Predicting Insurance Claims
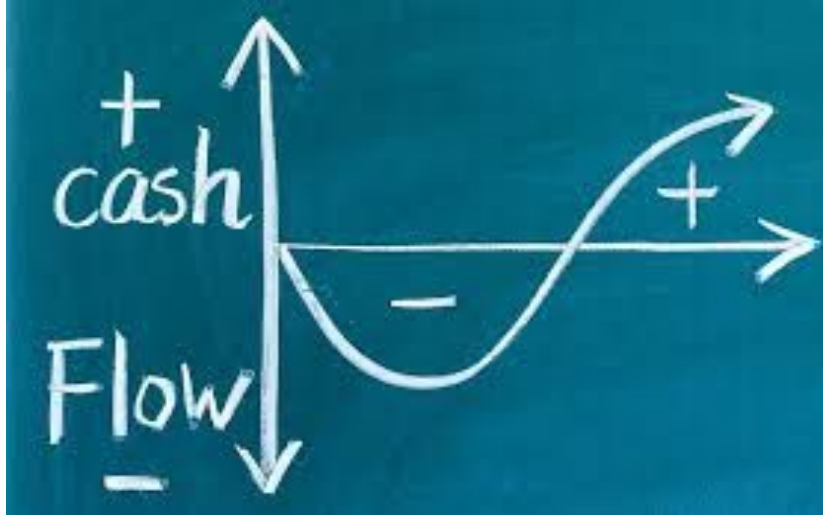Matan Gavish

Cash Flow Problems?

Mischaracterizing drivers can lead to too much cash outflow and not enough inflow
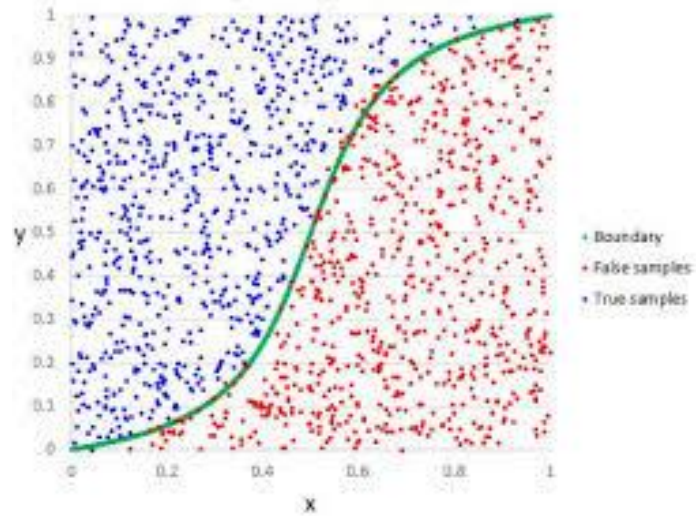
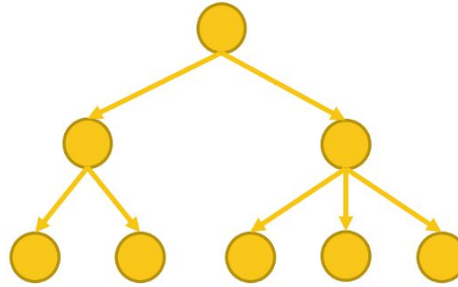Poor cash flow and expense forecasting can make a good business go bad

Customized premiums based off strong correlations let us tailor our rates

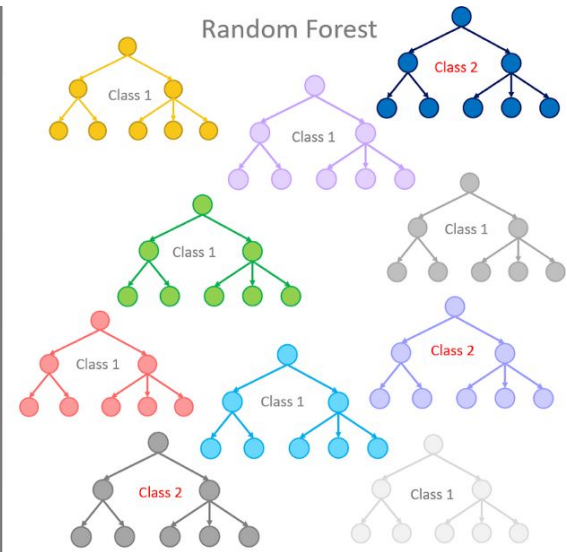Accurate predictions make for good business and happy customers

Logistic Regression Example
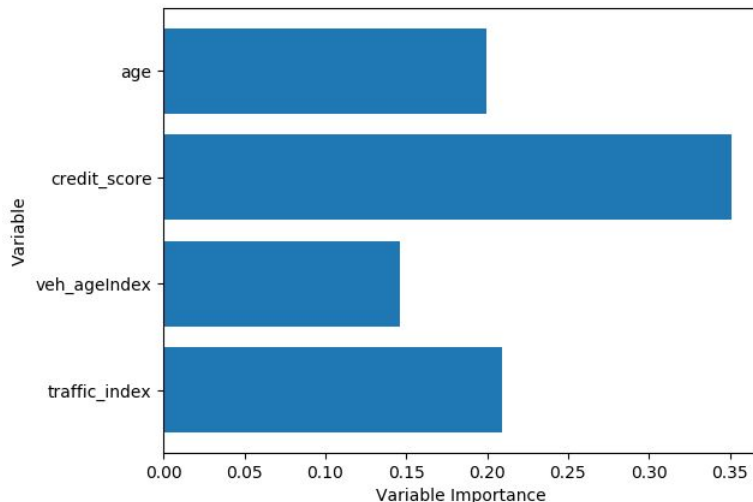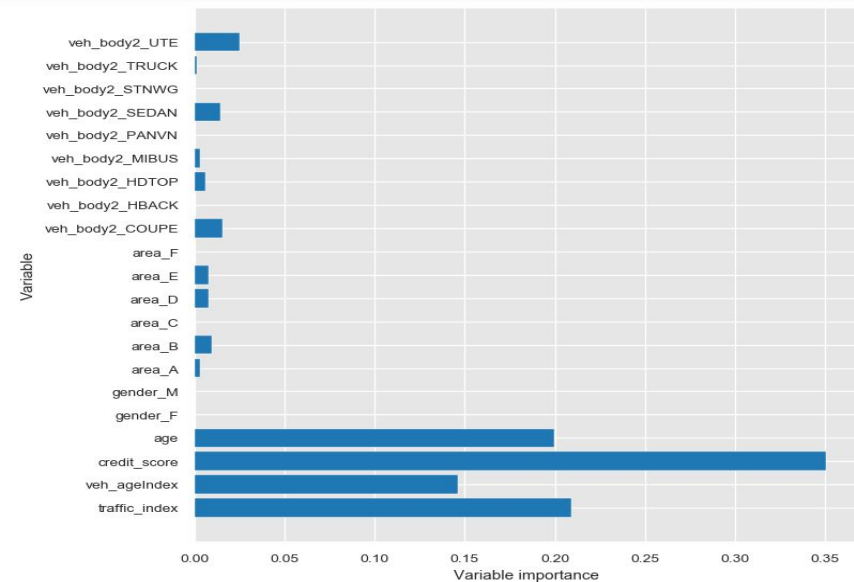
Single Decision Tree

Random Forest

Findings

- Not enough germane data
  - A dozen models later...and insignificant results

Recommendations

- Not enough germane data
  - A dozen models later...and insignificant results

- Change data aggregation focus

Future Work

- Research on additional predictors of propensity to file claim
  - Research papers
  - Public datasets
  - Different insurance products, eg, homeowners, renters, health...etc.
- Feature engineering potential using other company databases

Thank you!