Dear AD,

I hope this email finds you well. The PowerCo is experiencing significant customer churn and to answer this a 20% discount to customers is proposed. To test the hypothesis and take on this situation I would implement the following steps:

1. Data Collection: -

Customer data comprising of characteristics of customers like category (corporate, SME or residential), consumption history, etc.

Churn data of the customers

The pricing data i.e., the price customers are charged for the services.

1. Data Preprocessing and Feature Engineering: -

Cleaning the data by handling missing values and outliers.

Creating relevant features on which we will proceed our analysis.

1. Exploratory Data Analysis: -

Conduct an exploratory analysis to identify trends, patterns, and relationships between customer features and churn behaviour.

1. Creating ML model and evaluating it: -

Use the processed data to train a binary classification model (e.g., logistic regression, random forest, gradient boosting, etc.) to predict whether a customer will churn or not. We will use cross-validation to tune the model and select the one with the best performance.

Based on the model picked, we would be able to understand the impact of prices on churn rates, as well as the weight of prices compared to other factors which will help how much the discount will affect the customer churn. The model can be implemented to flag customers at a risk of churn.

Best Regards

Gaurav Anand