## Task 2

Summary of PowerCo's Data EDA

## **Key Findings**

## Based on the provided data, some interesting findings had been found:

- Customers churned increased gradually to 9.71% & retained customer is occupied 90.28%
- Customers churn takes place in end of 2008 to 2014
- Customers who churned on average have high consumptions of electricity & gas over the last 12 months.
- To understand whether price sensitivity is the largest driver of customer churn rate.
- Customers who have higher churn rate are customers who stayed with PowerCo for 3-7 years.
- Churned customers that have contract with PowerCo have lower churn percentages compared to customers who have no fixed contract.
- Most of the churned customers subscribed to 1 of the PowerCo active product/service only.
- Estimated lifetime value of each customer is: 1946.1702647266832, there are 97.2% of our customers are high-value lifetime value customers while 2.8% remain unknown.
- The hypothesis of customer churned due to price changes is not true; the relationship between the two variables being studied have low correlation between customers churn and the prices.

## Suggestions:

- Customer feedback data, customer service data, billing and payment data should the client provide me to identify the factors of customer churning.
- For open source datasets, The UCI Machine Learning Repository might be useful in this case to help with training the model(machine learning) and including several related to electricity usage and pricing.