Executive summary

prepared by: Adeniyi Fajemisin

Situation

- PowerCo, a major utility, faces SME customer churn. There's a hypothesis that price changes drive churn. The team aims to test this by developing a predictive model to identify price-sensitive customers. A proposed solution involves offering a 20% discount to at-risk customers to reduce churn.

Machine Learning Modelling

- After Data Cleaning, EDA and feature engineering, I applied Random Forest Classifier. The model was built to predict customer churn probability. The model had an accuracy of 90%.

Insights

- 9.7% of the customers have churned
- net and gross margin on power subscription are top factors influencing customer churn
- Long term customers are the least likely to churn.

Recommendation:

- Offering of the proposed 20% discount to at-risk customers will help reduce the churn rate while increasing revenue with a predicted 7% increase.