

Executive Summary

The analysis of the Telco Customer Churn dataset offers key insights into factors driving customer churn. This report outlines major findings and provides targeted recommendations to help reduce attrition and enhance customer satisfaction.

Key Findings

1. **Overall Churn Rate:**
 - Approximately **26.54%** of customers have churned, highlighting the importance of implementing effective retention strategies.
2. **Demographic Analysis:**
 - **Senior Citizens:** Senior citizens show a significantly higher churn rate, with **42% of senior citizens** churning compared to **22% of non-seniors**. This suggests that age-related preferences or unmet needs might influence churn.
 - **Gender:** Churn rates are similar across genders, with **27% of males** and **26% of females** churning. This indicates that other factors may have a greater impact than gender alone.
3. **Contract Type:**
 - Customers on **month-to-month contracts** have the highest churn rate at **43%**, compared to **11%** for one-year contracts and only **3%** for two-year contracts. This pattern indicates that the flexibility of month-to-month contracts may correlate with increased attrition.
4. **Payment Method:**
 - Customers using **electronic checks** have a churn rate of **45%**, much higher than those using **credit cards (16%)**, **bank transfers (14%)**, or **automatic payments (25%)**. This suggests that customers using electronic checks might be less satisfied or committed.
5. **Tenure and Total Charges:**
 - **Tenure:** Customers with shorter tenure are more likely to churn, with **56% of customers with tenure under one year** leaving. This indicates that new customers are more at risk and could benefit from early engagement strategies.