EXECUTIVE SUMMARY

Situation

PowerCo is experiencing customer churn, and they assume that the churn is due to price sensitivity. One possible strategy is to provide a 20% off discount to customers with high chances of churning.

Machine Learning Modeling

After thorough data cleaning, exploratory data analysis, and feature engineering, a Random Forest Classifier was built in order to predict the probability of customer churn. The model scored an Accuracy of 0.90, and a Precision of 0.86.

Insights

- Approximately 10% of clients have churned and 90% have not.
- Net margin on both power and energy subscription and consumption is a key driver for churn.
- Forecasted bill of meter rental for the next 2 months is also a key factor for customer churn.
- The number of months a client has been active, and their association period with PowerCo; both seem to have an influence on churn.