

Respected Sir/Madam,

In order to test the hypothesis of whether churn is driven by the customers' price sensitivity, we would need to model churn customers, and test the impact of prices on churn rates.

We would need the following data to be able to build the models.

Data needed:

1. Customer data - which include info regarding clients, for example, id, date joined as customer, electricity consumption, etc.
2. Churn data
3. Historical price data - client charges to each customer for both electricity and gas at time intervals, etc

Once we have the data, the work plan would be:

1. We would need to define what price sensitivity is and calculate it
2. We would need to engineer features based on the data that we obtain, and build a binary classification model (e.g. Logistic Regression, Random Forest),
3. The best model would be picked based on the tradeoff between the complexity, the explainability, and the accuracy of the models.
4. We would subsequently dive deeper into why and how price changes impact churn.
5. The model would allow us to size the business impact of the client's proposed discounting strategy.

Regards,
Kalyan Budharam