

Building ‘a safe Kansai’ through integrating natural disaster measures

—IKES (Inter-Kansai Evacuation System) Business Plan—

Osaka University School of Law
Junior
SEO HYEMIN

Summary

- This document focuses on the impression and impact natural disasters have on foreign visitors to Japan.
- This document explores businesses that will contribute to the internationalization of Kansai from the viewpoint of disaster prevention.
- It will mainly indicate the limitations of actual examples of disaster prevention measures (taking the examples of Kansai International Airport and the “Disaster prevention map” developed by Osaka University) and introduce IKES (Inter-Kansai Evacuation System) as my business idea.
- It will also look at the issues that can be predicted for IKES, and respective measures that can be taken.

Keywords: Disaster, safety, lack of awareness, internationalization, foreign visitors, Japan visit, public-private cooperation, IKES, excessive competition

1. Introduction

As a study-abroad student, I was often asked why I chose this particular university. I came to Japan as a government-sponsored study-abroad student in April 2016. I had a year of going to preparatory school before deciding on and starting my studies at Osaka University School of Law. At the time, the most popular choice of region among other study-abroad students was not the city of Tokyo as might generally be assumed, but the Kansai region, namely the cities of Kyoto, Osaka and Kobe. I asked a classmate who had submitted documents to a university in Kansai the reason for his choice, and his response was that unlike Kanto, it seemed that there were fewer earthquakes in Kansai, and he was attracted by the sense of safety there. My other classmates gave similar responses. In reality, statistics show that the 2011 Great East Japan Earthquake has impacted the number of foreign tourists to Japan, resulting in a 27.8% decline. Japanese language schools also faced the challenge of a steep decline in the enrolment of study-abroad students. I feel this is one example that painfully demonstrates the impact natural disasters such as earthquakes have on the image of Japan among foreign visitors.

However, in reality the perception of Kansai as being a dependable “safety zone” seems to be gradually changing. With the 2018 Osaka earthquake and Typhoon Jebi striking the region in September of the same year and causing major damage and casualties, some are even viewing the region as one in which many natural disasters occur. In particular, in the case of the 2018 Osaka earthquake, false information exaggerating the scope of damage went viral on social media such as Twitter². This led to many study-abroad students around me packing their bags to go back to their home country based on a blind belief in such news. The root cause of this issue is mainly a fear of and a lack of understanding of natural disasters, as well as a lack of awareness of measures to take in response to a disaster. In order to make Kansai a region that is easy and comfortable for foreigner residents to live in, and that can expect further internationalization, this needs to be recognized as an issue that requires the exploration of appropriate measures. This document will touch on the limitations of existing examples of measures for responding to natural disasters, and introduce my business plan, IKES (Inter-Kansai Evacuation System).

¹ Ryoichi Matsuyama “Visitors to Japan decreased by 27.8% to 6,219,000” Japan National Tourism Organization, 2012 (Date last viewed: 27 October 2019)
https://www.jnto.go.jp/jpn/downloads/12.0120_monthly.pdf

2. Actual examples of natural disaster measures and their limitations

One natural disaster measure that can be considered with a focus on Kansai is the disaster prevention plan being developed by Kansai International Airport, a strategic location for transportation in international exchanges in Kansai. Kansai International Airport is owned by a public organization and operated by a private organization under a concession agreement. It is therefore a perfect example of a case in which cooperation between the public and private sectors is important. The disaster prevention measures of Kansai International Airport are based on a certain level of standards required by the nation, and conformity to these standards is also monitored. In addition, further measures are currently being established based on stronger collaboration with the region taking into account the state of recovery from flooding damage resulting from Typhoon Jebi in 2018³. Another measure relating to cooperation between the public and private sectors is the “disaster prevention map,” a natural disaster relief application for mobile phones, developed by Osaka University. The “disaster prevention map” is developed through liaison with municipalities and volunteers to show evacuation sites specified by the local government or religious facilities that can be used as evacuation sites, in multiple languages. It can be said that this is an example of attempting to realize the value of coexistence through the cooperation of the government⁴.

Despite such measures across both public and private sectors to establish ways of supporting international exchanges and foreigner visitors and residents, why is it that the fear of natural disasters is not fully alleviated among them? This document explores the limitations of such measure from the viewpoints of “lack of awareness” and “the need for further collaboration between disaster prevention measures” as stated in the introduction. Even if various disaster prevention measures are established in Kansai, they cannot actually be used in the event of a disaster if there is no way for non-Japanese to access the relevant information. In addition, even if there is collaboration between the public and private sectors for most disaster prevention measures, there needs to be an effective method of tying together individual measures. Without this, there is a likelihood that major confusion will ensue regarding which measure to prioritize, and in the case of differences arising in information provided by various sources, which information should be used in making a decision.

² “False information spreading via social media following the earthquake – Osaka Prefecture calling for caution when taking action, Kobe Newspaper NEXT, 2018 (Date last viewed: 26 October 2019) <https://www.kobe-np.co.jp/news/sougou/201806/0011365678.shtml>

³ Takamasa Taba “Measures for Nankai Trough Megathrust Earthquake at Kansai International Airport and Shirahama Airport” (Osaka University Law Review, 2018)

⁴ Keishin Inaba “Regional collaboration using IT – taking on the challenge of creating a mechanism for disaster prevention and monitoring” Osaka University HP Latest News, 2017 (Date last viewed: 20 October 2019)

https://www.osakau.ac.jp/ja/news/storyz/special_issue/research_topics_nl77/201710_special_issue03

3. IKES (Inter-Kansai Evacuation System)

In addressing the limitations stated above, this document proposes a new disaster prevention system offering better access, and which ties together all disaster prevention measures within the Kansai region. The name of the system is “Inter-Kansai Evacuation System” based on the concept of “integrating all natural disaster measures in Kansai,” and providing easy understanding by non-Japanese through its emphasis on “tying Kansai together” and “evacuation.” Some may feel that Japanese residents of the region may be put at a disadvantage by use of an English name, but this is resolved by using the abbreviation “IKES,” which is much easier to use. This document will also hereinafter refer to the business plan as IKES.

In order to explain the specific mechanism of IKES, it is first important to understand the origin of this platform. IKES is an integrated disaster prevention system that allows access by everybody while online or while going about their everyday lives—in other words, a system that is accessible both online and offline. As with disaster prevention applications for mobile phones on the market, information relating to natural disasters such as earthquakes or typhoons and the availability of various transportation and public facilities, as well as the location of evacuation sites, is provided via the internet. However, a major characteristic of IKES is that this information can also be directly communicated by facilities run by the local government such as museums and art galleries, by privately-run shops, and by educational institutions such as universities and elementary, middle and high schools. In view of this special characteristic, this document explains the mechanism of IKES separately for its online and offline modes of operation.

① Online IKES

As previously stated, the online version of IKES will have a similar role to many currently available disaster prevention applications for mobile phones, which is that of providing disaster prevention-related information. However, IKES differs from such applications in that it allows all disaster prevention systems in the Kansai region to be listed, thus becoming a so-called hub website. The platform will include websites for desktops and mobile phones, as well as the previously mentioned mobile phone application (hereinafter “app”).

When accessing the IKES website, the information you will first see is a list of natural disaster measures in the Kansai region according to various categories, including evacuation sites, the weather, electricity/gas/water, transportation, medical, etc. For example, measures relating to the state of recovery from Kansai International Airport flood damage mentioned earlier will fall under the transportation category, and the “disaster prevention map” indicating evacuation sites can be checked from the evacuation site category. A system may of course fall under multiple categories. Keywords can also be used to search for more detailed information that may be required.

The provision of such information will also be carried out in cooperation with companies, local governments, and local public bodies managing the respective disaster prevention systems and has the advantage of improving access while maintaining all existing natural disaster measures. Moreover, in the event of discrepancies between the various platforms regarding the operational status of trains and other information (there are many cases of tourists and foreign residents in Japan who experienced inconveniences in using transportation facilities due to map applications not displaying delays in departures, etc.) IKES will serve the function of comparing all available data and presenting the most accurate information.

② Offline IKES

While the IKES service can be accessed via a website or app, not everybody owns a mobile phone, or is familiar with internet technology. In addition, some tourists are not able to use data on their mobile phones in Japan, and for many, internet usage is restricted. And most importantly, we must not overlook the possibility of communication failures occurring at the time of a disaster. For this reason, the IKES service will not only be accessible online but also offline. As previously stated, offline access will be available at locations such as facilities run by the local government such as museums and art galleries, by privately-run shops, and by educational institutions such as universities and elementary, middle and high schools. This will be realized mainly through cooperation between IKES and the facilities mentioned as examples. These facilities will have an “IKES House” sign on the outside of the building, and their locations can be checked via GPS through the cooperation of map applications on the market.

If there are any concerns or problems relating to a natural disaster, anyone can enter an “IKES House” and request the help of or make inquiries to the manager, staff or teachers of the facility. In addition, these facilities also have the role of giving guidance to foreign tourists who are unfamiliar with evacuation procedures in the event of an actual natural disaster. Due to the nature of this role requiring experience with disaster prevention and foreign language skills, we can expect a natural increase in employment opportunities for the senior generation and foreign residents at such shops and facilities run by the local

government. This will also lead to a positive impression among visitors to various “IKES Houses” and improve usage rates, thereby driving the revitalization of local governments and public institutions, as well as private corporations and organizations.

4. Conclusion: The limitations of IKES and appropriate measures

However, the fundamental question remains of whether it is realistic for a private corporation to own and operate IKES as a “business” that brings together the disaster prevention systems within the Kansai community.

The online version of IKES is simply a hub, so no particular issues are expected to arise. However, the offline version may lead to excessive competition in IKES locations with IKES functioning as a means of attracting customers, as it would lead to increased profit in privately-run shops. This may lead to losing sight of the original intention of IKES as a disaster prevention measure.

That said, there are some measures that exist to address this kind of issue. Considering examples of the national government and public organizations outsourcing a certain level of operations to private corporations, like the operation of Kansai International Airport and the “disaster prevention map” introduced earlier, this business idea can be approached in the form of a public-private cooperation. In regard to excessive competition, elements that will in reality contribute to IKES, such as the availability of staff capable of guiding people to evacuation sites in foreign languages, will be taken into consideration to allow facilities limited cooperation with IKES. In other words, this can be prevented by sending “invitations.”

By establishing a natural disaster measure that is comprehensive and allows easy access by everybody at all times, I look forward to developing “a safe Kansai” that will be chosen as the stage for people from around the world to achieve their personal success.