A data science approach to gas prices

An analysis on fleet usage and gas prices Christopher Griffiths University of Kaiserslautern

Problem definition

100 truck fleet

220 000 kms per year per truck (22M kms per year)

Assumption: Average fuel consumption per truck - 33.1L/100km

7.2 Mlitres of total gas consumption per year

Considering 1.28 euro per liter, 9.3M euros spent yearly on fuel with average gas price

Best case using predictive model: 8.1M euros per year

Over 1 Million euros in savings per year

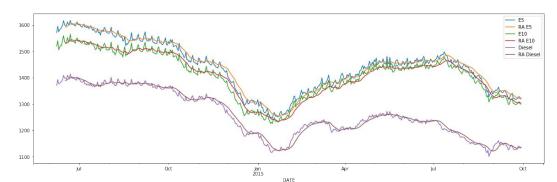
Our model

Uses data with daily updates



Able to predict rise or fall of diesel gas price with 89% accuracy

Highly autonomous, more time for additional features



Stipulations

Lowest price is not always possible

Expanding the model to predict actual gas prices (not just rise and fall)

Include geographic data to better inform drivers

Working with the drivers to ensure the predictive model is followed

Feedback: Work closely with drivers to better understand their needs