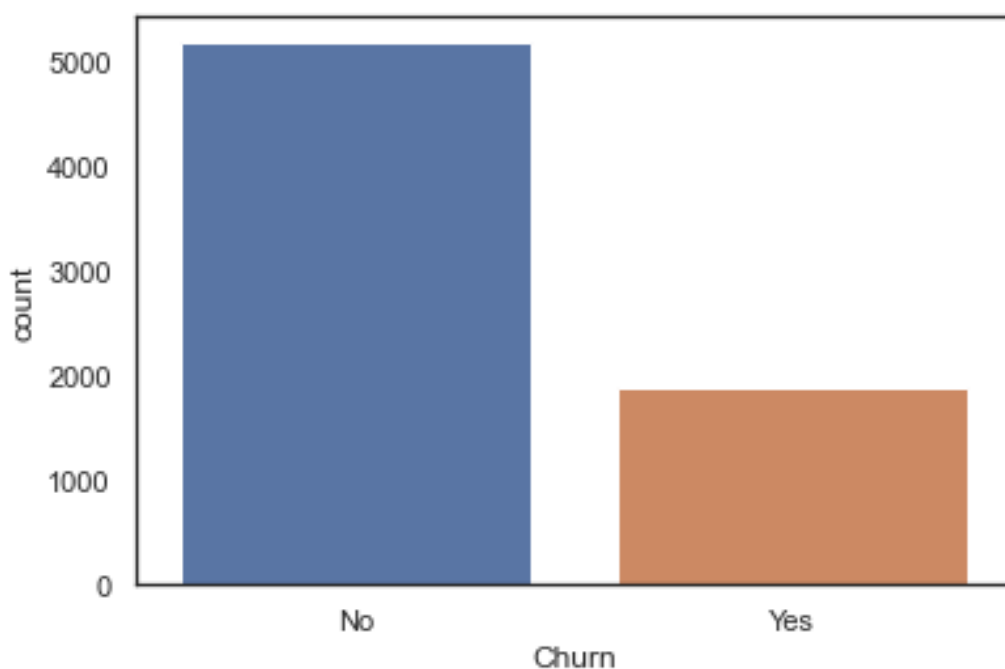


A picture is worth a thousand words

The following pictures present the whole story of Customer Churn Prediction for management to take action, before it happens

It is more expensive to get new customers than keeping the existing customers

Customer Churn 26.5%



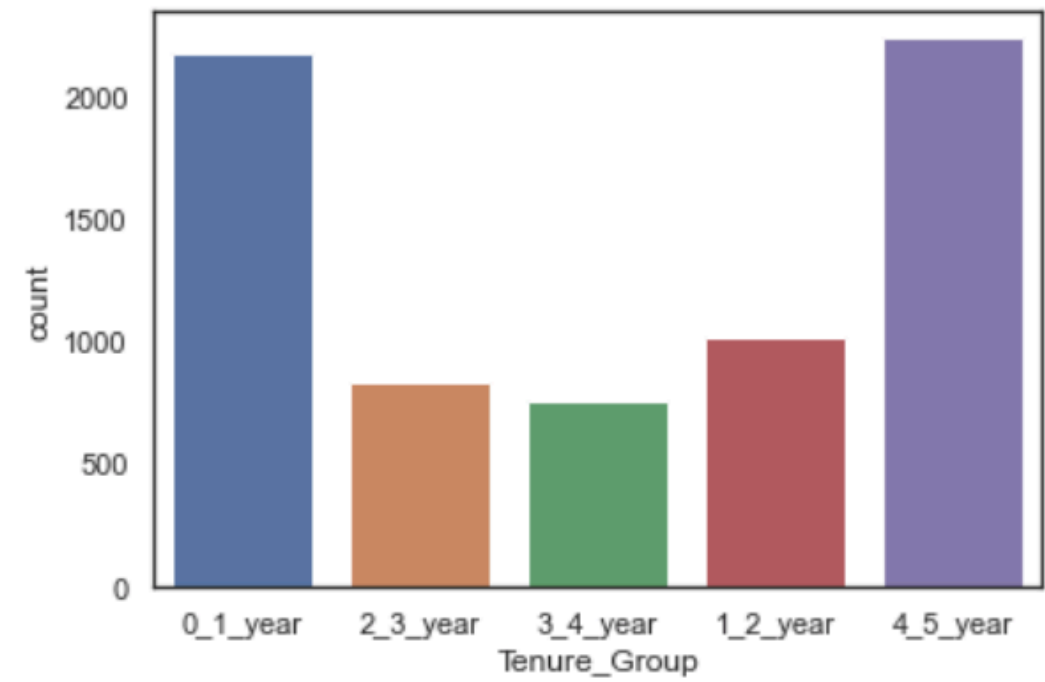
The management can see the customers in the **initial period** of their contract most likely to leave

so they can give discounts , possible perks, good customer and tech support in the initial weeks and beyond to make them more loyal customer base.

The churn for even the most loyal customers after their 4-5 year contract , is high.

The management can offer high speed/ fiber optic internet compared to their competitors

and extend telephone services beyond US, like Mexico , Canada and Virgin Islands



AdaBoost Modeling gave the best prediction

Summary

	precision	recall	f1-score	AUC
Decision Tree	0.73	0.73	0.73	0.6621
Logistic Regression	0.79	0.80	0.79	0.7090
SVM	0.78	0.79	0.77	0.6677
Random Forest	0.76	0.78	0.76	0.6649
AdaBoost	0.91	0.72	0.80	0.7572