Hi [LDS],

In order to test the hypothesis of whether churn is driven by the customer’s price sensitivity, we would need to model churn probabilities of customers and derive the effect of prices of churn rates, we would need the following data to be able to build the following models.

Data needed:

1. Customer Data- which should include characteristics of each client – industry segmentation, electricity/ utility consumption, join date, price charged(fixed/ variable), services paid for
2. Historical Price data- indicate the prices the client charges its customers for the utilities consumption
3. Churn Data- Indicating if the customer has churned

Analysis Required:

To test the validity of the hypothesis, we will need to analyse the following-

1. Correlation between customer market segmentation and churn
2. Demand patterns of the customers and identify the prospective customers likely to churn
3. Correlation between among other features as per the data available

Once we have the data, we would need to engineer the features based on the data we obtain and build a binary classification model (e.g. Logistic regression, Random Forest, Gradient Boosted machines etc.), picking the most appropriate model based on the trade off between complexity, the explanability, and the accuracy of the models. Based on the model picked, we would be able to understand the magnitude and direction of impact of the prices on churn rates, as well as the relative importance of prices compared to the other factors. Furthermore, the model would allow us to size the business impact of clients proposed discount strategy.

Regards,

[ABC]