Hypothesis:

- Powerco has a problem with customer churn; they believe it is caused by customers' price sensitivities. One possible solution is to provide 20% off to customers who are most likely to start leaving.

Machine Learning Modeling:

- After Data cleaning, EDA and Feature engineering, I applied Random Forest Classifier. Random Forest Classifier model has been built to predict customers' churn probability, achieving an accuracy of 0.90 and Precision score of 0.91 on the test set.

Insights:

- Nearly 10% (9.7%) of the customers have churned and 90% of the customers have not churned.
- Yearly consumption, forecasted consumption and net margin are the 3 largest drivers
- Time seems to be an influential factor, especially the number of months they have been active, so is their tenure and the number of months since they updated their contract
- Our price sensitivity features are scattered around but are not the main driver for a customer
- Offer discount to only to high -value customers with high churn probability