

GETTAXI Showcase

GETTAXI

Taxi Service Design Project

As long as the public transportation system is insufficient, “Taxi” is still an essential kind of public transportation for most people. Yet, often times, “Taxi” is also considered unreliable and troublesome.

Phongsathorn Laiadon, an expert on design thinking process and service design from FIF DESIGN studio, together with Creative Business Development Department, Thailand Creative & Design Center (TCDC) has initiated a project and organized a workshop on ‘Taxi Service Design Project’ during July - September 2017.

Through a co-creation process, Taxi drivers, passengers and other involved parties are determined to find a sustainable solution to improve taxi service to a better standard.

Participants

1. Passengers and General public
2. Taxi service providers, Taxi drivers, and Taxi coops
3. Government officers and Organizations that are involved with urban transportation
4. Hardware and Software engineers
5. Designers from various fields

Service Design

“Service design is the use of design thinking process to help develop a service or a product to its highest potential in order to offer the most useful, convenient and impressive service or product to the customers. Most importantly, service design also creates a positive outcome for the organization in both concrete and abstract forms.”

Birgit Mager

“Service design is an application of design thinking process to find a solution through a co-creation among all involved parties in an attempt to understand the people and the context of the problems and to come up with ideas that have been tested and developed, in order to offer systematic and inclusive service experiences to the customers in every touchpoint.”

Phongsathorn Laiadon

Why do we need Taxi Service Design?

1. Recognize the actual problems with taxi service and help the taxi drivers understand the passengers’s needs and existing problems.
2. Develop service concepts, prototypes and protocols that help create ‘values’ and ‘satisfaction’, to make the win-win situation for both the driver and the passenger.
3. Create sustainable solutions through a co-creation process. By using design thinking and service design processes to set new ways of services that would respond to passengers before, during and after services.

Service Design Workshop

The problems are “difficult” to solve because... There are “various” needs and “different” target groups, the ways to find a solution was not simple but they have to be through numerous processes of brainstorming and testing to find a better, more accurate, and more appropriate solutions for every party.

1. UNDERSTANDING

Survey and collect comprehensive data to gain a better understanding. Brainstorm and analyse the collected data such as the taxi drivers’ common routes, behaviours, and problems. Also suitable case studies and interesting technologies. Study the overall picture of service system through the use of Journey Map to see the connections among the data. Analyse target group’s concerns, problems, and expectations. Journey Map also helps survey the possibilities of service concepts such as safety, income, and taxi drivers’ and passengers’ experiences.

2. IDEATION

From the results in the UNDERSTANDING process, all involved parties brainstorm and design a new way of service through problem-solving activities. They are to find the connections and to analyse the ‘value’ of each idea to decide which idea is worth developing, through the use of various thinking conditions.

- Create a diagram for ‘values and efforts’ conditions. Analyse and evaluate the ideas and display the results in the diagram.
- Gather a vote on which ideas are ‘more effective’ and ‘easier to implement’ and categorized them.
- Concrete the ideas by creating additional elements to Journey Map.
- Present the service ideas that will happen during the journey through role plays.

3. IMPLEMENTATION

After reaching a conclusion, an experiential prototype is created. The service prototype is tested in an actual environment that includes the passengers and the taxi drivers. Then analyse the result and make improvement to satisfy all parties.

Conclusion from Workshop

The “Taxi Service Concepts” gathered from every group in the workshop are as follows:

Safety

1. Handheld transceiver.
2. Rating: passengers could decide, assess taxi drivers' performances should taxi drivers need further driving etiquette training courses from Department of Land Transport (DLT).
3. Internal and external vehicle cameras.
4. Black box: to record journey.
5. In-app emergency button: to contact call center or the police.
6. Sharing journey status, license plates, routes, and taxi driver profiles.
7. Car fire extinguisher.
8. Every car is equipped with emergency alarm/alert system.
9. Window breaker and seat belt cutter.

Database System

1. Telematics systems is used by Department of Land Transport (DLT) to collect and manage taxi drivers’ profile.

2. Identification registration for ID verification.
3. Pre-driving ID confirmation using E-Keycard provided by Department of Land Transport (DLT).

Taxi driver's Information and Selection

1. Passengers are able to select taxi drivers based on their profiles, rating, other passengers' reviews, and distance.

Route Information

1. Passengers are able to check their routes from the application or from monitors attached to the back of front seats.

Acquiring the Service

1. Kiosks situated in landmarks and popular places.
2. Passengers can specify pick-up and drop-off points, estimated time and approximate fee.
3. Passengers can make an advance booking.
4. Passengers can select service category such as vehicle size or car sharing service.

Taxi Share

1. Taxi sharing is an alternative service for the passengers who are travelling on the same route. Passengers can save the money for the sharing distance while taxi drivers can earn more money driving the same route.
2. Companion rating.

Additional Services and Extra Benefit

1. Rooftop taxi ads.
2. Wifi and charging outlet.
3. Movies, music, games, and other advertisements.
4. Destination suggestions such as tourist attractions, hotels, department stores, etc. (with Advertising fees.)
5. Delivery service.
6. Specific request such as numbers of passengers, luggage, passengers with special needs, pets, etc.

Car Status

1. Rooftop light box is added to display the car status i.e. vacant, occupied, fuel refill needed, or destination.

Display Monitor for taxiDrivers

1. GPS map provides information such as traffic, accidents, locations of gas stations, etc.
2. Display monitor is installed on the car console.
3. Map displays density area of passengers requiring services.
4. Display lists of passengers requiring services, pick-up and drop-off points, and passengers' information.
5. Display show fees' details for the passengers.

Service Rating

1. Rating help passengers select Texi driver.
2. Passengers can rate taxi driver after the journey according to their satisfaction.
3. Taxi drivers whose scores are under standard must attended training at Department of Land Transport (DLT).

Communication

1. Kiosks and Application offer multiple languages.
2. Language translator device is installed in the car to reduce communication errors.
3. Passenger monitor, which linked with the driver's, displays significant destinations with information to help passengers select their destinations.

Payment

Passengers are offered several ways of payment:

1. Cash.
2. Credit cards.
3. Other ways of payment.

Receipt

1. Online receipt.
2. Full-details receipt.
3. Promotional offers from various shops.

Innovation: From Different Ideas to Prototype

Development

Since the workshop is based on various needs of different groups of people, this leads to the result of numerous ideas. Mr. Phongsathorn Laiadon and Thailand Creative & Design Center (TCDC), with the support of Asst. Prof. Sukree Sinthupinyo, Ph.D. from the Department of Computer Engineering, Faculty of Engineering, Chulalongkorn University, have selected the ideas that are interesting, innovative and practical to develop into a prototype. Thus, the beginning of an application called "GETTAXI." The application that includes numerous service features in one touch point. It provides easy access to both taxi drivers and passengers. Application's Main Features

- Demand Map – Supply Map. A real-time map that displays the "location" and "population distribution" of both "taxi drivers" and "passengers." This creates a balance between the passengers' demand and the taxi drivers' supply.
- Customers are able to check the numbers of available cars in the area while the taxi drivers are able to check the numbers of passengers in demand of the cars. This helps for their choices of route.

Moving Forward Together

The co-creation among all parties to find solutions for the service problems and to develop service concepts that offer satisfactions to both passengers and taxi drivers are not able to succeed if there are no participants and no supports from all involved parties. The ultimate goal is to create a mutual understanding that the cooperation of all parties is essential, and that, in order to bring change, they need to "take actions" together and not just "brainstorm" together. This is the beginning to a better standard and quality of life.

Application's 2 Main Features

1. Call: Anonymous Passengers

Taxi drivers	Passengers
"Demand Map" shows the numbers of passengers' demand in the area.	"Supply Map" shows the numbers of available cars in the area so the passengers are ensured that there are available taxis in service.

2. Booking: Advance Booking by Identified Passengers

Taxi drivers	Passengers
Taxi drivers are assured of passengers and destinations.	Passengers can make an advance booking with a stated destination.

Specific Request

Taxi drivers	Passengers
Drivers are informed of special requests such as passengers travelling with pets, luggage or people with disabilities so they can provide proper service.	Passengers can create booking in advance if they are travelling with pets, luggage, or people with disabilities so a suitable car is provided.

Other Features (Work in progress)

1. Rating feature is provided for the assessment of the service and the taxi drivers.
2. Displays monitor information about traffic, taxi driver profiles, and other in-car services.
3. Passengers can text the driver or make a call through the application.