

AE 10

Upon examining store and product data for the Razor, store location '3' is the most relevant factor influencing the sale of the Razor at these drugstores. If the razor is sold at store 3, then the only other factor buyers seem to consider is saleprice. At store 3, if the saleprice is greater than \$14.9, a majority of buyers are unlikely to purchase the product. If the saleprice is less than \$14.9, an overwhelming majority of customers say yes to purchasing the product. If the buyer is not purchasing at store 3, saleprice is a factor as well, but it leads to other factors based on whether saleprice is greater or lesser than \$13.4. If lesser, the buyer considers the price of a generic razor, and is most likely going to purchase the generic razor. If the price of the generic model is greater than \$13, they are far more likely to purchase this Razor. On the other hand, if the saleprice at store 1 or 2 is greater than \$13.4, buyers also consider generic price. In this case, if the generic model costs less than \$14, almost all buyers go with the generic razor, and if the price of the generic razor is greater than \$14, they reconsider saleprice once again, establishing a higher bench mark this time. If the saleprice of the razor is greater than \$16.4, almost all buyers chose the generic model, and if the price was less than or equal to \$16.4, approximately half the buyers were purchased the razor. The analyst can focus on saleprice and competitive analysis of generic brands, as well as sending a higher inventory to store 3, which would help reduce decision fatigue. Targeting stores with high traffic as well as positioning the product for certain age groups would be beneficial.

Based on the analysis, the bagg and random forest models were better at classifying the data over a simple decision tree.

Regression Tree for ProductHigh Sales





