Prediction and Prevention of Customer Churn
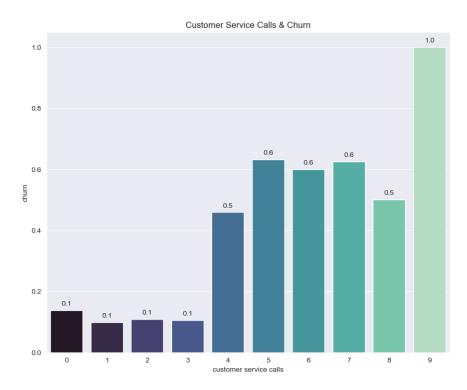
SYRIATEL COMMUNICATIONS

Key Areas

- How much people are using their plan?

- Do customer service calls serve as a sign of unhappiness or potential churn.?

- Churn variations in different states.

- Cost benefit analysis and confusion matrix.

Customer Service calls and potential churn

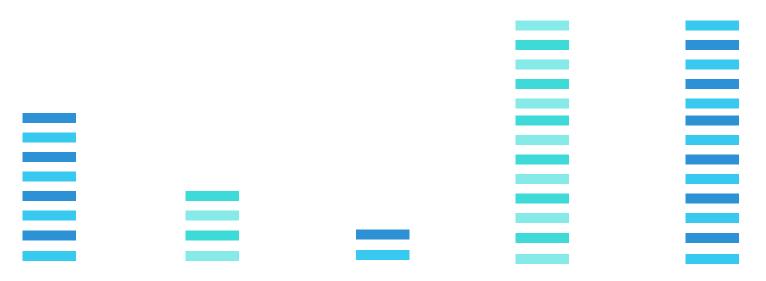▶ Notable increase after three customer service calls.

Recommendations

- Review customer service system and how reported challenges are handled
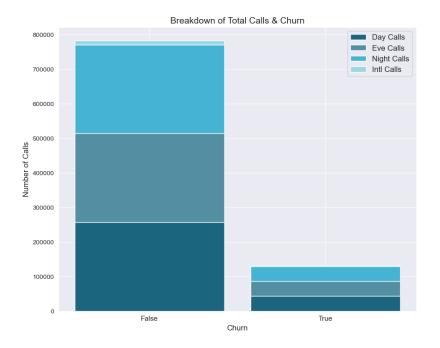- Isssue major incentives to those with more than 3 customer service calls

Usage on plans

- Observe that international rate is the same regardless of having an international plan.

Day Rate	Eve Rate	Night Rate	Intl Rate (Plan)	Intl Rate (No Plan)
$0.17 /min	$0.08 /min	$0.04 /min	$0.27 /min	$0.27 /min

Calls made by customers who churn
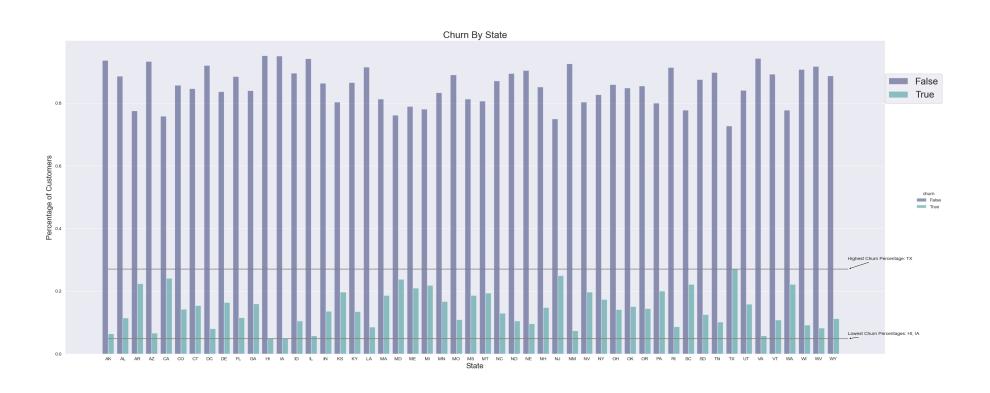
▶ No difference between churn and percentage of calls that are made.

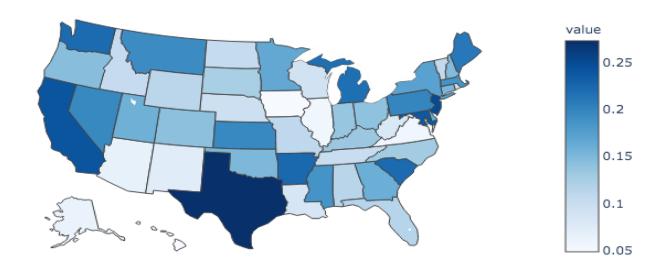
Breakdown of Total Calls & Churn

Recommendations

- Changing rates for international calls for those with international plans.

Churn based on location

► Highest churn rate coud be as a result of stiff competition.

States with Highest Churn Percentage

Recommendations

- Take a look into cell signal and see whether any weaknesses are contributing to the higher churn.

- Examine competitors and see their offers and selling points.

Analysis of Confusion Matrix

False negative True positive

▶ Labeled them as FN and TP .

▶ Labeled as 'going to churn' and they did churn.

True negative False Positive

- Labeled as TN and FP
- Labeled as 'going to churn' and they did not churn.

False Positive

Offer a fifty percent discount tp existing customers with a monthly bill of 50$.

False negative

Pay a customer acquisition cost of 50$ and lose 50$ month payment.

▶ **True Positive**

Offer a 50% discount to customer with monthly bill of 50$.

True Negative

0$ we will not have to offer discount

Validation Set Confusion Matrix

Validation Set Cost Benefit Analysis ($)

Expected Value: $0.37 per customer per month

Conclusion

- The key areas to focus on are:
- 1. International plan and rates.
- 2. Competition from companies
- 3.Customer service.