Cultural Probe method as a tool of design ideas for enhancing experience city strategy.*

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Abstract

"Experience City" is a city branding concept in this research which aims to provide economic growth opportunities and to improve the well-being of residents. This research is a part of PhD research that aims to explore the user needs and user motivation related to the proposed design ideas for the Experience City strategy. The focus of the study is on tourism experiences in the city of Nakhon Si Thammarat, Southern Thailand, used in the research as a case study.

A Cultural Probe, a method used to gather information about people and their activities, is used in the research to explore the tangible and intangible aspects of the tourism experience. The experimental process has involved three main stages of the tourism activity, namely: pre-journey, during the journey, and post-journey with each stage providing different activities to approach its objectives. Participants in the study were required to follow the activities shown in the "Experience Journey Book" by using all items in the cultural probe kit.

The results from cultural probe method will be analyzed to create a visual communication design, aimed at enhancing the Experience City strategy. It is expected to be an alternative solution tool in order to achieve the transactional way for the Experience City branding, based on the attraction of tourism dimension.

Keywords: Cultural Probe, Experience City Branding, Experience City

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Introduction

There are a variety methods, which support the researcher to approach the issue and discover the solution for the research. Cultural Probe also knows as diary studies, is a common design research method to gather qualitative data work with user self-documentation called "probe kit" which is a collection of tools that might consist of the item such as camera, user diaries, maps, postcard and instructions. The selected participants are provided probe kits to participants to use the items and finishing the instructions in absence of the researcher, then return their item to the researcher. Thus, Cultural Probe is the experimental design method in a responsive way of the collecting and assessing participants' perceptions and interactions with products, services, spaces and systems. The finding is qualitative data for the project that the researcher can capture the specific circumstance as well as user-experience.

Cultural Probe is a method to gaining contextually sensitive information in order to inspire the design of new technology (Gave & Dunne, 1999) there is an appearing first step in a technology design process with collections of evocative task meant to inspirational response from participants. Used as an instrument to discover the unknown (Gaver et al., 2004). Also recently cultural probes have become a common method that are the combination of several thing that given to participants express themselves in absence of the researcher and revealing something about their life, lives, thoughts, and activities.

To understand the users is important in design process, each different methods are the research tools that support the researcher to approach the solution – however, the method itself has individual structure, explaining their own project. Thus this research paper illustrates and describes cultural probes method as a part of research design and a case study for proposed design ideas of visual communication design enhancing experience city strategy through the used methodology of cultural probes, to gather data and analysis information about user and their activities during experience the tourist attraction and city of Nakhon Si Thammarat as a case study area.

This design process concerns to create the appropriate tools for several stages which is included in a probe kit package, encouraging the participants to complete the expectation for research purposes. There are both tangible and intangible aspects that aims to explore the user needs and particularly proposed design idea for the touch point of experience city strategy and to identify the user motivation during their experience that are shown from the probes return.

The probes package might include a package of maps, postcards, notepads, pens, camera, a diary, and other material which is provoked design for inspirational participants. It is an experimental design for understanding the group of participants, lead to unexpected idea of the relating topic and contents. As the probes were part of a strategy of pursuing experimental design in a responsive way and addressing a common problem in developing projects for unfamiliar groups. To understand the local cultures is important for design which relevant the user while it does not limit their already existing. It lead to the user share the idea with others without to dominate it toward unexpected idea. (Gaver, Dunne and Pacenti, 1999)

Nakhon Si Thammarat is the second largest province, located in the South of Thailand, where was an independent kingdom for many centuries and a historical centre of Buddhism in ancient, including its role as an important centre of art and culture, sculpture, architecture, and intelligence of locality, where forms a valuable story and cultural heritage. (http://thai.tourismthailand.org) Moreover, the Nakhon Si Thammarat's action plan 2015 which follows the eleventh Thailand's National Development plans also includes the direction for development of tourism is to conserving the local tradition, culture heritage of each small area for being strength opportunity to support heritage attraction "Wat Phra Mahathat Woramahawihan" as a world heritage site. Consequently, the fundamental background illustrates that Nakhon Si Thammarat would be effective case study create an alternative solution for creating experience city branding, using as a case study that would be effective for enhancing city opportunity.

According to the tourism industry remains a major contributor to Thailand's economic growth, the Tourism Authority of Thailand realized that travelers have been visiting only famous and popular cities. As a result, a new initiative to promote "secondary" tourist cities has been rolled out in hopes of helping boost tourism revenue. Thus, Nakhon Si Thammarat Province is being promote to be the Secondary Tourist Cities. Nakhon Si Thammarat is an ancient city of great importance to Thai history. It was once the center of art, culture, and marine trading of the region. In addition to its great history, there are the many undeveloped beaches as well as two national parks within an interior of verdant jungles abundant with luxuriant vegetation, beautiful waterfalls, and exotic wildlife where persuade a lot of tourist to visiting there. In consequence, Nakhon Si Thammarat is selected to be a case study area for this cultural probe method where the participants can independent trip arrangement individually based on their interests.

To study and design the cultural probe method of this research is qualitative data based on participatory user self-documentation. It is expected to be an experimental design in order to approaching the insight of user's need and particularly proposed design ideas of the

touch point of experience city strategy through participant's stories, experiences, opinions, emotions, and activities. Also, the result allow the researcher to acknowledge in-depth the user's motivation during their journey experience. In addition, the result of this study will lead to an experimental design of guideline for experience city branding development, enhancing place branding for sustainable city's benefit.

Research Questions

How to create experience city branding bases on user needs and motivation through using cultural probe method for gathering research data and?

Research Objectives

1. To identify the particularly proposed design ideas of cultural probe method for gathering research data, enhancing touch point of experience city strategy.
2. To explore the user needs and motivation during the user experience through cultural probe design.

Design Experience as a Research

This cultural probe method is design research process which aims to explore the user needs and particularly proposed design idea for touch point of experience city strategy and to identify the user motivation during the customer experience at the case study area as Nakhon Si Thammarat provinces, Thailand by designing and using the probe kit of this research method in order to approach area environment, society, culture, way of life through participant's experience who collected the qualitative data.

Cultural Probe items in this research is a case study that was designed as a tool to develop the design guideline for experience city branding, based on the situations during the travelling to Nakhon Si Thammarat province, Thailand by selected participants who are compared as the core stakeholders.

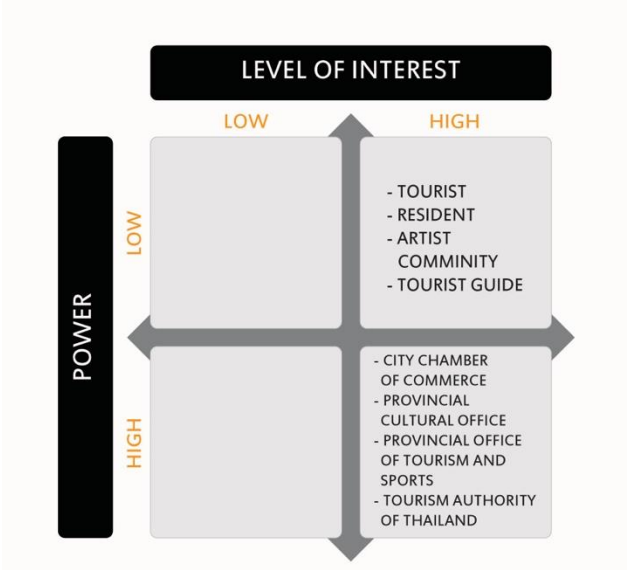


Figure 1: Prioritize Stakeholders of tourism authority of Nakhon Si Thammarat
Adapted from Power/ Interest Grid (Mendelow, 1991)

According to understanding and identifying the core stakeholders in this research leaded to selecting the propose sample group who participate the cultural probe method. There were 2 group of participants that consisted of 3 tourists and 3 residents. The qualitative data was collected from participatory experience under the probe kit items during the limited period of journey time for 2 nights and 3 days.

Research Methodology

As the literature review shows that there are the process to create the positive touring experience with good quality (Figure 2), which the researcher can adapted the idea by separating the effective experience process to be 3 steps as before the journey, during the journey, and after the journey in order to create the idea and design the cultural probe process.

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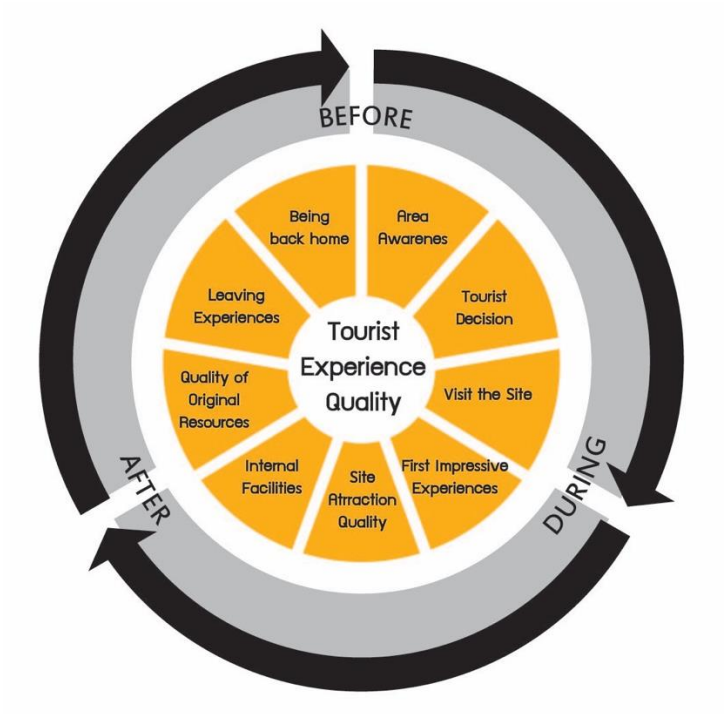


Figure 2: The process to create the positive touring experience with good quality.

Cultural Probe Process was designed through 3 main stages of the tourism activity, namely: pre-journey, during the journey, and post-journey which provide the different activities to gather their individual objectives. Furthermore, there are 2 groups of selected participants was divide as tourists and residents for different perception of users data gathering. Participants in the study were required to follow the activities shown in the “Experience Journey Book” by using all items in the cultural probe kit.

“Experience Journey Book” is an important tool in the probe kit for cultural probe method, excepting other material as emotional sticker, colour pens, site and so on. Within the experience journey book contains the list of issue ordering tools in each sectors for approaching the main objectives of method’s expectation. There are the variety of methods are included in the book for data gathering which leads to important and effective result and information for further analysis stage.

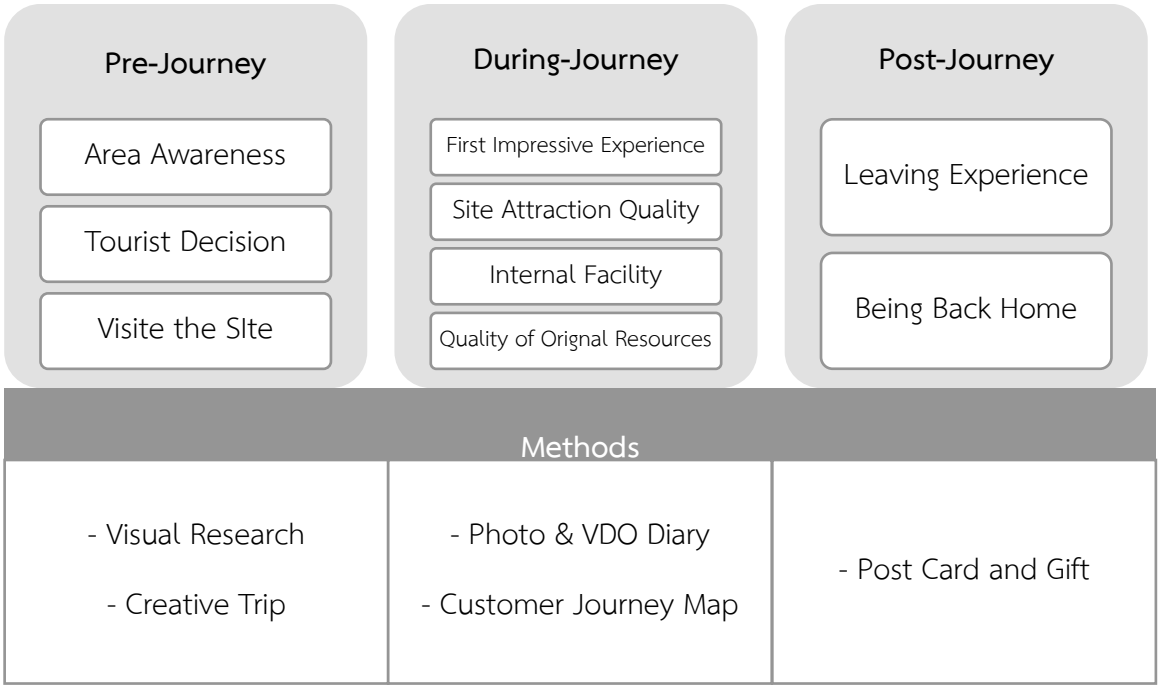


Figure 3: Cultural Probe Method of "Experience Journey Book"

1) Pre-Journey: Visual Research and Creative Trip

The first section of the "Experience Journey Book" aims to understand the area attraction awareness of the Cultural Probe Method participants. Thus, the design contained about the blank space and asks the participants to do the list of tourist attraction by self-serving the internet. They can search the data for their journey as much as they can. After they have done the first part of area awareness, they can continue to arrange their creative 3 Days and 2 nights trip in Nakhon Si Thammarat with the personal reason of visiting and record their plan on the experience journey book, this process was expected to illustrate the motivation that provoked participant's decision. Moreover, during their visiting to the site of the journey the participants have to record their experience before arrive to the destination which this qualitative data can be the design idea for create the touch point for visiting experiences.

2) During-Journey: Photo and VDO Diaries and Customer Journey Mapping

After the pre-journey process is done, the participants continue the second section which is the during-journey stage. This section are included the illustrated guideline map concerned the idea of each attractions towards their journey for being opening evocative space. Furthermore, there are independent space for putting and upload the photo on media diary to tell their story during the journey such as the objects, foods, people and places which present their experience about participant's first impressive experience, their opinion

concerning the site attraction quality, internal facility, and quality of original sources. This process aims to capture the significant experiences in personal nature surroundings along with to gain delighted insights an individual's experience with a particular product or activity.

3) Post-Journey: Postcard and Image

The last section of the book were the question to buy the emotional postcard and send them to other to express their individual experience. This opening evocative space is for the independent participants who involves in this activities can receive information and experience from the participants.

Classification of Cultural Probes Items (Categories)

A cultural probes kit design based on the research of literature review, it is developed as a list of typical cultural probes items along with related functions such an item might serve.

The Wrapping: All items of a cultural probe kit are stored in case of packaging.

Diary: A diary is a common cultural probes item. This is a blank book that the participants fill with their observations or ideas. It can either be a chronological report, or it can contain instructions what to fill in, or it can be completely empty to give the users the area to express their own observations and thoughts.

Map: Site Map provides an example structure of a given destination. Participants can either plan their trip or own activities within this map, or they can fill it with visionary ideas.

Frameworks: Framework is designed as Experience Journey Book which provides a structures and tasks for different purposes that can be time-related such as process maps, schedules, and user journey maps, which the participants follow with their own ideas or observations.

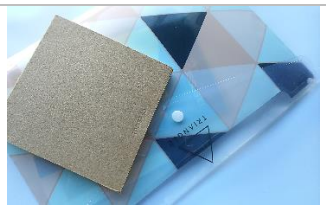
Photo/Video Documentation: The participants are asked to record their journey through photograph or video of specific places or situations related to the research. This recorder tool usually does not work alone and it is additional required tool, there are some instructions what to capture, store and deliver them.

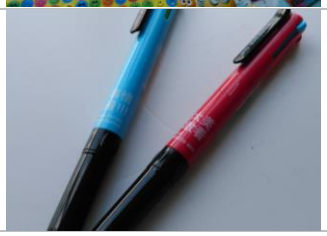
Supporting Material: These items such as post it set, emotional stickers, Magic colour, and pen are not a part of the research, but might be important to make the inspiration for the participants more interesting and enjoy the activities.

Evaluation of Cultural Probe Method

This cultural probe deployed to six selected samples that based on two categories as visitor and resident. The participants were required to follow the activities that is showed on in the "Experience Journey Book" by using all items in the cultural probe kit.

Table 1: Example of cultural probe item and related function (based on the case study)

Item	Picture	Category	Function	Comments
Case		Wrapping	Practical	Problem; Water proof, too large to carry on and fragile.
Experience Journey Book		Framework	Documentary/ Instructive	A5 (Visitors); difficult to pick up the paper inside the plastic envelope, size is suit to carry on. B5 (Residents); need more space for writing down. Some exercise is not clear, participants did the wrong direction.
Diary		Diary	Documentary	Least task using, some participants don't use it, it might be concluded with experience journey book.
Site Map		Map	Motivational	Overall is ok.
Camera/ VDO Recorder/ Cell Phone		Photo/VDO Documentation	Documentary/ Visionary	Optional task for using as a journey recorder and upload on social media.

Item	Picture	Category	Function	Comments
Post it		Supporting Material	Inspirational	Least favorite task for many participants.
Emotional Sticker		Supporting Material	Inspirational	Favorite task of participants, showing clearer emotions.
Pen		Supporting Material	Inspirational	Too big

Moreover, questionnaire is the additional task for qualitative data, concerning the usability of each cultural probe items. Figure 4 is the contentment for the probe kit and tools from the participants.

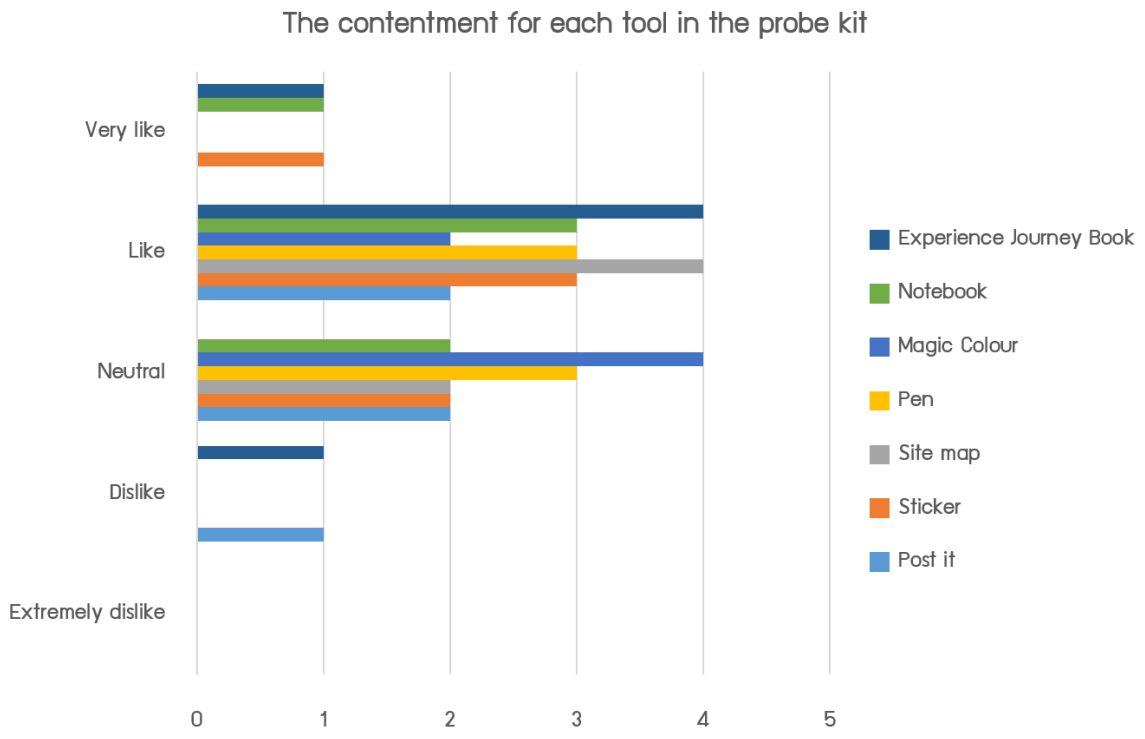


Figure 4: Participants' s feedback on the cultural probes items (Questionnaire Results)

Information and Responses to Cultural Probe Activities

This cultural probe were designed to allow insight into the participants interests and passion of their site journey. The probe activities and tasks were created based on the methods which provides constructive data. The probe tasks consists of the following methods:

1) Visual Research: to start with the process of area awareness, participants were asked to do visual research on their individual research such as surfing internet and asking someone's opinion for the quantitively trip data before considering and planning the trip based on their personal motivation.

The visual research task of this probe design is found that participants can independent and easily collect the data. Due to the clear task, it leaded to the expedient data analysis.



Figure 5: Examples of Visual Research Task Response on Experience Journey Book

2) Creative Trip: after the process of desk research leading to the creative planning the trip, this task asked participants to arrange their personal journey for 3 days and 2 nights and independent recorded their experiences during the journey.

To provide the design with blank space for creative trip task that participants fill their own trip arrangement before visiting the site area which purposed to gather the insight data. Most participants were misunderstand the task and filled their experiences instead of arranging their trip. However, there are a chronological report and it can contain participants ideas and thoughts.

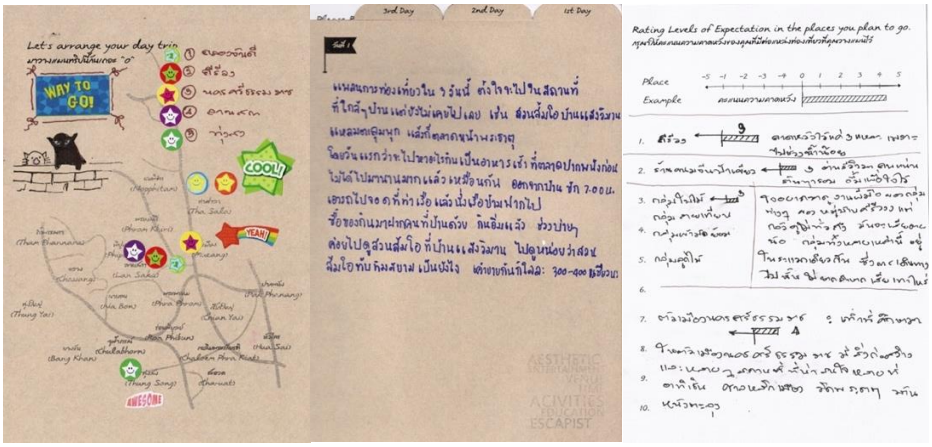


Figure 6: Examples of Creative Trip Task Response on Experience Journey Book



Figure 7: Examples of Creative Trip Task Response on Experience Journey Book

3) Photo & VDO Diary: the participants were asked to capture their experiences and shared them on the online media (named Instagram). They also can descript the ideas and memories the moment in text and in pictures.

Photo and Video are interesting document and a highly effectively way of collection observational data to gain about details insights into the participants' s visions, emotion, wishes, or ideas through their individual visionary output based on the specified categories such as object, food, people and place during the journey. It delivers either information or atmospheric of the studied area that relates the creation of good travelling experiences.



Figure 8: Examples of Photo and Video Diary Task Response on Experience Journey Book

4) Customer Journey Map: the participant also asked to tell the story of their experience during their journey through easily describe a possible map by using the supporting material in the probe kit.

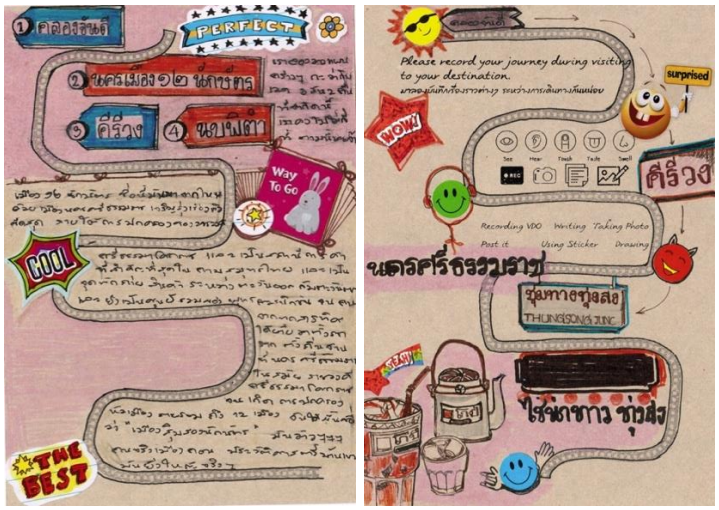


Figure 9: Examples of Customer Journey Map Task Response on Experience Journey Book

This customer journey task aims to identify the customer touchpoints development concerning the possible tourist management. The task design shows the guideline and description for participants that can follow with their independent ideas. Although, this task can gain some useful data from participants' s experience but it only gathers least specific issue.

5) Post Card and Gift: the participants are requested to buy some post cards or gifts then sent them to other who they want to share and express the travelling experience for completing the task. This task helps them to hint about what to do, where to go and what to deliver.

There are different gifts that were expressed the participants experiences, however this task was not complete if the receivers are not respond. Due to this task purposed to gain the feedback from the people who are involve the activities.

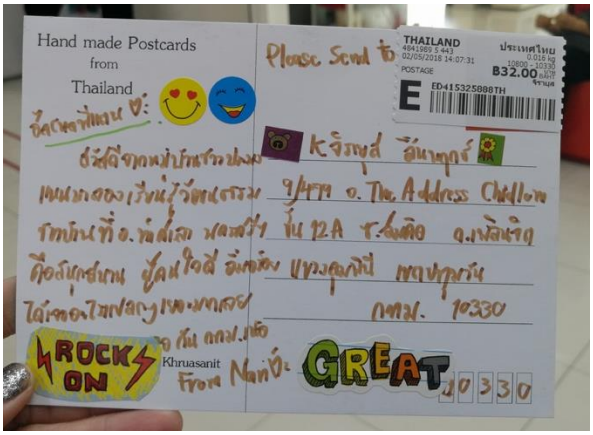


Figure 9: Example of Post Card and Gift Task Response on Experience Journey Book

The cultural probe kits took the form of an activity pack which contributed to the traveling journey in Nakhon Si Thammarat Province, Thailand as a case studied area. The participants were asked to return the completed probe in the package to the researcher at the end of the journey. Participants required more time at the end of the period were given as extra about 2-3 days to complete their probes. Finally, a total of 6 probe sets were return.

Design Inspiration

The clearly instruction of different structure in cultural probe design is crucial that bring about the useful and typical tool for gathering data since the participants were guided to use them properly. Furthermore, participants became more engaged in activities which required them to be creative and constructive. In response to the cultural probe activities a number of participants appeared the idea of creating the experience city strategy as user motivation through tourism experience process during their journey which is the relationship between people as local residents and the visitors. While tourism experience process is related to the physical evidence by creating visual aspect system of the touchpoint for enhancing user requirement. (Figure 10)

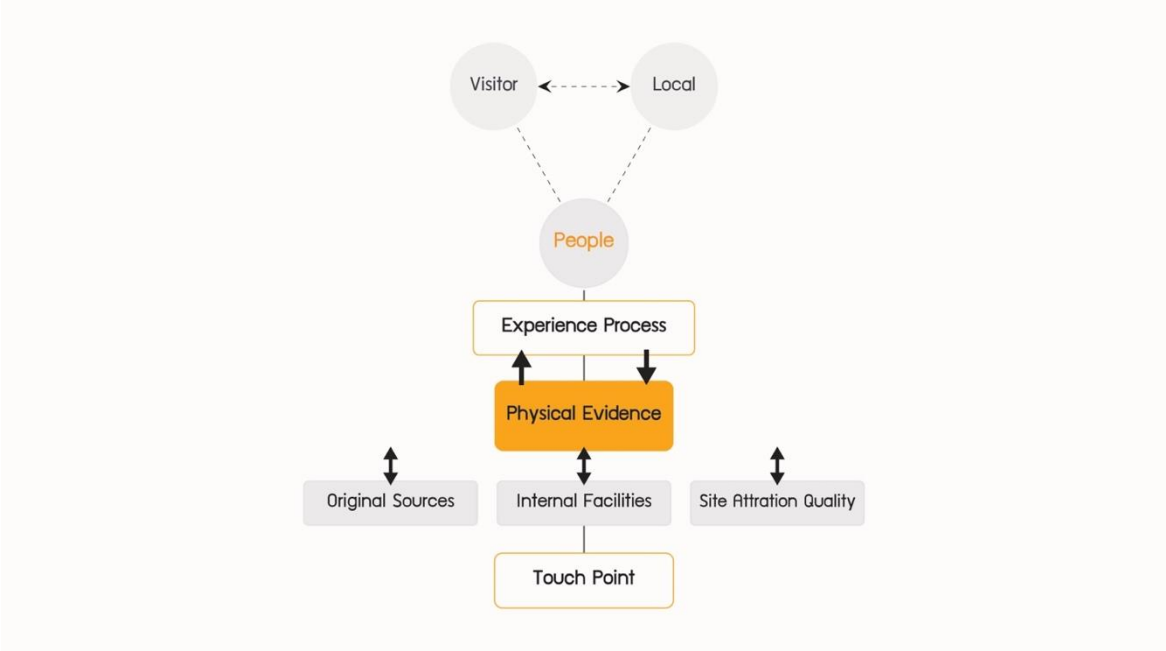


Figure 10: Tourism Experience Process

Conclusion and Discussion

This research has demonstrated that the cultural probe were useful and it influenced to collect as much as the information concerning travelling experience in Nakhon Si Thammarat. It is obviously shows that cultural probe is the practicable tool for gathering the contextual insight data into the idea of creating tourism experience process. Early results have showed that well-designed cultural probes can be effectively used for inspiration to convey the design of visual communication. The completed cultural probe from the participants appeared that some tasks in the cultural probe should be clear and can be developed. Activities should allow for creative and independent responded and there are simply categorize, but are effective for the research objective and requirement.

To design the proposed cultural probes material is needed for gathering the data, due to participants need the items that can lead them to achieve the process. As the result of the design research can divided the items into 2 categories; main items and additional items. The Experience Journey Book is the main item that is created and designed for participants. They can follow the step easily and also the researcher can collect and analyze the data as the purpose is sett up in. In contrast, others material such as diary, site map, camera post it and colour pen are the additional items which is prepared for the participant to fulfil their experience and motivations. As well as the research The probe packs also contained a set of instructions and some suggestions as to how the various devices in the probe pack

might be used. As well as Andy C., Terry H. and Tom R. (2001) stated that The probe packs also contained a set of instructions and some suggestions as to how the various devices in the probe pack might be used. It shows that the effective of participant's response concerns the carefully cultural probes material design.

Moreover, to explore the user needs and motivation during the user experience through cultural probes design found that to interact with the people and community when they were travelling, is their motivation. As Ina R. (2014) mentioned that in a tourism context, it can be expected to differ strongly from interactions experienced within everyday life and to have the highest impact upon the visitor experience. Thus, to interaction between local, community, and travelers is the most important for participant's motivation and user needs which are involved in the user experience for further design strategy.

Recommendations

According to cultural probe method is designed material and combination of a variety of items that are required to participants to express their idea. So cultural probe is suited to experiment process where designer can extend the idea for relating design experience bases on the focused area. However, there is different area study can reveals the different key touch point.

In the design research process enhancing touch point of experience city strategy, it can follow the basis process following the figure 11. that is the benefit for applying to further design bases on experience element and the design can adapt the method up on the appropriated limitation such as participant group, area of the study, and proposal situation.

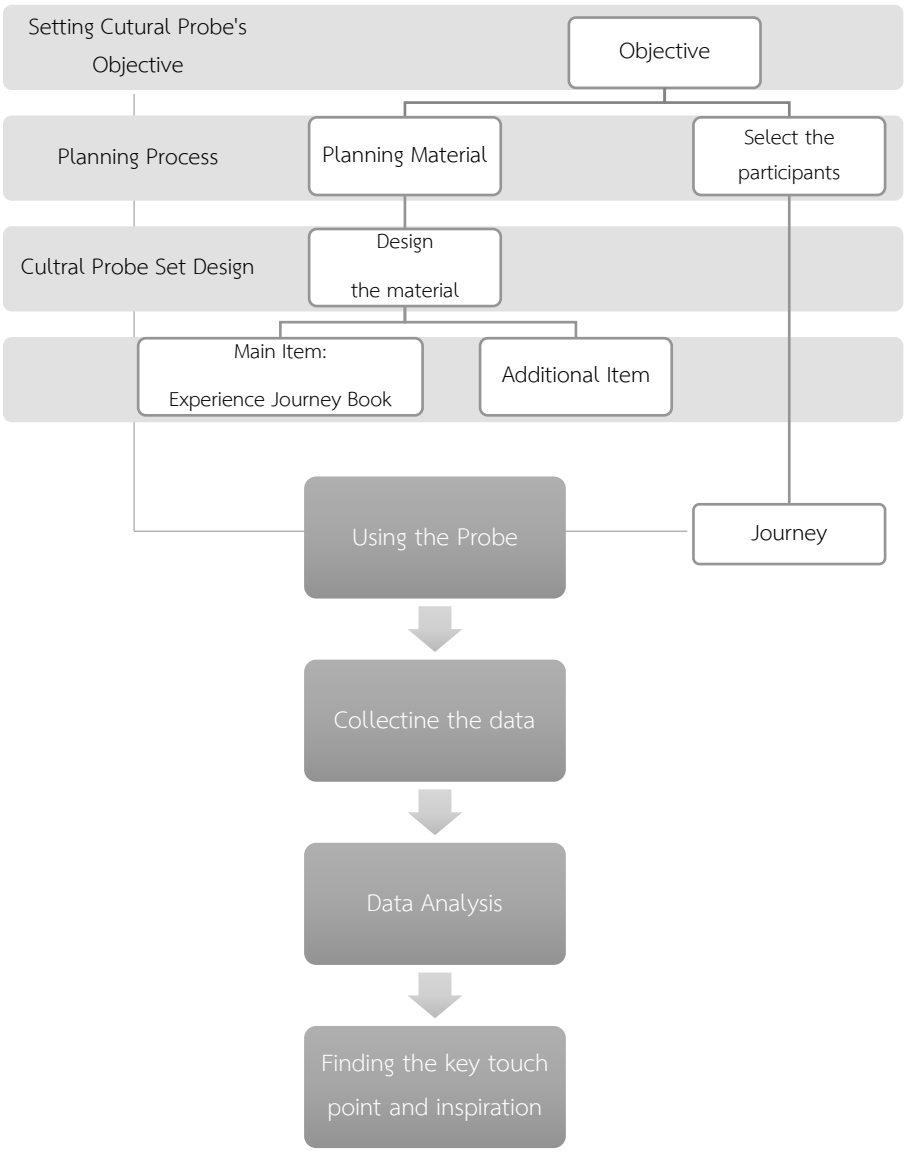


Figure 11: Design process for creating cultural probes, enhancing experience city strategy

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