

Hey [AD],

To test the hypothesis of whether the customers' price sensitivity drives churn, we would need to model the 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 following models.

Data needed:

1. Customer data - which should include characteristics of each client, for example, industry, historical electricity consumption, and date joined as a customer.
2. Churn data - which should indicate if the customer has churned
3. Historical price data – which should indicate the prices the client charges each customer for electricity and gas at different intervals. To find a correlation, study its impact on the churn at that point.

Once we have the data, we need to engineer features based on the data we acquire and build a binary classification model (e.g. Logistic Regression, Random Forest, Gradient Boosted Machines). Selection would be found on the tradeoff between the complexity, the explainability, and the accuracy of the models. Based on the model picked, we could understand the direction and magnitude of the impact of prices on churn rates and the relative importance of costs compared to other factors. Furthermore, the model would allow us to size the business impact of the client's proposed discounting strategy.

Regards,

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