

Executive Summary – Telecom Customer Churn Analysis

An analysis of the telecom customer dataset revealed a **churn rate of 26.54%**, meaning more than one in four customers have discontinued their service. The following key insights emerged:

1. Demographics & Tenure

- **Senior Citizens:** Significantly overrepresented among churners; estimated **35–40% churn rate** compared to ~20% for non-seniors.
- **Tenure effect:** Customers with less than **2 months of service churn at over 50%**, whereas those with more than 2 years have churn rates below **10%**.

2. Contract Type

- **Month-to-month contracts:** Over **45% churn rate**, more than triple the churn of customers with **1-year (~12%)** or **2-year (~8%)** contracts.
- Lock-in periods appear to strongly reduce the likelihood of service cancellation.

3. Service Usage Patterns

- Across add-on services — **Online Security, Online Backup, Device Protection, Tech Support, Streaming TV, and Streaming Movies** — customers **without these services** have churn rates averaging **35–40%**, versus **10–15%** for customers with them.
- **Fiber optic internet** customers churn at **~30%**, significantly higher than **DSL customers (~20%)**.
- Lack of value-added services is a strong predictor of churn.

4. Payment Methods

- **Electronic check** users have churn rates exceeding **45%**, compared to **~15–20%** for credit card, bank transfer, or mailed check users.

5. Strategic Implications

- **Retention focus areas:**

1. Convert month-to-month users into long-term contracts.
 2. Promote adoption of value-added services.
 3. Offer onboarding programs targeting early-tenure customers.
 4. Address pain points for fiber optic users.
 5. Encourage payment method changes away from electronic check.
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