



# Customer Churn Analysis Report

## Objective

The goal of this analysis is to examine customer behavior, identify churn patterns, and develop effective retention programs to improve customer loyalty for the fictional Telco company.

## Dataset Overview

- **Total Customers:** 7,043
- **Target Variable:** `Churn` (Yes/No)
- **Key Features:** Customer demographics, service subscriptions, contract details, payment methods, and billing information.

## Key Observations & Insights

### 1. Overall Churn Rate

- **Churned Customers:** ~26.5% of customers have churned.
- This is a significant loss and requires targeted intervention.

## 2. Tenure & Churn Analysis

- **Short-tenure customers (<12 months)** have the highest churn rate.
- **Customers staying beyond 70 months (532 users)** are highly loyal and may benefit from a reward program.
- **Critical Drop-off Point:** Customers tend to leave around 18-24 months, possibly due to competitors or dissatisfaction or service charges.

## 3. Contract Type & Churn

- **Month-to-Month Contract Customers:** Have the highest churn (~42%).
- **One-year and Two-year contract holders:** Significantly lower churn rates.
- **Insight:** Customers prefer flexibility but are more likely to leave without commitment. Encouraging longer contracts can improve retention.

## 4. Monthly Charges Impact on Churn

- **Users paying >\$70 per month are more likely to churn.**
- High charges alone do not determine churn, but when combined with short tenure and no contract, it increases significantly.

## 5. Senior Citizen Impact

- **Senior Citizens (16% of total users)** have a slightly higher churn rate compared to non-senior citizens.
- Possible factors: Pricing sensitivity, technical challenges, or service preferences.

## 6. Internet Service & Churn

- **Fibre optic users** have a higher churn rate than DSL users.
- Possible reasons: **Higher cost, service dissatisfaction, or better competitor options.**

## 7. Payment Method Impact

- **Electronic check users show the highest churn.**

- Credit card and bank transfer users have significantly lower churn.
  - **Possible Reason:** Auto-payment methods might increase customer stickiness.
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## Recommendations & Retention Strategies

### 1. Targeted Rewards for Long-term Users

- **Loyal Customers (>70 months):** Offer discounts, loyalty points, or referral bonuses.
- Create a **VIP membership program** to maintain their engagement.

### 2. Improve Contract-Based Retention

- Offer **discounted rates or perks for 1-year and 2-year contracts.**
- Provide limited-time offers for customers nearing **12-month tenure** to incentivize them to renew.

### 3. Pricing Strategy & Discount Offers

- Introduce **customized plans for customers paying >\$70/month** to provide value.
- Offer **bundled discounts** for high-paying customers (e.g., free streaming services, additional data benefits).

### 4. Reduce Churn in Fiber Optic Users

- Improve service reliability and customer support.
- Introduce a **customer satisfaction survey** to understand specific pain points.

### 5. Payment Method Optimization

- Encourage **credit card and auto-payment methods** with small discounts.
- Run targeted campaigns for **electronic check users**, promoting better alternatives.

### 6. Customer Engagement for Senior Citizens

- Provide **senior-friendly plans** with better support options.
  - Offer a **dedicated helpdesk or tutorial services** to assist with technical issues.
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## Conclusion

By implementing the above strategies, Telco can reduce customer churn, increase loyalty, and improve overall business sustainability. **Key focus areas include tenure-based retention programs, contract incentives, targeted pricing adjustments, and service enhancements.**

With these steps, we can work towards reducing the churn rate from **26.5%** to a much healthier level.