Customer Churn Analysis

Analytical Report for Excel Dashboard

Introduction

This report presents an analysis of the customer churn dashboard designed using Microsoft Excel. The dashboard aims to provide deep insights into the causes and patterns of customer churn, helping to make strategic decisions for customer retention and service improvement.

Dashboard Overview

The dashboard is designed to present information visually and in an easy-to-understand format, focusing on the following key indicators:

- **Key Performance Indicators (KPIs)**: Total customers, churned customers, and churn rate
- **Churn Reasons**: Detailed analysis of factors influencing customer decisions
- **Demographic Analysis**: Distribution of churn by age groups and geographic regions
- **Competitor Analysis**: Impact of competitor offers on churn rates
- **Consumption Patterns**: Relationship between data consumption and churn rates

Methodology

To create this dashboard, the following steps were followed:

1. **Data Collection**: Customer data was collected from the company database, including demographic and behavioral information
2. **Data Cleaning**: Missing data and outliers were processed to ensure analysis accuracy
3. **Data Analysis**: Using pivot tables and advanced Excel formulas to extract patterns and trends
4. **Visual Representation**: Creating various charts (bar, pie, line) to visually represent the data
5. **Dashboard Design**: Organizing visual elements in a cohesive layout with a focus on readability and comprehension

Key Findings

1. Churn Overview

- **Overall Churn Rate**: 26.86% (1796 out of 6687 customers)
- This rate is relatively high and indicates the need for effective customer retention strategies

2. Main Churn Reasons

- **Competition**: Better offers and devices from competitors represent more than 30% of churn reasons
- **Customer Service**: Attitudes of support and sales teams represent a significant proportion of dissatisfaction causes
- **Technical Issues**: Network reliability and connection problems significantly impact customer decisions

3. Demographic Analysis

- **Age Groups**: Young people under 30 (38.22%) and seniors (24.71%) are most likely to churn
- **Relationship between Age and Churn Rate**: As age increases, churn rate increases, with high rates also observed in the younger category

4. Geographic Distribution

- **States with High Churn Rates**: California (75%), Indiana (66.67%), New Hampshire (62.5%)
- **States with Low Churn Rates**: Wisconsin, North Dakota, Rhode Island, Idaho (25%)

5. Consumption Patterns

- Customers with low consumption (less than 5GB) who are active in using the service are most likely to churn
- There is no significant difference in churn rates between active and inactive users in higher consumption categories

Technical Skills Used

In developing this dashboard, the following technical skills in Excel were employed:

- **Pivot Tables**: For analyzing and summarizing data
- **Advanced Functions**: VLOOKUP, IF, COUNTIF, SUMIF for data processing
- **Advanced Charts**: Composite charts combining bars and lines

- **Conditional Formatting**: To highlight important values and facilitate data reading
- **Slicers**: For filtering and analyzing data interactively
- **Interface Design**: Organizing visual elements in a coherent and attractive manner

Strategic Recommendations

Based on the dashboard analysis, the following recommendations can be made:

1. **Improve Offers and Devices**: Review product and pricing strategy to address market competition
2. **Develop Customer Retention Programs**: Design specialized programs for groups most vulnerable to churn (youth and seniors)
3. **Train Customer Service Team**: Improve customer interaction skills for support and sales teams
4. **Improve Infrastructure**: Address technical issues related to network reliability and connectivity
5. **Geographic Strategies**: Focus customer retention efforts in areas with high churn rates
6. **Customized Plans**: Offer economical packages for customers with low consumption

Conclusion

This dashboard provides valuable insights for understanding customer behavior and reasons for churn, helping to develop effective customer retention strategies. Through continuous analysis of this data and monitoring trends, the company can improve its services and significantly reduce churn rates.

This report was prepared as part of the analysis of the customer churn dashboard designed using Microsoft Excel.