# VISUALIZATION TOOL FOR ELECTRIC VECHICLE CHARGE AND RANGE ANALYSIS

### 1.INTRODUCTION

An EV is a shortened acronym for an electric vehicle. EVs are vehicle that are either partially or fully powered on electric power. Electric vehicle have low running cost as they have less moving Parts for maintaining and also very environmentally friendly as they use little or on fossil fuels (petrol or diesel).

### 1.1 Overview

Our project is about Electric Vehicle and charge stations then there data analysis

# 1.2 Purpose

Low noise pollution

Low maintenance cost

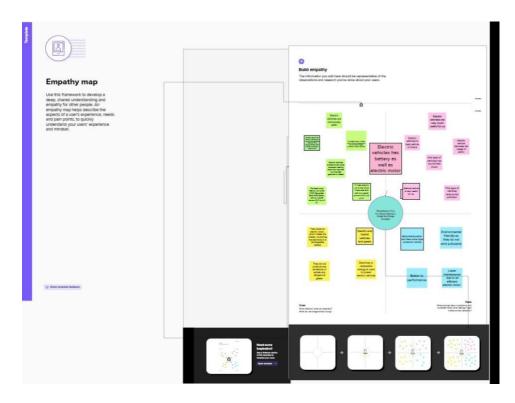
#### 2.PROBLEM DEFINITION:

A EV is defined as a vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source.

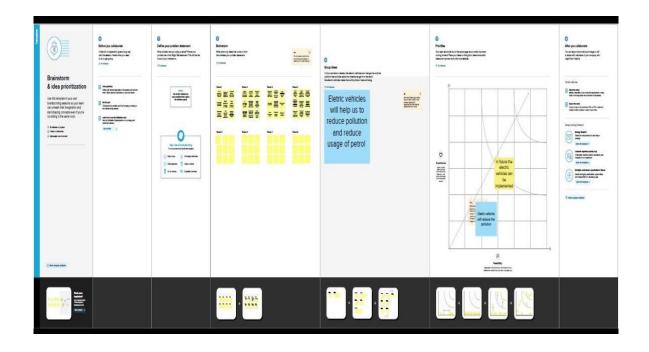
### **DESIGN THINKING:**

Vehicle design is a very complex domain since it involves a lot of attributes, like: interior space, dynamic performance, active and passive safety, connectivity, etc. The same principle apply to either electric vehicles for conventional vehicles (with internal combustion engines) design

# 2.1 Empathy Map Electric Vehicle (BEV)



# 2.2 Ideation & Brainstorming Map screenshots



### 3.RESULT:

Different brands of electric cars globally

## 4.ADVANTAGES:

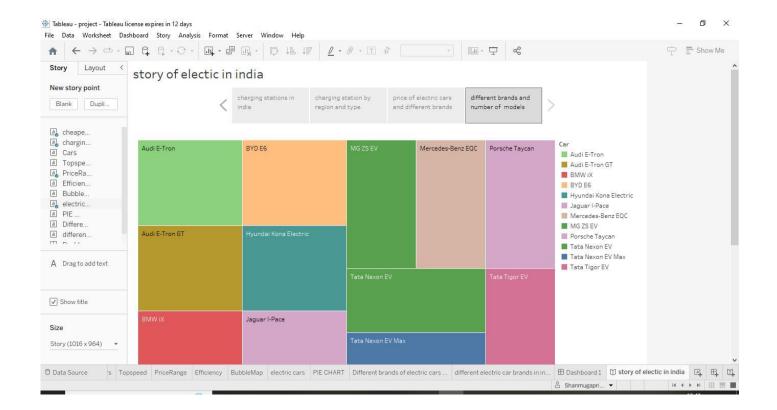
- Low noise pollution
- Source environment
- Low maintenance cost
- More convenient
- ❖ No fill
- Natural resource saving
- Increasing popularity
- Parking for a low fee
- Golden investment opportunities
- Subsidy benefits

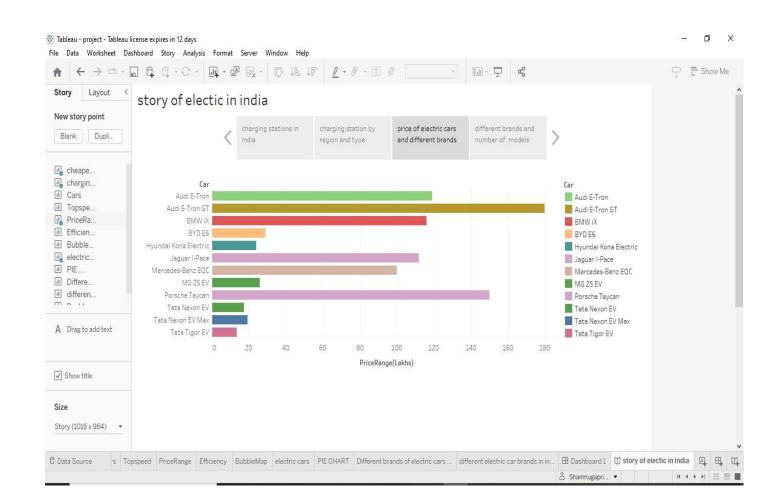
## DISADVANTAGES:

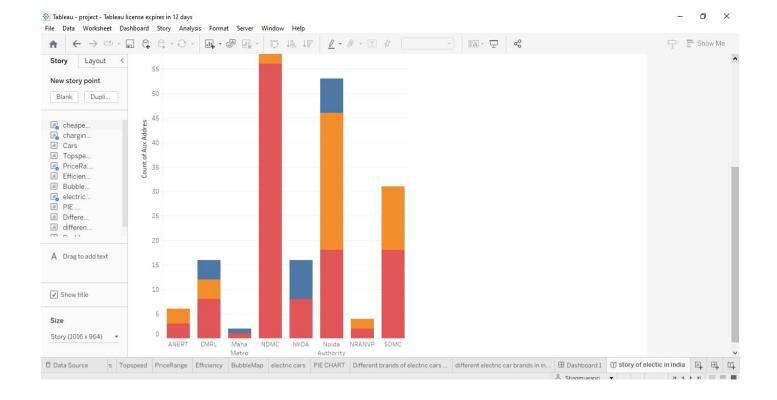
- Higher purchase cost
- Low speed and range
- Low price and selling
- Low energy
- Battery expanse
- Slow charging
- Expensive recharging options
- Problem for fuel producing countries
- ❖ Fewer uses

# **APPLICATIONS:**

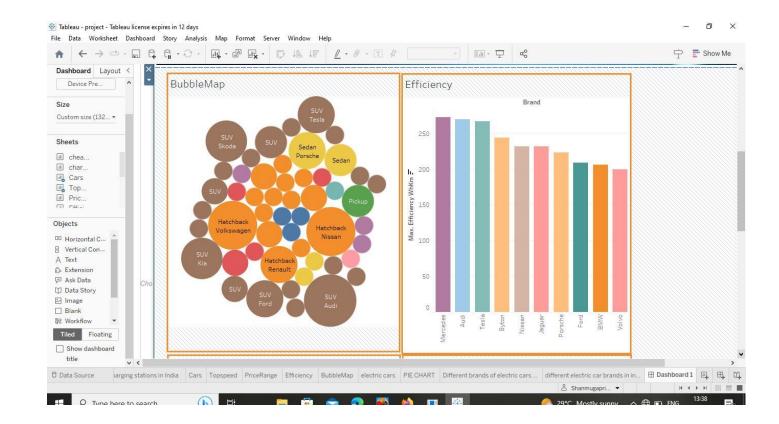
Copper is an essential material component of electric vehicle (EVs). It is used in the electric motors, batteries, inverters, wiring and in charging

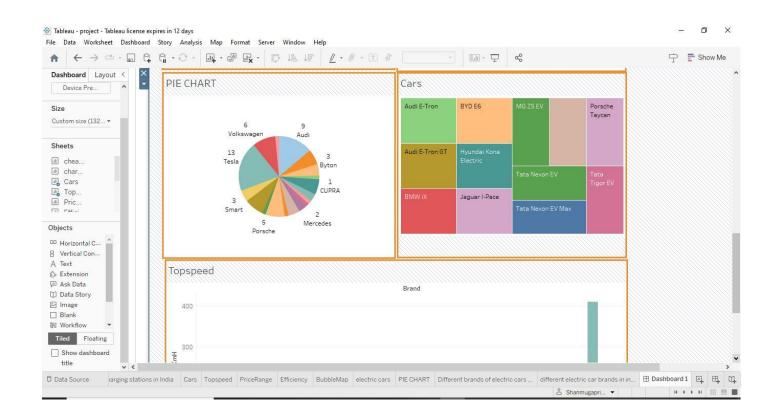


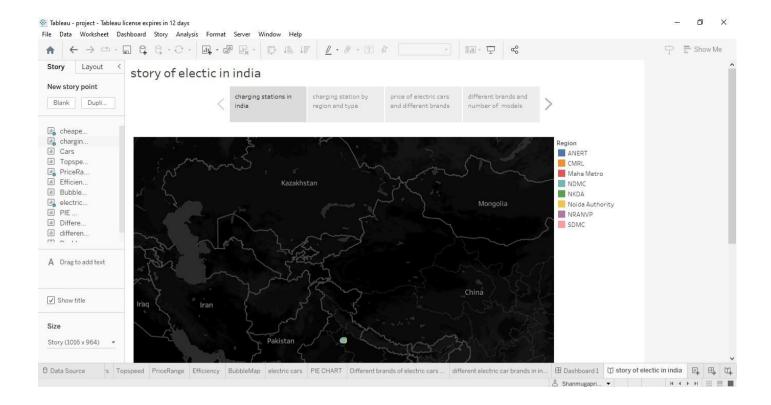












### **CONCLUSION:**

The progress that the electric vehicles industry has seen in recent years is not only extremely welcome to but highly necessary in light of the increasing.

#### **FUTURE SCOPE:**

Several factors are expected to continue to drive consumer demand for EVS our the 2021 \_31 decade: environmental concerns creator vehicle choice, improved battery capacity, and caste saving. combination chart with 2 data series.