Telecom Customer Churn Analysis

Total Subscribers



Subscribers Churned



1869

Churn Rate



27%

Subscribers Retained



5174

Total Revenue



\$21,371,132

Revenue Lost



\$3,684,460

Rvenue Lost %



Revenue Lost



\$17,686,672

Top 9 Areas Of Improvements for Churning

Attitude of service provider

Attitude of support person

Competitor had better devices

Competitor made better offer

Competitor offered higher download speeds

Competitor offered more data

Don't know

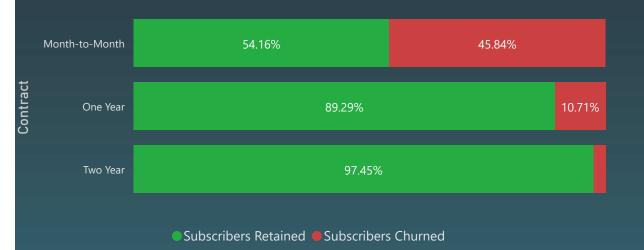
Price too high

Product dissatisfaction

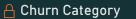
Subscribers Churned 1869

Customer Churn Vs Retention

Monthly subscribers tend to churn unlike yearly and bi-annual subscribers



Drivers Behind Churning



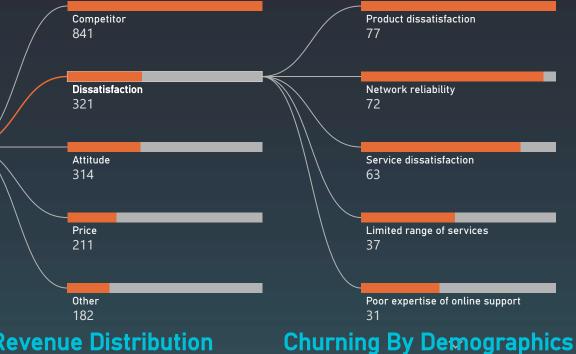
Churn Reason

X





Please click on the churn category bars to explore the reasons



Revenue Distribution



Youths 8.45% — Seniors 25.47%

Revenue Lost Revenue Retained

└─ Adults 66.08%

Telecom Customers Churn Analysis

In this project, I analyze sample dataset provided by IBM regarding customer churn in a Telecom organization in California. The raw dataset is available at kaggle.

The Business problems for this report are defined as-:

- 1) Analyze the rate at which customer leave the company.
- 2) Investigate the impact of the customer churn in the industry as a whole.
- 3) Identify which customers are leaving.
- 4) Identify the root cause of customer churning.
- 5) Which group of customers have the highest churn rate?

I used Power-Bi to provide solutions and insights to business problems. The dataset contains 7,044 rows and 37 columns including all the details about customer demographics, location, services, and current status. For data cleaning:

- 1. I replace the blank values with null, check for duplicates but none were found and removed the excess columns which are not required for this particular report.
- 2. 2. I calculated the number of subscribers retained and churned which turned out to be 5174 & 1869 respectively.
- 3. I calculated churn rate metrix which comes out to be 27% as displayed in the card. This answers the first business problem.
- 4. Since 27% of the customers churned, it is worth investigating the cause.
- 5. I investigated the relationship between subscribers churning and their subscription type. Out of 1869 subscribers churned, 1655 (45.84%) had month-to-month contract, 166(10.71%) had one year contract & 48(2.55%) had two years of contract. In contrast, out of 5174 subscribers retained, 1955 (54.16%) had month-to-month contract, 1384(89.29%) had one year contract & 1835(97.45%) had two years of contract. Therefore, subscribers with monthly contract subscriptions tend to churn more.
- 6. I created a pie chart for Revenue distribution explaining total revenue lost and retained depending upon the subscribers churned. To understand, how the churn affected the business; it is important to find out how much ws lost in revenue.
- 7. I made a visualization to support my claim Monthly subscribers tend to churn more.
- 8. I created a decomposition tree to categorize the subscribers churning by churn category defining the reasons for the same. Moreover the list for the Top areas of improvements need to be considered in order to improve the churn rate.

RECOMMENDATIONS-:

- a) Introduce discounts and retention deals on yearly and bi-annual subscription to reduce the churn.
- b) Encourage positive attitude of support persons, offer higher download speed than competitors.
- c) Improve network reliability, attitude of the service providers, product satisfaction.
- d) Introduce market competitive offers and devices to subscribers.