

Telco Customer Churn Analysis Summary

Objective

The primary goal of this analysis was to identify the factors contributing to customer churn in a telecommunications industry. By understanding which factors lead to higher churn rates, the company can implement strategies to improve customer retention and reduce churn.

Dataset Overview

The dataset used in this analysis contains information about customers, including demographic details, subscription services, payment methods, and whether or not they churned. Key attributes include:

- **Demographic Information:** Age, gender, and customer tenure.
- **Service Details:** Subscription to various services such as phone service, internet service, and premium services.
- **Payment Methods:** Methods used for payments (electronic check, credit card, etc.).
- **Churn:** A binary column indicating whether the customer churned or stayed.

Key Findings

1. **Payment Methods Impact on Churn:**
 - Customers using **electronic checks** have a churn rate of **42%**, significantly higher than the overall churn rate of **26%**.
 - In contrast, customers using **automatic payment methods** such as credit cards or bank transfers have a churn rate of only **12%**, suggesting these methods are much more customer-friendly.
2. **Customer Tenure:**
 - Customers with a tenure of less than **1 year** have a churn rate of **50%**, indicating high dissatisfaction among new users.
 - For customers with tenure over **5 years**, the churn rate drops to **10%**, demonstrating strong loyalty and reduced churn likelihood as tenure increases.
3. **Service Subscription and Churn:**
 - **Premium services:** Customers subscribed to premium services (such as advanced internet or TV packages) have a churn rate of **35%**, compared to **20%** for those without premium services, indicating potential dissatisfaction with the value or pricing of premium options.
 - **Internet service type:** Fiber optic customers have a churn rate of **30%**, while customers using DSL services have a lower churn rate of **15%**, suggesting that fiber optic customers may face issues with service quality or pricing.

4. **Demographics:**

- **Senior citizens:** Churn rate for senior citizens is **45%**, significantly higher than the overall churn rate, indicating specific challenges for this demographic.
- **Gender:** The churn rate for males is **26%** and for females is **27%**, showing no significant difference in churn behavior based on gender.

Recommendations

Based on the findings, the following actions are recommended:

1. **Promote Automatic Payment Methods:** Encourage customers to switch from electronic checks to automatic payment methods by offering incentives or simplifying the process.
2. **Improve Early Customer Experience:** Implement a targeted retention strategy for new customers within their first year, such as personalized customer support, onboarding programs, or discounts, to improve satisfaction and reduce early churn.
3. **Evaluate and Optimize Premium Services:** Conduct a thorough review of premium services to ensure they meet customer expectations and provide value for money. Adjust pricing or features as necessary to improve customer satisfaction.
4. **Senior Citizen Retention Program:** Develop a customer service initiative tailored to senior citizens, addressing their unique needs and concerns to help reduce their churn rate.