Executive summary

Situation

- Powerco is experiencing customer churn, they assume that the churn is driven by the customer price sensitivities, one possible strategy is to offer customers who have high probability to churn a 20% discount

Executive summary

Machine Learning Modeling

- After the data cleaning, EDA and feature engineering, compared several classification model such as Logistic Regression, Random Forest , SVC.

- Finally a XGBoost model has been built to predict customers' churn probability, achieving an accuracy 0f 0.92 and AUC score of 0.72 on test set

Executive summary

Insight 1

- Net Margin on Power Subscription is the most influencing factor to determine customer's churn

- To reduce number of customer churn, some strategies can be applied to intervene net margin:

- A discount can be effective to compete in the tight market

- Promotion can be massively conducted on two influencing region: LXI and KAM

Executive summary

Insight 2

- A discount at 30% will generate optimum revenue and amount of customers at the same time

- Revenue is important to keep the company financially stable

- Amount of customers is important to keep the sustainability of the business in the long term

Executive summary

Insight 3

- We can conduct a study a year after this plan is conducted to:

- understand how discount affect churn. For that case, we need to examine competitor's price and compare to ours

- Analyze performance of key variables (region, consumption, net margin and its interaction each other) to improve our model