

Dear Associate Director,

I'm writing this email to sum up my analysis and approach for PowerCo's business problem. my analysis put emphasis on aspects required to test the hypothesis that customer churn is truly due to price sensitivity.

Before deciding on the steps needed to test the hypothesis, we need to acquire certain data to build models to test it, such as:

- Customer data on different periods before and after power-liberalization. Examples of such data are energy type, consumption, date joined, period as customer, churn, etc.
- Price data and trends before and after power-liberalization.

Once we obtain the above data, we can perform the following steps to conclude our hypothesis:

1. We assume and hypothesize (i.e., null hypothesis) that customer churn is due to price sensitivity.
2. We state our alternative hypothesis that customer churn is not due to price sensitivity.
3. Define what price sensitivity is.
4. Perform data analysis and exploration to understand relationships between data fields.
5. Perform feature engineering to perform further analysis and build our model.
6. based on the results, we reject the null hypothesis that customer churn is due to price sensitivity, or we fail to reject it.

At last, the churning model will help us understand whether a price discount for customers will prevent them from churning or not.

Kindest regards,
Hamed Alkaff