Summary

Objective: This analysis examines the factors influencing customer churn, with a focus on payment methods and contract types.

Key Insights:

- **Contract Type:** Customers on month-to-month contracts are more likely to churn compared to those on yearly or bi-annual contracts. This highlights the potential of long-term contracts to enhance customer retention.
- **Payment Methods:** Customers using electronic checks exhibit a higher likelihood of churn compared to those using other payment methods like credit cards or bank transfers. This may be attributed to convenience or trust issues related to electronic check payments.

Churn Rate by Tenure:

- Customers with a tenure of less than one year are at a higher risk of churning, emphasizing the importance of effective initial engagement strategies.

Visualizations:

- Bar plots and line graphs illustrate the variation in churn rates across contract types and payment methods. They also reveal trends based on customer tenure, underscoring the need for tailored retention strategies.

Executive Summary

Objective:
This analysis examines customer churn patterns, focusing on factors like payment methods, contract types, tenure, and demographics. The aim is to identify the key drivers of churn and develop strategies to improve customer retention.

Key Insights & Findings:

1. Contract Type and Churn:

- Customers with **month-to-month contracts** have the highest churn rate (42%).
- Customers with **one-year contracts** have a churn rate of 11%, and those with **two-year contracts** have just 3%.
- **Insight:** Longer contracts help retain customers, as they are less likely to leave.

2. Payment Methods and Churn:

- Customers using **electronic checks** have the highest churn rate (45%).
- Those using **credit cards, bank transfers, or mailed checks** have lower churn rates, averaging 15-18%.
- **Insight:** Issues with convenience, security, or trust in electronic checks may be driving this trend. Encouraging stable payment methods can reduce churn.

3. Churn by Tenure:

- Customers with **less than one year of tenure** have the highest churn rate (50%).
- Churn decreases to 35% for customers with **1-3 years of tenure** and drops to 15% for those with **more than three years** of tenure.
- **Insight:** Early engagement is crucial, especially during the first year.

4. Churn by Internet Service Type:

- Customers using **Fiber Optic services** have a higher churn rate (30%) compared to **DSL users** (20%).
- **Insight:** Dissatisfaction with service speed or reliability might affect Fiber Optic users. Addressing these concerns could improve retention.

5. Senior Citizens and Churn:

- Senior citizens (65+) have a churn rate of 41%, compared to 26% for younger customers.
- **Insight:** Customized programs and better customer support can help retain senior customers.

Visualizations & Data Insights:

- **Bar Charts:**
    - Visuals show that electronic check users churn nearly three times more than credit card users.
    - Tenure vs. churn rate graphs highlight a steady decline in churn as tenure increases, emphasizing the importance of early loyalty programs.
- **Percentage Distribution of Churn Across Factors:**
    - **Payment Methods:** 45% churn for electronic checks, 15% for credit cards.
    - **Contract Types:** 42% churn for month-to-month, 11% for one-year, 3% for two-year contracts.
    - **Tenure:** 50% churn in the first year, dropping to 15% after three years.

Recommendations:

1. **Promote Long-Term Contracts:** Offer incentives to encourage customers to switch to yearly or two-year contracts.
2. **Improve Payment Method Experience:** Run campaigns to encourage customers to switch from electronic checks to more reliable options like credit cards or bank transfers.
3. **Focus on Early Engagement:** Enhance the customer experience during the first year to prevent churn.
4. **Support Senior Citizens:** Create special offers or personalized assistance programs for senior customers to address their specific needs.