

Executive Summary

Situation:

- Powerco experiences high customer attrition, which they attribute to their clients' pricing sensitivity. Giving 20% off to clients who are most likely to start leaving is one potential answer.

Machine Learning Modeling:

- I implemented the Random Forest Classifier after cleaning the data, doing EDA, and engineering features. The Random Forest Classifier model, which was created to forecast the likelihood that consumers will leave, has a precision score of 0.91 and an accuracy of 0.90 on the test set.

Insights:

- 90% of customers have remained loyal, whereas 9.7% of total customers have left.
- One of the main causes of churn is the net margin on 12-month power subscriptions and consumption.
- Another important factor is the anticipated 2-month meter leasing bill.
- Time appears to have an impact, particularly the duration of their employment, their tenure, and the number of months since they changed their contract.