DAT 530 Advanced Statistical Methods

Project Review: Week 6

Reviewer: Brandon Hosley

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Project Title:

Predicting Conversion of Free Trial Users to Paying Customers to Increase Sales by Developing an Effective Free Trial Program

Author(s):

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Source:

Galit Shmueli Student Projects

The Problem the Author(s) is Trying to Solve in the Project:

The authors seek to determine plausible correlations between free trial features and a customer moving to subscribe to the full service.

Machine Learning (ML) Algorithm(s) used:

- **Naive Bayes**
- Lasso Regression
- Random Forest

A Brief Description of One of the ML Algorithms used:

Naive Bayes is a probabilistic classifier that generates a model that resembles Bayes' Theorem. Each factor is given a probability to affect a certain outcome and each factor is treated interdependently.
This is one of the more simple ML algorithms, and can be performed in linear time and similarly, the training data needs scale linearly with the number of features.

Metrics Used to Evaluate the ML Algorithms:

The performance and comparison of the authors' models is performed using lift and gains measurements.