# ultifi design

USER EXPERIENCE RESEARCH STUDY PLAN

**Innovation Committee: In-Park Research** 

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**PROJECT NUMBER: UX2023052** 

PRINCIPAL RESEARCHER(S): Ethan Jannott, Nina Barraco

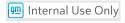
REQUESTOR(S): Maria Gagnon, Samantha Brown, Monica Malden-Stevens (+ Innovation

Committee)

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#### Introduction

#### **Problem Statement**

In-Park Framework: the screens that are accessible while in Park. May be the same, similar, or totally different than those that are available while the vehicle is in motion.

Users can interact with the screens while in park to be productive, be entertained, review information about the vehicle status/condition, or prepare for their next journey.

Framework team is looking to create common core framework for the in-park experience, focusing on ICS, though we could look at other screens - or how all the screens could create one experience.

#### **Existing Research**

- UX2023020 3<sup>rd</sup> Party Apps Qualitative Exploration
  - "Time spent waiting in a vehicle was passed by visiting stores/restaurants, monitoring email (personal and work), catching up with family/friends via social media postings, web browsing or prepping for next steps, whether that was the weekly schedule or the next stop.
    - In some cases, this quiet time was a short opportunity to relax and take a break from a hectic schedule.
    - EV Owners reported spending time investigating charging stations along their route, the cost, charge level and its surrounding amenities. Some combined a restaurant stop or other type of entertainment during charge time; others shopped the retailer associated with the charging location.

# **Research Questions**

This study will answer the following questions:

- o What do people currently do when in Park? (on their vehicle screen or phone or any other behaviors)
  - Especially if they have noticed a change compared to previous ICE vehicles, in their behavior / needs / wants / likes / dislikes
  - Initiating drive (when you first get into vehicle): screens are on and ready to interact with, before you start your journey
  - At mid-point stops (charging, stopping for groceries, stoping and waiting to pick someone up...)
  - At end points (destination arrival)
  - Misc. (using your vehicle for anything other than drive, such as tailgating, camping, etc.)
- o What do people need/want to do when in park?
  - Different scenarios: long charge time, waiting for someone, quick stop along several destinations, using vehicle as a generator or power source, learning about your vehicle's capabilities, checking on vehicle status, preparing before you leave your home/office....
  - Connecting to their "out of vehicle" life: work/personal calendars, store apps, home apps, social, etc.
- o Determining if people even want different experiences when they are in park
  - Do they want the framework to change when they are in park?
    - More immersive? Or more streamlined?
    - Small changes (small parts of current framework)? Or totally different layout?



- Multiple screens to swipe through?
  - o Example: Help, Vehicle info, Entertainment, Power (plugging in a tool),

. . .

## **Participants**

8 participants will be recruited from UserTesting.com based on the following criteria:

• Age: 25+

• Income: \$40,000+

• Geography/Language: External, USA residents, English speakers

MY2020+ EV Owners

• Industry: Excluding automotive, UX research, market research, UX design

Has webcam, ability to share screen

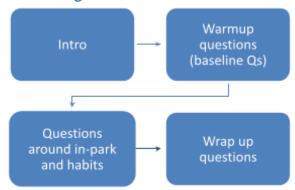
Has ability to take test from inside their vehicle

 SCREENER: Able to do online interview via laptop, tablet or phone from inside their primary vehicle.

# Methodology

~45 minute (scheduled for 60 mins) moderated interviews via UserTesting.com

## **Study Flow & Timing**



#### Stimuli

- None
  - o Seeking to have the participants speak freely about their experience, and if they have wishlist items, then we will hear about those without them being influenced by an image or a mocked-up UI.

#### **Data Recorded**

Video recordings of study sessions (Usertesting)



# Responses and verbatims

Completed report target date: End of September



# **Interview Guide**

# Intro - Welcoming

Hello! Thank you for taking the time to participate in our study. My name is \_\_\_\_\_. Can I ask what your name is?

Our session today is going to be focused on what you do in your vehicle whenever you're parked. The purpose of the interview is to gather insights and feedback from EV owners like yourself. We are seeking to understand your experiences and The interview will take approximately 45 minutes and will involve a series of questions about your EV ownership experience. Your responses will be kept confidential and used for research purposes only. Please feel free to share your honest opinions and provide specific examples whenever possible.

Do you have any questions about anything so far?

Ready to get started?

#### Questions

- What is the year, make and model of your current primary vehicle?

P8: 2023 tesla model y P8: Had a 2020 Chevy bolt

How long have you owned this vehicle for?

P8: 6 months

P8: Range and size. More space in the Tesla. Found that they were using the EV more than the gas car (forester).

- Is this your first EV?
   P8: No, had the bolt.
   Also have a 2011 Mini cooper, and a fors f250
- How satisfied are you with your current EV? (baseline; get them talking about favorite or least favorite aspects of their vehicle)
- P8: Pretty satisfied with it. Some things are quirky... "these are first world problems for sure" Soemtimes the saved settings are gone. The range estimations don't seem to always be accurate. They always seem to get less miles than the ranger. Driver settings like positioning. There are 3 driver profiles saved and when the updates come it wipes the driver profile settings.
  - o How do you feel using the in-vehicle screens and menus of your vehicle?
  - o Describe to me some of the things you typically do on your in-vehicle screens?
    - How do you interact with those screens? Touchscreens? A dial or controller?
    - [If they say something along the lines of "EVERYTHING"] What would you say you're doing most often on those screens?
    - What content do you typically keep up while you're driving? What about when you're parked?
    - P8: Day to day, trypically using just the navigation, also the car controls. Climate and music.



- Will also locate search function quite a bit for finding chargers or other things as well.
- Map always up while driving. Usually 50:50 if its navigating or not.
- Only other thing that's regularly up, she will have apple music. "I'm a set it and forget it kind fo peson.
- When parked, its usually the navigation screen because that's whats up most of the time when she is driving. If she parks, she might switch to dog mode for her kids if they're in the car.

#### How are you typically charging your vehicle? (public chargers or at home?)

P8: charger at home. Once in a whle uses public chargers, tesla charging stations. As a general rule that happens just because she forgot to plug it in, or if there's a longer trip and its just her and just her and her son to top off.

Once in a while going further road trips. Once in a while. Stopping mid point during those trips.

- What are the kinda of trips you're typically taking? (Things like going to work, going to see friends or family, getting groceries, picking up people, etc.)
- P8: she works from home, so sometimes her husband will take it out to work, he works at a air force base. Sometimes taking son to appointments. Doesn't go into grocery stores with him anymore. Can turn child locks on in the back and can keep her son in the car.
- When you are in park, what activities are you typically engaging in?
  - o On the vehicle screen?
  - P8: if they're charging she will usually launch the arcade. For herself to kill time or for her
  - o On your phone?
  - o P8: Yeah, texting, checking emails, maybe will be using social media, maybe sometimes on Instagram
  - o Other devices in the vehicle that you use?
  - o P8: no
- Are there any specific behaviors or tasks that you have noticed are different for you in an EV compared to what you might've done previously in a gas-powered vehicle?
- P8: pays more attention to the charge level, didn't really worry about the gase milage before, now she thinks more interntionally about her trips.
- I'd like you to walk me through your routine when you first get into your vehicle. So is there anything that you typically do on the vehicle screens or on your phone before starting your drive?
- P8: Unplug it, get in, put her phone in the holder of the center console, get some music going on the screen, if she is just running to the store or into town, she may or may not put in nav. If she is going across town she will put in the destination to know traffic.
  - o Did this routine look any different when you used to drive a non-EV?



- o P8: a little bit different for the electric vehicles. May have to manually adjust the seat and will set the music or audiobook on her phone. It's a manual.
- I want to focus on midpoint stops for a moment, so things like charging, stopping for groceries, picking someone up, etc. How do you typically interact with the vehicle screens during these stops?
- P8: sometime nothing sometimes she is just on her phone. It depends on the length of the stop. If they're charing, she will launch the arcade. If shes in the kid pickup line or grocery pickup, sometimes she will mess with the music of change the playlist or somethings.
- P8: Length of the stop if they're waiting at the target, she might switch apple music or playlists.
- (GOOD QUOTE)
  - o What do you usually do when you're waiting for your vehicle to charge?
  - o P8: somteims will look at the analytics of the battery. Sometimes she will look at the current drive and the current charge and how the effiency is working
  - o Sometimes will go into the service menu. Once a week she will look once a week. Today she will be telling her husband to deal with the tires (lol).

0

- Now I would like you to walk me through your routine once you arrive at your destination and park your vehicle. What activities or information do you seek on the screen, if anything?
- P8: there's two things if the boys are waiting in the car, she will put it into dog mode. She can monitor the vehicle using the vehicle cameras. If she is by herself she will just get out. Wont check any vehicle info when she gets out.
- Do you use your vehicle for anything other than driving? So things like tailgating, camping, to take phone calls, maybe using it as a workstation...
- P8: No, she will work at her home office. She has an office in the barn. If they're going camping they're taking the truck. Every day family use the tesla.
  - o What sorts of things are you doing on the vehicle screen in the situations?
- What are you typically doing when you are in park in your vehicle (in any situation e.g. waiting for someone, waiting to charge, etc.)?
- What would you say your specific *needs* are when you are in park (again, thinking about scenarios like long charge times, waiting for someone, making a quick stop, etc.)?
- P8: No, the bolt did have apple carplay, which she wishes the tesla had. Genuinely cant think of anything.
- Tesla is very comfortable, have the extended ranger version (others cant match this). The price, size, range, storage space.
- Arcade, could take it or leave it. The dog mode, favorite of her tesla specific features. She doesn't ever take her dogs in the car but she uses it all the time.
  - o Is there anything that you wish you could do on your vehicle screens while in park that you currently are unable to do?



- o P8: she wishes she could interface with her actual phone. Prefers waze or LA Traffic apposed to the tesla specific navigation. She doesn't like having to use both so she defaults to the tesla navigation. I feel like it's a little wonky in directions sometimes.
- o Being able to have her phone content on her display. She uses a lot of podcast and audiobooks and she needs to do that on her phone rather than the screen.
- o It would be nice to have an option to interface with her phone.
- Only other thing is I wish it was easier to respond to texts. It's very hit or miss with the tesla.
- o Replying to texts on the tesla is wonky esp with group texts, and making calls can be cumbersome.
- o Apple carplay was convenient because she didn't have to touch her phone at all.
- Are there any specific features or funtions that you would like to be able to access while you're in park?
- P8: except for the ones before (apps that she uses a lot on her phone)... if she was parked it would be handy if she could utilize a video chat feature. She gets calls at really random times. Historical consultant. One of her clients often shows her stuff it would be convenient. Finished up at a doctors office and she's just in the car.
  - o This could be things like connecting your "out of vehicle" life, checking vehicle status, accessing your work or personal calendars, using apps really anything you might be able to think of.
- Suppose you are able customize your vehicle so that you can choose what is shown on the screen when you put it into park. What are some things that you would want automatically shown on the display each time you put the vehicle into park (think buttons, controls, information, illustrations, etc.)?
- P8: She would set it to pop up to the basic controls for easy entry so that she could turn child locks on or off since she uses that so often. Folding the mirrors from there, etc.
- Other things that would be handy automatically giving her her charge left when she gets home so that she knows how much more she can travel.
  - O Do you think this is a feature you'd utilize? How would this would improve your current "in-park experience"?
- Last question if you could wave a magic wand and add any feature you wanted to your vehicle, realistic or not, what would it be (no judgement)?

P8: would like to be able to add other apps to the vehicle, waze she would definitely add – and app store. The lack of the customization.

Would prefer to use the in car screen to do things like texts, but the problem is that she can't use some of the features in the car. But the voice recognition doesn't always get everything.

Is not a brand-loyalist. She likes waze the most because it seems the most accurate.

[End]



TRANSCRIPT OF INTERVIEW:

**INTERVIEWER:** Ethan

INTERVIEWEE: Heather Beaumann (aka: "P8")

Heather Baumann: Hello! Hi, there!

Ethan: How you doing today?

Heather Baumann: I'm good. Thank you.

Ethan: I'm Ethan. What's your name?

Ethan: Hi, there! Nice to meet you. Thanks for joining me today. I appreciate you giving some of your

time. So we can do our research.

Heather Baumann: Yeah, no problem.

Ethan: Alright great. So I have a script. I'm going to be reading here for most of the stuff. So you

ready to get started?

Heather Baumann: Yeah.

Ethan: Alright. Great so hello again. Heather our session today is gonna be focused on what you do

in your vehicle whenever you're parked the purpose of the interview is to gather insights and

feedback from electric vehicle owners like yourself.

Ethan: We're seeking to understand your experiences. The interview should take about 45 min and

it'll involve a series of questions about your electric vehicle ownership experience.

Ethan: your responses are kept confidential and used only for our research purposes and feel free to

share your honest opinions and provide any specific examples you have whenever possible.

Ethan: Do you have any questions about anything so far?

Heather Baumann: No.

Ethan: alright great so just to start us off. What is the year making model of your current primary

vehicle?

Heather Baumann: It's a 23 Tesla model. Y, Ethan: okay. And then is the Tesla your first electric

vehicle?

Heather Baumann: No?

Ethan: Okay. What vehicle do you have before? Then Heather Baumann: we had a 2020 chevy bolt.

Ethan: Okay?

Ethan: How long have you had the model wi for?



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6 months.

Ethan: Okay. And what caused you to switch from the bolt to the Tesla Heather Baumann: range. And

size. I have 2 teenage boys.

Ethan: Okay.

Ethan: so what about the size? Specifically.

Heather Baumann: just more space in the back?

Heather Baumann: we found we were using the electric car a lot more than our other car which at the

time was subaru forester we live in Los Angeles. So gas is like \$6 a gallon.

Heather Baumann: and so we just found we were using the bolt a lot more than the other car.

Originally it was supposed to just be my husband's commuter.

Ethan: and so we decided to switch things up a little bit, Heather Baumann: and an upgrade. Our electric car since we were starting to that was our becoming our primary vehicle.

Ethan: Okay.

Ethan: alright great. So then, do you still have a gas fire vehicle in addition to electric car?

Heather Baumann: We do. Yes.

Ethan: okay. And just out of curiosity. What kind of vehicle is that?

Heather Baumann: So we have a 2,011 Mini Cooper. and then we have a Ford, f, 2, 50.

Ethan: Okay, you said, F, 250.

Ethan: Okay, great.

Ethan: okay. So how satisfied would you say you are with your current electric vehicle.

Heather Baumann: I'm pretty satisfied with it. I mean, there are a couple of things Heather Baumann:

you know, that are quirky, but overall, it's a great vehicle, and I'm really glad that we got it.

Ethan: Okay, you mentioned some things are quirky. What's quirky about your Tesla?

Heather Baumann: Sometimes it will. And these are first world problems, for sure. Sometimes it will reset like the settings, like when it does a software, update and then all of your saved settings are

gone. So like the user profiles and things.

Heather Baumann: Which you know.

Heather Baumann: that's 2 whole minutes of my life.

Heather Baumann: so it's not a huge deal, but it's annoying.

Heather Baumann: And then the other thing is, the the range estimations don't seem to be terribly accurate.

Heather Baumann: we tend to get a significantly less real world, miles and Heather Baumann: like. The range says.

Heather Baumann: so you just have to plan for that. That's all.

Ethan: Okay. so a couple of things the save settings were those 4 exactly Heather Baumann: so like the user, the driver settings so like, mere feet Heather Baumann: positions.

Heather Baumann: you know, the pedal positions. All of that stuff.

Heather Baumann: Okay? So all the positioning of everything.

Heather Baumann: which again, it's very much a first world problem. But you know, it's annoying.

Ethan: Yeah, no, definitely. So when the updates come and wipes those settings, you kind of need to.

Not all the time Heather Baumann: like, I said. It's happened twice now. And it, it happened with this last one, which is why it's kind of front and center in my head.

Ethan: Okay, very great. and okay. So can you describe some of the things you're typically doing with your vehicle? So like some of the trips you're taking? Anything that you're typically just doing with your vehicle?

So Heather Baumann: this isn't.

Heather Baumann: I work from home? So sometimes my husband will drive it to work cause he works out at an Air Force base which is about 120 miles round. Trip. If I have the car.

Heather Baumann: then I am Heather Baumann: running to therapy appointments for my son. I have a special needs, kiddo. So I'm running him to medical appointments and therapy appointments and Heather Baumann: most of our errands are pickup Heather Baumann: like for groceries and things, which is one of the other reasons that I really liked Heather Baumann: having the electric car, and specifically the Tesla, because I don't go into grocery stores or things like that anymore.

Heather Baumann: Since Covid with him.

Ethan: So it's it's more convenient to not be idling. A gas engine.

Heather Baumann: Can sit, and I can pop the trunk from the back, and I can turn child locked on and off in the back.

Heather Baumann: and you know. Keep him entertained on, you know the screen and things while we wait.



Ethan: So it's Heather Baumann: and then, yeah. So you know, he has a lot of medical appointments and things. So we're doing a lot of driving in. La.

Ethan: okay. alright, great Ethan: so we're gonna jump. Come back to that. But how do you typically charge your vehicle.

Heather Baumann: We have a charger here at home.

Ethan: Okay? Are you ever using public chargers?

Heather Baumann: Every once in a while? We'll use the Tesla Heather Baumann: charging stations. as a general rule that happens because I've either forgotten to plug it in at night. Or we're Heather Baumann: like he one of his my son's doctors is down in Irvine, which, depending on traffic, is quite a ways away. So sometimes, just to be safe, I'll top off things like that.

Ethan: Okay? So you might. If you're you have a little bit further to go, you might stop at a public charger. And just Heather Baumann: ye, yeah, certainly, if it's like just me in the car, and I don't wanna ha! You know I don't want to worry about it, or if it's just me and my son. You know I'll charge for 10 min just to to just to Heather Baumann: guarantee that I'm good to go.

Ethan: Okay. Great Ethan: Are you ever taking like longer trips. Just kind of outside your normal stops you're going to. Are you ever traveling further distances?

Heather Baumann: Every once in a while? We've we've done a couple. my tattoo artist is in by Salia, and that's about a 3 h drive.

Heather Baumann: so yeah, every once in a while we'll do longer ones.

Ethan: Okay? And then are you stopping at public chargers for those long trips like midpoint? Heather Baumann: Yeah. So like, when I go up to see my artists will.

Heather Baumann: you know, we use the included navigation software and figure out where the super charges are.

Heather Baumann: and Heather Baumann: and then we'll you know we'll charge up. you know. depending on, you know, just whatever the navigation says.

Ethan: Okay.

Ethan: okay, great. So Ethan: the navigation that's on the vehicle. Correct.

Heather Baumann: Yes.

Ethan: Okay. So is that. Are you typically using the in vehicle navigation when you're going on trips? Heather



Ethan: okay. That's a good transition here. So thinking about the navigation and just your in vehicle screen. Can you kind of describe to me some of the things you're doing on the screen? Just day to day?

Heather Baumann: So day to day. It's mostly utilizing the built in navigation. just trying to figure out the quickest way to go places. It is Heather Baumann: utilizing the car controls.

Heather Baumann: So you know, turning turning child locks on and off that kind of thing.

Heather Baumann: you know, air, climate. And then Heather Baumann: music.

Ethan: Okay.

Heather Baumann: I would say, those are the the biggest things we do with the screen. Day to day.

Ethan: Okay? And then with the navigation. It sounds like, sometimes you also use that screen to find charges as well.

Heather Baumann: Yeah. So we'll we utilize the search function on the navigation screen. Quite a bit.

Heather Baumann: Okay, mostly defined charges or other things as well. you know.

Heather Baumann: whatever comes up day to day. Oba shops, you know.

Ethan: Okay.

Ethan: alright. So then, on that screen. What would you say you typically have up on display while you're driving around Heather Baumann: the navigation screen?

Ethan: Okay? And would you say it's always navigating, or it's just the map, or what does that usually look like?

Heather Baumann: It's not always navigating. I would say. It's probably 50 50. Again. I you know I live about 30 min from downtown Ia, so traffic is always an issue. So I'm always monitoring Heather Baumann: what's happening as far as traffic goes, because Heather Baumann: I need to know if there's a reason for me to not get on the freeway cause. There's often a reason for me to not get on the freeway.

Heather Baumann: so yeah, it's it's not always on. Then it's always on the navigation screen. But it's not always actively navigating.

Ethan: Okay.

Ethan: alright. Anything else that you typically have up just kind of while you're driving about.

Heather Baumann: The only other thing that's regularly up is we use apple music so that one is up quite a bit.



Ethan: Okay.

Ethan: and it's up to browse music, or just to have the album on display, or or what?

Heather Baumann: yeah, usually. I'm a set it and forget it. Playlist kind of person. But Heather

Baumann: yeah, like, if we're stopped, I'll I'll be browsing music, or you know my kid will ask for

something else. He's a big tompet event.

Heather Baumann: so yeah.

Ethan: Okay.

Ethan: okay. And so then when you go into park somewhere, Ethan: what what would you say is typically on the screen when you park the vehicle.

So it's usually Heather Baumann: the navigation screen, because that's what's up. Most of the time when I'm actively driving Heather Baumann: And then once I after I park it, it completely depends. So like if my boys are gonna stay in the car.

Heather Baumann: I switched to the climate screen Ethan: because I was turning on dog road for them.

Ethan: Okay.

Ethan: alright. So Ethan: alright. So I kinda wanna hone in on Those midpoint stops for a second. So Ethan: When you're in park you mentioned that sometimes you will engage the dog mode. Is there anything else that you're kind of doing while you're just parked in the vehicle on the vehicle screen. Heather Baumann: So just like in a parking lot.

Ethan: yeah, like let's, you know. Picture anytime. You're just kind of in the vehicles park. So whether that you're waiting for charging you're waiting to pick someone up?

Ethan: Yeah, it might just be parked in the vehicle. If we're charging I usually launch the arcade Ethan: and Heather Baumann: pick something.

Heather Baumann: that I think will be entertaining Heather Baumann: either to myself to kill time or to my kid in the backseat.

Ethan: Umhm. Okay.

Ethan: are you ever doing anything on your phone when you parked?

Heather Baumann: Yeah.

Ethan: okay, what do you typically do on your phone when you're in park?

Heather Baumann: When I'm in park texting, Heather Baumann: checking emails. You know the usual stuff that you do on your phone? probably usually texting.

Ethan: Okay. using social media or anything like that.

Heather Baumann: Maybe.

Heather Baumann: sometimes it Heather Baumann: on Instagram.

Ethan:

Heather Baumann: have to think about life now, like, what do I do?

Ethan: Right? okay, and then, besides your phone, are there any other devices that you usually have in the vehicle with you. Maybe like a laptop or a tablet. Anything like that?

No, huh!

Ethan: Okay.

Ethan: let's see.

Ethan: So I know you had the bolt before. But I want you to think back a little bit, if you can. And if there, if you could think of any specific behaviors or tasks that you notice are different for you. Now, being an ev owner compared to when you own a gas vehicle.

Ethan: Just in general, or yeah, just in general.

Heather Baumann: I think the biggest thing is I pay more attention to Heather Baumann: the the charge obviously as opposed to like, I didn't really worry about Heather Baumann: gas mileage because you could get gas anywhere Ethan: so I didn't really pay attention Heather Baumann: super like I do now with the you know the charge rate and think a little bit ahead about like.

Heather Baumann: you know, am I just running Erin today? Are we going down to Uc. Irvine? Are we going to Disneyland cause. That's a big one for us.

Heather Baumann: you know. So those distances are different.

Heather Baumann: You know, I have to pay attention like if we're sitting in traffic, and I'm running that climate.

Heather Baumann: you know. I pay a lot closer attention to Heather Baumann: like, should I charge?

Do I need to charge? Should I find a charger?

Heather Baumann: You know. Are we gonna make it home?

Heather Baumann: Do I have to get on the 405? If that's the case, then I need to find a charger. That kind of thing. Yeah.



Ethan: Okay. So it sounds like, cause you mentioned the gas mileage. So you we had a gas car. You don't think as much about Ethan: I guess, having enough range to get where you're going, whereas Ethan: okay. So now, if you could, can you kind of walk me through? Your team is when you first get into your vehicle to go somewhere. So you know you're starting your day you have an errand to run, or whatever that might be, normally just kind of walk me through what it what that looks like when you first walk out to your vehicle like would so like, for the first thing we have to take it out during the day, so I'll unplug it.

Heather Baumann: Get in, put my phone in the holder in the center. Console.

Heather Baumann: I will get some music going Heather Baumann: on the screen, and then Heather Baumann: you know if I'm just running like to the store or into town.

Heather Baumann: I may or may not put in the navigation Heather Baumann: like where I'm going. If I have to go all the way across town, I'll actually put it in just so I can avoid. If there's any thing particularly stupid.

Heather Baumann: And then I'll you know, make sure that everybody back there. Then I will adjust the climate Heather Baumann: and then push the brake so that it gets into position and go from there.

Ethan: Okay. So if you're traveling. it sounds like there's almost like a threshold of how far you're going, and you'll put in the destination.

Ethan: Just to make sure traffic. Everything is cop static on the way.

Heather Baumann: Yeah, exactly.

Ethan: Okay. Great would you say that that routine looked any different when you didn't drive an electric vehicle?

Heather Baumann: yeah, I mean, it's a little bit different.

Heather Baumann: And it depends on which one of our vehicles were driving Heather Baumann: because if we're driving the truck it's Diesel. And again, you know La county Heather Baumann: so unless I'm hauling horses or getting hey? That truck does not move right now.

Heather Baumann: And then, if I'm driving the mini I have to. It's like I said, it's a 2011, so I would plug my II actually plug my phone in, you know, because it's from the Stone Ages Heather Baumann: and Heather Baumann: manually change like the seat and stuff. Because you know if my husband drove it last.



Heather Baumann: Because again, stone ages and then Heather Baumann: I tend to just set some Heather Baumann: music or audio book on my phone. It doesn't have a super great Heather Baumann: like, it's got a CD, I don't even own any Cds anymore.

Heather Baumann: I Heather Baumann: I'm trying to think of what I do.

Heather Baumann: Yeah, plug the phone in, set some music. adjust the mirrors and the seat, because invariably my husband has driven it.

Heather Baumann: I'm 5 4. He's 6, too. So Ethan: seats are not the same.

Heather Baumann: and then Heather Baumann: it's a manual. So you know the process of driving, it is significantly, different Ethan: you're, speaking specifically about the Mini Cooper.

Ethan: Yes.

Ethan: okay. So some of the key differences I heard were or I guess, for me, the main difference I heard was the Ethan: When you're turning on your music or podcast you're doing it on your phone, whereas on the Tesla, you can do it all on the screen.

Ethan: That's correct. Yes. Then you're also having to adjust the state manually. Yes. okay.

Ethan: alright great. Thank you for that. I wanna hone in now on your midpoint stops with your electric vehicle. So again, things like charging if you stop for groceries, maybe picking someone up.

Ethan: what are you doing typically on the screens at those stops.

Heather Baumann: Sometimes nothing.

Heather Baumann: Sometimes I'm on my phone.

Heather Baumann: it depends on the length of the stop. So if we're charging.

Heather Baumann: you know. Generally I will. you know, like I said. I'll launch the arcade, or we'll get messing around if it's just. You know I'm waiting in the car pickup line. If the kid pick up line Heather Baumann: or I'm waiting for, you know, at target or bonds for them to bring groceries out.

Heather Baumann: you know. Sometimes I will mess with the Heather Baumann: the music, or I'll change a playlist or something.

Heather Baumann: but as a general rule, I'm mostly using my phone at that point.

Ethan:

Ethan: so and correct me if I'm wrong. But what it sounds like is, if you're alone, you're probably on your phone. But if you have your kids with you, then you're probably doing something with like the arcade or longer. Stop.



Heather Baumann: Yeah, it depends on the length of the stop.

Heather Baumann: So if you know, if we're, you know, waiting for them to bring our groceries out at target, and it's taking a long time, I might want Youtube on the screen or play an arc game or something like that.

Heather Baumann: if it's just, you know, a couple of minutes. you know, I might Heather Baumann: switch to apple music and switch playlists Heather Baumann: or something like that.

Heather Baumann: But you know, for the short ones, I would say, I'm probably just on my phone, checking messages and things like that.

Ethan: Great are you ever checking like? Any of the vehicle information? So I don't know if there's like analytics. You can see of how much you use. You've used the battery kind of anything like that. Heather Baumann: Yeah, sometimes. I can scroll underneath the car, and it gives like the current drive and the charge. and sometimes I'll I'll take a look at that, because it can be kind of interesting to see Heather Baumann: you know, and compare from day to day like driving styles. And if we're sitting in traffic, or if we're not.

Heather Baumann: you know how that affects it.

Heather Baumann: The other one is I'll go into Heather Baumann: If we go to a car wash I'll go into the service menu because I can turn it. I will turn on car wash Heather Baumann: mode Heather Baumann: you know, and that shows me oh, my tire pressure monitoring system is on right now. As a matter of fact, it's an alert so that's fun for me. And it gives me like tire service mileage and things like that. When I go into that screen.

Ethan: Okay. alright. So how often would you say you're kind of poking around in there? Heather Baumann: I'd say, probably once a week.

Ethan: Okay, that's a week.

Ethan: And then are you doing anything with that information? Or you're just kind of looking just out of interest.

Heather Baumann: Well, today I'm going to be telling my husband to deal with the tires.

Heather Baumann: sometimes, sometimes not, sometimes it's just out of interest, so like the charge and comparing Heather Baumann: sometimes like, if it's time to rotate tires or something. I will, you know. We'll make a plan to act on that. Be like, oh, I've got to take this in in a couple of days and we'll have.



Heather Baumann: We'll have the tires rotated. That kind of thing.

Ethan:

Ethan: okay, so sounds like you're going to learn about just like the general service stuff you need to do. Okay?

Ethan: Okay? So now, if you could, can, you kind of walk me through what your regular routine looks like when you arrive at your destination and park your vehicle. So you know you pull up wherever you're going, and you throw the vehicle in the park. And what are you doing from that point? Heather Baumann: There's there's 2 different things. So if Heather Baumann: if my boys are gonna wait in the car, and they don't want to get out. I will put it in dog mode because then it allows me to monitor my special needs, son, via the video Heather Baumann: and then my other. My other son has his phone. So if there's any kind of he has seizures Heather Baumann: so unless I can monitor him, and there's someone with him. I can't leave him Heather Baumann: so I will put it in dog mode, just so I can watch him. If I'm not actively in the car with him.

Heather Baumann: If I'm by myself Heather Baumann: once I park, I just get out.

Heather Baumann: I don't really do anything.

Ethan: Are you checking any information on your on your vehicle at all before you get out. Anything like that?

Heather Baumann: I don't think so. Usually I'm just.

Heather Baumann: I'm trying to think about.

Heather Baumann: No, I mean, once I put it in Park, I just get out.

Ethan: Okay, yeah, good to know. Yeah, that is, that sounds like, super convenient for for you, the dog mode. Yeah.

Ethan: Okay.

Ethan: let's see Ethan: some of these. I'm I've already covered a little bit.

Ethan: So do you use your vehicle for anything other than driving. So I'm thinking about things like tailgating, camping, maybe taking phone calls or using it as like a workstation. Anything like that Heather Baumann: no, Heather Baumann: no, I the I work from home. So I have a Home office. Heather Baumann: I don't know if it's if you could tell, but we have a barn? Where we part to the Co, yeah. And I actually have an office pod in the barn.

Ethan: Oh, okay. Positioning Ethan: awesome.



Heather Baumann: And so Heather Baumann: no, huh! If we're going camping, we're gonna take the truck.

Heather Baumann: yeah, it's just driving.

Ethan: Okay. So would you say the Tesla is definitely more of your like just around town vehicle just for running errands, or maybe taking your kids somewhere, and then your other vehicles use for other things, or or am I wrong there?

Heather Baumann: So I would say. it's definitely the main vehicle for just everyday family youth.

Ethan: Sometimes my husband will commute in it.

Heather Baumann: and we trade off driving the Tesla in the mini.

Ethan: Okay.

Ethan: So let's see.

Ethan: Would you say that you have any now, after having your Tesla. Would you say you have any specific needs when you're in park? So again, thinking about things like the charge times waiting for someone.

Ethan: making a quick stop. Anything like that.

Heather Baumann: Hmm.

Heather Baumann: specific needs in Park.

Ethan: So maybe a way to think about this, too, might be You cause you had mentioned. Use the arcade on the Tesla and I don't know if the the bolt has anything like that. So maybe even looking at some of the differences in the Tesla versus the bull.

Heather Baumann: No. So the bolt did him have apple carplay Ethan: to actually kind of wish the Tesla had Heather Baumann: or at least, you know you could utilize. I genuinely can't think of anything.

Ethan: Okay? So so could I ask if you were to get another electric vehicle. Do you think you would? Look at Tesla again?

Heather Baumann: Yes. yeah.

Ethan: Okay. And why do you think that is Heather Baumann: I? It's extremely comfortable.

Heather Baumann: we haven't had any issues with it.

Heather Baumann: I like the range on it. We have the extended range version.

Heather Baumann: which that's one of the big things is we looked at other ones, and they just don't have the same amount of range.

Heather Baumann: so yeah, I would. I would definitely look at Tesla, and it's got as far as Heather Baumann: It just was the right Heather Baumann: kind of all of the things. So the price point and the size and the back room and storage.

Heather Baumann: all of that was kind of like the right Heather Baumann: spot. You know what I mean?

Ethan: Yeah, definitely.

Ethan: Okay.

Ethan: So do you feel that cause you mentioned those key things for you. So is the arcade, and the dog. Mode features, features like that that are more.

Ethan: I guess. Tesla specific are those features that you would Ethan: could take or leave? Or are they more important to you? Not the Arcade. I could take it or leave it. We pretty much only use it when we're charging and setting for extended periods of time.

Heather Baumann: Or like, if I get to the pick up line early for school, and we've got time to kill but honestly, it's yeah. I could take it or leave it.

Heather Baumann: The dog mode is Heather Baumann: actually probably my favorite of the like. Tesla. Significant Tesla. Specific features.

Heather Baumann: I Heather Baumann: don't ever take my dog in the car, but I use dog mode Ethan: all the time.

Ethan: Right? Okay.

Ethan: sorry. I'm just trying to know here.

Ethan: okay, so, is there anything that you wish you could do on your vehicle screens that you're currently not able to do Heather Baumann: So I do. As far as the Tesla goes. I do wish that I could interface with my actual phone Heather Baumann: like, I prefer ways for la traffic as opposed to the Tesla Heather Baumann: specific navigation.

Heather Baumann: But I don't like having to mess with my phone and the screen.

Heather Baumann: so I tend to default to the Tesla navigation, although Heather Baumann: I don't think it's Heather Baumann: It doesn't seem to update as regularly. And every once in a while. I feel like it's a little wonky.



Heather Baumann: and it's Heather Baumann: like directions.

Heather Baumann: So I do prefer to use ways. But it's just kind of cumbersome Heather Baumann: to have to use my phone for navigation Heather Baumann: on top of having the screen in my face. So I do wish I could interface better with my phone.

Ethan: okay, so being able to have, maybe some of your phone content on the so the other thing, II listen to a lot of Heather Baumann: podcasts and audiobooks.

Heather Baumann: And so that's not super like, again, I have to directly use my phone to do that as opposed to like, just being able to one stop shop on the screen.

Ethan: Okay? So podcast audio books being able to do that on your screen rather than your phone, okay, maybe some of the navigation stuff as well.

Heather Baumann: Yeah. So if I hadn't, you know, and I understand why Tesla has, you know.

Heather Baumann: they only have the Tesla navigation as far as like the autonomous driving and stuff. But it would be nice if I had an option.

Heather Baumann: you know, either to interface with my phone or to just have, like audible app or a podcast app. You know what I mean. Things like that just a little more convenient.

Ethan: It'd be nice to not have to pick up my phone at all.

Ethan: Again, first, world problems. Right?

Ethan: Okay, so is there anything else besides? The navigation, podcast audio books, is there anything else that you do on your phone that you would rather be doing on the vehicle screen? Heather Baumann: so the only other thing is, I wish it was easier to Heather Baumann: respond to text messages.

Heather Baumann: It's Heather Baumann: very hit or miss with the Tesla so, for instance, if it's a group text message, and you respond via the Tesla. So you know I hit respond on here.

Heather Baumann: Responds to the last person individually. It doesn't stay in the group text, message.

Heather Baumann: and so that's kind of annoying.

Heather Baumann: So i tend to not respond using the car controls.

Heather Baumann: oh, excuse me, thank you.

Heather Baumann: how's it coming?

Heather Baumann: yeah. And then the phone like to call someone Heather Baumann: sometimes it's not super great at recognizing Heather Baumann: So sometimes it's easier just to pick up my phone real quick and respond with, you know, like a thumbs up, or.

Heather Baumann: you know, scroll to the contact and call from the phone and then let the Heather Baumann: audio in the car takeover.

Ethan: Okay.

Ethan: let's see here, and then anything else that you would that you have on your phone that you'd rather have in the Ethan: the vehicle screen because I know you mentioned you, you would want apple car play.

Heather Baumann: yeah, it just the apple Carplay was a little more. It was convenient because I didn't have to touch, my phone at all cause you know all of the apps that I would be using Heather Baumann: ways and audible and podcasts and music and everything. Was there? Where? That's not the same with the Tesla Ethan: Umhm.

Heather Baumann: But you know Heather Baumann: E, even if it wasn't Carplay. If like, we just had the option to download, other apps would be awesome.

Ethan: Okay. great.

Ethan: So again, focusing on when you're in park? Are there any specific features or functions that you'd like to be able to access when you're in park?

Heather Baumann: Hmm.

Ethan: I Ethan: yeah. And I'll elaborate just a little bit. This could be you've been things like connecting to you like you're out of vehicle life. So whether that's checking the vehicle status accessing like your personal calendars, maybe using apps that you regularly use anything you're able to think of, really.

Heather Baumann: I mean, except for the Heather Baumann: You know the ones that we were talking about before?

Heather Baumann: You know, having access to the apps that I use a lot on my phone Heather Baumann: trying to think If I was parked it would be handy if I could utilize Heather Baumann: like a video chat feature.

Heather Baumann: So I could handle some work calls while I was out running Erin's. That's the only thing that you make of.



Ethan: Yeah, okay, that's cool idea. I like it. So for you, would that be? Convenient, so that you could take calls whether you're running errands or charging, or whatever that might be? Yeah, exactly.

Ethan: Okay.

Ethan: Okay.

Heather Baumann: Cause. I get calls that Heather Baumann: really random time?

Ethan: so it'd be. It would be nice if like.

Heather Baumann: especially cause sometimes. So I'm a historical consultant Heather Baumann: for film and TV.

Heather Baumann: Oh, that's awesome. Okay, it's sometimes it's awesome. It's it's very Ethan: It's a monsoon. Or is it that it's desert. And right now it's desert because of the strike.

Heather Baumann: But so sometimes the video chat feature would be kind of cool. Because then I could chat with Heather Baumann: whoever cause a lot of times. I need to be able to see them, cause they're Heather Baumann: like, though one of the projects I'm on right now is set in the 19 thirties.

Heather Baumann: and she's always trying to show me things.

Heather Baumann: So it would be nice if she wasn't having to send me text messages if we could just have a quick Heather Baumann: video chat, you know.

Ethan: As opposed to going back and forth for 10 min of texting.

Ethan: Yeah.

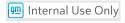
Heather Baumann: which you know right now is fine, cause I can do it on my phone. But like I have a giant screen right here, it would be cool if I could actually see cause, you know, I'm old now.

Ethan: no, that's awesome. So it'd be convenient for Heather Baumann: You know. We finished up at a doctor's office, and I'm just sitting in the car.

Heather Baumann: you know, putting putting in, you know, something into navigation or whatever.

Ethan: you know, there's a lot of times that would be really handy. Okay.

Ethan: okay, great. Thank you for that. So Ethan: let's see. So suppose you're able to customize your vehicle so that you can choose what is shown on the screen every time you put it in the park. So what are some things that you'd want to automatically display each time you put the vehicle in the park. So this could be anything like specific controls. Specific buttons, maybe even information or illustrations. Really, anything that you would want automatically coming up on the display.



Heather Baumann: Hmm! I think Heather Baumann: If I could set it to anything I would set it to pop up to the basic controls Heather Baumann: for easy entries, so I could Heather Baumann: turn trial locked on and off.

Heather Baumann: because IA lot of times if both of my boys are in the car. I have to turn them off so the other one can get out Heather Baumann: so that would be like if I could set it myself. That's the screen that would come up when I hit Park.

Heather Baumann: you know, and I could pull the mirrors and all of that stuff from there. The other thing, I think, would be Heather Baumann: handy is, if it gave me like it automatically gave me Heather Baumann: the charge left Heather Baumann: if I got home from there. So like they're automatically calculated Heather Baumann: how much charge is required to get home from wherever I'm at when I put it in Park.

Ethan: Okay.

Heather Baumann: just for Heather Baumann: you know. curiosity's sake, just to make sure I'm always on top of it.

Ethan: Yeah, okay.

Heather Baumann: so knowing how much range you have remaining and how much charge you know, information like, I can put home. You set your home that work that kind of thing so like if it automatically gave me.

Heather Baumann: You know how much charges left after you got like, if it automatically calculated range home at when you put it in, park would be kind of cool.

Ethan: Okay.

Ethan: anything else that you can think of. And if not, that's cool.

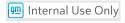
Ethan: okay. Great. No, those are awesome ideas. I appreciate you talking me through those. okay? So then.

Ethan: you could wave a magic wand any feature you want to your vehicle, realistic or not, and not just focus on the screen. What would it be for you.

Heather Baumann: Oh, boy.

Ethan: hmm, hmm.

Heather Baumann: yes. I'm aware, and he has to go to school, Heather Baumann: I think from a very practical standpoint.



Heather Baumann: if I could wave them on today.

Heather Baumann: I would like the ability to add Heather Baumann: other apps to the Tesla. So like I would immediately.

Heather Baumann: add ways.

Heather Baumann: You know. I think that would be the big one Ethan: ways. You said.

Heather Baumann: yeah, like just the ability to add, like an app store for it where I could add my own apps.

Heather Baumann: I think that's Heather Baumann: my biggest, because I do utilize navigation a lot. but like I said, the Tesla navigation is Heather Baumann: not great.

Ethan: Okay?

Heather Baumann: And so I think that's the biggest like, my biggest gripe, you know, is then that it's not really customizable.

Heather Baumann: it makes it slightly less user friendly Ethan: cause. I still have to Dick with my phone a bunch.

Ethan: Okay? So the lack of customization in regards to the apps that you can have on the screen.

Ethan: I mean that, you know, I'd like to improve Ethan: okay.

Ethan: okay, great Ethan: let's see just a couple of things Ethan: you mentioned that you work at

home. I just wanna make sure I have a couple of things just for my day. You guys work at home.

Ethan: and then.

Ethan: Sorry I'm just no, no, you're fine. You're fine and that you are a historical consultant. Okay?

Ethan: I think I'm good on the questions for the interview. I see.

Ethan: I have one of my colleagues in here, Glen Glen. Did you have any questions? Before we start to wrap up here?

Yeah, actually, I do.

Glen: So my question is.

I heard that you were referencing.

Glen: using your phone versus using something within the vehicle.

Glen: And Glen: when you talk about using your phone to accomplish whatever task you're trying to do.



Glen: we? Are you using it out of Glen: familiarity? Or do you think it executes things better. You mean, as far as like the text messages and things. Yeah, just in general, like, if you were to, if you were given the choice. Let's say between something in your vehicle versus on your phone Glen: is, would it be more that you go to your phone on a familiarity Glen: in that way, or is it? Heather Baumann: I would prefer to use the in-car screen? just because, you know, it's I don't wanna have to pick my phone up and like, do a bunch of things.

Heather Baumann: it's more of when I pick my phone up. It's either I can't do something so like I wanna listen to an audio book for a podcast or I want to use ways instead, because I have I am doubting the navigation that is installed or Heather Baumann: so it's either I can't do something, or the text messaging is can be kind of funky Heather Baumann: in the car.

Heather Baumann: so it doesn't necessarily pick up the voice like the voice to text, not that apple any better.

Heather Baumann: but it. It doesn't always Heather Baumann: get everything, and especially if I'm responding to a work email or customer or something.

Heather Baumann: II need that to not be like, I'm a drunk monkey.

Glen: Okay, Gotcha.

Glen: and a a kind of a related question to that. When you were talking about the use of ways. For example.

Glen: you you use ways again. You're you're familiar with it. You like how it it functions. I'm I'm assuming, like you like functionality of it. Okay, if you were to have a different something similar in in your built into your vehicle. It's not not ways, but something similar.

Glen: is it Glen: is. Would it still be something where you don't necessarily care that it's ways itself? It's just that it works or yeah. So it I, I'm not brand specific like, it doesn't have to be Heather Baumann: ways. I have just found that that particular navigation software tends to work better with LA. Traffic. It seems to be the most accurate Heather Baumann: if there was a navigation software Heather Baumann: that was native to the car that I felt Heather Baumann: worked just as well, I would be more than happy to use it.

Glen: Okay.

Glen: alright, that's the questions I had. Thank you.

Heather Baumann: Yeah, you're welcome.



Ethan: Awesome.

Ethan: cool. Well, that concludes our time today. Heather. Did you have any questions for us before we kind of wrap up?

Ethan: Okay, cool. And I had kind of a selfish question. But how did you get into becoming a historical consultant? So I have. My bachelors degree is in us history. My master's degree is in museum and archive science.

Heather Baumann: and I am a member of Hollywood Heritage. So it's a preservation and museum organization, and I'm on their museum committee.

Heather Baumann: So so Hollywood Heritage, their museum is the Laski to mill barn. I don't know how familiar are with classic film.

Ethan: Hi, Barry.

Heather Baumann: Okay. So Cecily, the mill was one of the first, like major directors, silent film and into talkies.

Heather Baumann: And the barn was built in 1,913, and it's the only remaining.

Heather Baumann: Well, it's the oldest remaining studio building in Los Angeles.

Heather Baumann: So it's in Hollywood, directly across from the Hollywood Bowl and it served as the original studio for paramount studios. And I'm on the museum committee. So it's just kind of this. Heather Baumann: it kind of things morphed into other things. And I started getting to know as I

Heather Baumann: started getting into that world. I started getting to know a lot of indie filmmakers and a lot of other people in the industry, and it just kind of Heather Baumann: I have a lot of Heather Baumann: interest in like historic costuming. And and that kind of thing.

Heather Baumann: So it just kind of morphed into like, oh, yeah, I can help you with that.

Heather Baumann: Oh, yeah, I can help you with that. Yeah, I can take a look at that. And it Heather Baumann: slowly turned into a business.

Ethan: Wow, that's awesome. Yeah, it seems like such a cool job. I'm jealous.

Heather Baumann: It can definitely be a lot of fun like I said. It's very much feast or famine.

Heather Baumann: but it's it's a lot of fun. It's a lot of fun Ethan: sometimes. It's a lot of fun I've read through.

Heather Baumann: I've read through some crap Heather

Heather Baumann: and things seem to go and wave so like. After Westworld came out. I got so many Heather Baumann: Western scripts to.

Heather Baumann: you know, as potential consults, but like Heather Baumann: the thing with La is 99% of stuff. Just get shelved. So you put a lot of effort into something essentially a project that you really like. And you're like this is awesome. And then it goes nowhere. You have to be prepared for absolutely nothing. Of all of the projects I've consulted on in the last year.

Heather Baumann: They're Heather Baumann: was one in production, pre-production rather. The rest of them are just.

Heather Baumann: you know, floating in the ether.

Ethan: Yeah, that kind of comes to the Territory, I guess. Right? Right? Well, very cool. Thank you for sharing that.

Ethan: yeah. Awesome. Well, okay. Great. Yeah. Again. We don't have any other questions for you. So again. Thanks for your time. I know it's early in the morning, then. So so yeah, have a good rest of your day, and have a good weekend. See ya.