# Telco Customer Churn Prediction Report

## Model Performance

-----------------

The Logistic Regression model achieved around 75–80% accuracy and an AUC score of ~0.82–0.85.

This indicates strong predictive ability. Recall values suggest that the model captured a good proportion of churners,

although some customers who actually churned were still missed. Overall, the model provides a reliable baseline

for churn prediction.

## Feature Importance

------------------

The most influential features in predicting churn were:

* Contract type: Month-to-month customers are more likely to churn.
* Tenure: Longer-tenure customers are less likely to churn.
* Monthly charges / Total charges: Higher charges increase churn risk.
* Internet service add-ons (e.g., Online Security, Tech Support): Lack of add-ons correlates with higher churn.

## Recommendations for Improving Retention

---------------------------------------

* Focus retention campaigns on month-to-month contract customers by offering discounts or promotions for longer-term contracts.
* Provide bundled services or add-ons to increase customer stickiness.
* Monitor high-charge customers closely and offer loyalty rewards to reduce churn risk.
* Further improvements can be made by testing tree-based models (Random Forest, XGBoost) and applying threshold tuning

to reduce false negatives (missed churners).