SYRIA TEL CUSTOMER CHURN

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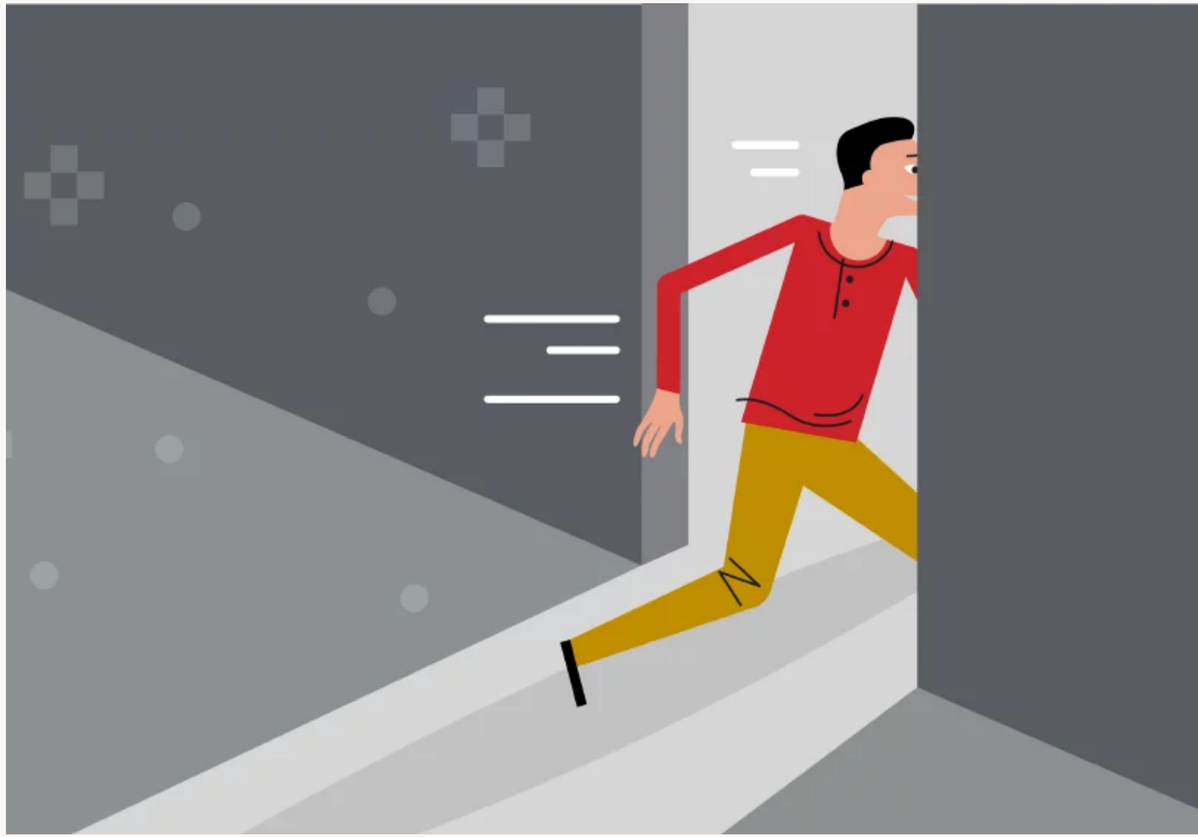
Business Overview

This project aimed at investigating the churn rates to impact decisions on products being offered to the clients and more so decisions on client-based products. Churn rates indicate the growth potential and also through them we're able to see the amount of revenue lost due to the unsubscriptions.

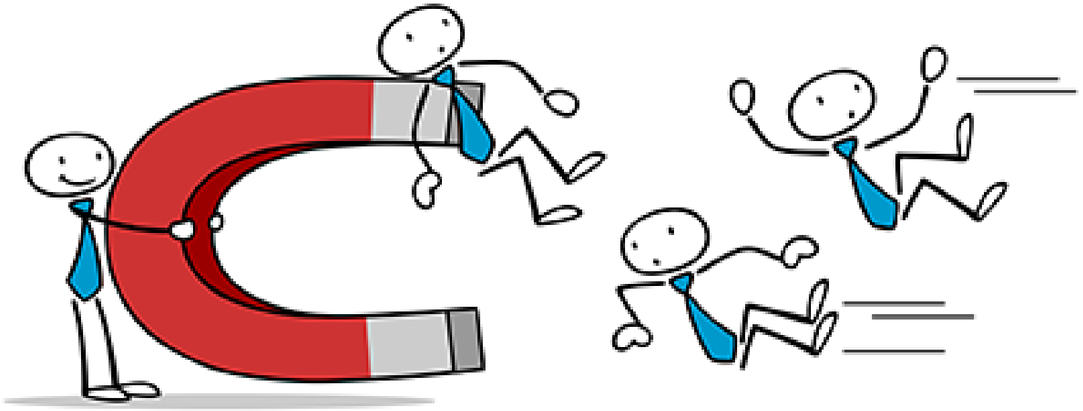
According to Forbes, it takes a lot more money (up to five times more) to get new customers than to keep the ones you already have. Churn tells us how many existing customers are leaving the business, so lowering churn will have a big positive impact on our revenue streams.



Business Problem

The company plans to increase its revenues through customer retention as we've seen it's cheaper to retain a customer you already have.

Learning clients' patterns and managing to make predictions on customers who are likely to churn will enable further engagements to be done through tailoring the products enabling the company to retain the client and try to maximize its revenues.



Objectives

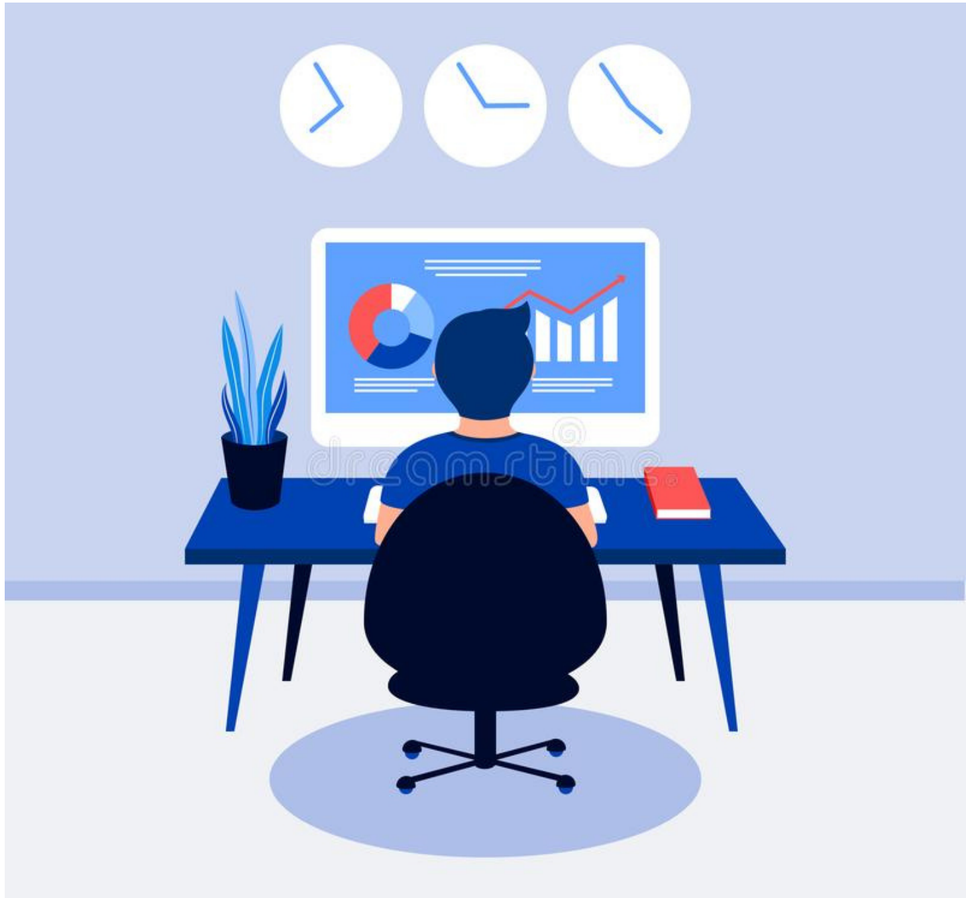
The main objective of this project is to predict churn.

The impact of churn rate is clear and predicting churn would be a good way to create proactive marketing campaigns targeted to customers about to churn and also understand customer pain points which would help us improve our products.

Data Sourcing/Understanding

The data used was sourced from Kaggle and later went through cleaning and preparation through Python.

The dataset was great as it had exhaustive features about customers' subscriptions and also their average use in terms of spending and time.

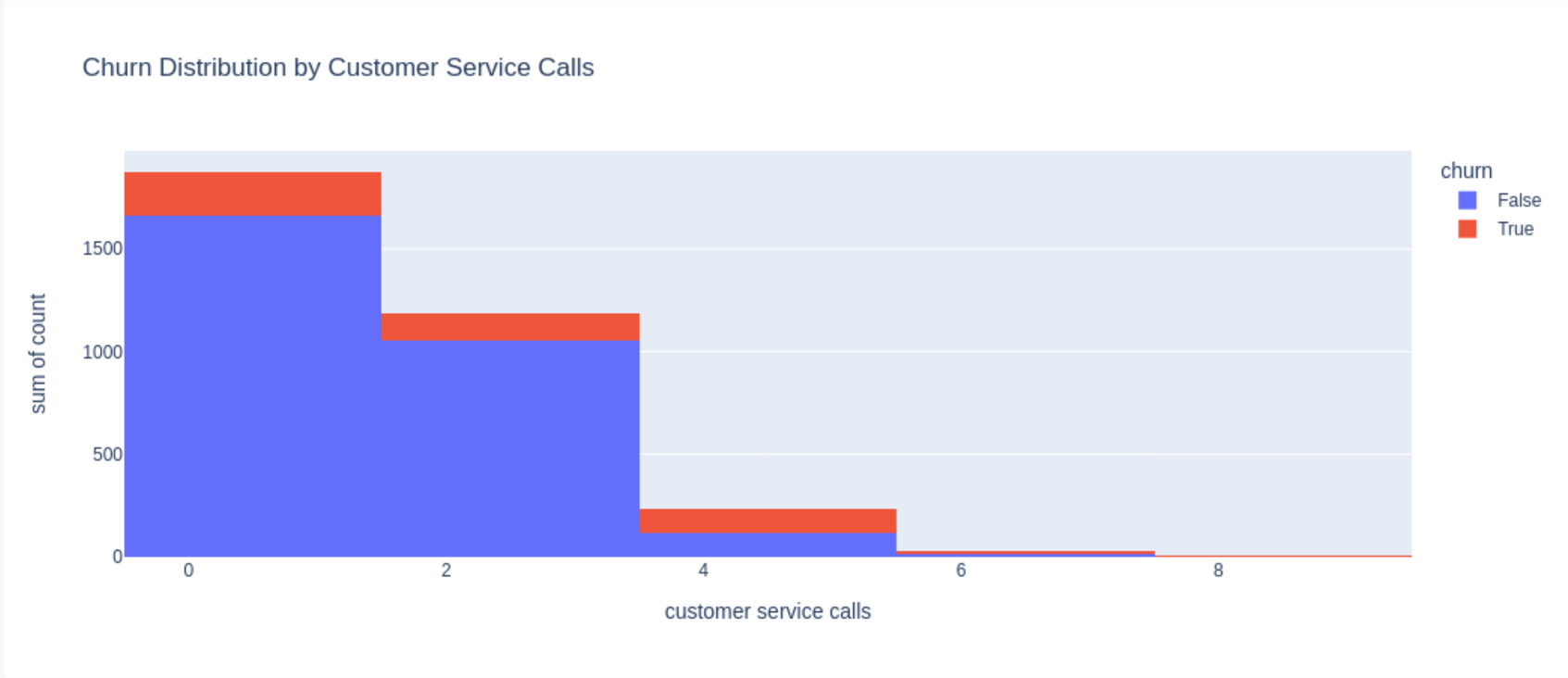


Exploratory Data Analysis

The greater percentage of customers who made more than four customer service calls churned.

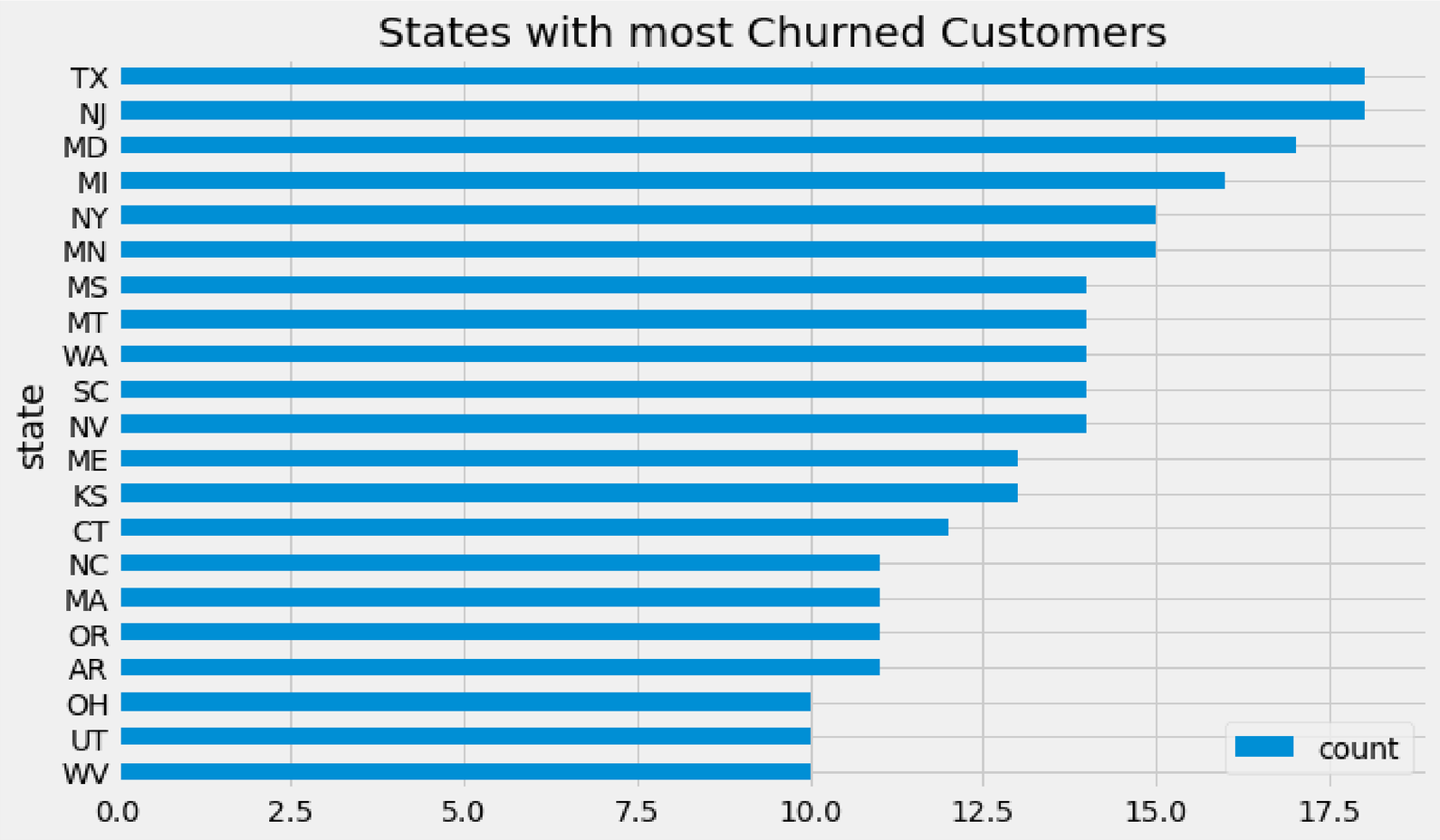
But also we have a huge number of people who churned even without making a call or just made a call

What could be the problem?



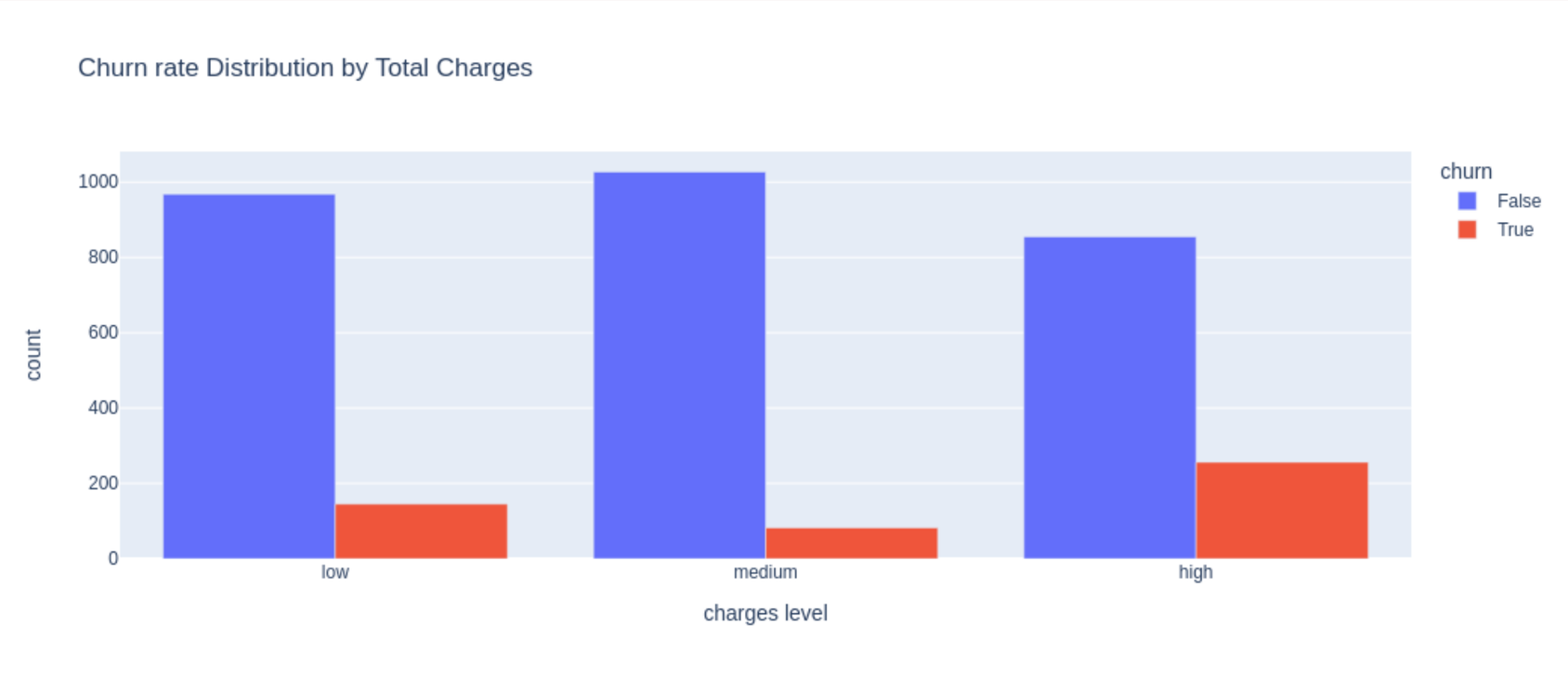
Exploratory Data Analysis

Texas and New Jersey are the states leading with the most churned customers.



Exploratory Data Analysis

With high charges most customers tend to churn



Modelling

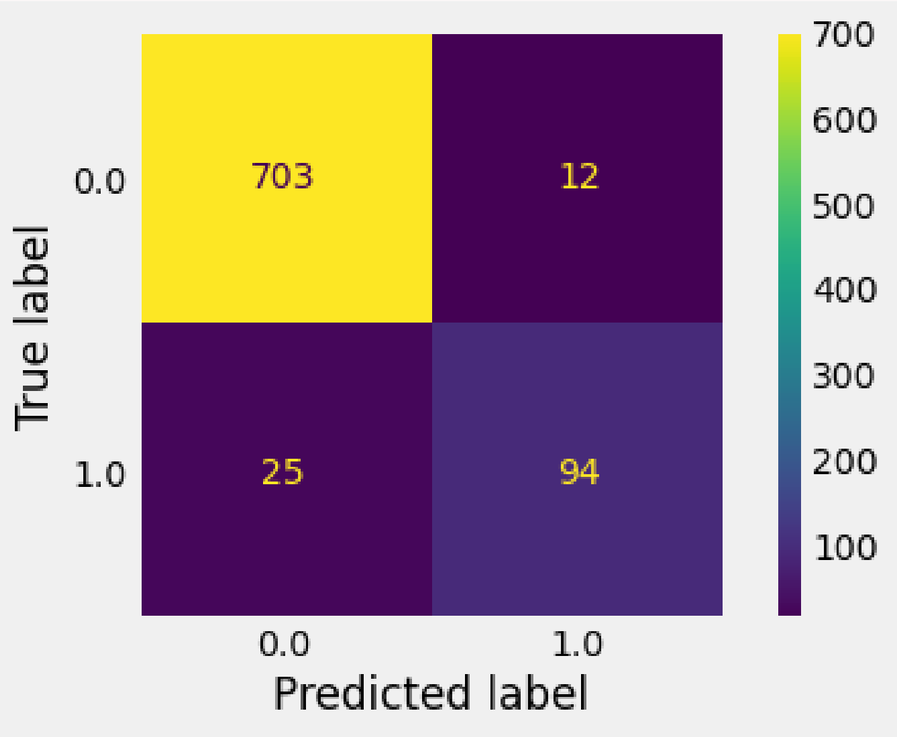
Through various customers' characteristics, we developed various models which were able to predict whether a customer is likely to churn or not.

Model Evaluation

Concluded to one model which seemed better than the others.

The model is 96% accurate and is able to identify 79% of all the customers likely to churn

It's also 89% precise in that there is an 89% chance that the customer predicted to churn is actually likely to churn.



Limitations

The model is not able to identify 1 in every 5 customers likely to churn.

The model is wrong in 1 out of 9 people predicting they are likely to churn whereas they're not.

Recommendations

I recommend the model being included in production predicting churn as we've seen it's 96% accurate and is able to identify 79% of customers likely to churn.

The model is wrong 1 in 9 times and so we should be very keen on the communications sent to avoid a message like "we're sorry to see you go" to a customer not intending to churn.

Next Steps

There is still room for improvement and so more research on customers' features and characteristics will be vital in improving the model.

Thank you!

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