

Customer churn Prediction for PowerCo

Abstract:

PowerCo is a major gas and electricity utility company which is facing a major problem of customer churn. The company believes that the increase in the customer churn is because of the power liberation of energy market in Europe.

The liberalization of the energy market was a very important step for the energy industry as it has influenced the economy of different countries, but most of all it had a significant impact on both industrial and domestic consumers. Over the last 25 years more and more developed and emerging economies started to streamline the process of privatization, restructuring, reorganization and liberalization in this strategic sector, initially monopolized by the government which took action through price regulation. (1)

The liberalization has increased the competition and made the prices flexible for the customers. So, the client's assumption is that the 20% discount in the price may reduce the churn.

Client's hypothesis: The churn of the customer is determined by the sensitivity of the price.

Hypothesis testing:

Null Hypothesis: There is no statistical significance between the Price and customer churn.

Alternative Hypothesis: There is a statistical significance between the Price and customer churn.

Data Needed:

We need data about the customer's energy consumption details per day or per week. We may also need the demographic details of the customer, so that we can identify if the demographics has an impact on churn or not.

Research Methodology:

We will be using the classification algorithms like Logistic Regression or Decision Tree to predict the customer churn.