Executive summary

Churn Prediction Performance

- The model performed admirably at predicting non-churning customers, with an accuracy of approximately 90%. However, it struggled to correctly identify churning customers, catching only about 5% of them. This suggests that the current feature set may not be discriminative enough to distinguish between churners and non-churners effectively.

- Supporting Data: True positives (accurately predicted churners): 18 out of 366 (4.92%). False negatives (churners mislabeled as non-churners): 348 out of 366 (95.08%). Accuracy score: 90.36%.

Feature Importance

- The top features driving churn in this model are net margin, consumption over 12 months, and margin on power subscription. This indicates that financial aspects and consumption behavior hold significant weight in influencing churn.
- Supporting Data: The feature importance chart showed 'net_margin' and 'cons_12m' at the top, implying they have the highest importance in predicting churn.

Price Sensitivity

- Initial hypotheses suggested customer churn might be driven by price sensitivity. However, our findings show that price sensitivity features are not the primary drivers of churn, though they do contribute weakly.

- Supporting Data: Price sensitivity features were scattered throughout the feature importance chart, indicating a weaker correlation to customer churn compared to other features like net margin and consumption over 12 months.