

Problem Identification

- Problem statement formation

For 2016, how can an industry-wide analysis be conducted on what will be the most indicative towards a used vehicle's sale price and is that sale price reflective of the true market value of the car?

- Context

Vehicle sales transactions date as far back as 1982 and are sold from a variety of dealers. Their sale price is determined from a variety of factors such as car condition, mileage, and other specifications.

- Criteria for success

Understanding the attributes of vehicles that influence sale price, with a keen eye on trends in higher selling cars vs lower selling cars. Gather a fundamental view into what attributes matter and which have little impact towards sale price

- Scope of solution space

Gathering intel on the future of car sales without factoring in seismic external trends (ie recession or market collapse). Focus specifically on the truths and commonly stated myths behind vehicle evaluation, such as the relationship on a highly used car's impact on sale price

- Constraints

Lack of full observations from older vehicles

Most vehicles are from 2010s and then 2000s, higher bias towards recently made cars

- Stakeholders

Steve Lind, President of Kelley Blue Book

Lead Data Scientist Kelley Blue Book

Senior Vehicle Evaluation Editor at Kelley Blue Book

- Data sources

Vehicle Sales CSV