

Capstone 2 - Martin Moreno - Car review vs. Company Performance

Hypothesis: How much does the quality of the product according to experts matter? Website reviews of car models should have a significant effect on company performance.

Context: Car manufacturer's numerous models are methodically reviewed each year by several car-centered websites on every aspect of an automobile. If company performance was solely determined by the quality of the products they put out, then the 'expert' reviews should have a big say on which companies are succeeding or not. If these opinions on the cars do not seem to strongly correlate, then perhaps a company's performance is about much more than the various technical and aesthetic aspects captured by a reviewer.

In order to be successful in this analysis, we should be able to conclude with a level of correlation between reviews and company performance overall and historically. We should be able to show the correlation between reviews and performance graphically in a way that can be understandable for the consumer. Lastly, we can try to explain the implications of our findings and give recommendations for both the consumer and the corporations making these machines. We will solely focus on car models sold and reviewed by companies for the United States consumer market.

The dataset that will represent the company's success for this project will be the historical stock price. Company performance can be measured in a variety of ways, and by looking at a particular success metric vs. another can always be deemed incomplete in some way. Also, these 'car' companies are probably not only being valued in their stock prices for their car products, but also for the technological progress and other endeavors (notable example is Tesla).

This analysis involves car-buying consumers, and the car companies. Car consumers can find more confidence in car reviews if they align with company performance and companies can see how much they should be listening to and gathering feedback from these reviewers.

Data will be gathered from popular car-review websites who claim to use experts and objective measures. Data will be scraped from selected websites for models of the companies in the car company stock dataset. If there are difficulties scraping all models and their trim variations, we can focus on the US market's most popular body styles.