Hi [AD],

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

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

1. Customer data - which should include characteristics of each client, for example, industry, historical electricity consumption, date joined as customer, customer demographics, business size etc.
2. Churn data - which should indicate if customer has churned & when they did so.
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. Data cleaning & data preparation to ensure that it is suitable for analysis.
3. Exploratory Data Analysis to gain insights into the relationship between customer churn and pricing. This could involve generating summary statistics, visualizations, and correlation analysis.
4. Feature engineering based on the data that we obtain, and build a binary classification model (e.g. Logistic Regression, Random Forest, Gradient Boosted Machines etc)
5. The best model would be picked based on the trade-off between the complexity, the explainability, and the accuracy of the models.
6. We would subsequently dive deeper into why and how price changes impact churn.
7. Last but not least, the model would allow us to size the business impact of the client’s proposed discounting strategy.

Regards,

[Your name]