[EV (Electric Vehicle) Fast Charging Station Locator app, research plan]

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Study 1: Semi-Structured Interview

Background

This study is about designing an app that helps to locate the nearest, fast charging station for the EV (electric vehicle) specifically for private cars. The app should provide overview of locating the fast-charging station as well as the cost, real-time availability of charging station, power levels of charging station. As electric vehicle would trend in the upcoming years. Its very important for Users to locate fast charging stations in quick time as per there location in order to have long journey more convenient.

Research Goal

To gain insight about how customers conveniently use the app to locate the nearest fast charging station. To understand the need of the user, how often they use the charging station. And would they be interested in using the Private Fast charging station locator for their car.
1. To design a simple & structured, user-friendly mobile app.
2. To learn about the EV fast charging station & discover different ways to easily & quickly locate the station.
3. To provide quick web mapping, fast loading screen, easy functions while driving.

Research Questions

- What is necessary for an EV fast charging station locator app?
  - What are its features?
- Which app do they prefer to locate EV charging station?
  - How do they interact with existing app?
- Do users really need another EV fast charging station locator app?
  - How do users feel about existing app?

Method & Recruiting

Our team choose a screener survey to collect a data from about more than 10 potential participants, who drive EV cars, use existing EV charging station locator app.
   The categorized volunteers for the survey would be

- Private EV car owners.
- Customers planning to buy EV cars.
- EV car rental customers.

Screening Questions

1. What is the primary reason for you to use EV charging app?
    a. For mobile phones (screened out)
    b. For charging cars.
    c. For bikes (screened out)
    d. Other (screened out)

2. What is your primary way to charge EV cars?
    a. Use new battery (screened out)
    b. Use battery cells or fuel cells (screened out)
    c. Use EV charging stations
    d. None of the above (screened out)

3. How long have you been using EV charging app to charge your car?
    a. Since a week (screened out)
    b. Few days (screened out)
    c. Over a month
    d. Since a year

4. When was the most recent time you have used EV charging app?
    a. Since a week.
    b. Few days.
    c. In the last 6 months (screened out)
    d. Since a year (screened out)

5. How often do you use EV charging app?
    a. A few times a week
    b. About once a week
    c. 2-3 times a month
    d. About every 6 months (screened out)
    e. Fewer than once a year (screened out)

Script

Introduction

My name is Ishwari Hakari. Thank you very much for participating in this study. I am currently working on a project related to EV (electric vehicle) fast charging station locator. I would be interested to know more about your experience with EV apps. The interview will take about 30 minutes. If you want to leave this session or take a break at any point, please let me know. Do you have any questions before we start?

Do you mind if I record this session for note-taking purposes? The recording won't be shared with anyone outside of our team.

Warm-up Questions,

1. Could you tell us more about yourself?
2. Which charging stations are you currently using?
3. Which apps are you currently using to locate EV charging station?
    Have you tried other apps before?

Probe into needs and behavior Questions,

4. How did you get started using EV charging station locator apps?
    o   When did this happen?
    o   What was the trigger?
    o   How convenient it was using EV charging station locator apps?

5. How long have you been using EV (electric vehicle) car?
    o   How convenient is using EV car?
    o   What are they like to drive?
    o   How often do you travel?
    o   How long does the battery last for?

6. How do you locate EV car charging station?
   - How often do you recharge your car?
   - Is there sufficient public charging station nearby?
   - How long does it take to recharge?
   - Do you look for fast charging or regular charging station?

7. How do you currently locate private EV car charging stations?
   - Have you used other apps?
   - Which is the very first app you were using? Why did you switch to another app?
   - Do you use more then one app? If yes, then what do you use each app for?

Wrap-up

Thank you so much for sharing your experience and insights. Your answers will help our team build a better product. If you have any additional thoughts and comments, I would love to hear about them at any time. I can be reached at [ishwarihakari@gmail.com]. Hope you have a wonderful day.

Study 2: Survey

Background

Survey is conducted to understand or gain more in sights on the specific topic, in this case we are trying to understand the customers opinions on the EV app, what customers think could be game changer in EV Application, and to understand what customers really feel about using the EV apps. We are following the results from customers and mainly addressing their pain points. Like more flexible payment method, real time traffic information on the EV stations, increasing the charging capacity and charging time.

Research Goal

To make Electric Vehicles usability and adoptability a reality, to make earth a pollution free as much as possible, which would reduce the green house effect on our planet.

Research Questions

- What are the benefits of EV charging stations?
- What makes EV charging stations more reliable?
- What makes EV charging stations user friendly?
- How to make good pricing model for EV charging stations?

Method & Recruiting

This is a survey conducted using survey monkey, we have taken into an account of people from different age groups, different profession, different lifestyle & people from different geographic locations.

Survey Questions

1. Which vehicles are you currently driving? (Assumption: people might use different vehicles)
   a) Diesel
   b) Petrol
   c) Electric Vehicle
   d) Hybrid

2. What is your primary way to locate EV car charging station? (Assumption: people might use different digital tools to locate)
   a. Use EV charging station locating app
   b. GPS
   c. Others
   d. None of the above

3. How long have you been using EV charging station locator app? (Assumption: frequency)
   e. Less than 3 months
   f. 3 months to a year
   g. Over a year
   h. None of the above

4. When was the most recent time you have used these EV charging station locator app? (Assumption: duration)
   e. Within a week
   f. Within a month
   g. Over a month ago

5. How often do you travel/use the EV car? (Assumption: do participants have a routine)
   a. Daily
   b. A few times a week
   c. About once a week
   d. About once a month

6. How convenient are you with using current EV charging station locator app? (Assumption: how convenient are participants using existing digital tools)
   a. Very Convenient
   b. Convenient
   c. Not convenient

7. Which mode of payment do you prefer in EV charging station locator app? (Assumption: current tools)
   a. PayPal
   b. Online banking
   c. Credit card/ debit card
   d. Other

8. What is your age? [Assumption: People in different age groups might have different look over on digital products.]
   a. 18-25
   b. 26-35
   c. 36-65
   d. Other

9. What is your profession? [Assumption: different lifestyle may very on different routine.]
   a) Student
   b) Graduate
   c) Working
   d) Retired
   e) Other

10. How well do you like using your EV car [Assumption: people might have different approach /second thoughts on using EV cars)?
    a) Very much
    b) Good
    c) Not so much
    d) other