

Predicting revenue from online shopper behavior

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Problem Statement

- Predict what type of behavior leads to to an online purchase
- Classification Problem

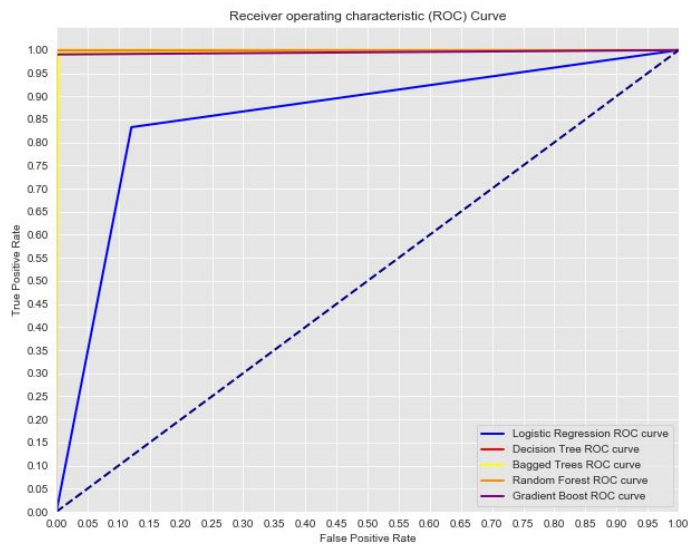
Business Value

- Identify online shopping behavior trends that lead to revenue
- Adjust marketing strategy to capitalize on revenue generating trends

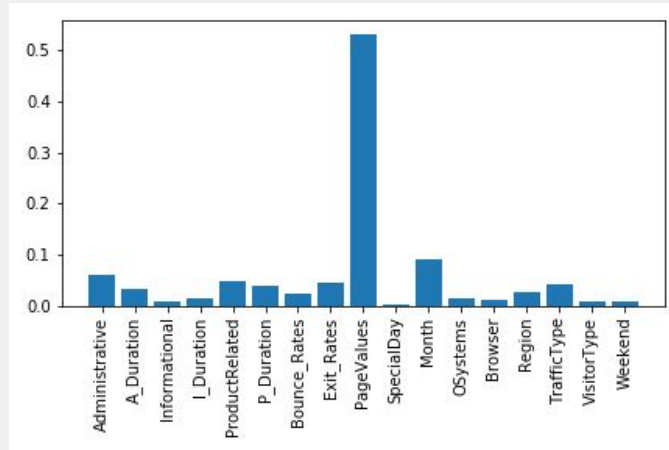
Methodology

Model	Precision %	Recall %	Accuracy %	F1 Score %
Logistic Regression	89	78	84	83
Decision Tree	100	100	100	100
Bagged Trees	100	99	99	99
Random Forest	100	97	98	98
Gradient Boost	100	99	99	99

The decision tree and ensemble methods classified revenue occurrence optimally.



Findings



The feature that is the most likely positive predictor for revenue is PageValue, the average amount of times a page leads to revenue. Month also is a likely positive predictor because during certain months of the year consumers purchase more.

Future Work

- Build more predictive models
- Learn predictive modeling mechanics

Thank you