

## Project Progress Report -2

Date of project proposal approval – November 8<sup>th</sup> 2022

**Goal for the week:** The goal for this week was to research a lot about electric vehicles and the factors that would impact the daily life of a consumer who drives everywhere.

Spent time on analyzing what factors to include in our project which will take user inputs based on the factors and our machine would analyze and give out a consolidated report as a pie chart and a numerical value which would help consumers determine if buying an electric vehicle is good for them.

### Deciding Factors:

- Cost difference between gasoline and electric charging – We aim to determine the average cost it takes to drive certain number of miles.
- Availability of the electric charging stations – This is a very important factor that would help identify the effectiveness and ease of use of an electric vehicle. This factor would also include sub-factors like
  - Location
  - The time spent to charge the vehicle – The human time factor. Some people are super busy and must use their car multiple times a day (Food/Groceries Delivery Professionals) or do not have enough time to wait for their car to get charged.
  - Price to setup the charging station at home, calculate the power consumption per one full charge of the vehicle.
- Primary purpose of the car: Determine if the consumer wants to get from point A to point B or to get a car that one would drive long distances. This will also include sub-factors like:
  - Is this the only car that the consumer will have
  - How often does the consumer does a road trip?
  - How long does the consumer drive on a road trip?
- Additional Costs: How much does the insurance cost for an EV vehicle. Price difference between a gasoline and EV insurance.
  - How much does the maintenance and repairs usually cost
- **Benefits:** What are the tax benefits EV would offer
- **Budget:** What is the amount of money that the consumer would like to spend to get a car?

**Customized Report:** Decided on the website design and the modules to be included in the report a user would get. Decided to give out the report to the user in pie chart which would give values – Yes, No and maybe.

So far, we have decided that adding an additional parameter – “Maybe” would be beneficial since it would give the user the choice to consider additional and human subjective parameters to decide if one should buy an EV vehicle.

My goal moving forward for the next week is to develop a webpage with the above-mentioned factors and develop a web page that would take the user inputs as a form.