Good morning, Sir/Ma’am

We would need to model customer churn probabilities and determine the impact of prices on churn rates in order to test the hypothesis of whether customer price sensitivity drives churn. To be able to construct the following models, we would require the following data.

Data required:

1. Customer information, such as each customer's industry, historical electricity usage, date of joining the customer base, etc.

2. Churn data, which should show whether a customer has left the company.

3. Historical price data, which should show the rates the client charges each customer for gas and electricity at precise time intervals.

In order to build a binary classification model (such as Logistic Regression, Random Forest, or Gradient Boosted Machines, to name a few) once we have the data, we would need to engineer features based on the data that we have obtained. We would choose the best model based on the trade-off between the complexity, explanability, and accuracy of the models. We would be able to comprehend the direction and size of the impact of prices on churn rates, as well as the relative importance of prices compared to other factors, based on the model we chose. Additionally, the model would enable us to quantify the financial effects of the client's suggested discounting strategy.

Regards

Arnav Singh