# 📊 Executive Summary – Telco Customer Churn Analysis

This analysis explores the factors driving customer churn for a telecommunications company using descriptive analytics and visual insights. The objective is to understand *who is churning, why they are leaving,* and *what business actions can reduce churn*.

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## 🔍 Overall Churn Insight

- The dataset reveals that **26.54% of customers have churned**, while **73.46% remain active**.

- This indicates that roughly **1 out of every 4 customers leaves the service**, representing a high attrition rate for a subscription-based business.

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## 👥 Demographic-Based Churn Patterns

| Category | % of Churners | Key Insight |
|---|---|---|
| **Senior Citizens** | Higher than non-senior group | Senior citizens churn at a **significantly higher rate**, indicating possible issues with service usability or support. |
| **Non-Senior Customers** | Lower churn rate | More stable, indicating better satisfaction or product fit. |

✅ Action: Tailored support, simplified communication, or senior-friendly service bundles may help improve retention.

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## 📅 Tenure & Loyalty Behavior

- **Short-tenure customers (1–2 months)** show the **highest churn rate**, suggesting early customer dissatisfaction or onboarding gaps.

- Customers with tenure **> 2 years show <10% churn**, confirming that *loyalty increases with time*.

✅ Action: Improve **first 90-day experience** with onboarding calls, personalized support, and early loyalty rewards.

## 📄 Contract Type & Churn

| Contract Type | Churn Percentage |
|---|---|
| **Month-to-Month** | **~45–50% churn rate** |
| **1-Year** | ~11% churn |
| **2-Year** | ~3% churn |

- Customers on **month-to-month plans are nearly 10X more likely to churn** than those on 2-year contracts.

   ✅ Action: Incentivize contract upgrades via discounts, bundled benefits, or reward credits.

## 🛠️ Service Features & Churn

General trend from charts:

- Customers **missing value-added services** (Tech Support, Security, Phone Service) churn at noticeably **higher rates**.

- Customers actively subscribed to services like **Streaming TV and Movies churn less**, showing *engagement reduces churn*.

| Service Gap | Churn Likelihood |
|---|---|
| No Tech Support | High |
| No Internet Service | Highest |
| Streaming Services Active | Lower churn |

   ✅ Action: Promote **cross-selling** of add-on services, especially to at-risk segments.

## 💳 Payment Method Influence

- Customers using **Electronic Check** as a payment method are **most likely to churn**, compared to credit card, auto-pay, and bank transfer users.

- This may be due to: extra steps, lack of automation, payment failure friction, or fee sensitivity.

  ✅ Action: Provide incentives to switch to **AutoPay** or Digital Wallets.

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## 🧠 Key Strategic Recommendations

1. **Fix early churn**: Deploy 30–60–90 day onboarding journey.

2. **Lock in loyalty**: Offer financial benefits for yearly / multi-year plans.

3. **Bundle services**: Push "value packs" including tech support + security + streaming.

4. **Target seniors** with special support programs or senior-friendly UI/tutorials.

5. **Reduce friction in payments** by promoting card/auto-payment options.

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## 📌 Final Insight

The churn problem is *not random* — it is **highly predictable**.
Most churn is concentrated among:
✅ new customers
✅ month-to-month contract users
✅ electronic-check payers
✅ customers lacking value-added services
✅ senior citizens