

Telecom Customer Churn Analysis

Predictive Analysis to Retain
Customers

May-05-2018

Overview

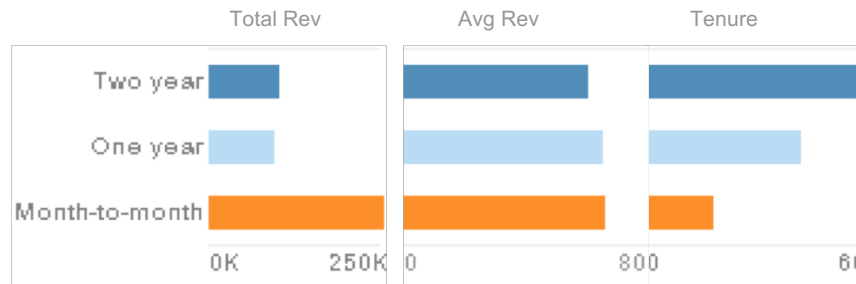
7043

Total

1869

Churns

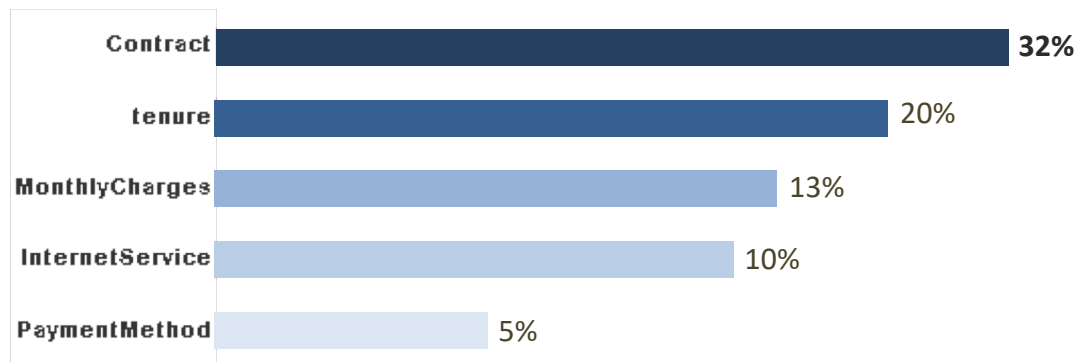
Customer Profile by Contract



Key Take Aways:

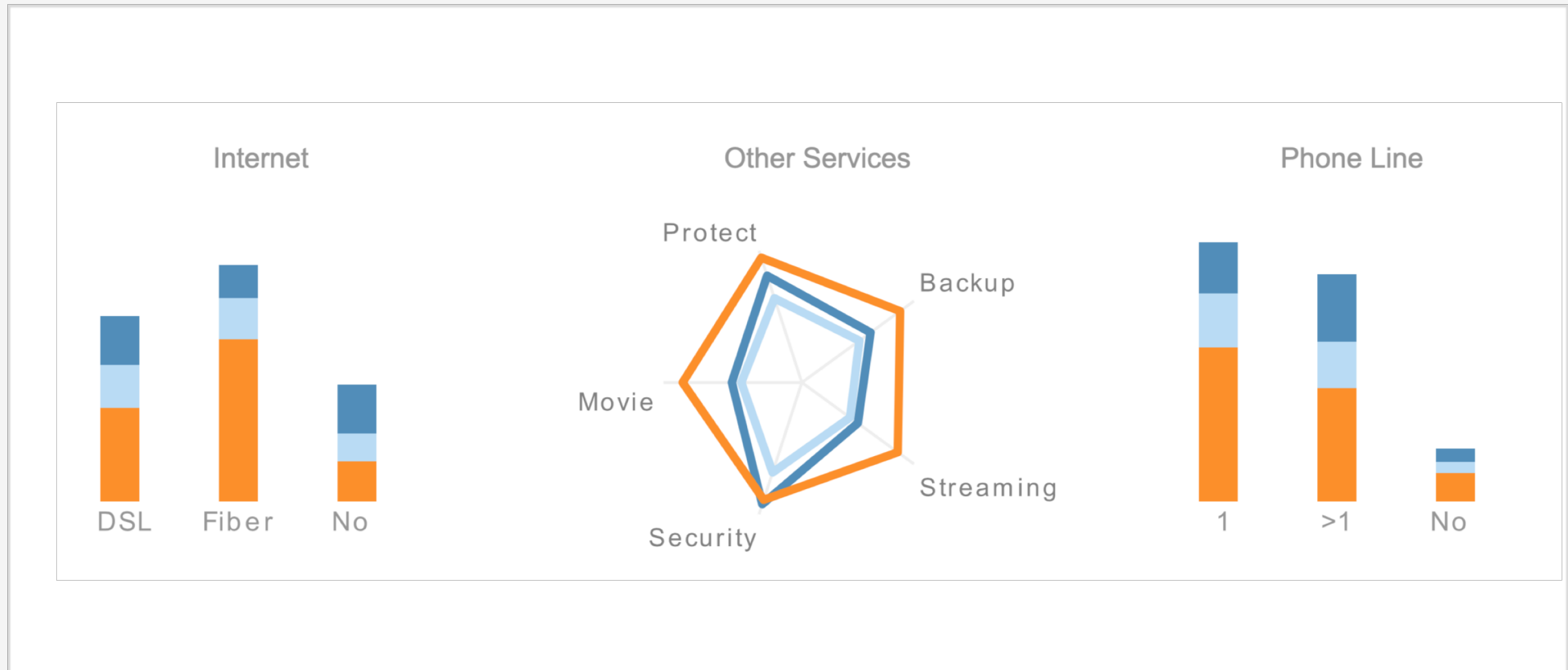
1. Churns 26.5% for the month of April.
2. Month-to-Month plan customers average revenue/income is higher than other plans.

Top 5 Churn Factors Determined by Machine



Factor Contract is determined to be a key factor for Churn.

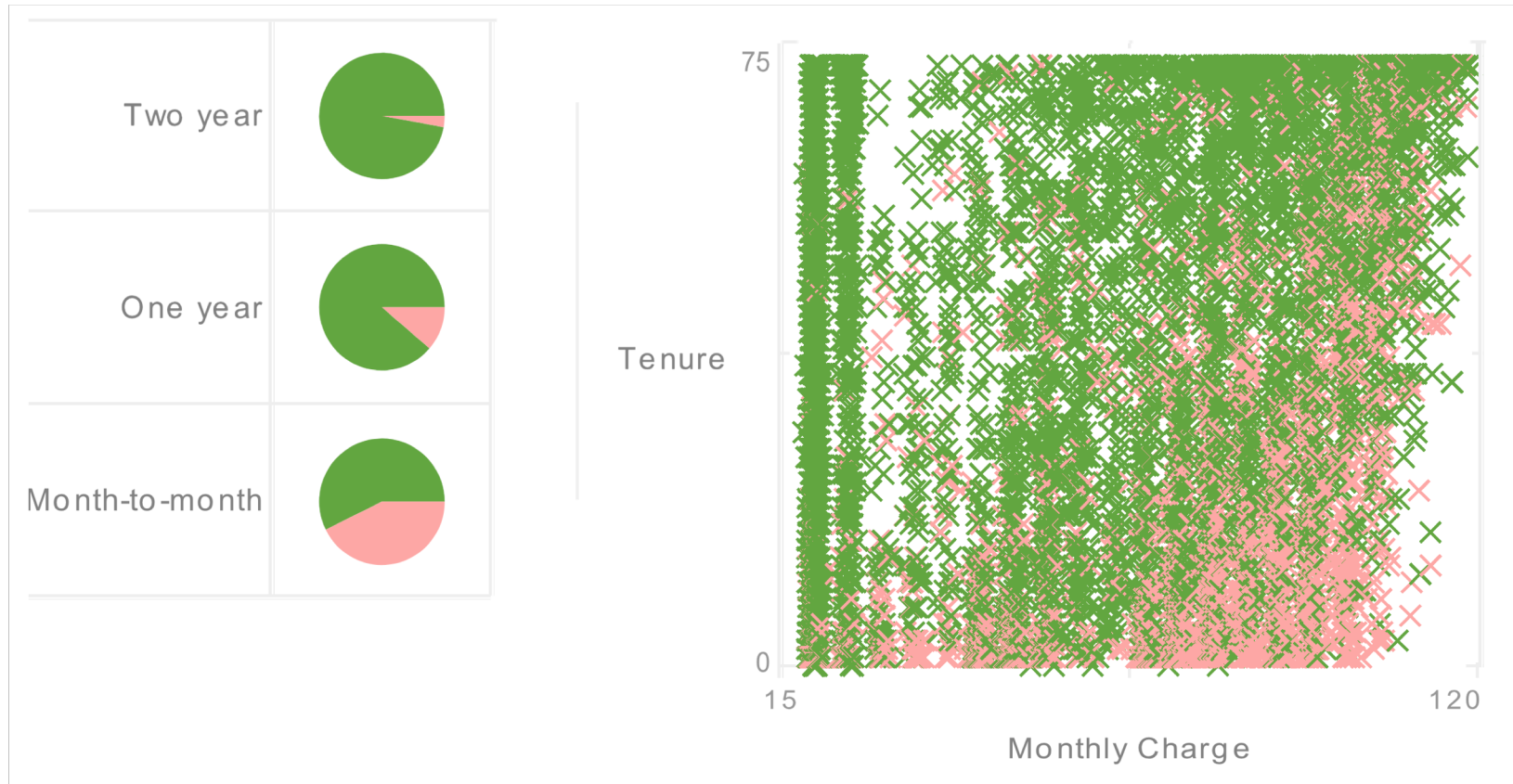
Service Purchase



Key Take Away:

1. Month-to-Month contract fiber optic internet service has highest no. of Customers.
2. Customer Month –to– Month have subscribed to Extra services equally, however, One Year & Two Year Contract Customer prefer Security more.
3. Irrespective of the Contract highest number of customer have subscribed to only on one Phone Line Service.

Churn Distribution by Contract

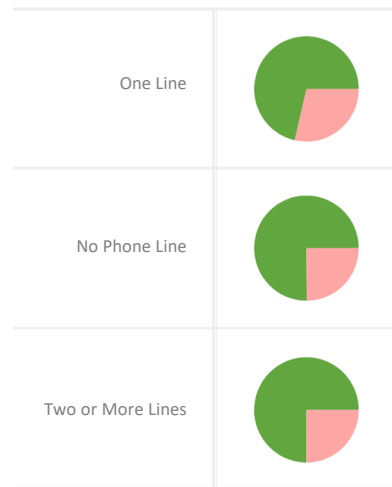


Its understood that the highest number of churns are customers who

1. Pay monthly charge of \$80 - \$110 for a lesser tenure
2. Have a Month -to- Month contract

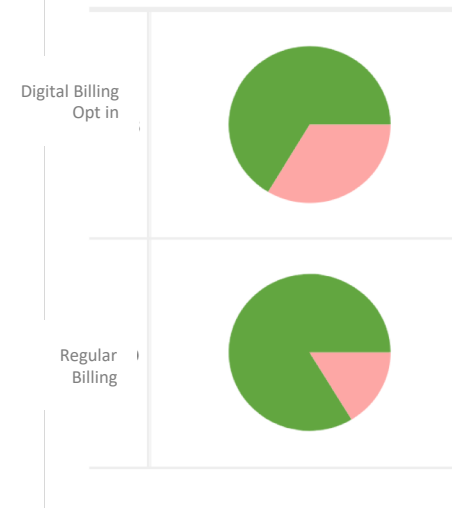
Churn Factors

Churn by Phone Line Subscriptions



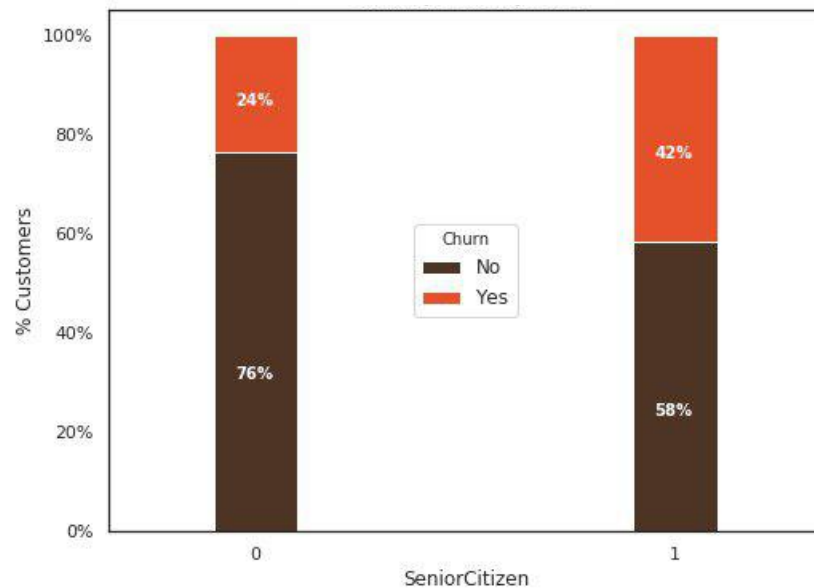
Churn % is more from customers who have opted for one phone line service.

Churn by Paperless Billing



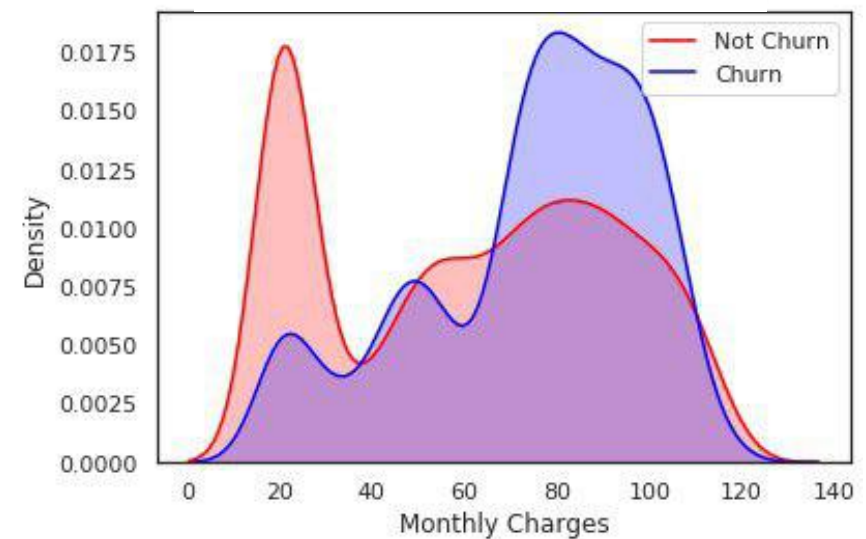
Churn % is more from customers who have opted for Paperless billing

Churn – Senior Citizen vs General



Senior Citizens have almost double the churn rate than General population.

Churn – Monthly Tariff



It seems that there is higher churn when the Monthly charges are higher.

Summary

We can see that some variables have a negative relation to our predicted variable (Churn), while some have positive relation. Negative relation means that likeliness of churn decreases with that variable.

Let us summarize some of the interesting features below:

- Subscribed to a 2 month contract reduces chances of churn. 2 month contract along with tenure have the most negative relation with Churn as predicted by logistic regressions.
- Having DSL internet service also reduces the probability of Churn
- Monthly contracts, fibre optic internet services and seniority can lead to higher churn rates.
- This is interesting because although fibre optic services are faster, customers are likely to churn because of it.

Recommendation:

- Explore more to better understand why Monthly contracts, Fibre Optics and Senior Citizen have a higher churn %.