In order to test hypothesis of whether or not churn is affected by customer’s price sensitivity.

We would need to model churn probabilities of customers and devise effect on churn rate.

Therefore, we would need the following data to be able to build the model.

Data needed:

1. Customer Data – which should include characteristics of each client, for example, industry, historical electricity consumption, date joined as customer etc.
2. Churn data – which should indicate if customer has churned
3. Historical price data – which should indicate the prices the client charges to each customer for both electricity and gas at granular time intervals

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

1. Define what price sensitivity is and calculate it.
2. Engineer features based on the data and build binary classification model.
3. We will compare each model to find the best model based on tradeoff between complexity, the explain ability, and the accuracy of the models.
4. We will dive deeper into why and how the price change impact churn.
5. The model will allow us to create business impact of client’s proposed discounted strategy.