

HCI Design Project 2: User Research (Individual)

Observation Summary and Reflection:

Light rail station was observed. It was seen that people mainly use the allocated ticket vending machine for tickets. Also, they use a mobile app through which tickets can be purchased. They can have either tickets or monthly passes. Most passengers travel with monthly passes, it is more convenient than buying tickets regularly. Road maps are visible clearly at the stations which helps in finding our own route. Also, timings of upcoming trains are displayed on the indicator. There was not much crowd in the station because the frequency of trains is more. There were trash cans visible which were partially filled. There was only one platform in the middle which is surrounded by trains coming from either direction. Certain travelers carry bicycles along with them. The station was surrounded by motels which helps for the accommodation of people coming from longer distances.

Photos and Sketches

The trimet showing platform and empty benches: there was no rush on the platform



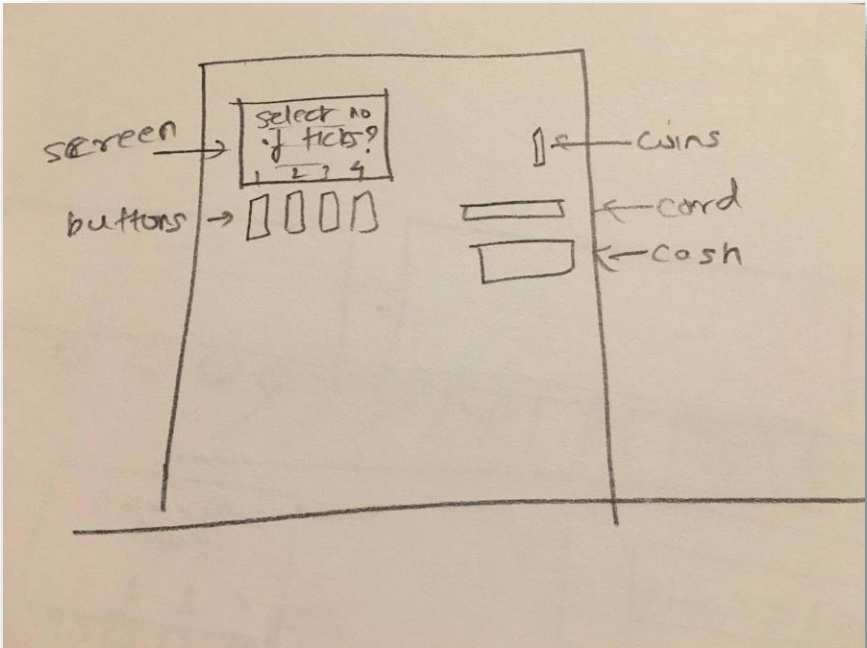
The other side of platform showing highway. This side has motels which are out of sight.



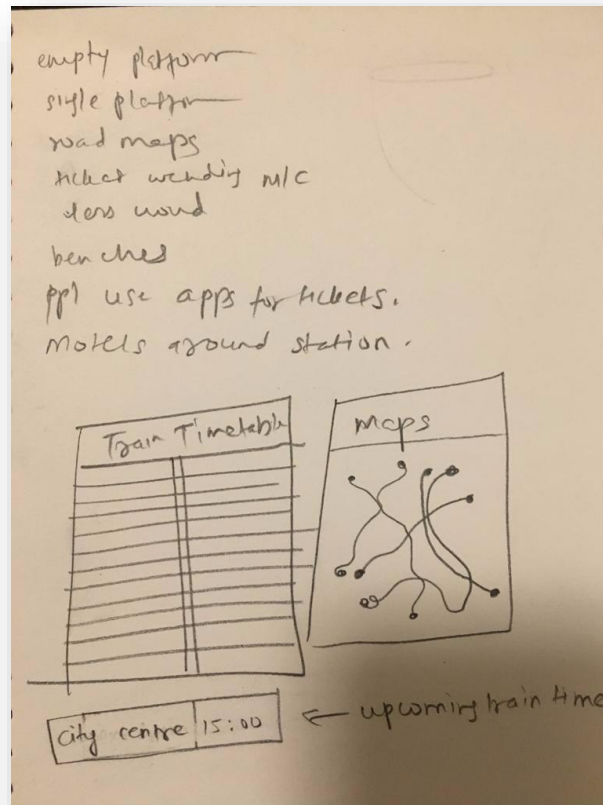
The official android application of Trimet used for buying tickets and referring train schedules and timetable:



Sketch of ticket wending machine seen in platform



Field Notes:



Interview Summery and Reflection:

Interview 1:

Interview guide:

Questions:

Questions that are crossed out were initially planned, but were cancelled later on due to their redundancy and unimportance.

1. Tell me how do you travel to office, daily?
2. Are there any other modes of transport for your office?
3. Why have you preferred car over other modes of transport?
4. ~~How much gas do u need per week to go to office?~~
5. Would you prefer an electronic car over a gas car? Why do you think so?
6. What other places you take your car to?
7. Do u prefer road trips over flights?
8. ~~What is the longest distance you have travelled by your car?~~
9. What difference do you find in driving car in the city and outside the city?
10. Do you use any tech while travelling? What is it?
11. In what way does this tech help u while travelling?
12. Are these technologies really helpful or distracting?
13. How can they serve you better according to you?
14. Have u used any other modes of transport for daily commute?
15. Given a choice car bus rail, what will you prefer? Why?
16. Do you think the services given by rails and buses were adequate for you?

17. Did you have to walk after getting down from train/bus? Distance?

18. Do you think there are ways to improve public transport experience with the help of technology?

The interviewee is not from the class. He is my family member. He is 35 years old. He has done his major in Electrical Engineering. He works in a reputed technology company incorporated in Bay Area.

The interview was taken at home. The interview went on for 14 mins total. It was mainly about how he normally travels to his office and what technologies he uses while traveling. He told about his experiences of how google maps help him while driving and what extra modifications and improvements can be added to it so as to improve the overall utilities of google/apple maps. There are many things which we don't realize in everyday life, which I learned while taking this interview.

A normal application like google maps can be distracting at times where you have to focus on the road. Especially in the cities, where distances are less than that of highways. Also, as a driver, we must focus on the road. You might end up in colliding other vehicles while watching the maps for roads. Thus, audio feedback is essential in maps. In order to overcome this, he feels that the audio inputs must be enhanced. Or the google maps should be integrated into the windshield. This will reduce the risk of peeking into the maps application while driving. He has also traveled by bus and trains and he finds the car as the most suitable option for his commutation. He gave helpful insights on what ways public transport can be enhanced with the help of technology. A tracking system should be developed in public transport which will facilitate decision making of whether to wait or not to wait for the bus or train you are waiting for. Live mapping of buses should be done using which we can decide what time to leave home for bus, whether to wait for the bus or not.

3 key findings:

1. Audio guide should be optimized.
2. Public transport tracking system should be introduced.
3. Integration of GPS into windshield.

Notes taken while taking interview:

How? car.
Others? bus, carpool
why car? bus - no near office
electronic / gas → electronic ✓ → eco friendly
doesn't own electronic. Hence gas
places → office, travel → national parks
grocery, road trips → driving distance

city vs highways & ncity
city speed is high. travel thru school, carpool
highways → no signals. drive fast.
tech → google maps & music
early - only route, shortest distance. likes choices
now: traffic info. congestion. smart select? gr
distract? → while looking at GPS, not on road, risky!
sense better → already visual & voice
↑ trust in voice betterment in voice prompts. no looking
↑ integrate GPS into windshield. no looking away

other modes? → Bus, light rail
Preference, if less walking dist, public trans
else car.

services by public trans → can be improved
improve public transport?
* live mapping of buses.
wait or no wait

Interview 2 :

Interview Guide:

Questions that are crossed out were initially planned, but were cancelled later on due to their redundancy and unimportance.

1. Tell me how you commute normally. Are there any other modes of transport?
2. What is your preferred mode of transport?
3. Why do you prefer cab over public transport for grocery runs?
- ~~4. What other places you go?~~
- ~~5. What is the longest distance you have travelled by your car?~~
6. Do you use any tech while travelling? What is it?
7. Which technology is most helpful?
8. Do u ever find google maps distracting?
9. Is uber better than google maps?
10. How can they serve you better according to you?
11. Have u used any other modes of transport for daily commute?
12. Given a choice car bus rail, what will u prefer? Why?
13. Do you think the services given by rails and buses were adequate for you?
14. What improvements they should make in public transport?

The interviewee is not from the class. She is a student of Portland state university. She is a CS graduate. He is 23 years old. The interview was taken at home. The interview went on for 13 mins total. It was mainly about how she normally commutes and what technologies she uses while travelling.

She goes to college by shuttle services provided by college. She told that her most preferred vehicle for commuting other than college is car. This is mainly because for bringing groceries, car is helpful when we have loads of stuff to carry. In case of going somewhere far, she finds car as a convenient option. Also, she feels that Uber and other options are bit pricy. It will be good if they introduce car-pooling options everywhere, which reduces the cost. She finds Ways app better because it gives details about the accidents that happen on the way, which can be helpful for drivers to drive through that road. She is not into public transport mainly because she finds them time consuming. She finds google maps most helpful because it provides users alternatives to reach a certain destination from where ever we are. Also, they redirect to services like Uber and Lyft which gives you an idea of time as well as cost. She finds it distracting when a person has to see the maps and drive at the same time. She feels this can be solved by introducing one more person along with the driver so as to avoid the distraction.

The main improvements that can be done according to her in shuttle services are- in case of rush, keeping a track of people getting in the shuttle and arranging another shuttles as required would be useful. In case of trains and buses, she feels there are not much changes required. Since the rush won't be same at all times.

3 key findings:

1. Uber services should be made cost effective.
2. A track of people getting into the shuttle must be kept to avoid flooding.
3. Public transport should be less time consuming.

Notes taken while interview:

→ what do you do? student/employee.
→ what do you use to commute normally?
cab, pub? for → car-rent
rent a car →

- 1) commute normally → college shuttle, ^{insurance} car, public car, cab
2) other modes → car, cab
3) 4. ① → primarily chose which? shuttle, car, cab
4) what other places? how
5) why cab →

tech? uber not helpful
helpful (distracting)? expensive.

serve better?

improvements?

why cab? public → time consuming ✓
stuff grocery.

7) what tech? cab - no tech ✓
cab → uber, lift, google maps ✓ ways app
referred

8) most helpful? ① maps → ^{always provide} methods to how to go
cab, bus, train
② redirection

distracting - to uber & lift
if only one person driving, yes. voice.
good if 2 ppl travelling. no distraction

10) uber vs google maps?
bookings vs directions

11) serve better? How? improvements?

ways → ppl report accidents. you know.
add this to google

uber → good. but expensive.
include uber pool everywhere.

other modes? never. used. very rare.

Cars are better.

becuz - many stops

better if affordable → car ✓ else public

services of public transport → good. overfilled bus.

* improvements?

1) college shuttle: many ppl load at sometime
make note of how many ppl
arrange some other shuttle

2) train/bus: nothing much
ppl wait a much always.