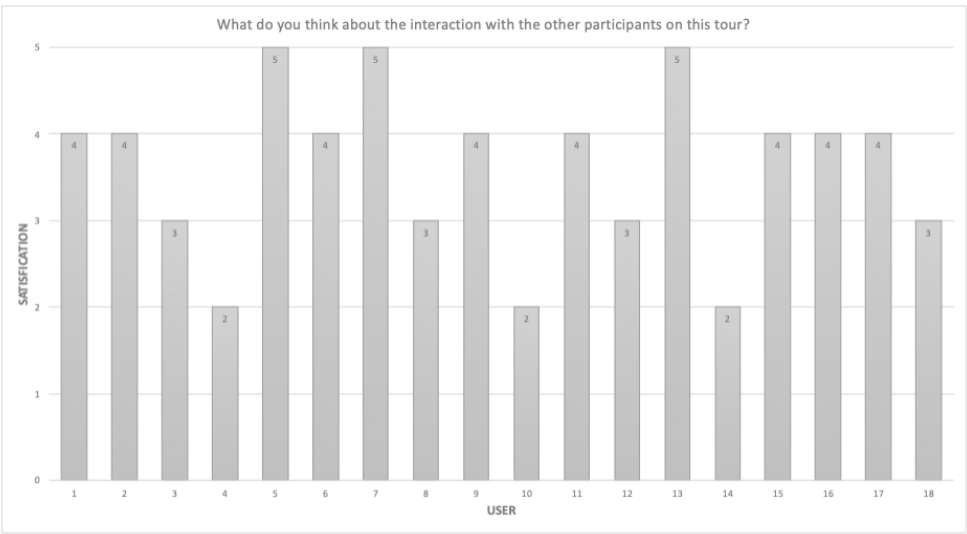


Figure 5.8 Users' Satisfaction About The Interaction With The Other Participants

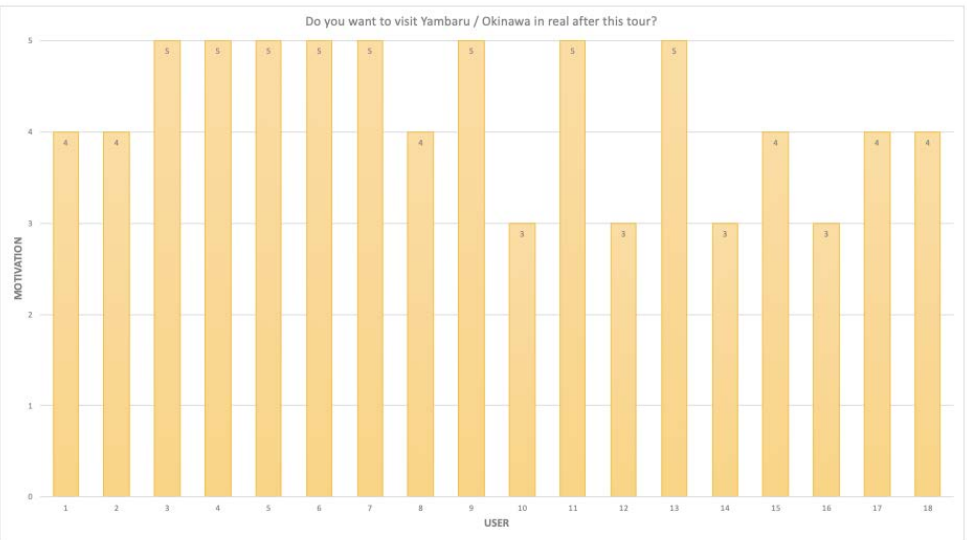


Figure 5.9 Users' Motivation To Go To Yambaru/Okinawa In Real

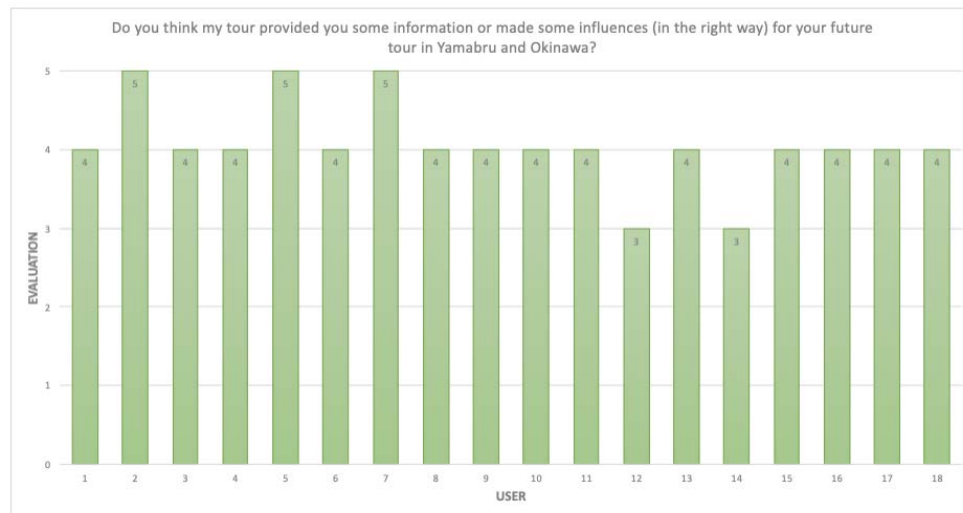


Figure 5.10 Users' Evaluation For Overall Contents For Their Future Plans In Yambaru

*“The tour was interesting. I think the material was well made. It would be nice if there were links to buy Yambaru’s recommended products for those who want to buy and try them.”*

*“Thank you for planning! I had a good time. One of the best things about the trip for me is that I was able to meet various people and share time and places with them, so I thought it would have been nice to have more interaction with the participants. I’m looking forward to the next one!” (Male, 30s)*

*“I really love the virtual tour, but the history session was kind of too long for me so I got bored before the tour finished. I suggest maybe it will be better if you make the history session a bit shorter and focusing to the art, foods, and tourism spots instead. Okinawa’s language was so fun too. Too bad the time was running out so it only introduced slightly. Also, the slide presentation about food was nice but there weren’t any numbers or names on the pictures so I got confused about what is what (I got interested in food’s pictures but I didn’t know what was it called)” (Female, 20s)*

*“Your online experience about Okinawa Island was really good. it’s just that there is a slight problem in the video playback part that looks not so smooth but*

*I think it's a mistake from the zoom application. You did a great job!"* (Female, 20s)

*"I want to go there."* (Female, 30s)

*"I learned that there is a place with natural abundance."* (Male, 30s)

### • **Feedback from User Type 2**

There are some feedback from visitors who defined as user type 2 show below,

*"I felt I was traveling in Yambaru, but it will better if we can have more interactions with other participants".* (Female, 20s)

*"This was my first time attending and I enjoyed it so much it felt like time was short! I would like to participate in the future. I would like to know the mythology of Okinawa like Saiba Utaki and Ryukyu mythology. Thank you very much."* (Male, 50s)

*"I want to go to Yambaru more and more now."* (Male, 30s)

*"I liked the feeling of eating breakfast, lunch, and dinner together."* (Female, 40s)

### • **Users' perceptions concerning the engagement with Yambaru from tests**

Since the author set 5 scales for users to evaluate the overall tour, contents, interactions with guide and the other participants, the degree of desire to Yambaru and user experience in the questionnaires. Most of users assumed that the information they gained from virtual tours made influences to their future tours in Yambaru. And the virtual tours increased their motivation to go to Yambaru.

For user type 1, the virtual tours gave them the first impression of Yambaru area since they did not have any understanding about the destination. They got excited when they saw the Yambaru area offer real local guide tours, 74% of users of user type 1 chose that they are interested in go to observation tour of threatened species - gallirallus okinawae (Yambaru kuina) and walking tour of rural community in Yambaru. The author found that the user type 1 is likely to learn more about culture and unique things in Yambaru.

For user type 2, the virtual tours gave them different impression of Yambaru are though they already heard about this area before. One of participants was

thinking to relocate to there. Some of them thought that Yambaru is a really natural place and not so many facilities. They changed their mind because of “Yambaru Style”, they were hesitated if they can climb the mountains or waterfall. “Yambaru Style” helped them build their confidence and expanded their interests. Most of them chose that they want to join some local tours like Yambaru Awamori (Sake) drinking party and know how to enjoy Awamori, cooking workshop of Yambaru food and art performance from Yambaru residents. The author feels that they really hope they can know about daily life in Yambaru.

### 5.2.3 User Type 3

As the author mentioned that the minority of virtual tours are young generation from case study in chapter 2, the user tests for user type 3 and user type 4 will choose two target users in 20s. The author followed one target user of user type 3 for user test (see Figure 5.6). The author conducted this user test with the target user when she was traveling to the Yambaru area in October, 2020. She joined “Yambaru Style” from her hotel by her laptop and iPad. (see Figure 5.7) The user stayed in Yambaru for a week and she joined “Yambaru Style” on her second day during the trip. Both pre-interview and post-interview were conducted. Also, the author asked her following questions when she finished her trip in Yambaru,

1. Do you think “Yambaru Style” helped your trip last week?
2. What will you tell your friends or family about “Yambaru Style”?

- *User Profile*

### 5.2.4 Test Results of User Type 3

#### *Pre-Interview*

First, the user was invited to answer three questions before starting the “Yambaru Style”.

- Please tell me your thoughts about virtual tourism.

User Profile - User Type 3



Name: Ying, Z.  
Age: 29  
Sex: Female  
Current City: Tokyo  
Hometown: Shanghai  
Occupation: Project Manager  
In an translation company

Personal and Working Profile

Ying came to Japan 3 years ago and this is her first time in Yambaru. She used to study in London and have lived in Barcelona for 2 years. She can't speak Japanese. She works as a project manager in the aspect of life science in an International translation company in Tokyo.

Goal(s)

She wants to have a relaxing time out of work during her holidays. She wants to know about some non-tourist places and find some interesting ways to enjoy Yambaru better. She wants to have more local information about Okinawa.

Figure 5.11 Target user for user type 3



Figure 5.12 User test environment for user type 3

*“...I know virtual tourism became really hit since the coronavirus happened. But this is my first time to actually have a virtual tour. I think the virtual tour can bring me something new that I cannot get from real tour. Because I am already here...”*

- What do you expect for today’s virtual tour?

*“...To be honest, I am very excited. I did search a lot of information about Yambaru and booked my hotel before I coming here, but I still a little lost that how can I enjoy here in the best way. I want to see and know Yambaru from other’s eyes, because I came here by myself. I hope today’s virtual tour can teach me something special about Yambaru and give me some great plans for my real trip...”*

- Please tell me about your impression about Yambaru at this moment.

*“...I just stayed here for one night and I feel this place is very peaceful and natural, I think it is a great place for relaxing holidays, that is also what I expected for my trip during the hard time...”*

The author found the biggest purpose of virtual tours for the user is looking forward to seeing Yambaru from a different way, especially for someone who travel by themselves. The user had the virtual tours, “Yambaru Style” after the pre-interview and also answered three other questions after it.

### ***Post Interview***

In addition, post interview was conducted once the virtual tour is done.

- What do you think of the contents you went through today?

*“...I am very happy that I learnt some history about it. Because as an foreigner tourist, it is hard to know a place without speaking the local language. It is hard to me to talk to some local people here so it was very good. The information of local stores and restaurants are very useful, I will go to try those restaurants tomorrow. I think the real local guide tours are very attractive as well, I am going to book some of them. The contents are very good, I learnt a lot and saw something I could not search on internet by myself...”*

- Are there any thoughts changed about Yambaru after joining the virtual tour?

*“...I only thought Yambaru is a very natural place and I did not know there is a long history about Yambaru but also Okinawa. This place used to seem just a relaxing place to me before, but I think it is a place for adventure, I cannot wait to explore those spots mentioned in the tour and see them in real soon...”*

- What do you think about virtual tourism after joining it?

*“...Since this is my first time to have a virtual tour, I think it is very useful for someone who are traveling in that place at that moment. Tourists usually spend a lot of time to search restaurants, accommodation and where can take beautiful pictures. Virtual tours can take tourists to visit a place much deeper than physical tours. Real tours are very interesting but I think virtual tourism can make the whole trip more perfect...”*

The author found the user was happy about the virtual tour, she thought the virtual tour can collaborate with her real tour and make her travel experience in Yambaru more interesting. And she can see Yambaru from more aspects at the same time.

### 5.2.5 User Type 4

The author invited one user who have been to Yambaru in June, 2020. The author conducted this test with a target user (see Figure 5.8) after she traveling to the Yambaru area in November, 2020. She joined “Yamabru Style” at her home in Tokyo. She joined “Yamabru Style” by her phone. (see Figure 5.9)

- *User Profile*

### 5.2.6 Test Results of User Type 4

#### *Pre-Interview*

First, the user was invited to answer three questions before starting the “Yambaru Style”.

### User Profile - User Type 4



Name: Jialing, W.  
Age: 25  
Sex: Female  
Current City: Tokyo  
Hometown: Macau  
Occupation: CEO of a trading company

#### Personal and Working Profile

Jialing finished her university study in Japan and established her own trading company in Tokyo to do business between Japan and China. She is a young CEO and she is good at doing business in fashion industry. She usually stays in China for half a year and stays in Japan for half a year to manage her company.

#### Goal(s)

She wants to buy some products in Yambaru and Okinawa. She wants to go back to Yambaru some days in the future. She wants to let more people know about Yambaru because she loves this place.

Figure 5.13 Target user for user type 4



Figure 5.14 User test process for user type 4

- Please tell me your thoughts about virtual tourism.

*“...I have joined some virtual tours during the lockdown and I had a lot of fun! I think virtual tourism can help people who love traveling but can not go because of some situation like pandemic or no time to take only one hour to see all around the world...”*

- What do you expect for today’s virtual tour?

*“...I only joined some tours to some places that I have never been before. Today is my first time to travel to a place I think I already known a lot virtually...”*

- Please tell me about your impression about Yambaru at this moment.

*“...Yambaru is a beautiful place, stunning view. However it is not easy for tourists who use public transportation, distance from one place to the other place is a little too far if you do not have a car. So it is better to make a good plan before going to Yambaru. But it is very worth going and I will definitely go again in the future. I miss the delicious pork there...”*

### **Post Interview**

In addition, post interview was conducted once the virtual tour is done.

- What do you think of the contents you went through today?

*“...They exceeded my expectation. I traveled to Yambaru before but I did not join any guide tour. There were a lot of new things to me inside the contents. I am very happy about the shopping part because I did not know what is famous in Yambaru and I also miss the place. I think I think the contents provide me the other way to enjoy Yambaru next time. And I want to go back there more...”*

- Are there any thoughts changed about Yambaru after joining the virtual tour?

*“...I thought that I went to a lot places when I was there but I am wrong. There are still a lot of places like some local restaurants and spots I did not go. They even do not have so much information on the internet. Now I think Yambaru is a place full of nature and humanity after the virtual tour ... ”*

- What do you think about virtual tourism after joining it?

*“...I feel I connected to Yambaru more after joining it. I was like only one-time tourist for Yambaru before and now I got to know more about it and I feel like a Yambaru master now. I visited Yambaru for real before and now I also visited Yambaru virtually, I would like to let more people know about this place...”*

The author found the user was more serious and focus than the users of the other user type. She thought she already known a lot of things about Yambaru and “Yambaru Style” brought her some surprise and also let her learn deeper about some places she has been. She became more likely to visit Yambaru again and join some guide tour in the future. And she wants to introduce Yambaru to her family and friends more after the virtual tour.

### 5.3. Discussion

- **“Yambaru Style” provides a new concept for virtual tourism.**

The author designed “Yambaru Style” as a new concept to virtual tourism in this research and evaluate it by sample tests for different target users. The author could find much positive feedback. Virtual tourism can happen in the all-time series. It is more flexible than a real tour experience. It can also provide more campaigns with digital marketing like the usage of online tools. The author considers it can collaborate with visitors’ actions in real tours very well. Virtual tourism provide an easy way to engage visitors all over the world. The author considers that “Yambaru Style” is a new concept for the tourism market in Yambaru, and the other local areas like Yambaru in Japan can also apply this concept into their local tourism businesses, to expand their market.

- **Local Places in Japan like the Yambaru area can use virtual tourism for a wide range of topics to expand its tourism market.**

Through analyzing all answers for all user types from questionnaires and interviews, the author was able to qualitatively identify relevant topics, as well as the purposes of joining “Yambaru Style.” Users in all groups preferred

focusing on topics related to many aspects, likely because of the comprehensibility and immediacy. They joined virtual tours for the first time and sought to have a different travel experience from their usual travel style and hoped that they could connect their virtual tours with real tours.

The author can find if they have known about Yambaru or if they have been to Yambaru before also make significant influences on their actions. There are 3 times of peak time, which the virtual visitors had most interactions with the guide and the other participants during the virtual tours during the tests for user type 1 and user type 2, a quiz about Okinawan things, introduction to three tourists spots, a small class of Okinawan languages. There are 2 times of 2 peak times during the test of user type 3, the local guide information, and local restaurants information. There are 2 times of 2 peak time during the test of user type 4, the history part and the local stores' information part. Nevertheless, the author can also see the interests about the contents mainly concern local guide tours from each user type, especially asking for more information about real local tour tours. Since their purposes and motivations for virtual tourism are different, it means local places like Yambaru can provide content from many aspects to help visitors from all user types go more profound about the Yambaru area. The virtual tours can also help promote local guide tours to help local guides gain more customers to make their living in the future.

The author can see virtual tourism can provide more contents than real tourism, such as introducing four seasons in Yambaru, live adventure in Yambaru, cooking workshop of Yambaru food, and art performance from Yambaru residents, Yambaru Awamori (Sake) dirking party and know how to enjoy Awamori. As visitors can join tours anywhere, virtual tourism decreases visitors' financial problems and provides opportunities for tourism associations and local people in Yambaru to increase their revenue. Visitors in virtual tourism are more likely to support local businesses and buy their products once they finish their tours and maintain a relationship with Yambaru since they joined the tours. Virtual tourism allows building a bridge between Yambaru and visitors, building communities between local guides and visitors.

Visitors use “Yambaru Style” for a wide range of topics also help them to build closer relationships with Yambaru. They can get to know other visitors, both online interactions, and look forward to offline interactions. Virtual tourism creates a better understanding of Yambaru and creates a stronger bond for communities for visitors at different locations worldwide.

- **Virtual tourism are used for different purposes dynamic in new normal life.**

In-depth quantitative analysis of post patterns reveals specific post patterns over each week. For us, the author found 4 main categories for the contents of virtual tourism. Considering the user test contents, they were classified in history related, culture related, local things related, tourists related. The use of “Yambaru Style” as a new virtual tourism concept in new normal life. Visitors can have a travel experience before traveling to Yambaru, while they are in Yambaru, or after traveling to Yambaru. The most reason visitors join “Yambaru Style” is that most visitors can not travel because of COVID-19. They want to travel. Most of them have no experience with virtual tourism before, and they began to join some virtual tours from some online platforms. Since virtual tourism brought people a simple way to enjoy the travel experience, the author can consider virtual tourism will be highly dynamic from now on, and even the vaccine comes out later.

Most visitors enjoy using the “Yambaru Style” to have a conversation with local guides from many aspects. From my interview with the target users of user type 3 and user type 4, they mentioned they would like to use virtual tourism to see a place from other people’s eyes and compare the Yambaru in their minds with others. And all of the target users joined “Yambaru Style” to gain different information. The author found 53% users will leave their questions about Yambaru at last though they have already asked some questions at the end of the tour, which means they use different WeChat groups for various purposes. They were active during and after the virtual tour, and they make those tours dynamic.

- **Four main types of virtual tourism users are identified, online Yambaru communities are created from each virtual tour.**

The author defined four user types during the design process. (1) New visitors (visitors who have never been to Yambaru and never heard about it before), (2) Potential visitors (visitors who have never been to Yambaru, however, heard about it before), (3) Active visitors (visitors who have been to Yambaru), (4) Royal visitors (visitors who are travelling in Yambaru at this moment).

As a non-famous tourist destination, Yambaru still have more target users for user type 1 and user type 2, new visitors and potential visitors. They will more likely to invest their money into local guide tours, they have more expectations to go there in real. For user type 3, active visitors, they will more likely to invest their money into local spots like restaurants. For user type 4, they will more likely to invest their money into shopping for Yambaru things. It is important to create a cycle to let new visitors become potential visitors, then active visitors to royal visitors. This cycle can help Yambaru area develop sustainable tourism and become the beneficiary in “Yambaru Style”.

At the same time, the author can also see visitors would like to use virtual tourism to talk about their own experience about traveling always the popular topic in both groups. Interviews with users also indicate they it is convenient for them to ask something about Yambaru directly.

- **Virtual tourism will play an important and effective role for regional tourism in new normal life.**

ZOOM, TEAMS, many online communication tools became the most popular tools in 2020 and their users are all around the world. The author used ZOOM to join many virtual tours and also conducted own virtual tours. Since a lot of companies move their offices into countryside and more people work from home today, the author can see the potential use of virtual tourism. Most users did not have any experience with virtual tourism before joining “Yambaru Style” but they mentioned that they enjoyed the virtual tours.

“Yambaru Style”, as a new concept of virtual tourism for regional tourism market in Japan, it seems that both appearance and inside can be involved.

Through conducting 5 user tests for 4 target users, the author can find that users from each test, they always try to ask for more information, confirm if they are right for those things about Yambaru.

Especially from the interviews the author did with user type 3 and user type 4, the author can see the visitors with experience about Yambaru would very much like to maintain and strength their relationships through their actions in the virtual tours. the author can assume that “Yambaru Style” provide an important platform to help engage visitors. Also for user type 1 and user type 2, they contacted the author for more information after the virtual tours to discuss about their plans for Yambaru, most of their participation were quite high, which can show they would like to keep their engagement with Yambaru.

It would be also interesting if other local areas in Japan can provide their own virtual tourism experience to different target visitors based on “Yambaru Style” and compare how visitors use virtual tourism to have their travel experience and what kind of contents will be more welcome for virtual tourism.

# Chapter 6

## Conclusion

### 6.1. Summary

This research aimed to design and develop a new concept for virtual tourism to local areas like the Yambaru region in Japan. To help regional tourism get to adapt to the new normal life while many people are still suffering the COVID-19 and after the COVID-19.

The author chose the Yambaru region as the target area because there are few people heard or know about this area and how to make this area develop virtual tourism as soon as possible is a huge task. As the findings, the author discussed in chapter 5, “Yambaru Style” provides a new concept for virtual tourism, and it can provide a wide range of topics to expand its tourism market. “Yambaru Style” can be used for different travel purposes dynamic in new normal life. There are four main types of virtual tourism users identified, and online communities for Yambaru also can be created. The author assumes that virtual tourism will play an essential and influential role in regional tourism shortly.

Finally, for answering those research questions, virtual tourism will use contents from real tourism, and it will become a way to promote real tourism as well. Virtual tourism itself connects with real tourism all the time and the users of virtual tourism have strong potential to be royal visitors through joining virtual tourism and real tourism in different timelines. Virtually, visitors who are new to an area would much like to ask usual travel information and cultural issues like local languages. In contrast, visitors who are already in that area would much like to make plans for real local guide tours and get different information from tourist spots and local stores, restaurants, and then they can use that information right away. Visitors who have been to Yambaru would much like to use virtual tourism to strengthen their engagement with one area with getting deeper into its

history and willing to buy local things during the tours. Through conducting those monitor virtual tours, the author found that visitors consider virtual tourism as a new way to travel and connect to Yambaru (local area). There is little information about local areas like Yambaru online, and it is hard for them to talk to someone who knows about that area well if they cannot travel in real. They want to keep the connection with Yambaru (local area) no matter if they have not or have been to there. They hope they can find a community to engage in local things and local people in Yambaru (local area). “Yambaru Style” can be a significant and active concept to support tourism associations/tourism industry to open their virtual tourism for the local market. There are many existed online tools now, and companies and agencies should choose some tools that have a large number of users, and choose some local areas that can gain visitors’ curiosity and motivations. Focusing on local communication with local people and online communication with virtual visitors can help them use this concept to meet expectations from local people, support, and develop other businesses for Yambaru (local area).

## 6.2. Research Limitation

Since the situation of COVID-19 in Japan and all over the world is still very serious when the author was conducting this research, the numbers of users (user type 3 and user type 4) in the tests were not enough. Furthermore, since all the testing processes were conducted online, it was hard to get to know every user much deeper. The author wanted to compare real tours and virtual tours and contact with more local people in Yambaru, but all the real tours and local activities have to cancel due to Coronavirus Pandemic. Since all the virtual tours are designed and created by the author, it was not easy to evaluate them with an objective eye.

## 6.3. Future work

- **More experiments in more local areas are needed.**

The author designed this virtual tourism concept for the Yambaru region, but this can be considered to apply to other local areas in Japan as exten-

sibility. Once more experiments in more local areas can be evaluated, the regional tourism market in Japan can use virtual tourism to make marketing plans and turn it into more kinds of businesses for more industries. Virtual tourism can be an important part of Japan's local tourism industry, and the author wants to provide this concept to let the industry have more new ideas about virtual tourism.

- **More stakeholders have to be involved, and their feedback is required.**

The research was conducting tests focus on “users” mainly, the virtual visitors. As the author mentioned in the design process, local guides, local people, local tourism associations and local stores are also the stakeholders in “Yambaru Style”, their feedback for virtual tourism is also vital if it becomes a tool to open their market in their areas.

- **More testing numbers are needed.**

The research tested four kinds of users, but there is still a lack of user numbers for some specific user types, the conclusion will get more accurate if more user numbers can get involved in the tours.

- **This should be a long term project to evaluate its sustainability and social impact.**

The Yambaru area was supposed to open a new railway station, and the author wanted to conduct some real tours for visitors. However, the plan of the railway station was postponed due to the COVID-19 as the Yambaru region will establish a new base for sustainable development to do some distribution based activities like “Farmers’ Village” from June 2021. It will be exciting to combine “Yambaru Style” with the new base. To design new outdoor and indoor experience, online and offline experience, experience for day and night by using the resources and industries in Yambaru. It can be a long term project to estimate the sustainability and social impact of “Yambaru Style”.

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# Appendices

## A. Questionnaire

- English Version

### A Survey about Yambaru Online Experience

Hello!!

I am Lauren, a Master Students from Creative Industry, Graduate School of Media Design at Keio University.

Thank you very much for joining my Yambaru Online experience today.

As a part of my Master Study, I have made this tour. I will very appreciate if you can answer this short survey (5-10 mins) and thank you very much for your cooperation.

If you have any questions, please email me [Lauren1104@keio.jp](mailto:Lauren1104@keio.jp) (To Lauren)

You can also send me a message from MeetUp, or my Facebook Account (@Yambarulove).

There is a question about your email address in the last session.

I will send you the reply to your questions and the newest information of my tour (my project)!

Please feel free to fill your email address! (Please type "NO" if you do not want to write it down)

I hope I can see you in our virtual tours or in Yambaru again in the near future!!

Thank you very much for taking your time to join my tour and answer this survey today.

Let us fight with Coronavirus!

## A Survey about Yambaru Online Experience

\*必須

### About Virtual Tour

Have you ever been to Okinawa before? \*

- ☐ Yes  
☐ No

Have you been to Yambaru before? \*

- ☐ Yes  
☐ No

Was it your first time of Online Experience? \*

- ☐ Yes  
☐ No

Why you chose to join this online experience or what you expected about my online experience? (Optional)

回答を入力

Did you know "Yambaru" before you joining this tour? \*

☐ Yes

☐ No

Are there any changes happened to your impression/imagination of Okinawa after joining this tour? \*

回答を入力

Are there any changes happened to your impression/imagination of "Yambaru" after joining this tour? \*

回答を入力

Which souvenir do you want to buy the most? \*

- ☐ Pineapples Products
- ☐ Sweet potatoes Products
- ☐ Papaya Products
- ☐ Not Intersted

I am going to make other online experience in the future, what kind of experience below you would like to join? \*

- ☐ Introduction to four seasons in Yambaru
- ☐ Live Adventure in Yambaru
- ☐ Cooking Workshop of Yambaru Food
- ☐ Art Performance from Yambaru Residents
- ☐ Yambaru Awamori (Sake) Dirking Party and Know How to Enjoy Awamori
- ☐ Others
- ☐ Not Interested
- ☐ その他: \_\_\_\_\_

オンライン体験の中に、特に気になった部分（コンテンツ）もしくは、好きな部分を教えてください。Please let me know the part(s) you like the most during my tour. \*

- ☐ Okinawan quiz
- ☐ Introduction to History of Ryukyu Kingdom (Okinawa)
- ☐ Introduction to Food Spots of Yambaru
- ☐ Introduction to Tourists Spots of Yambaru
- ☐ Introduction to Shopping Tips of Okinawa
- ☐ Introduction to Guided Tours of Yambaru
- ☐ Music from Yambara-Miyaki
- ☐ Tiny Okinawan languages class
- ☐ その他: \_\_\_\_\_

Which food spot do you want to try the most? \*

- ☐ Breakfast : Yui Yui Road Station
- ☐ Lunch : Fureai Cafeteria, Nanto house
- ☐ Dinner : Cafeteria of Kunigami Harbour
- ☐ Not Intrested in those 3 places

Which tourist spot do you want to visit the most? \*

- ☐ Ta-taki (Ta - Waterfall)
- ☐ DaisekiRinzan
- ☐ Hiji-Otaki (Hiji Waterfall)
- ☐ Not Interested

Which Guided Tour(s) do you want to try the most? \*

参考リンク：(1) Trekking tour of Limestone Mountains : <https://www.yambaru-mori.jp/tour/tour1/>  
(2) Canoeing Tour in Gesashi River : <https://www.yambaru-mori.jp/tour/tour2/> (3) Observation  
Tour of Threatened Species, Gallirallus okinawae (Yambaru Kuina) : <https://www.yambaru-mori.jp/tour/tour3/> (4) The others : <https://www.yambaru-mori.jp/tour/tour-etc/>

- ☐ Trekking tour of Limestone Mountains
- ☐ Canoeing Tour in Gesashi River
- ☐ Observation Tour of Threatened Species, Gallirallus okinawae (Yambaru Kuina)
- ☐ Walking Tour of Rural Community in Yambaru
- ☐ Gourmet Tour of Wild Vegetables
- ☐ River Trekking Tour
- ☐ Forest Therapy Tour
- ☐ Not Interested

About Contents in Today's Tour

Could you let me know about your satisfaction of this tour? \*

1 2 3 4 5

Lowest (I didn't enjoy it at all) ☐ ☐ ☐ ☐ ☐ Highest (I enjoyed it a lot)

Could you let me know about your satisfaction of the contents of this tour? \*

1 2 3 4 5

Lowest (I didn't enjoy it at all) ☐ ☐ ☐ ☐ ☐ Highest (I enjoyed it a lot)

What do you think about the interaction with guide in this tour? \*

1 2 3 4 5

Worst (I didn't enjoy it at all) ☐ ☐ ☐ ☐ ☐ Highest (I enjoyed it a lot)

What do you think about the interaction with the other participants in this tour? \*

1 2 3 4 5  
Worst (I didn't enjoy it at all) ☐ ☐ ☐ ☐ ☐ Highest (I enjoyed it a lot)

Do you want to visit Yambaru / Okinawa in real after this tour? \*

1 2 3 4 5  
Dont want to go ☐ ☐ ☐ ☐ ☐ Really want to go

Do you think my tour provided you some information or made some influences  
(in a good way) for your future tour in Yamabru and Okinawa? \*

1 2 3 4 5  
Not at all ☐ ☐ ☐ ☐ ☐ Very much

Your Thoughts About Yambaru

Which style will you choose to visit if you will go to Yambaru in the future? \*

☐ Go by Myself

☐ Go with My Couple

☐ Go with My Family

☐ Go with My Friends (Colleagues)

☐ Others

Do you have any questions about Yambaru, Okinawa or Japan? (Any questions are welcome, I will reply you all the questions by messages /email )

回答を入力

Could you give me any advice or do you have any thoughts about my Yambaru (Okinawa) Online Experience? (Everything is ok!! Please give me some advice) \*

回答を入力

About Yourself

Gender \*

☐ Male

☐ Female

☐ Prefer Not to Answer

Age \*

☐ Age 10~20

☐ Age 20~30

☐ Age 30~40

☐ Age 40~50

☐ Age 50~60

☐ Age 60~

☐ Prefer Not to Answer

What is your main tourism style until now? \*

- ☐ Travel by myself
- ☐ Travel with my friend(s)
- ☐ Travel with my family
- ☐ Others

What kind of information you searched the most when you make your travel plan or when you are traveling? \*

- ☐ Access to Tourists Spots / Facilities
- ☐ Weather
- ☐ Information about Tourists Spots / Facilities
- ☐ Information about Shops / Restaurants
- ☐ Information about Accommodation
- ☐ Information about Events
- ☐ Information about Traffic
- ☐ Others

Name (Or Nickname) \*

回答を入力

Email Address \*

回答を入力

Tour Photograph Copyright Release \*

I would like to publish and use some photos/videos during the tour for planning more events and my master study in the future. If you are willing for your photos/videos to be published, please read following things and I would appreciate that I can get your permission, 1. All the photos/videos will be ONLY used for promotion about my events and my study. 2. Your name will be ONLY show by initials. 3. It is POSSIBLE that your photos will be shown on some Internet media such as my MeetUp page and my Facebook Page (@Yambarulove) or some external media. 4. I will change or delete your photo(s) on media IMMEDIATELY if you request about it in the future.

☐ Agree

☐ Not Agree

Email Address \*

回答を入力

Tour Photograph Copyright Release \*

I would like to publish and use some photos/videos during the tour for planning more events and my master study in the future. If you are willing for your photos/videos to be published, please read following things and I would appreciate that I can get your permission, 1. All the photos/videos will be ONLY used for promotion about my events and my study. 2. Your name will be ONLY show by initials. 3. It is POSSIBLE that your photos will be shown on some Internet media such as my MeetUp page and my Facebook Page (@Yambarulove) or some external media. 4. I will change or delete your photo(s) on media IMMEDIATELY if you request about it in the future.

☐ Agree

☐ Not Agree



## B. Facebook Page for “Yambaru Style”

## C. Previous plans for Yambaru

