Executive Summary of Plotted Results in Customer Churn Analysis

This analysis investigates customer churn patterns in a telecom company using various visualizations. Below are the key insights derived from the plots:

Overall Churn Rate

The pie chart shows that **26.54% of customers have churned** (i.e., stopped using the service).

Churn by Gender

The count plot reveals that **churn rates are similar for both genders**, meaning gender does not significantly impact customer retention.

Churn by Senior Citizen Status

A higher percentage of **senior citizens have churned** compared to non-senior customers, indicating they may require better engagement strategies.

Churn by Tenure

Customers with a **short tenure (1-2 months) are more likely to churn**, whereas long-term customers tend to stay. This suggests that **early retention strategies** are crucial.

Churn by Contract Type

Customers with **month-to-month contracts have the highest churn rates**, whereas **one-year and two-year contracts** reduce churn. Offering incentives for long-term contracts could improve retention.

Churn by Service Features

Higher churn is observed among customers using **Fiber Optic Internet** and those **without security/protection features (Online Security, Device Protection, Tech Support)**. Enhancing these services may help reduce churn.

Churn by Payment Method

Customers using **Electronic Checks** have the highest churn rate, suggesting issues with this payment method or its users.

Key Takeaways & Recommendations

- **Focus on early retention strategies** for new customers.
- **Encourage long-term contracts** with attractive offers.
- **Improve Fiber Optic Internet Service** and promote security features.
- **Review the electronic check payment process** to enhance customer experience.