SF Chargers

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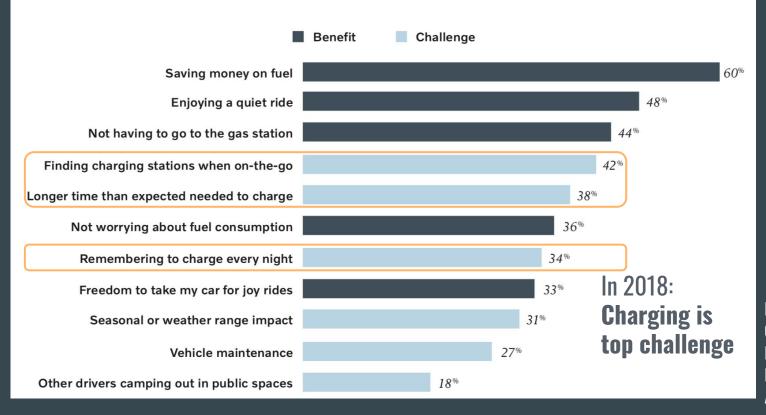
Optimize EV charging for all

The Problem



- To charge or not to charge?
- Where to charge?
- To inject power back to grid, Vehicle-to-Grid, V2G?

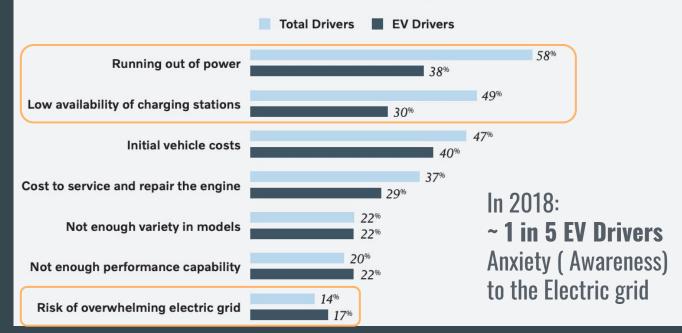
DAY-TO-DAY BENEFITS AND CHALLENGES OF DRIVING AN EV



From Source: Volvo Car USA/The Harris Poll, THE STATE OF ELECTRIC VEHICLES IN AMERICA

RANGE ANXIETY IS LESS OF A CONCERN FOR EV DRIVERS, WHO ARE MORE FOCUSED ON PRICE

Top barriers to purchasing an electric vehicle



From Source: Volvo Car USA/The Harris Poll, THE STATE OF ELECTRIC VEHICLES IN AMERICA

The Solution



- Platform that recommends efficient EV charging options with impact score
- Charge State: Informed decision to charge/not
- EV charging options: charging efficiency, grid impact considerations, V2G pricing

WHARE FORT Francisco St. TELEGRAPH Chestnut St RUSSIAN Octavia St Filbert St San Francisco Gough (101) FINANCIAL DISTRICT o pacific Ave Ferry Building Pacific Ave Embarcadero Sacramento St Lafayette Montgomery St. LOWER Geary TENDERLOIN Powell St. Ellis St Turk St WESTERN ADDITION Civic Center/ UN Plaza McAllister Oracle CIVIC Ferry T San Francisco Caltrain SOMA San Francisco Oak St Page St Pier Mission Haight St WER GHT Creek Park MISSION BAY {101} Potrero-Center © 1987–2019 HERE | Terms of use start 44 Tehama St. San Fran end 683 Sutter St. San France Submit Get Charging Stations Range Left 194.78

DEMO

Summary

Inspiration: EV charge impact unclear to EV owners

What it does: Platform that recommends efficient EV charging options with impact score

How we built it: Python & JavaScript in Flask

- with Smartcar APIs
- with HERE Map, Geocoder APIs
- with <u>Alternative Fuel Data from U.S Department of Energy</u>

Challenges we ran into: New APIs + Scope creep

The Team

Gabriela Gerson - Musical Hacker

Marcy Reyes - Financial Hacker

Mena Adams - Social Hacker

Tanny Ng - Product Hacker

Accomplishments: 75% first time hackers!

What we learned: New APIs