

11/29/22

- a. Education is the most important.
- b. Education and Income could vary in importance for the classification tree because the amount of branch splits that proceed the variable within the tree. So having less splits after the variable in the tree could prove to be more important, since less factors would be included in a decision after deciding for education, as opposed to just being the root node, where more decisions still need to be made on if a particular person will or will not convert.

c. Securities is the least important.

6.

a. Accuracy: 98.2% of observations predicted correctly

b. Precision: 92.09%; This model accurately predicted 92.09% of customers who actually converted

c. It would be more important for the bank to focus on sensitivity, where they can focus their marketing on customers with favorable characteristics who are more likely to convert, as opposed to knowing who is less likely to convert, which is not necessarily as helpful for a campaign trying to convince customers to open asset accounts.

7. Customers 5, 7, and 10 the bank should target to convert to asset customers.