



# Telco Customer Churn Analysis – Executive Summary


## Objective

The objective of this analysis is to identify key factors influencing customer churn by exploring variables such as **contract type**, **payment methods**, **tenure**, **internet service type**, and **demographic attributes**. The goal is to derive actionable insights that can guide strategic customer retention efforts.


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## Key Insights & Data-Driven Findings


### Contract Type & Churn

- **Month-to-month contract holders** show the **highest churn rate at 42%**.
- In comparison, customers with **1-year contracts** churn at **11%**, and **2-year contracts** at only **3%**.
-  **Implication:** Long-term contracts serve as effective tools to retain customers, likely due to reduced switching and greater satisfaction.


### Payment Method & Churn

- Customers paying through **Electronic Checks** show the **highest churn rate at 45%**.
- By contrast:
  - **Credit Card (auto):** ~15%
  - **Bank Transfer (auto):** ~16%
  - **Mailed Check:** ~19%
-  **Implication:** Promoting auto-payment methods may increase stickiness and trust, reducing churn.


## Tenure & Churn

- Churn is **highest (50%)** among customers with **<1 year tenure**.
- Drops to **35%** for 1–3 year tenure.
- Falls further to just **15%** for customers with **>3 years tenure**.
-  **Implication:** Onboarding and early engagement strategies are critical within the first year to prevent churn.

## Internet Service Type

- **Fiber Optic users** churn at **30%**, compared to **20%** for **DSL users**.
-  **Implication:** Investigating service satisfaction among fiber users could uncover technical or pricing issues.

## Senior Citizens & Churn

- Senior citizens (age 65+) have a **41% churn rate**, compared to **26%** among non-senior citizens.
-  **Implication:** Tailored communication and support services may help reduce churn in this vulnerable demographic.

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## Visual Insights

- Bar plots and percentage-stacked charts show **clear trends**:
    - Churn rate **declines sharply with tenure**.
    - **Month-to-month contracts and electronic check payments** are consistently the **highest-risk segments**.
    - **Non-users** of additional services (e.g., OnlineSecurity, TechSupport) are also prone to churn.
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## ✓ Strategic Recommendations

1. 🕒 **Promote Long-Term Contracts**  
Offer discounts or bundled offers to encourage commitment to 1–2 year plans.
2. 💳 **Migrate Users to Auto-Pay**  
Initiate campaigns or incentives to shift customers away from electronic checks to more stable, auto-payment methods.
3. 💡 **Focus on Early Engagement**  
Build structured welcome/onboarding experiences and loyalty programs targeting customers in their **first year**.
4. 👴 **Senior-Centric Services**  
Develop specialized customer service and retention strategies targeting **senior citizens** with higher churn probability.
5. ✂️ **Improve Fiber Service Experience**  
Conduct customer feedback surveys for **Fiber Optic users** to improve satisfaction and reduce churn.