

Data Science Project 1

Business Context

The CEO, Sales Manager and Marketing Manager of a car company that sells both used and new cars would like you to build a model that would predict the cost of a car given some characteristics of the car.

This model is intended to power the backend of a vehicle valuation platform. This platform is in the form of a website that provides a prediction of the cost of a car when a potential customer enters certain details of a car in it. Consider [this](#) website to imagine what I am trying to explain.

The company has gathered data based on past sales and would like to maximize this vehicle valuation asset as a sales tool .

You have also been introduced to the data analyst in the company who has shared the data for the project with you.

Data

The data is attached to this email.

You have also been provided with a data dictionary that describes each feature in the data. This is within the email.

Actual Context of Data

US Cars' data was scraped from AUCTION EXPORT.com. This dataset included Information about 28 brands of clean and used vehicles for sale in US. Twelve features were assembled for each car in the dataset.

Project Success Evaluation Criteria

The success of this project is:

- Based on a metric that measures or shows how well the model is able to accurately predict the price of the car
- Identify characteristics that are most predictive of car price

Final Prediction

You are required to make a presentation to the key stakeholders in the company interested in this solution – the CEO, Sales Manager and the Marketing Manager. These are the main target audience of your presentation.

However, the data analyst will also sit in the meeting and is likely to ask you technical questions related to your model.

Also be prepared to justify the business impact of your model as the CEO is likely to ask.

NOTE:

For the sake of preparing to speak about this project during an interview consider taking down these notes for yourself:

- Business background/context
- Business problem
- Request
- Stakeholders interested in solution
- Time you took to complete project
- Main tasks, tools and results you got
- Nature of data provided – file format, size, dimensions of data etc
- Challenges encountered and lessons learnt