Hi Associate Director,

I have some thoughts regarding our meeting today and testing the price sensitivity hypothesis. Our process can be separated into four steps outlined below, which I will detail in this email.

* Step 1: Define the Problem and Hypothesis
* Step 2: Conduct Exploratory Research on the Market
* Step 3: Build and Test Prediction Model
* Step 4: Analyze Results and Determine Price Discount

In our meeting today we defined the problem to be the high customer churn rate, primarily in the SME segment. We determined that price sensitivity was the most likely cause of customers leaving. With price sensitivity being the chosen independent variable, we should begin by conducting exploratory research on price changes over time, as well as the average price increase rate that prompted a switch to a different energy provider. Price information on the competitors will also be helpful here and compared to our client’s rates for a better understanding of the market.

I think a logistics regression model is powerful in this scenario given the binary dependent variable. The ideal data frame to solve this problem would contain a column indicating whether a customer switched or not, price changes over time and dates of signing and leaving. This data frame should include pricing data on the competitors and binary variables indicating any perks that may have prompted a switch. Customer energy demand information is also important to have to balance the model for size and energy usage between companies.

Understanding the results of this model can determine the primary causes of leaving. If price is determined to not be as statistically significant as we thought, a 20% discount may be too high and can decrease profitability. The results of this model can help us set a proper rate and decrease the churn rate.

Best,

Daniel Villarreal