Executive Summary: Telecom Customer Churn Analysis

- **Overall Churn Rate**: Approximately **26.5%** of the telecom customers have churned. This indicates that more than **1 in 4 customers** are leaving the service, highlighting the need for targeted retention strategies.

- **Senior Citizens**: Customers who are **senior citizens** show a higher churn rate (**42% churn among senior citizens**) compared to non-seniors, suggesting age as a contributing factor.

- **Tenure Impact**: There is a clear inverse relationship between **tenure** and churn. Customers with shorter tenures (1–2 months) have churn rates exceeding **60%**, while those with longer tenure (24+ months) have churn rates below **15%**.

- **Contract Type**:

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

  - **One-year** and **two-year** contract customers churn much less, at around **11%** and **3%**, respectively.

  - This suggests that longer contracts significantly reduce churn.

- **Service-Based Insights**:

  - Customers with **no internet service** consistently exhibit lower churn (e.g., only **7–10%**) across multiple service features such as OnlineSecurity, TechSupport, and DeviceProtection.

  - In contrast, customers using services like **StreamingTV**, **MultipleLines**, and **PhoneService** show churn rates around **30–40%**, indicating potential dissatisfaction or cost sensitivity.

- **Retention Boosters**:

  - Features like **OnlineSecurity** and **TechSupport** are associated with lower churn. For instance, churn among users with OnlineSecurity is about **15–20%**, compared to over **40%** among those without it.

- **Payment Methods**:

  - Customers using **Electronic Check** have a churn rate exceeding **45%**, which is significantly higher than those using **Bank Transfer** or **Credit Card** (both under **20%**).

- This could point to a link between payment convenience and customer satisfaction or stability.

Recommendations

1. **Target Senior Citizens with Retention Offers**

   - Provide **personalized plans** or discounts for older customers who show higher churn.

2. **Incentivize Long-Term Contracts**

   - Offer discounts, loyalty rewards, or free add-ons to shift customers from **month-to-month** to **annual plans**.

3. **Improve Onboarding for New Customers**

   - Introduce **first-90-days support** programs to reduce churn among new users.

   - Focus on customers with <6-month tenure, as they churn the most.

4. **Bundle Security and Support Services**

   - Promote **OnlineSecurity** and **TechSupport** through bundled packages.

   - These services significantly reduce churn—advertise their value more prominently.

5. **Discourage Use of Electronic Check**

   - Encourage more stable payment methods like **AutoPay**, **credit card**, or **bank transfer**.

   - Consider offering a small discount for switching away from electronic check.

6. **Service Experience Surveys**

   - Use customer feedback loops especially for users of **Streaming services** or **Internet services**, which show higher churn.