

# Summary and Recommendations

This analysis examines customer churn patterns using a dataset of 7,043 records, considering factors such as demographics, contract types, internet services, and payment methods. The goal is to identify key contributors to customer attrition and provide actionable insights for retention strategies.

## Insights and Findings

### 1. Senior Citizen Churn Rate

- A **higher proportion of senior citizens churn** compared to younger customers.
- The lack of long-term contracts and perceived complexity of services could contribute to this trend.

### 2. Impact of Contract Types

- **Month-to-month contracts** have the **highest churn rate** compared to **1-year or 2-year contracts**.
- Customers with **long-term contracts (1 or 2 years)** show **significantly lower churn**, indicating that commitment helps retention.

### 3. Service Subscription and Churn Trends

- The analysis includes **multiple count plots** evaluating key services like:
  - **Phone Service, Multiple Lines, Internet Service, Online Security, Online Backup, Device Protection, Tech Support, Streaming TV, and Streaming Movies.**
- Customers without security-related services (like **Online Security, Tech Support, and Device Protection**) tend to churn more.

### 4. Payment Method Influence

- Customers using **electronic check** as a payment method show a **higher likelihood of churning** compared to those using **credit card or bank transfers**.
- This suggests that ease of payment and perceived security might influence retention.

## Recommendations

### 1. Retention Strategies for Senior Citizens

- Offer simplified service plans and better customer support.
- Provide incentives for long-term contracts.

### 2. Contract-Based Customer Retention

- Encourage customers on **month-to-month plans** to shift to longer contracts by offering loyalty discounts.

### 3. Enhancing Service Offerings

- Educate customers on the benefits of **Online Security, Tech Support, and Device Protection** to increase adoption.

### 4. Improve Payment Flexibility

- Encourage alternative payment methods by offering discounts or incentives for non-electronic check users.

This analysis provides a data-driven foundation to reduce churn rates and improve customer retention through strategic interventions.