

Telco Customer Churn Analysis Summary

Overview

This project focuses on analyzing customer churn behavior using the Telco Customer dataset. The goal is to uncover patterns that contribute to churn, evaluate service usage trends, and provide actionable recommendations to reduce customer loss.

Key Dataset Information:

- **Total Customers:** ~7,043
- **Churned Customers:** ~26.5%
- **Retained Customers:** ~73.5%

Churn here is defined by customers who have left the company, marked as "Yes" in the Churn column.

Major Findings and Percentages:

Feature	Key Insight
Payment Method	Customers using Electronic Check had the highest churn rate (~45%).
Tenure	Customers with low tenure (<12 months) are much more likely to churn.
Contract Type	Month-to-month customers are 3x more likely to churn than yearly ones.
Tech Support	Lack of tech support is linked with higher churn.
Internet Service	Those with fiber optic internet show higher churn than DSL.
Senior Citizens	Slightly higher churn observed among senior citizens.
Total Charges	Churn rate decreases as total charges increase (more loyal over time).

Visual Insights:

You used multiple countplots to understand service distributions. Some takeaways:

- Most customers have **Phone Service** and **Internet Service**.
 - Optional services like **Online Security** and **Tech Support** are less common, yet correlate with **lower churn** when present.
 - Churn is significantly higher for customers who use **monthly billing** or **electronic payment** methods.
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✅ Conclusions:

- 📉 Customers with **short tenure** are at the highest risk of churn.
 - 💳 **Contract length and payment method** play a major role in customer loyalty.
 - 💡 **Value-added services** like **tech support** and **online security** are linked to **higher retention**.
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💡 Recommendations:

1. **Incentivize long-term contracts:**
Offer discounts or perks for customers who upgrade from month-to-month to annual plans.
 2. **Reduce friction for new users:**
Create welcome offers or loyalty bonuses for users within their first 6 months.
 3. **Target fiber users at risk:**
Improve fiber service experience or offer bundles to increase satisfaction.
 4. **Educate about optional services:**
Highlight the benefits of tech support and online security in monthly emails.
 5. **Re-evaluate payment options:**
Encourage automatic payments (credit/bank) to reduce churn tied to electronic checks.
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📄 Summary Statement:

This churn analysis highlights critical service and behavioral patterns impacting customer retention. By addressing short tenure risks, promoting bundled services, and optimizing payment strategies, Telco can significantly reduce its churn rate and boost customer lifetime value.