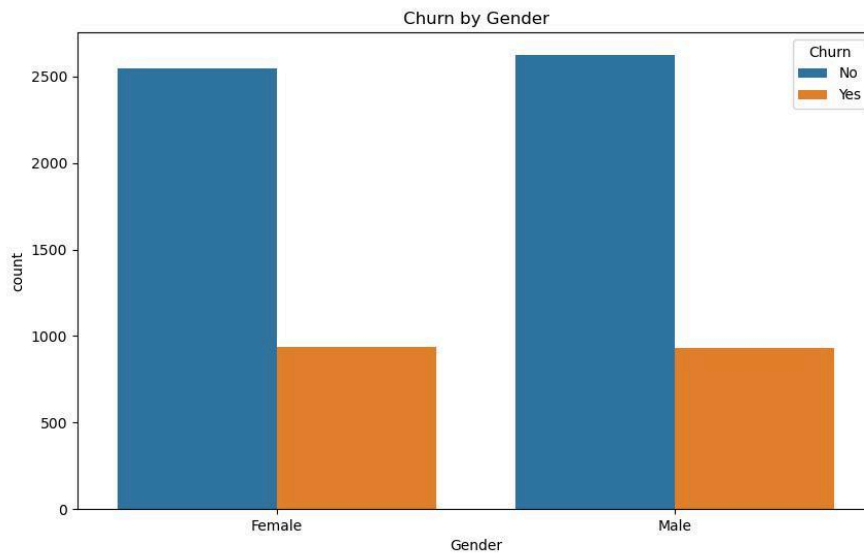
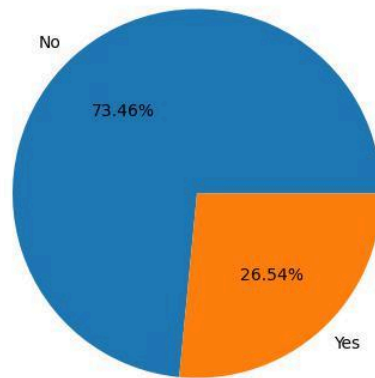


Summary and Recommendations

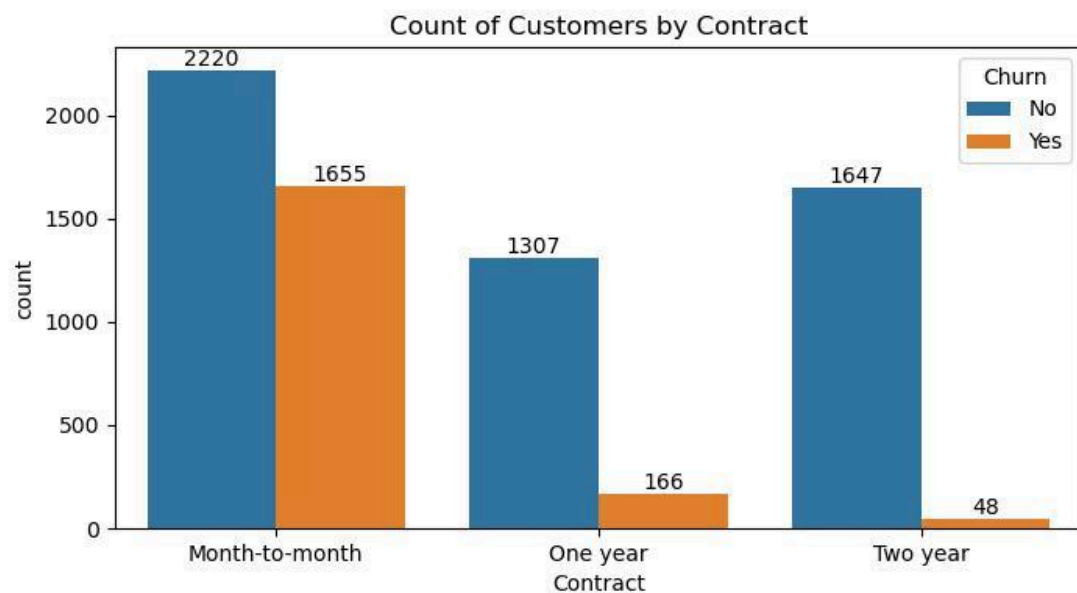
- **Objective:** The analysis primarily investigates factors influencing customer churn, particularly focusing on payment methods and contract types.

Percentage of Churned Customers

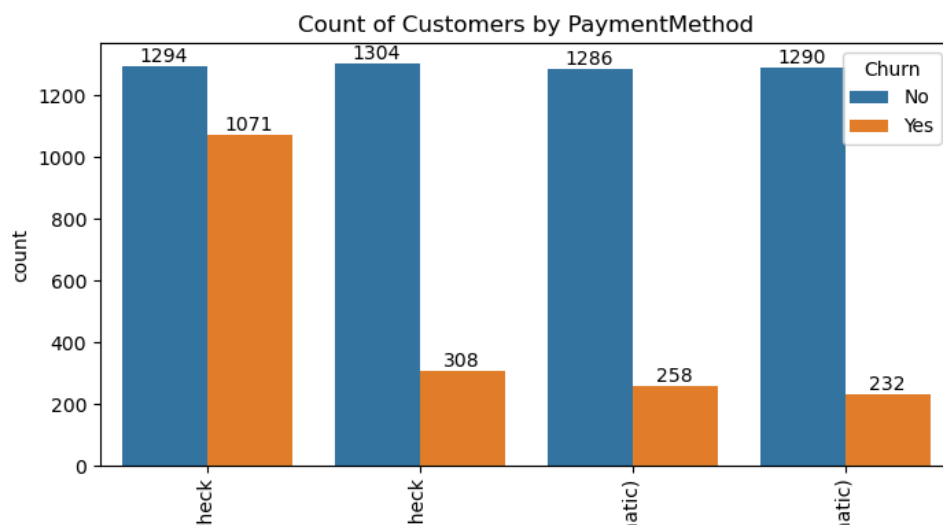


- **Key Insights:**

- **Contract Type:** Customers on month-to-month contracts show a higher tendency to churn compared to those on yearly or bi-annual contracts. This suggests that long-term contracts may improve customer retention.

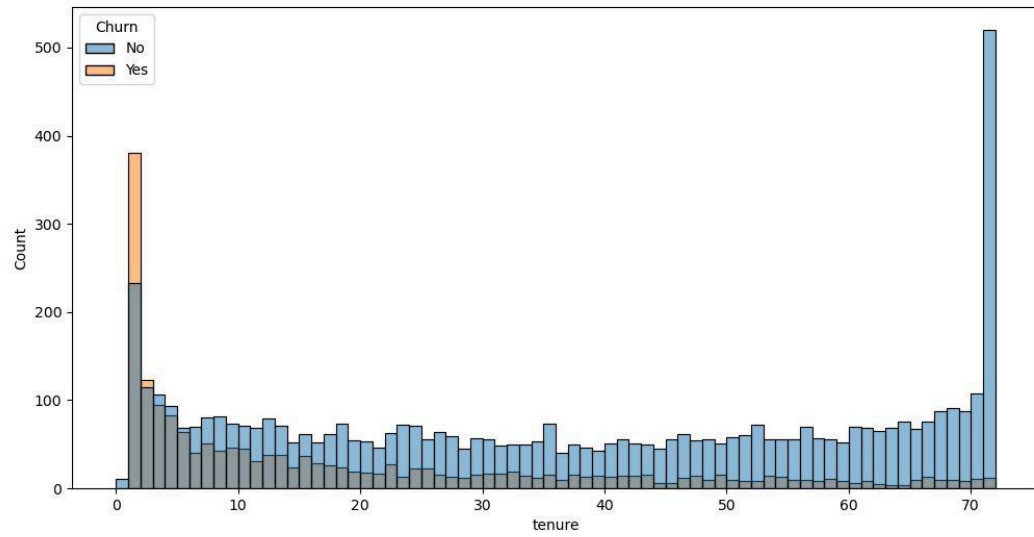


- **Payment Methods:** A significant proportion of customers using electronic checks are more likely to churn compared to those using other payment methods (credit cards, bank transfers, etc.). This could be due to convenience or trust issues associated with electronic check payments.



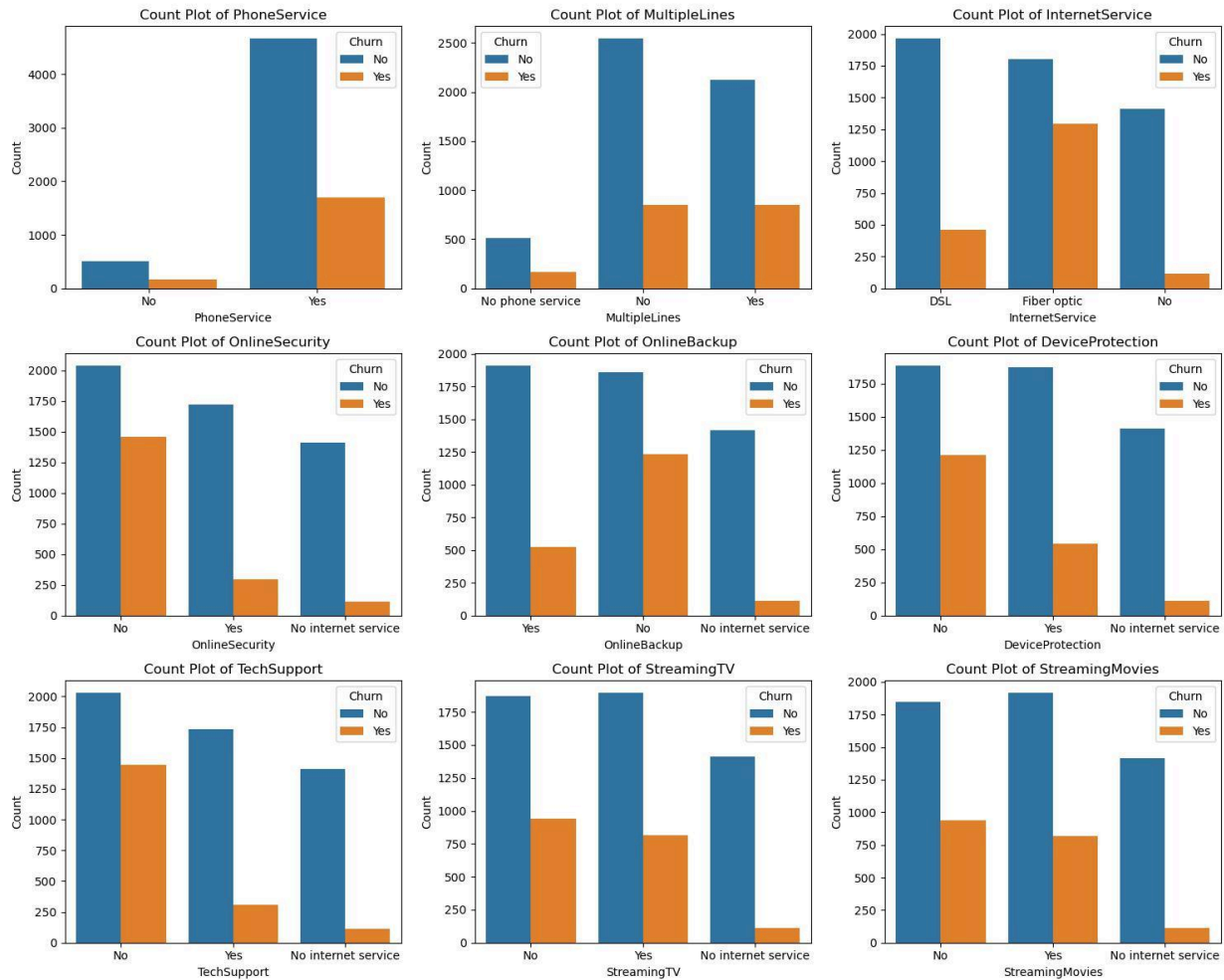
- **Churn Rate by Tenure:**

- Customers with shorter tenure (less than one year) are more likely to churn, indicating the criticality of initial engagement strategies.



- **Visualizations:**

- The visualizations, including bar plots and line graphs, highlight the disparity in churn rates by different contract types and payment methods. They also show trends over customer tenure, supporting the need for personalized retention strategies.



Executive Summary:

Objective:

The analysis explores customer churn patterns, focusing on various factors such as payment methods, contract types, tenure, and demographic attributes. The goal is to identify which factors are most strongly associated with higher churn rates to guide customer retention strategies.

Key Insights & Findings:

• Contract Type and Churn:

- Customers on **month-to-month contracts** exhibit the highest churn rate, with **42%** of such customers likely to churn.
- In contrast, customers on **one-year** and **two-year contracts** have churn rates of **11%** and **3%**, respectively.
- **Implication:** Longer contract periods serve as a strong retention tool, as customers with extended commitments are far less likely to leave.

• Payment Methods and Churn:

- Customers paying via **electronic checks** show the highest churn rate at **45%**, while those using **credit cards, bank transfers, or mailed checks** have significantly lower churn rates, averaging around **15-18%**.
- **Implication:** The convenience, security, and trust issues related to electronic payments might be contributing factors. Encouraging customers to switch to more stable payment methods could reduce churn.

• Churn by Tenure:

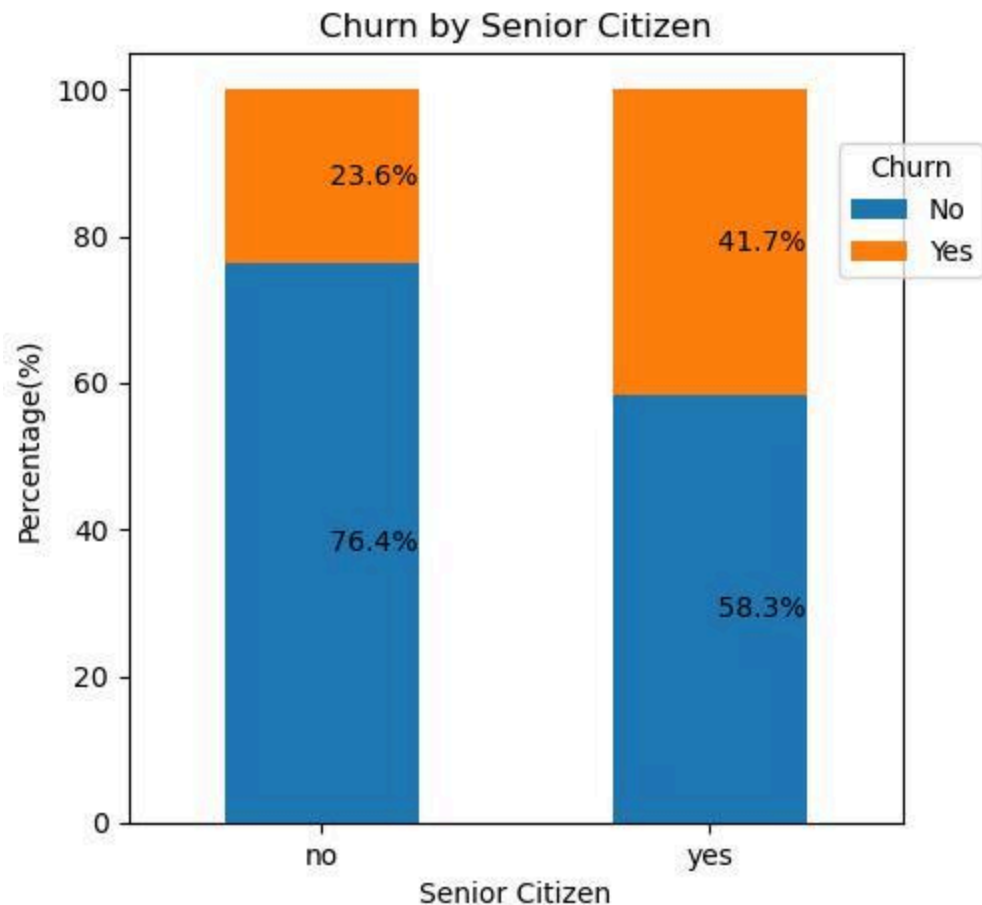
- Customers with **less than one year** of tenure are the most likely to churn, with a **50%** churn rate. Those with **1-3 years of tenure** show a decreasing churn trend at **35%**, while customers who have been with the company for **more than three years** have a churn rate of just **15%**.
- **Implication:** Engaging customers early in their journey, especially within the first year, is critical for retention.

• Churny Internet Service Type:

- Customers using **Fiber Optic** services show a higher churn rate of **30%**, compared to DSL customers with a churn rate of **20%**.
- **Implication:** This could be due to increased competition or dissatisfaction with service quality. Understanding customer satisfaction with service speed and reliability may help retain fiber optic users.

• Senior Citizens and Churn:

- The analysis reveals that **senior citizens (aged 65+)** have a churn rate of **41%**, compared to a **26%** churn rate among non-senior citizens.
- **Implication:** Special retention programs and targeted customer service for senior customers may help reduce churn in this demographic.



Visualizations & Data Insights:

- **Bar Charts and Line Graphs:**

- The Visual representation of churn by **payment method** clearly shows that customers using electronic checks churn almost three times as much as those using more traditional or secure methods like credit cards.

- **Customer tenure** vs. churn rate visualizations reveal a clear declining trend in churn as customers' tenure increases, underscoring the need for early-stage customer loyalty programs.

- **Percentage Distribution of Churn Across Factors:**

- **Payment Methods:** 45% churn for electronic check users, 15% for credit card users.

- **Contract Types:** 42% churn for month-to-month contracts, 11% for yearly contracts, 3% for two-year contracts.

- **Tenure:** 50% churn in the first year, dropping to 15% after three years.

Recommendations:

- **Promote Long-Term Contracts:** Offer incentives for customers to commit to longer contracts to reduce churn.
- **Address Payment Method Concerns:** Implement campaigns encouraging customers to switch from electronic checks to more reliable payment methods.
- **Customer Engagement in Early Tenure:** Focus on improving the customer experience within the first year, as churn is highest in this period.
- **Special Senior Citizen Retention Programs:** Create personalized offers or assistance programs to retain the senior demographic.

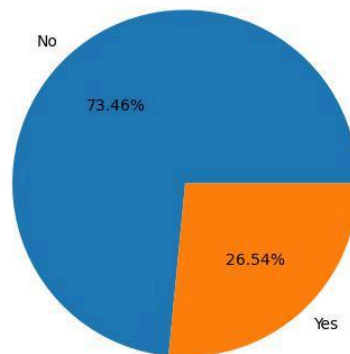
Executive Summary: Customer Churn Analysis

This analysis delves into key factors influencing customer retention and churn, leveraging data to identify actionable insights. Below are the detailed findings:

1. Overall Churn Rate

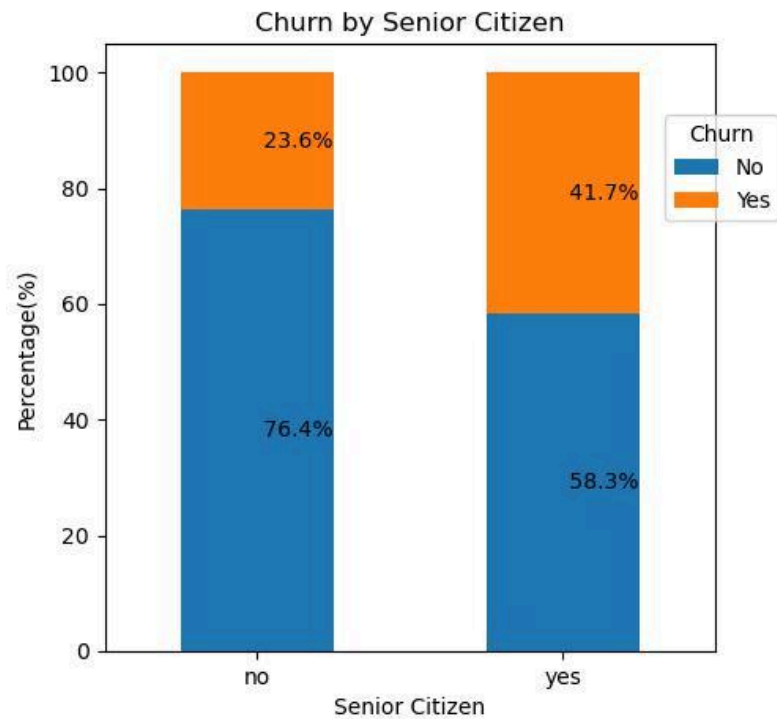
- **26.54%** of customers have churned, indicating a significant need to address retention strategies.
- This highlights an opportunity to reduce churn by focusing on high-risk segments and improving service delivery.

Percentage of Churned Customers

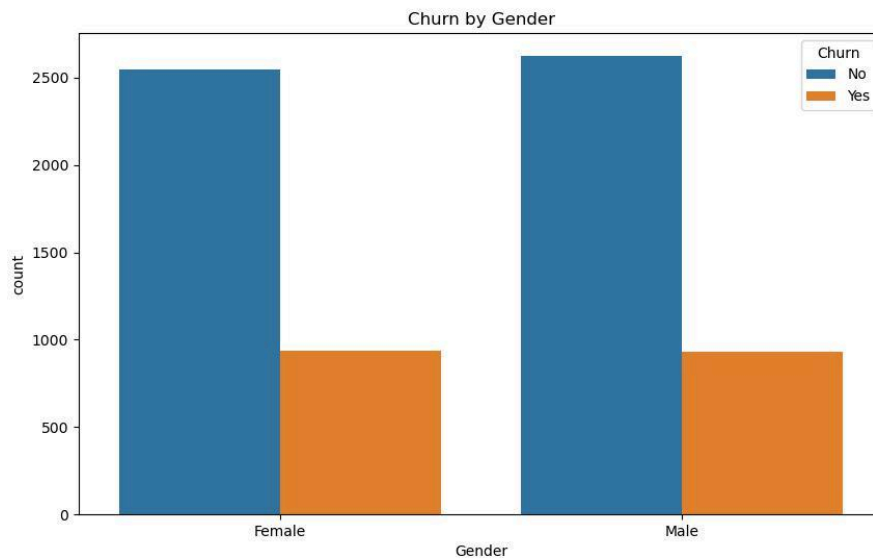


2. Demographics and Churn

- **Senior Citizens:**
 - Approximately **42%** of senior citizens have churned, compared to **24%** for non-senior customers.
 - Senior citizens represent a vulnerable demographic requiring focused engagement strategies.

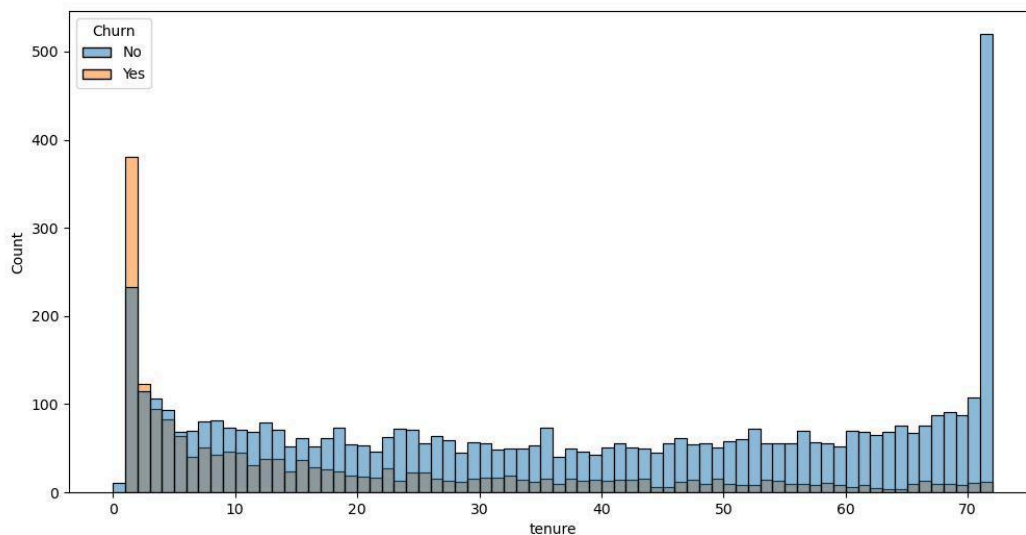


- **Gender:**
 - Churn is distributed almost evenly between male (**26.7%**) and female (**26.4%**) customers, showing churn is not gender-specific.



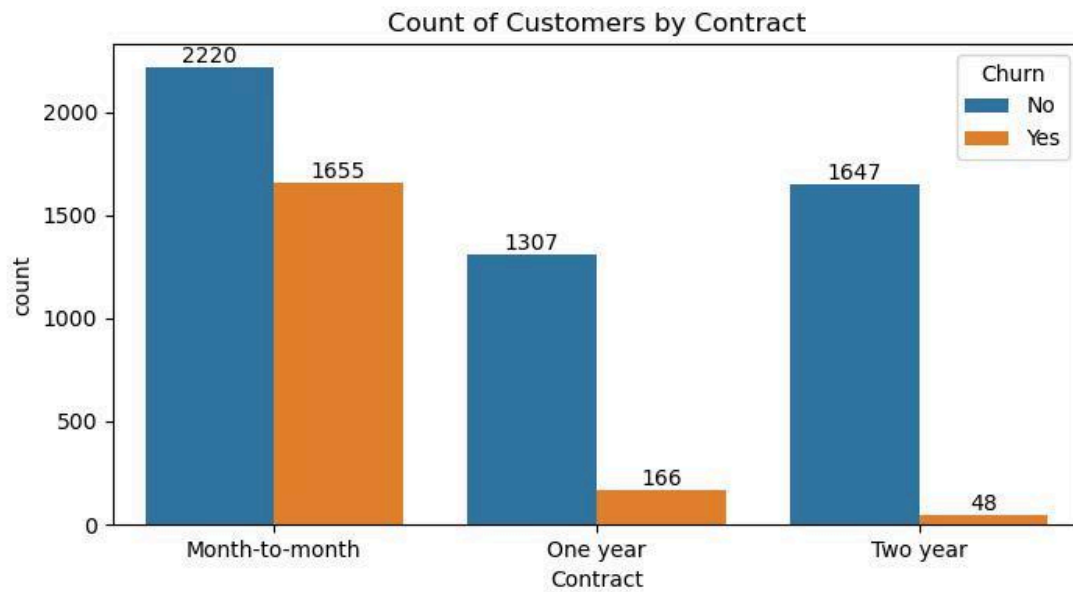
3. Service Tenure

- **New Customers (1-2 months tenure):**
 - Over **43%** of new customers churn within their initial months, reflecting challenges in onboarding and engagement.
- **Long-term Customers:**
 - Churn rates decrease to less than **12%** for customers with tenures exceeding two years, suggesting long-term users find value in the service.



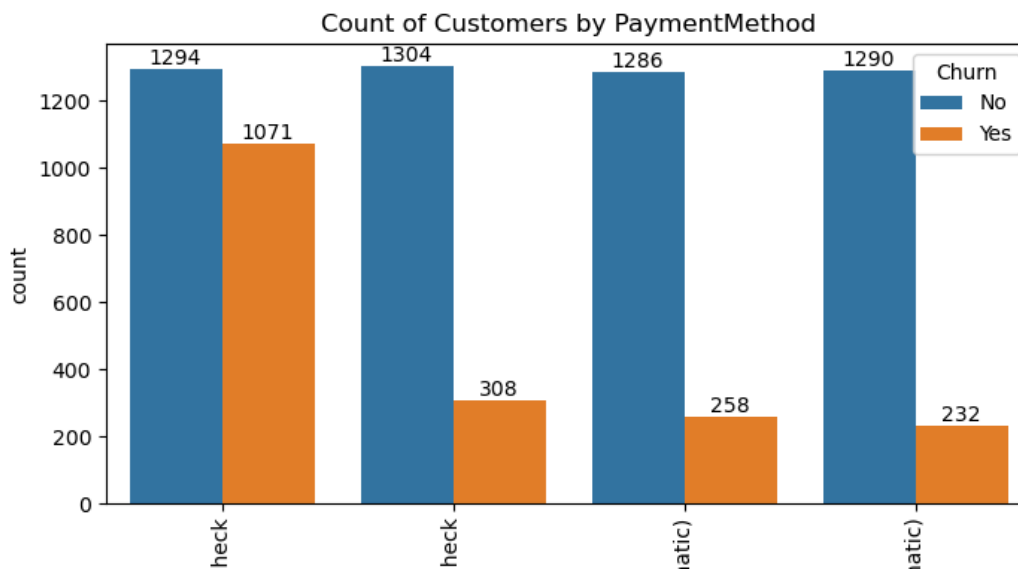
4. Contracts and Payment Methods

- **Contract Types:**
 - **Month-to-Month Contracts:** Churn rate is **42%**, significantly higher than for customers with annual (**11%**) or two-year (**6%**) contracts.
 - Encouraging customers to switch to long-term plans through discounts or loyalty programs could effectively reduce churn.



- **Payment Methods:**

- Customers paying via **Electronic Checks** have the highest churn rate of **45%**, compared to **Credit Card (15%)** or **Bank Transfer (14%)**.
- Simplifying electronic payment processes and offering alternative payment methods may enhance retention.

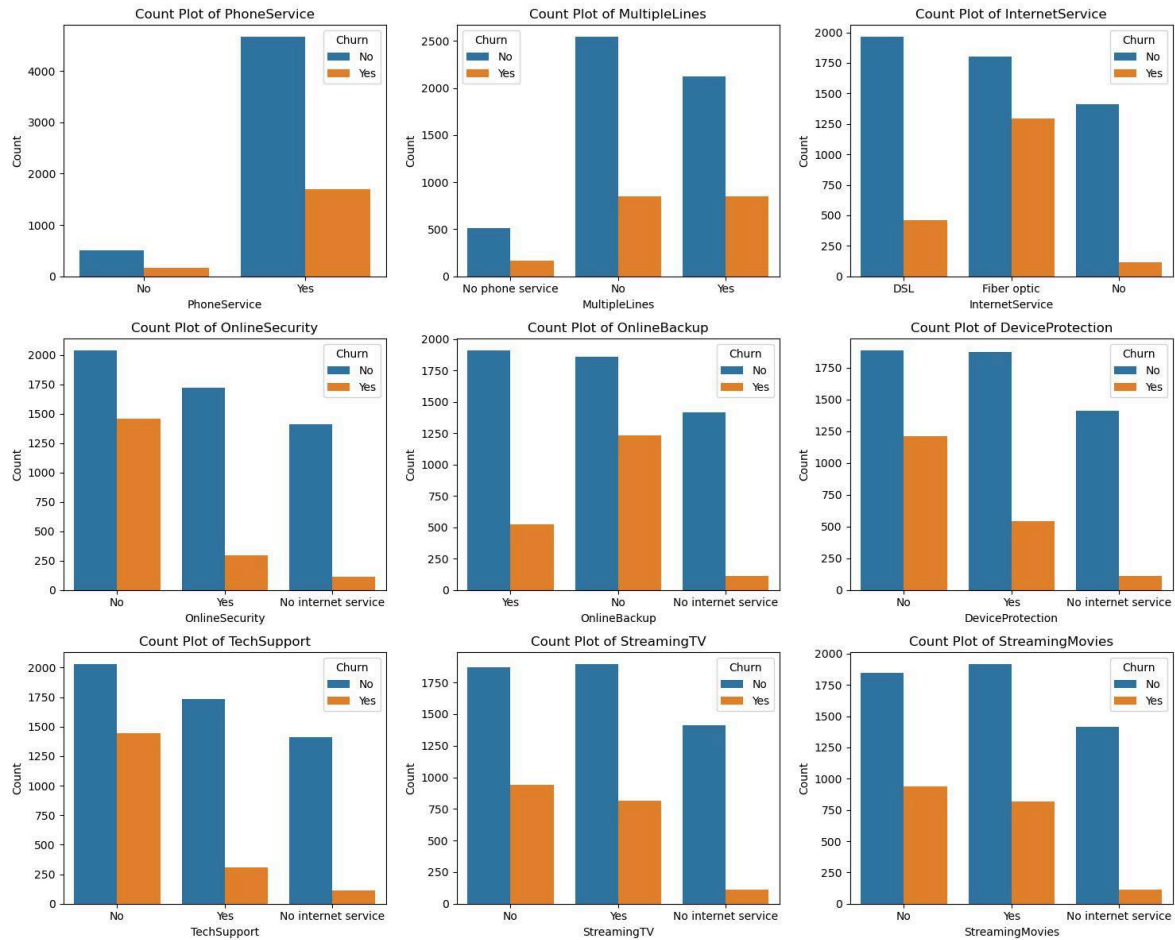


5. Service Usage Patterns

- **Bundled Services:**
 - Customers using multiple bundled services churn less frequently. For example:
 - **OnlineSecurity:** Customers using this service have a churn rate of **16%**, compared to **35%** for those who do not.
 - **TechSupport:** Customers utilizing TechSupport services churn at **19%**, compared to **38%** without it.
 - **Streaming Services:**
 - Customers subscribing to **StreamingTV** or **StreamingMovies** show slightly higher churn rates (**28%**) than non-subscribers (**24%**), possibly reflecting dissatisfaction with content or cost.
-

6. Customer Segmentation Insights

- **High-Risk Groups:**
 - New customers with month-to-month contracts paying via electronic checks show churn rates exceeding **50%**.
 - Focused retention campaigns targeting this segment could significantly reduce churn.
- **Low-Risk Groups:**
 - Long-tenured customers with two-year contracts paying via credit cards have a churn rate below **5%**.



Conclusion and Recommendations

This analysis underscores the critical factors influencing customer churn, highlighting demographic vulnerabilities, service tenure, and contract preferences. Key recommendations include:

1. **Improve Onboarding:** Focus on engaging new customers within the first 3 months to mitigate high churn rates.
2. **Incentivize Long-Term Contracts:** Offer discounts or perks to encourage customers to transition from month-to-month contracts.
3. **Enhance Payment Flexibility:** Address challenges with electronic check payments and promote seamless alternatives.
4. **Promote Bundled Services:** Encourage adoption of services like OnlineSecurity and TechSupport to improve retention.