Sample Practical Exam Presentation

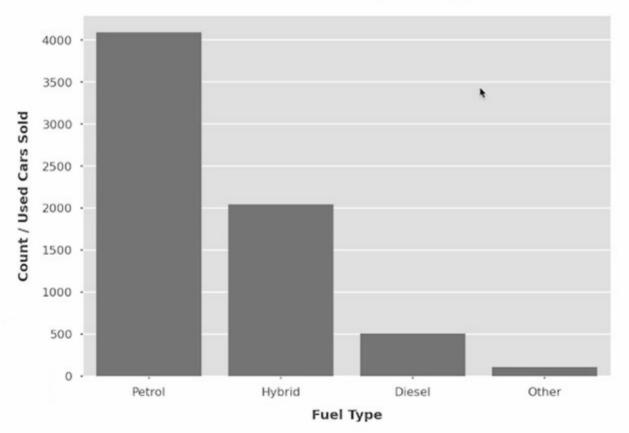
Used Car Sales

Business Goals

- All cars need to be electric by 2030 in UK. To follow the trend, the marketing team plans to run some campaigns to promote electric cars to increase the number of sales in environmentally friendly cars next year.
- Since there was no sales record in electric cars yet, the marketing team want to know the following insights:
 - Differences of the sales between hybrid and other fuel type cars
 - Make the hybrid cars more attractive to buyers

Differences of the sales between hybrid and other fuel type cars - Number of Cars Sold



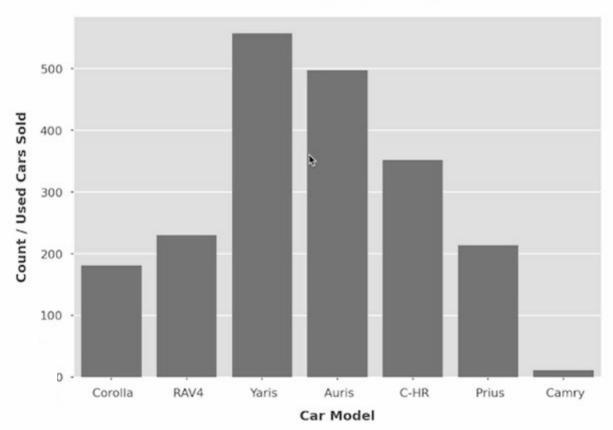


From last 6 months' record, more than half of the used cars we sold is using **petrol**, **followed by using hybrid**.

Also, we can see the number of cars sold in petrol is almost twice the number of cars sold in hybrid. Therefore, we can conclude that there is huge room to impove the sales of hybrid cars.

Differences of the sales between hybrid and other fuel type cars - Number of Cars Sold

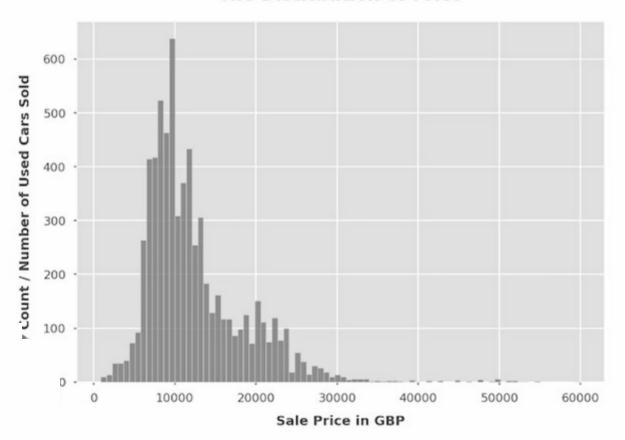
Used Cars Sold using Hybrid by Car Model



If we only look at hybrid cars. From the bar chart, the best seller in car model is **Yaris**, **followed by Auris and C-HR**.

Differences of the sales between hybrid and other fuel type cars - Price

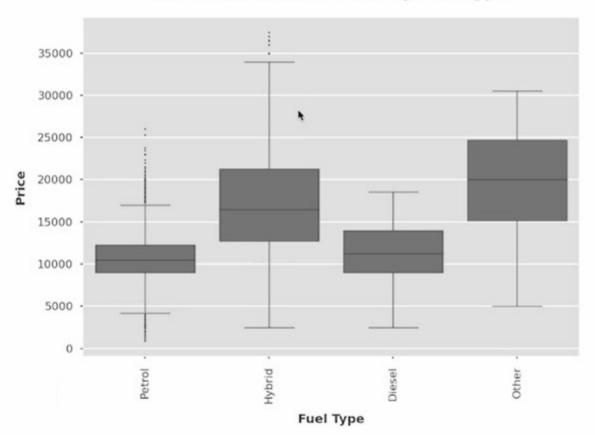
The Distribution of Price



From the distribution of price here, the majority of used cars sold last 6 months is less than 30000 GBP. Used cars sold more than 30000 GBP could be considered as the outliers.

Differences of the sales between hybrid and other fuel type cars - Price

The Distribution of Price by Fuel Type

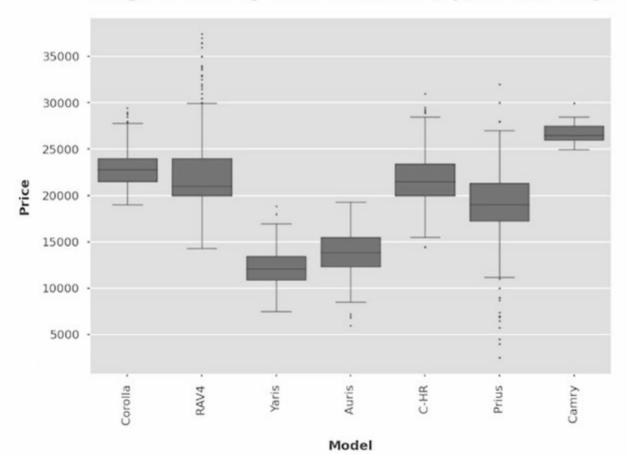


From the multiple boxplots here, we can see the price range in hybrid cars is more significant than other fuel types. The majority of the price of a hybrid car range from 13000 to 21000 GBP, which is higher than petrol and diesel.

The meaning of the fuel type in 'Other' is unclear.

Make the hybrid cars more attractive to buyers

Range of Price by Used Car Model (Hybrid Cars Only)

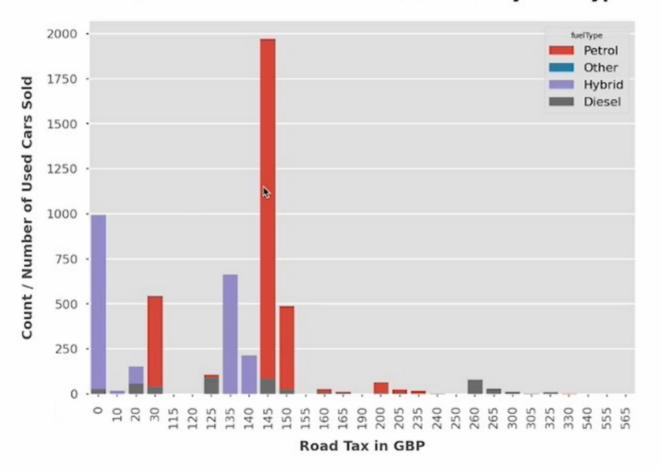


From this graph, **Prius, Yaris and Auris** have records of selling lower than 10000 GBP in the last 6 months, which is competitive with the petrol cars.

Therefore, for people concerned about price, we should make these three models our major campaign car models.

Make the hybrid cars more attractive to buyers

Number of Used Cars Sold in Road Tax by Fuel Type



The other attractive information is the tax. From the bar chart below, we can see the most common road tax for the petrol model is 145 GBP, while the most common road tax for the hybrid model is 0 GBP.

Therefore, for people buying traditional fuel-type car models, a Hybrid might be an excellent choice based on this information.

Business Metrics

Since our goal is to increase the number of sales of hybrid and electric cars next year, I would recommend we use the percentage of hybrid and electric cars in total number of used cars sold last 6 months as our metric.

Based on our last 6 month data, **30%** of the used cars sold are hybrid and electric cars. Therefore, if this number is increasing next 6 month, it indicates very good sign to achieve our goal.

Recommendation

For the following weeks, my recommendation would be:

- Using key metrics to monitor whether there is a strong sign to see the sales will increase.
- To implement the campaign as soon as possible, we should smartly promote the hybrid models in the market:
 - Promoting road tax reduction
 - Less expensive models -Prius, Yaris and Auris model
- Stay on top of the current electric and hybrid car markets so that the newest information can be integrated in the campaign.
- Data Collection for in-depth analysis
 - Improve data quality what the other fuel type means?
 - New related data Using different fuel types in the same car model to compare eco-friendly cars and other fuel types