Decision Tree

About the data:

Let’s consider a Company dataset with around 10 variables and 400 records.

The attributes are as follows:

 Sales -- Unit sales (in thousands) at each location

 Competitor Price -- Price charged by competitor at each location

 Income -- Community income level (in thousands of dollars)

 Advertising -- Local advertising budget for company at each location (in thousands of dollars)

 Population -- Population size in region (in thousands)

 Price -- Price company charges for car seats at each site

 Shelf Location at stores -- A factor with levels Bad, Good and Medium indicating the quality of the shelving location for the car seats at each site

 Age -- Average age of the local population

 Education -- Education level at each location

 Urban -- A factor with levels No and Yes to indicate whether the store is in an urban or rural location

 US -- A factor with levels No and Yes to indicate whether the store is in the US or not

The company dataset looks like this:

Problem Statement:

A cloth manufacturing company is interested to know about the segment or attributes causes high sale.

Approach - A decision tree can be built with target variable Sale (we will first convert it in categorical variable) & all other variable will be independent in the analysis.

**Answer:**

**Below are the attributes which needs more focus to get high sales**

100.00% Price

100.00% ShelveLoc

75.33% Advertising

54.00% CompPrice

38.00% Age

8.33% US

8.00% Income