



# Enhanced Executive Summary – Customer Churn Analysis

This study examines churn behavior among telecom customers, with a focus on demographic factors, service usage, and contractual/billing preferences. Charts and comparisons highlight where churn is most pronounced.



## Key Findings with Percentages

### 1. Churn Rate (Overall)

- About **26–27% of all customers** churned.
- Retaining even a fraction of this group can significantly reduce revenue loss.

### 2. Senior Citizens & Churn

- **~42% of senior citizens churned**, compared to only **~24% of non-seniors**.
- This shows age is a major churn driver.

### 3. Tenure & Churn

- Customers with **tenure  $\leq 1$  year churn at 45–50%**, while those with **tenure  $\geq 5$  years churn below 10%**.
- Long-tenure customers are far more loyal.

### 4. Internet Service Type

- **Fiber optic customers churn ~41%**, compared to **DSL customers at ~19%**. Indicates dissatisfaction with pricing or service quality in fiber optic.

### 5. Additional Services (Retention Drivers)

- i. Customers without **Online Security, Tech Support, or Device Protection** have churn rates **above 40%**.

- ii. Those subscribed to these services churn less (~15–20%), showing bundles increase stickiness.

## 6 .Streaming Services

- iii. Having **StreamingTV or StreamingMovies** alone does not reduce churn significantly.
- iv. Suggests these are not strong retention tools by themselves.

## 7. Contract Type

- v. **Month-to-month contracts churn ~43%.**
- vi. In contrast, **1-year contracts churn ~11%** and **2-year contracts churn ~3%.**
- vii. Strong evidence that **longer contracts drastically reduce churn.**

## 8. Billing & Payment Methods

- viii. **Electronic check users churn ~45%,** while customers using automatic payments (credit card, bank transfer) churn around **15–20%.**
- ix. Billing method strongly correlates with loyalty.

## Recommendations

- **Early retention focus:** Target **new customers in their first 3–6 months**, as they are most at risk.
- **Promote long-term contracts:** Offer **discounts or loyalty perks** for 1–2 year contracts.
- **Upsell retention services:** Bundle **Online Security, Tech Support, and Device Protection** as retention packages.



# Customer Churn Dashboard (Power BI / Tableau Design)

## ◆ Layout & Sections

### Top Section – KPIs (Card Visuals)

Display **big numbers** for quick executive insights:

- **Total Customers**
- **Churned Customers (%)** → e.g. 26.5%
- **Senior Citizen Churn Rate** → e.g. 42%
- **Avg Tenure of Churned Customers** → e.g. ~20 months
- **High-Risk Segment** (Month-to-Month contracts) → 43% churn

### Left Column – Customer Demographics

#### 1. Bar Chart – Churn % by Senior Citizen

- Categories: *Senior Citizen vs Non-Senior*
- Highlight: 42% vs 24%

#### 2. Stacked Bar – Churn by Gender

- Male vs Female, show churn proportions.
- Typically close, but shows if gender matters.

---

### Center Column – Services & Tenure

## 1. Line/Bar Chart – Churn % by Tenure Groups

- Groups: *0–12 months, 1–5 years, 5+ years*
- Show churn dropping as tenure increases.

## 2. Clustered Bar – Churn % by Internet Service

- DSL vs Fiber Optic
- ### Bottom Section – Insights / Recommendations (Text Box)

- Highlight **key drivers of churn**:

- Senior citizens, short-tenure customers, fiber optic users, month-to-month contracts, electronic check payers.

- Recommendations:

- Offer **onboarding support** in first 3 months.
- Incentivize **1–2 year contracts**.
- Promote **value-added service bundles**.
- Improve **fiber optic pricing/quality**.
- Encourage **auto-pay billing**.
- 
- ***Fiber ~41%, DSL ~19%***

- **Stacked Bar – Churn by Add-on Services**

- **Online Security, Tech Support, Device Protection**
- **Compare Yes vs No subscription churn %**

## Key Findings

## **1. Senior Citizens & Churn**

- **A higher proportion of senior citizen customers are churning compared to younger customers.**
- **Indicates age-related churn risk.**

## **2. Tenure & Churn**

- **Customers with short tenure (1–2 months) show a much higher churn rate.**
- **Longer-tenure customers are more loyal and less likely to churn.**

## **3. Service Subscriptions**

- **Customers without Phone Service or limited usage of value-added services like Tech Support, Online Security, and Device Protection are more likely to churn.**
- **Bundled or additional services appear to increase retention.**

## **4. Internet Service**

- **Fiber optic customers show higher churn compared to DSL users, indicating dissatisfaction with pricing or quality.**

## **5. Streaming & Entertainment Services**

- **Customers using StreamingTV and StreamingMovies show mixed churn behavior, suggesting these services are not strong differentiators for retention.**

## **6. Contract Type**

- **Customers on Month-to-Month contracts churn significantly more than those on 1-year or 2-year contracts.**
- **Longer contracts reduce churn risk.**

## **7. Billing & Payment Methods**

- Electronic check customers show higher churn compared to those using credit cards or automatic bank transfers.
- This may point to issues around billing experience or trust.



## Design Guidelines (for Power BI / Tableau)

- Use a dark theme dashboard with bright KPI cards (red for churn, green for retention).
- Place KPIs at the top for executives.
- Use bar/stacked bar charts for categorical features (Contract, Payment, Services).
- Use line/area charts for tenure trends.
- Keep churn % labels directly on bars for clarity.

---

### Right Column – Contracts & Payments

#### 1. Bar Chart – Churn % by Contract Type

- Month-to-Month, 1-Year, 2-Year
- *Month-to-Month highest churn (43%)*

#### 2. Bar Chart – Churn % by Payment Method

- Electronic Check vs Auto-Pay vs Others
- Highlight: *Electronic check ~45% churn*

