Hi LDS,

I propose that we can test PowerCo’s hypothesis by modeling the possibility of the customer churn behaviors with the effect of price taking into consideration.

We will need the data listed below to build models:

1. The records of all customers’ transactions at PowerCo in the most recent 5 years.
2. The price sensitivity of all customers and price records of PowerCo in the most recent 5 years. If no data for the price sensitivity of all customers should provide the quantity demanded the electricity/gas by the customers.
3. The records of all discount events in the most recent 5 years.

After data engineering, we can build machine learning models such as logistic regression and random forest. Then we can pick the best model based on the accuracy, how well the models explain the data, and the complexity of the model. After we find the best model, we can test PowerCo’s hypothesis, learn how price influences the customer churn, and compare the influence of price with other factors. Lastly, we can probably address the feasibility of PowerCo’s discount strategy in solving the customer churn problem.

Cheers,

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