Research Plan

Study 1: Semi-Structured Interview

Vehicle owners and how they find mechanics

Background

A lot of people have vehicles and most often these vehicles break down, but it's not just that it breaks down or develops fault but this happens sometimes when the individual is in an unknown/unfamiliar location. Our market research shows that there are about 20 million vehicle owners in Nigeria and 1/10 of them do not have a personal mechanic. Our team was interested in creating a web based platform for a listing service where you can find the nearest mechanic to you once you have a faulty vehicle. Since vehicles might tend to get fault in unknown locations, this platform aims at optimizing search based on the location of the vehicle.

Research Goal

Our team wants to learn about how vehicle owners find mechanics when their vehicle develops faults, including how fast they get one and what functions they would want when using these types of platforms. We want to determine what opportunities and needs might exist for mechanics listing products, so that we can use these findings to help us shape the direction we take in developing our product.

Research Questions

- [Who are our Users] Do they have a vehicle (car, bike, bus, truck, others)?
    - Has their vehicle ever gone faulty before?
    - Has their vehicle broken down in an unfamiliar location before?

- [Needs] What is essential for them when looking for a mechanic?
    - What are users' current pain points?
- [Behaviors] How do vehicle owners currently fix their faulty vehicles?
    - How do they interact with existing digital products. If any?
    - Would they allow another mechanic to fix your faulty car at the location you are at?

- Do users really need this mechanic listing product?
    - How do users feel about existing products. If any?

Method

- 30-minute in-person or phone-call semi-structured interview to gather in-depth qualitative data
- The researcher will use the interview script as a guide and ask follow-up questions based on answers from the users

Recruiting

- 5 participants for interviews
- Individuals with a vehicle whose:
    - Vehicle has gone faulty before at least once a month
    - May or may-not have a personal mechanic or service center
    - Have been using digital products for at least 3 months
- To recruit participants, we will send messages to business individuals who commute with their vehicles daily to either their place of work or as a transport service

Screening Questions

1. Do you have a vehicle (car, bike, bus, truck, others)?
    a. Yes
    b. No(screened out)

2. Has your vehicle ever gone faulty before?
    a. Yes
    b. No(screened out)

3. Do you have a personal mechanic?
    a. Yes
    b. No(screened out)

4. What is your primary way of contacting your mechanic?

a. Phone call(screened out)

b. Text Message(screened out)

c. Other (screened out)

d. Use digital products

5. When your vehicle broke down in an unfamiliar location, how easy/fast was it to get a mechanic to fix it?

a. Less than an hour (screened out)

b. Few hours(screened out)

c. A day

d. More than a day(screened out)

6. When picking a mechanic to work on your vehicle, what attributes do you look out for?

a. Expertise with fixing your vehicle type (screened out)

b. Distance from your vehicle

c. Integrity

d. Pricing

7. How long have you been using digital products?

a. Less than 3 months (screened out)

b. 3 months to a year

c. Over a year

8. Would you like it if there was a digital platform where you could get to know the different mechanics around the location of your faulty car?

a. Yes

b. No(screened out)

9. Is there already a digital platform that you already use to get this service?

a. Yes

b. No(screened out)

10. If Yes, would you like to share the name of the platform/tool?

Timeline

- Design proposal: July 1—3, 2019
- Recruiting: July 6—8, 2019
- Sessions: July 12—15, 2019
- Readout: Juy 18, 2019

Script

Notes: *[italicized brackets]* are used to document what we wish to learn from each question

Introduction

My name is [name]. Thank you very much for participating in this study. I am currently working on a project related to vehicle owners and how they find mechanics. I would love to learn more about your experience with finding mechanics for your faulty vehicle. This interview will take about 30 minutes. If you want to leave the 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 *[Build rapport. Start with easy questions to get to know the participant]*
1. Could you tell us more about yourself?
2. Do you currently have a vehicle (car, bike, bus, truck, others)?
3. Has your vehicle ever gone faulty before?
4. Do you have a personal mechanic?
5. What is your primary way of contacting your mechanic

Probe into needs and behaviors
4. Has your vehicle broken down in an unfamiliar location before? *[Motivation: how did participants react to the situation?]*
    Follow-up questions:
        ○ How did you go about getting a mechanic around your location ?

○ How easy/fast was it to get a mechanic to fix it?

○ How was the experience?

○ What was the outcome? Did the mechanic fix the vehicle properly?

5. How long have you been using your vehicle?

○ When picking a mechanic to work on your vehicle, what attributes do you look out for?

○ Would you use a mechanic based on friends recommendations?

6. How often do you get your vehicle serviced/checked? What motivates you to continue to service your vehicle on a daily/weekly/etc. basis? *[There might be internal motivation "I want to be able to know whether my vehicle is in good working condition at all times" and external motivation "I want to always have my vehicle ready for my Uber rides everyday".]*

8. How long have you been using digital products?

○ Would you like it if there was a digital platform where you could get to know the different mechanics around the location of your faulty car?

○ Is there already a digital platform that you already use to get this service?

9. You mentioned you are currently using Otobots, where do you usually use Otobots? *[Does participant have a daily/weekly/monthly routine? Is it spontaneous?]* Follow-up questions:

○ Ask participants about the context *[how]*: How do they get the mechanics? How long does it take?

○ Ask participants why they choose to use the web platform in certain locations or during certain times

10. When was the last time you opened up Otobots? Could you walk me through how you were using this web platform? *[How do vehicle owners interact with existing tools. Better to ask participants to show than tell]* Observation & follow-up questions:

○ Observe what features the participant is using and how the participant uses them.

○ Ask what participants like or dislike about each feature, why they like/dislike each feature.

○ Which features do participants not use and why?

○ What's on participants' wishlist for the platform? Like what would they love to be added

○ If participants talk about frustrations, ask why and their current workarounds

[Unmet needs]

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 [name@email.com]. Hope you have a wonderful day.

Study 2: Survey

How do you get a mechanic to fix your faulty vehicle?

Background

In our previous study, we learned that vehicle owners take a long period of time getting mechanics to fix their faulty vehicle in an unfamiliar location This is a promising opportunity we may be able to target with our product, but more data is needed to better understand the needs and whether they generalize to the larger population of vehicle owners.

Research Goal

This study focuses on better understanding users' needs related to locating mechanics nearest to them once their vehicle develops a fault , as well as better measuring the extent to which these needs are held by the majority of vehicle owners.

Research Questions

● How can digital products best support vehicle owners in their search for mechanics, particularly in an unknown location?

○ Which features/functions are useful?

Method & Recruiting

● Use surveys to collect data from at least 30 vehicle owners

● Test survey questions with 5 volunteers recruited from our product team

● Send surveys to transport workers whose answers in our screener meet our recruiting criteria:

○ Use digital product(s) at least once a week

○ Have been using digital products for at least 3 months

Survey Questions

1. In the past month, has your vehicle developed a fault?

    a.Yes

    b. No

2. How do you currently get a mechanic to fix your faulty vehicle? (If you have more than one way, select the one you use most of the time.) *[Assumption: people might use different approaches when getting mechanic]*

    a. Phone call

    b. Ask friends

    c. Walk down the street

    d. Go to service centre

    e. Use online platform

    f. Others (Specify___)

2. In the past month, how did you get a mechanic to get your vehicle fixed? (Select all that apply.)

    a. Use mobile device(s)

    b. Use desktop(s)

    c. Other digital devices (e.g.tablet)

    d. Physical methods (e.g., walking to the mechanic workshop)

3. In the past week, how often did you use a mobile phone/tablet/ laptop to search for a service? *[Frequency]*

    a. A few times per day

    b. About once per day

    c. 4-6 times per week

    d. 2-3 times per week

    e. Once per week

4. In the past month, do you know of any digital platform that provides a service to get mechanics? (select all that apply)

[current tools]

      a. Yes

      b. No

5. Would you allow another mechanic come fix your faulty car at the location you are at??
[Do participants have a preference?]

      a. Not at all, I can't trust another mechanic

      b. Maybe, if the mechanic is verified

      c. Yes I would, as long as the car works

6. In the past month, how long did it take to get a mechanic to fix your vehicle? *[How much timeframe should be given to the mechanics on the platform]*

      a. Less than 15 minutes

      b. 15 to 30 minutes

      c. 31 minutes to 1 hour

      d. Longer than 1 hour

Demographic Questions

7. How often do you use your vehicle? *[Assumption: People who use their vehicle regularly might have to fix more]*

      a. Everyday

      b. Weekly

      c. Once on a while

      d. Other (please specify:_____)

8. What is your age? *[Assumption: People in different age groups might have different opinions.]*

      a. Below 20 years

      b. 20 - 30 years

      c. 31 - 40 years

      d. Above 40 years