Capstone Project Milestone Report

The Problem

Customer Churn describes a measure of the number of customers who leave or stop a service within a defined period. In this particular study, Customer Churn is limited to the rate at which customers leave a service provider in the Telecom Industry.

With increasing competition and customers largely on prepaid subscriptions, Customer Churn is a widely prevalent problem in the telecom industry. Understanding this Churn can provide indicators of customer dissatisfaction, gaps in existing service models or offers by competition, etc while also highlighting services and offers that keep customers subscribed.
Using these indicators to develop better retention strategies and service can minimize churn, and I will aim to highlight these through my analysis.

The Data

The data has 3334 observations and 21 variables.
Each row is or has been a customer.
The columns represent different variables for the customer – state, area code, voice mail plans, customer service calls, night minutes, international minutes and so on.

Important Variables

Customer Account Information – The data lists important variables such as **customer tenure** and **customer location**

The data lists two services that each customer has signed up for – **voice mail plans** and **international plans**

Customer Service Calls and **Churn Status** are also important to my analysis.

Limitations

The churn data does not specify timelines, and so I cannot say which customers left recently; or how many calls, etc. were made within a time period.

There is no demographic information, and so customer segmentation is limited.

Data is only provided for two services, and the addition of data plans, family packages, etc. may have been helpful.

Approach

My thoughts are to conduct Exploratory Data Analysis on the following:

Look for patterns after Customer segmentation based on the churn column. It is possible segmenting customers by state will show up greater churn in specific areas.

Look at Customer Churn by tenure. Hypothesis is that customers on shorter tenures tend to leave.

Look at a combination of factors and identify key drivers that influence churn – subscribed services, day/night minutes, customer service, etc.