Executive Summary: Customer Churn Analysis

This report presents findings from a comprehensive analysis of customer churn behavior using demographic and service usage data. The goal is to identify patterns and actionable insights to improve customer retention.

Overview

- The dataset includes **21 variables** related to customer demographics, service usage, and payment behavior.

- Out of the entire customer base, **26.54%** have churned.

- The analysis highlights strong relationships between churn and variables such as **contract type, tenure, senior citizen status, and specific service features**.

Key Insights

1. Churn Distribution

- **Churn Rate**:

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

  - **73.46%** remain active, indicating a retention opportunity in the high-churn segment.

2. Tenure and Churn Behavior

- Customers with **tenure less than 6 months** make up a **significant portion of the churners**.

  - Over **50% of customers who left** had a tenure of **1 or 2 months**.

- In contrast, customers with **tenure above 24 months** show a churn rate of **less than 10%**.

- ○ Long-term users demonstrate **loyalty and satisfaction**, suggesting the importance of early engagement.

3. Contract Type

- Customers on **month-to-month contracts** have the **highest churn rate at ~43%**.

- Those on **one-year contracts** show a churn rate of **11%**, while **two-year contract holders** churn at **just 2%**.

  - ○ This suggests a **strong inverse relationship** between contract duration and churn likelihood.

4. Senior Citizen Status

- **Senior citizens make up 16%** of the customer base, but they account for **26% of churners**.

  - ○ This means senior citizens are **65% more likely** to churn than non-seniors.

- This demographic might require **tailored service support** and engagement strategies.

5. Internet and Add-On Services

- **Customers without internet service** have a churn rate of **~7%**, significantly lower than internet users.

- Among internet users:

  - ○ Customers **with Online Security** churn at **15%**, while those **without** churn at **35%**.

  - ○ **Tech Support** and **Device Protection** show similar patterns:

    - ■ Churn rates with service: **~17%**

    - ■ Churn rates without service: **~35-40%**

  - ○ These services likely contribute to **better customer satisfaction and perceived value**.

6. Phone Services

- **Multiple Lines** and **Phone Service** show **minimal difference** in churn behavior (both around **26%** churn), suggesting these features are **neutral in influencing churn**.

Recommendations

1. **Focus on Early Tenure Engagement**
   Target new customers (< 6 months) with:

   - Onboarding support

   - Personalized offers

   - Loyalty programs
     This could dramatically reduce early-stage churn.

2. **Incentivize Long-Term Contracts**
   Promote 1-year and 2-year contracts with:

   - Discounts or bundled packages

   - Rewards for contract renewals

3. **Expand Adoption of Add-On Services**
   Upsell features like:

   - Online Security

   - Tech Support

   - Device Protection
     These significantly correlate with **lower churn** and can boost ARPU.

4. **Address Senior Citizen Needs**
   Develop tailored communication or simplified service packages for this group to enhance satisfaction and retention.

5. **Monitor and Improve Internet Service Quality**
   Since customers with internet services are more likely to churn, investigate potential **service quality or pricing issues**.