

Customer Churn Analysis with Excel Project Report

Background Information

For subscription-based businesses, reducing customer churn is a top priority. In this case study, we investigate a dataset from an example telecom company *Databel* and analyze their churn rates. Analysing churn doesn't just mean knowing the churn rate: it's also about figuring out why customers are churning at the rate they are and how to reduce churn.

Churn is defined as the total number of customers lost over the total customers. This definition varies by industry. For example in e-commerce a churmer could be defined as someone who hasn't made a purchase.

Using Excel's powerful data analysis tools, we've uncovered key insights to help reduce churn rates and improve customer retention strategies.

Problem Statement

- To uncover insights so that we can analyse what are major contributors to customers churning.
- To recommend strategies that the telecom company can implement in order to reduce churning

Data Description and Metrics

- Databel fictitious Telekom Provider dataset.
- One big table containing 29 columns
- One row per customer

All the metrics that are within our dataset can be found in [‘Metadata Sheet - Customer Churn’](#)

Approach Framework

The following approach was used for the entire task.

1. Data Check (which includes Data Preparation and Cleaning)
2. Exploratory Data Analysis
3. Analyse and Visualize data
4. Dashboarding
5. Communicate Insights

Data Preparation

- ✓ Performed Data Cleaning by checking for any missing values and duplicate values.

Data Analysis

Methodologies

Prior to performing analysis on the given data we used the following methods to make our data easier to understand and analyse

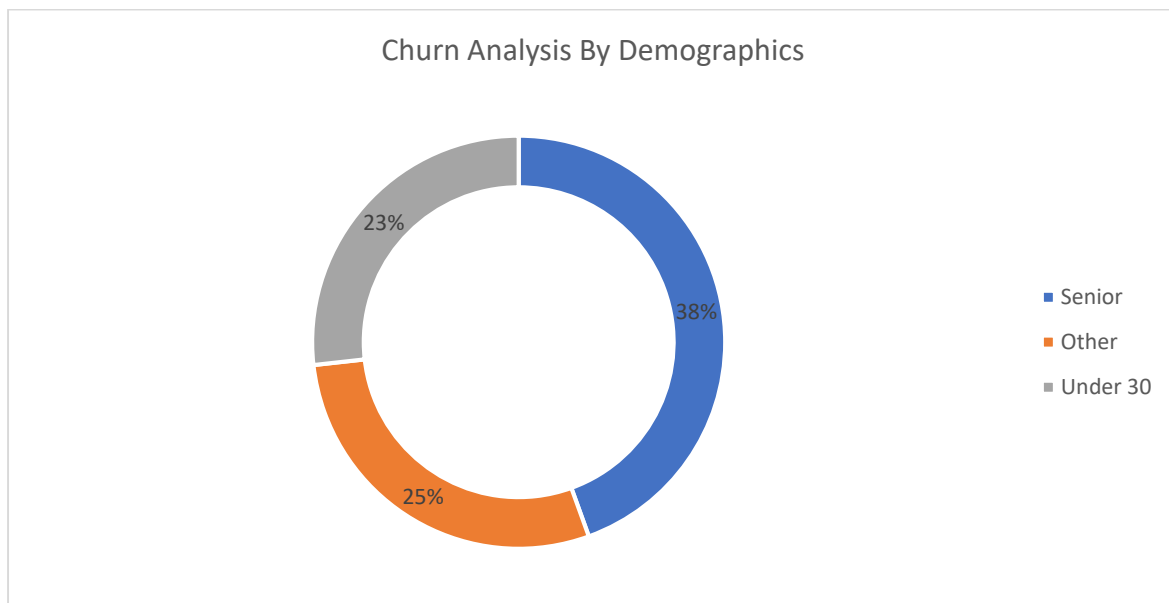
- ✓ Created new sheets for well organised and tidy work
- ✓ Organised data using Sorting and Conditional formatting
- ✓ Performed Data Aggregation using the Pivot Tables
- ✓ Created a Comprehensive Dashboard for overall analysis and KPIs

Key Findings

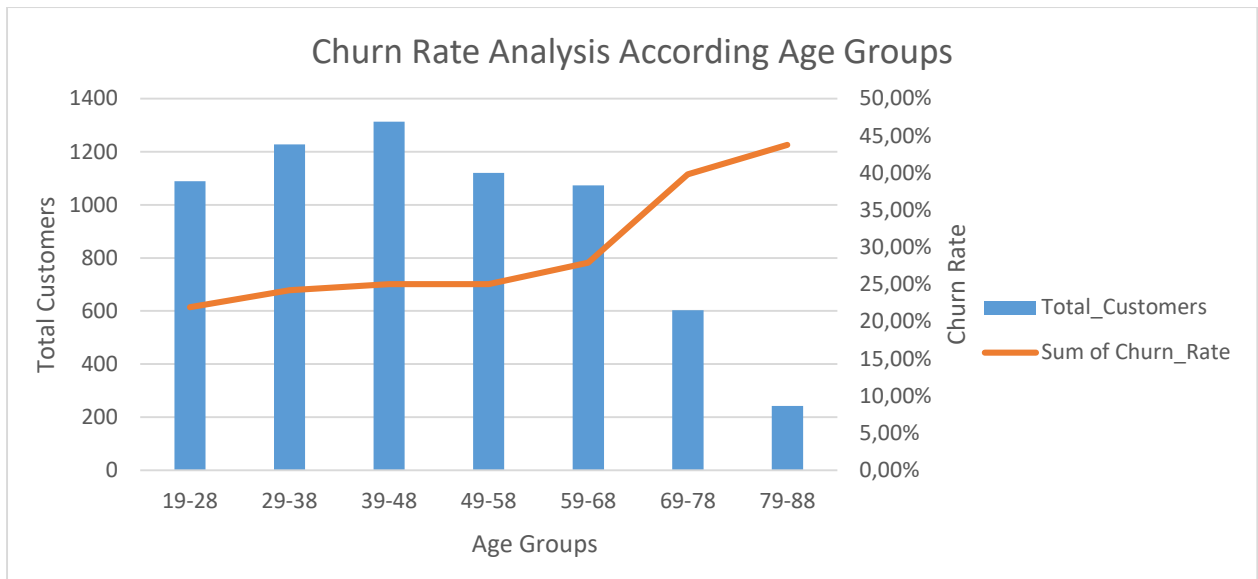
- Total Customers: 6687
- Churned Customers: 1796
- Overall Churn Rate: 26.86%

Churn by Demographics

- Significant variations in churn rates among seniors and customers under 30
- Seniors have the highest churn rate

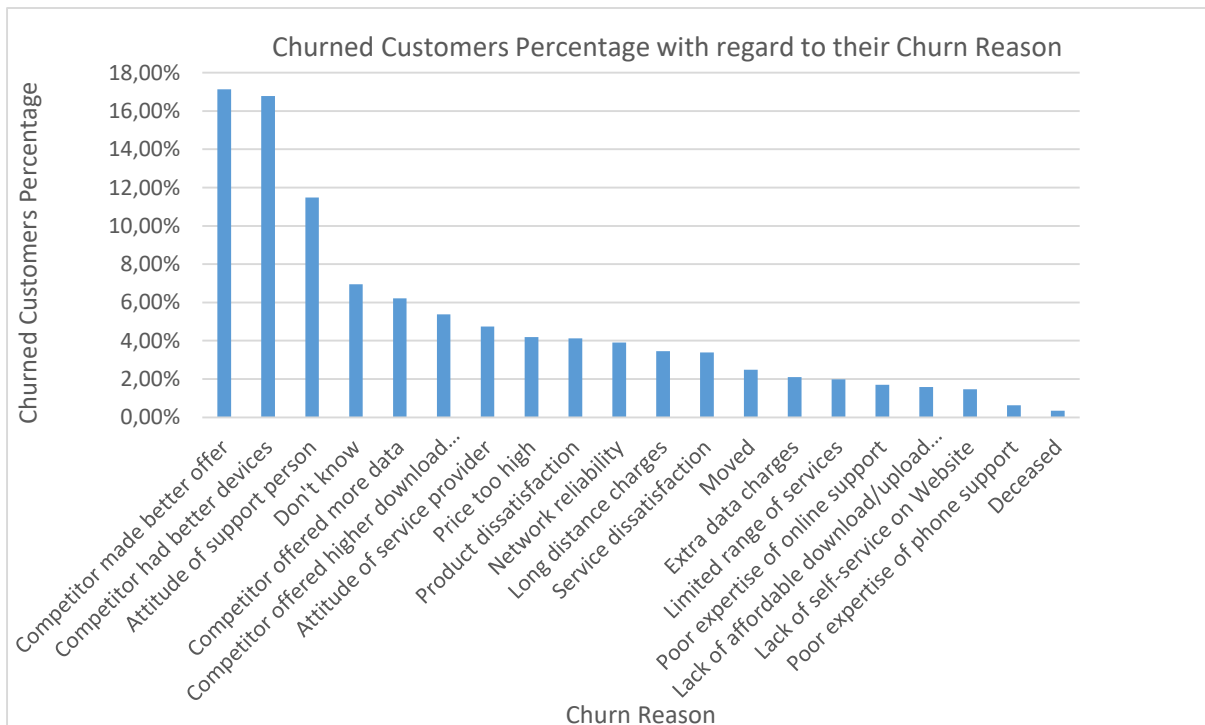


Churn by Age Group



- Highest churn rate observed in the 79-88 age group
- The Telecom company has a lot of customers in the age range 19-68

Churn Reason Analysis



From the above we can see that the main reasons for customers churning are the below.

- Competitor made better offer

- Competitor had a better devices
- Attitude of support person

Geographic Churn Patterns

Highest churn rates:

- California (75%)
- Indiana (67%)
- New Hampshire (63%)

Conclusion

- Competition from competitors is one of the major reasons why the customers are churning mainly because some competitors had better offers and devices.
- Churn for the Telekom company vary significantly when it comes to the geographic areas with some geographic areas having the highest churn rate
- Reducing the churn rate for the old age group 78-88 will be a challenge for the company since the old people tend to lack interest towards tech as they grow old.

Recommendations

- Target retention strategies towards the 79-88 age group. These strategies must accommodative as much as possible.
- Address pricing concerns and enhance service quality
- Develop competitive device and data plan offerings. These will also attract new customers.
- Focus on improving customer experience in high-churn states areas

Acknowledgements

Special thanks to DataCamp for providing the dataset and project instructions.