# 📊 Executive Summary: Telecom Customer Churn Analysis

This report explores customer churn behavior at a telecom company, analyzing key attributes and usage patterns. The objective is to identify actionable insights to reduce churn and enhance customer retention.

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## 🔍 1. Overall Churn Overview

- Approximately **26.54% of customers** have churned.

  - This indicates **over 1 in 4 customers** are leaving, a critical concern for sustainable revenue.

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## 👥 2. Customer Demographics

➤ **Senior Citizen Status**

- A **notably higher churn rate** is observed among **senior citizens** compared to younger demographics.

  - While seniors make up a smaller portion of the customer base, their **churn rate exceeds 40%**, suggesting targeted service strategies could mitigate this loss.

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## 📅 3. Customer Tenure

➤ **Short-Term vs Long-Term**

- **Customers with tenure of 1–2 months** represent the **highest churn segment**, with over **50% churning** within this early period.

- In contrast, customers who've stayed **longer than 2 years** show a **churn rate below 10%**.

  - ➤ **Interpretation**: The longer a customer stays, the less likely they are to leave. This highlights the importance of early engagement and customer onboarding.

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## 📄 4. Contract Type

➤ **Contract Duration & Churn**

- **Month-to-month contract holders** have a churn rate of **over 40%**.

- **One-year contract customers** show a churn rate of **11%**.

- **Two-year contract customers** have the lowest churn at just **3%**.

  - ○ ➤ **Recommendation**: Promote longer-term contracts through discounts and loyalty perks.

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## 🌐 5. Service Usage Patterns

➤ **Add-On Services Impact**

- **Higher churn rates** (over **30%**) are seen in customers **not subscribed** to the following:

  - ○ **Online Security**

  - ○ **Online Backup**

  - ○ **Tech Support**

  - ○ **Device Protection**

- In contrast, customers using these services churn at rates **under 15%**.

  - ○ ➤ **Conclusion**: Offering bundled services or making these features more accessible may help reduce churn.

➤ **Internet Type**

- Customers with **fiber optic internet** show a **churn rate of ~42%**.

- Those with **DSL internet** have a churn rate of around **18%**.

- **Customers without internet service** have the **lowest churn (~8%)**, likely due to fewer service expectations or different use cases.

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## 🧭 6. Churn Driver Summary

| Category | High Churn Segment | Churn Rate (%) |
| --- | --- | --- |
| Senior Citizens | Yes | ~40% |
| Tenure (0–2 months) | Yes | ~50% |
| Month-to-Month Contract | Yes | ~40% |
| Fiber Internet Users | Yes | ~42% |
| No Add-on Services | Yes | ~30–35% |
| 2-Year Contract | No | ~3% |

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## 💡 Key Takeaways

1. **Early-stage churn** is a major risk—customers who don't stay past the first 2 months are more likely to leave.

2. **Long-term contracts** drastically reduce churn—strategies like bundling and annual discounts can help.

3. **Add-on digital services** (security, backup, etc.) improve stickiness—highlighting value-added upselling opportunities.

4. **Senior citizens and fiber internet users** require tailored retention strategies.