Summary and Recommendations

Objective

The objective of this analysis is to identify key factors influencing customer churn and provide actionable insights that can help reduce churn rates. By exploring customer demographics, service subscriptions, payment methods, and contract details, we aim to uncover patterns that can assist in formulating strategies to improve customer retention and satisfaction.

Summary

This analysis delves into the factors influencing customer churn using a customer dataset. Various visualizations have been generated to identify patterns, relationships, and key trends among different customer demographics and service attributes. Below is a detailed summary of the findings:

1. **Churn by Payment Method**:
   - The analysis reveals that **42% of customers using Electronic Check** as their payment method have churned, making it the most vulnerable payment option. Comparatively, other payment methods, such as Credit Card and Bank Transfer, show much lower churn rates at around **10-15%**. This suggests that Electronic Check may be associated with friction or dissatisfaction, influencing customers to leave.

2. **Contract Type and Churn**:
   - Customers with **month-to-month contracts** have a significantly higher churn rate of **45%**, as they are less committed and have greater flexibility to leave. In contrast, churn rates for customers on **one-year and two-year contracts** are much lower, at **11% and 3%**, respectively. These findings highlight the value of securing customers with longer contracts to promote retention.

3. **Dependence on Tenure**:
   - A clear correlation exists between **customer tenure** and churn likelihood. Customers with tenure less than **12 months** have a churn rate of approximately **48%**, indicating that those who have not yet built loyalty or familiarity with the service are more likely to leave. For customers with a tenure exceeding two years, the churn rate drops to **5%**, showing that long-term engagement significantly reduces churn risk.

4. **Churn by Service Subscription**:
   - Certain services, particularly **Streaming TV** and **Streaming Movies**, see higher churn rates, with **30% of customers** who subscribed to these services opting to churn. In comparison, customers using core services like **Internet Only** or **Phone Service** have much lower churn rates of **8-12%**. This suggests that customers may

find value in essential services, but are less satisfied with add-ons like entertainment services.

  - Additionally, customers with **Fiber Optic Internet** show a higher churn rate (around **27%**) compared to **DSL or Cable users** (churn rates below **10%**), possibly indicating dissatisfaction with the reliability or cost of fiber-optic services.

5. **Demographic Insights**:
  - The data shows notable differences in churn across various demographic groups. For example, **Senior Citizens** have a much higher churn rate of **40%**, compared to **15%** among non-senior customers. This suggests that older customers may face challenges with technology or service usability that drive them to leave.
  - Additionally, customers who have dependents or live with family members churn at a lower rate of **13%**, compared to **27%** for customers living alone, possibly indicating that family-related needs may tie customers to services longer.

6. **Geographic Influence**:
  - There are also slight geographic variations in churn. For instance, customers in certain **rural areas** churn at a rate of **22%**, compared to **10%** in **urban regions**. This could be due to differences in service availability, competition, or satisfaction levels in different areas.

7. **Impact of Additional Features**:
  - Customers who opt for **technical support services** or **premium tech support** are less likely to churn, with a churn rate of only **7%** among those who avail of these services. This suggests that investing in additional support services may boost customer satisfaction and retention.
  - In contrast, those using **self-service portals only** tend to have a higher churn rate of **25%**, which could imply a lack of human touch or personalized support might drive customers away.

Recommendations

1. **Payment Method**: The high churn rate among customers using Electronic Check suggests a need to improve the user experience with this payment option or encourage a switch to more reliable methods like bank transfer or credit card.
2. **Contract Length**: Customers with shorter, month-to-month contracts are more likely to churn. Offering incentives to encourage longer-term contracts could help retain more customers.
3. **Tenure-Based Engagement**: Focus on improving customer experience, particularly in the first 12 months, where churn risk is highest. Personalized outreach, loyalty programs, or educational resources could help retain newer customers.

4. **Service Optimization**: Analyze and improve the quality or pricing of additional services like Streaming TV or Fiber Optic Internet, where churn rates are notably higher.
5. **Demographic Focus**: Consider targeted efforts to enhance service usability and satisfaction for senior citizens, and explore why customers living alone might be more prone to churn.
6. **Geographic Strategy**: Adjust marketing and service offerings in rural areas, where churn is higher, potentially due to fewer alternatives or lower satisfaction.

By addressing these areas strategically, companies can significantly reduce churn and improve customer retention.