

ELECTRIC CAR ANALYSIS



OUTLINE

1. Introduction
2. Methodology
3. Result
4. Discussion
5. Conclusion



1.INTRODUCTION

- Identify the top Electric Car Brand.
- Identify the target audience of Electric Car.
- Identify the relationship between Price and Efficiency, Range, Top Speed.



2.METHODOLOGY

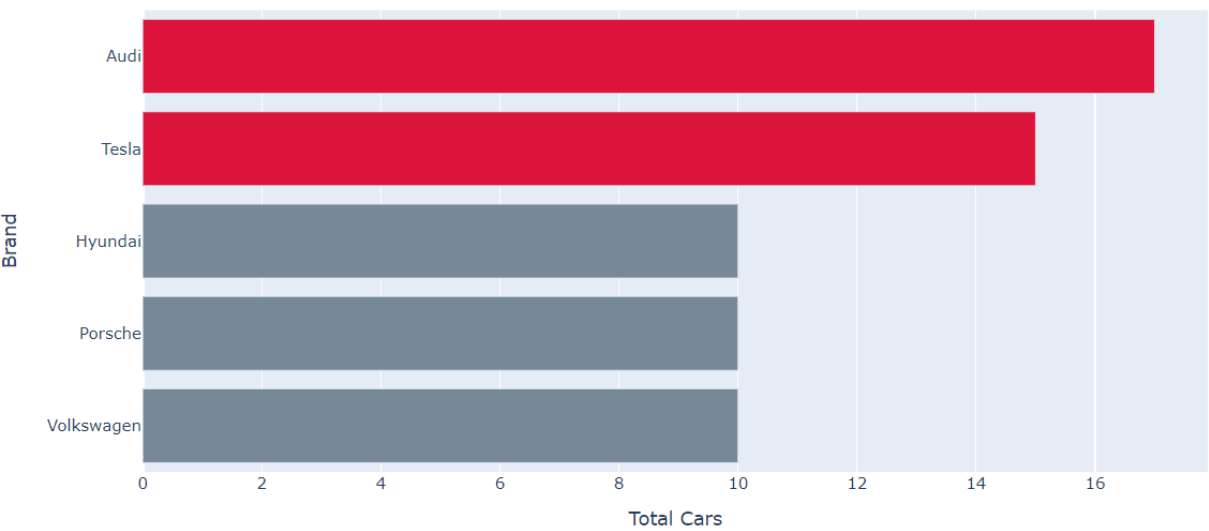
- Data Collection
 - + Collecting Data from Kaggle.
- Data Wrangling
 - + Checking for data types, null values and duplicate values.
 - + Changing the units, data types, split the column
 - + Adding necessary columns.
 - + Create new DataFrame
- Exploratory Data Analysis
 - + Analyze, explore data (using Plotly)



3.RESULT

	Name	Subtitle	Acceleration	TopSpeed	Range	Efficiency	FastChargeSpeed	Drive	NumberOfSeats	PriceinGermany	PriceinUK	Brand
0	Opel Ampera-e	Battery Electric Vehicle 58 kWh	7.3	150.0	335.0	173.0	210	Front Wheel Drive	5	42990.00	49868.4	Opel
1	Renault Kangoo Maxi ZE 33	Battery Electric Vehicle 31 kWh	22.4	130.0	160.0	194.0	-	Front Wheel Drive	5	27308.16	31680.0	Renault
2	Nissan Leaf	Battery Electric Vehicle 36 kWh	7.9	144.0	220.0	164.0	230	Front Wheel Drive	5	29990.00	25995.0	Nissan
3	Audi e-tron Sportback 55 quattro	Battery Electric Vehicle 86.5 kWh	5.7	200.0	375.0	231.0	600	All Wheel Drive	5	68873.80	79900.0	Audi
4	Porsche Taycan Turbo S	Battery Electric Vehicle 83.7 kWh	2.8	260.0	390.0	215.0	860	All Wheel Drive	4	186336.00	138830.0	Porsche

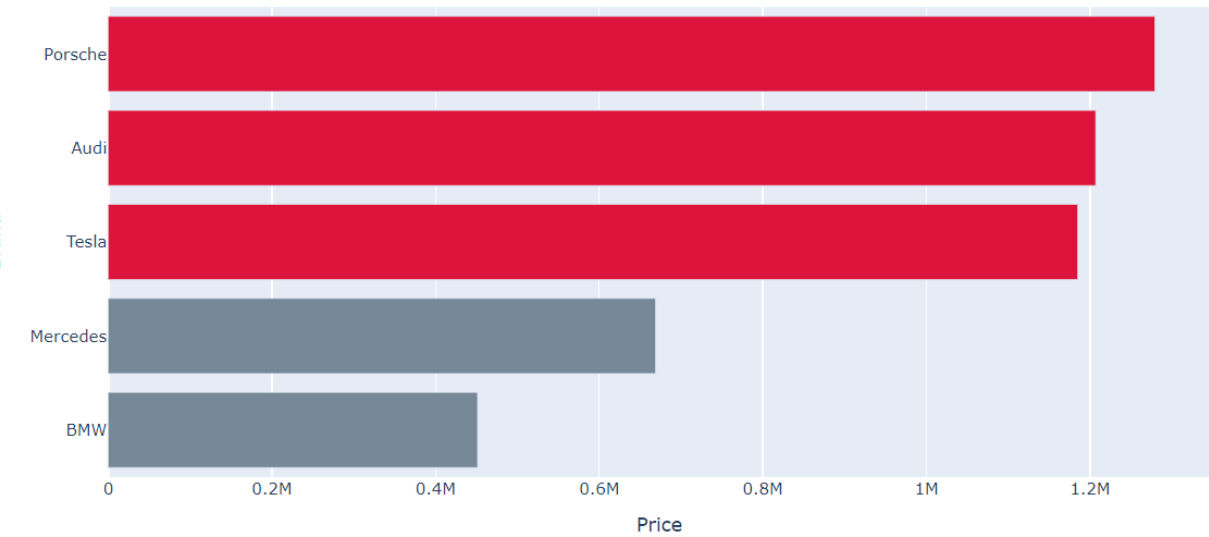
Top 5 Brand by Total Cars



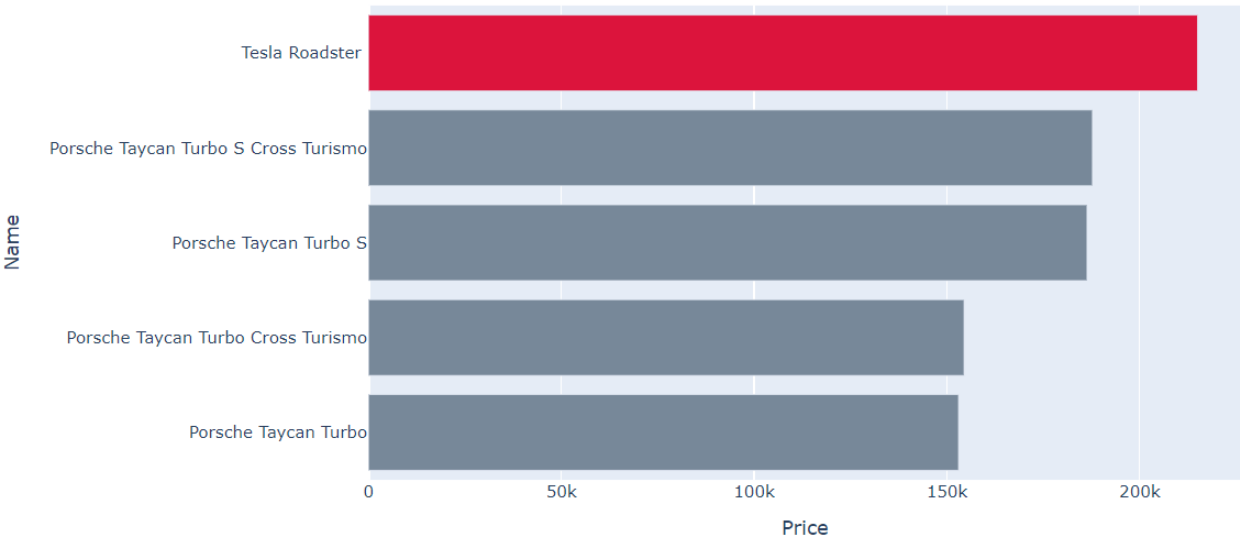
Identify the top Electric Car Brand

Based on the total sold car and price, top electric car brands are **Tesla, Porsche, Audi...**

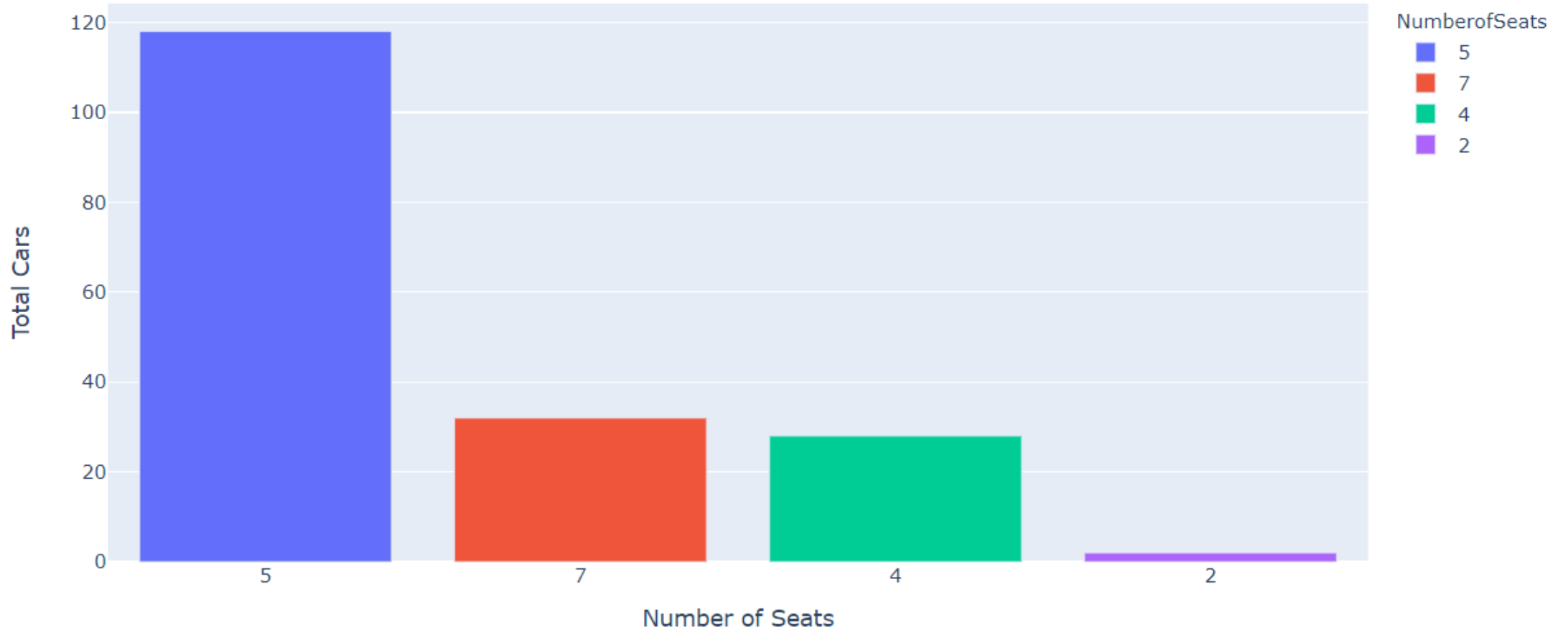
Top 5 Brand by Price



Top 5 most expensive electric cars



Total Cars by Number Of Seats



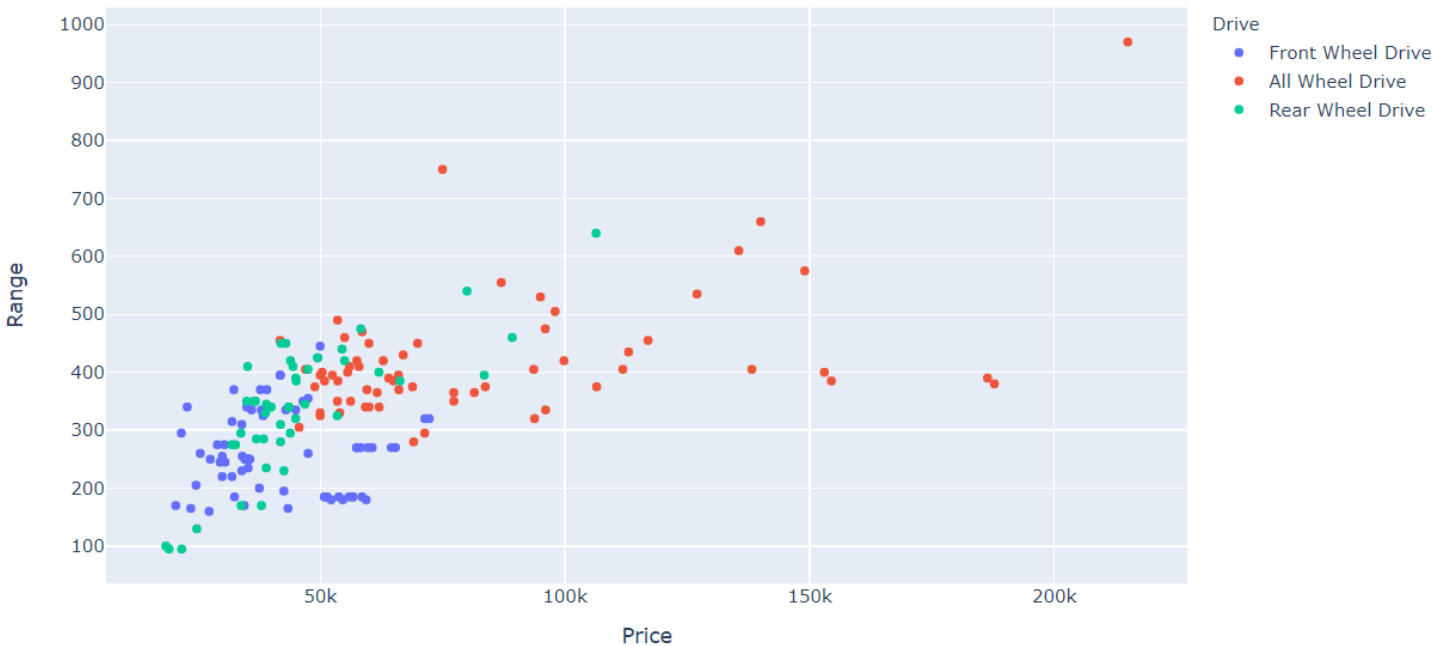
Because the number of seats are dominated by 5 seats followed by 7, the target market of electric car is for **family** now.

Efficiency vs Price



The majority of Electric Cars having **front-wheel drive** are **cheaper** and **more efficient**. But they run **shorter distances**.

Range vs Price



Most **rear-wheel drive** electric cars can run **longer distances** and aslo **more expensive**.



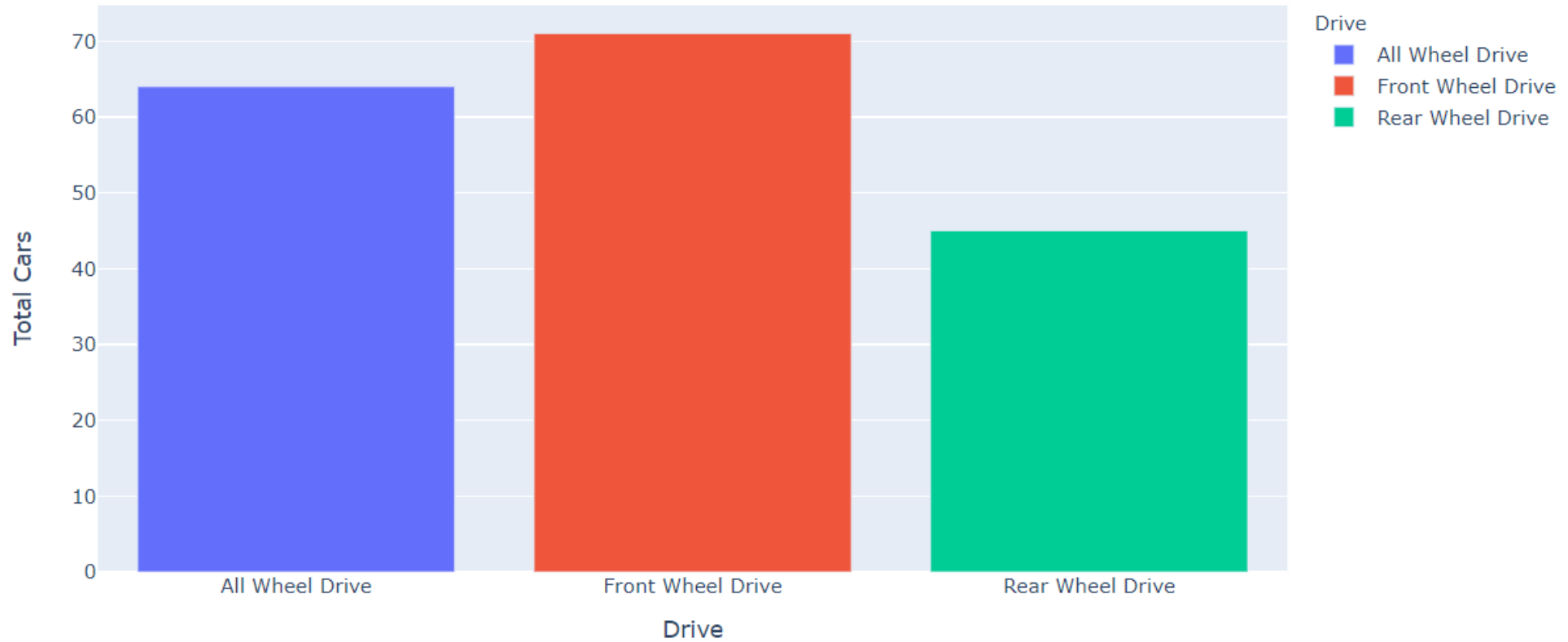
Most rear-wheel drive electric cars have **high speed** and aslo **more expensive**.

4.DISCUSSION

Are most electric cars
front-wheel-drive?



Total Cars by Drive



Most electric cars today are **FWD**. The advantages of **FWD** for gas cars included better space efficiency, less weight, lower cost, and better foul-weather traction with the weight of the engine over the drive wheels.

5.CONCLUSION

- Top electric car brands are **Tesla, Porsche, Audi...**
- The target market of electric car is for **family** now.
- Most electric cars today are **FWD**.

