

Executive summary

- **Situation**
 - PowerCo is facing a problem with customer churn and they think that the customers are price sensitive.
- **Hypothesis Testing**
 - After rigorous testing, we observe that there is price and churn rate are so related as expected implying that there are other strong contributing factors.
- **Modelling**
 - After EDA, Data cleaning, and Feature Engineering, I applied Random Forest Model and achieved 90% accuracy and 85% precision.
- **Insights**
 - 90.3% of the customers have retained whereas 9.7% have left the company.
 - Consumption in the last 12 months, net margin, and forecasted meter bill have been the most important factors to determine the churn rate.
- **Recommendations**
 - Offer personalized plans based on consumption history. This could involve offering discounts to customers who have consistently low consumption, or offering plans with higher usage limits to customers who have consistently high consumption.
 - Review pricing structures to ensure that they are competitive. This could involve comparing PowerCo's prices to those of other energy providers or conducting market research to determine what customers are willing to pay.
 - Provide customers with accurate and timely bill estimates. This could involve using historical data to forecast future usage or offering customers the ability to track their usage in real-time.
 - Offer flexible payment options.