Executive Summary

This customer churn analysis examines behavioral and service-related trends across 7,000+ telecom customers to identify factors contributing to churn. The churn rate stands at **26.5%**, indicating that over a quarter of customers have left the service.

Key insights include:

- **Contract Type**:
    - **Month-to-month customers** show the highest churn rate at **43%**, compared to only **11%** for one-year and **3%** for two-year contracts.
    - Longer contracts contribute to customer retention.
- **Internet Service**:
    - Customers using **fiber optic** internet have a **42% churn rate**, significantly higher than DSL users (19%) or those without internet service (7%).
    - This suggests dissatisfaction or pricing concerns related to fiber optic services.
- **Payment Method**:
    - The churn rate for users paying via **electronic check** is **45%**, nearly double that of customers using **bank transfers** or **credit cards** (both under 20%).
    - Manual payment types may correlate with more price-sensitive or less committed users.
- **Value-Added Services**:
    - Customers who **do not subscribe** to features like **OnlineSecurity**, **TechSupport**, or **DeviceProtection** are **1.5 to 2 times** more likely to churn.
    - For example, churn is **28.5%** among those without tech support, versus just **14%** among those with it.
- **Tenure Influence**:
    - Churn is highest (over **50%**) in customers with **tenure < 12 months**, highlighting the importance of early engagement.
    - Retention efforts should focus on the first year of customer onboarding.

- **Streaming Services**:
    - Interestingly, use of **StreamingTV** and **StreamingMovies** also shows a slight correlation with reduced churn, suggesting that entertainment bundles may help in customer retention.

Overall, customers who are new, on month-to-month contracts, paying via electronic check, and not engaged with value-added services are at **significantly higher risk of churn**. These insights offer valuable direction for targeted retention strategies such as bundled offers, incentives for contract upgrades, and promoting security/tech support add-ons.