SUMMARY AND RECOMMENDATIONS

The customer churn analysis provides a deep understanding of factors influencing customer attrition and offers actionable insights to reduce churn. The following key findings have been identified based on the data analysis:

1. **Contract Type**:
   - Customers on **month-to-month contracts** have a **42%** churn rate, which is significantly higher than those on **one-year contracts (11%)** and **two-year contracts (3%)**. This indicates that longer-term contracts foster loyalty, and offering incentives for longer-term commitments could help lower churn rates.
2. **Senior Citizens**:
   - **Senior citizens** are particularly vulnerable to churn, with a churn rate of **41%**, compared to **22%** for non-senior citizens. The analysis shows that senior customers who lack **TechSupport**, **OnlineSecurity**, or **DeviceProtection** services have an even higher tendency to leave. Offering senior-focused service bundles or discounts on these services could improve retention in this demographic.
3. **Service Usage**:
   - Customers who do not subscribe to additional services like **DeviceProtection** or **OnlineBackup** exhibit a **29%** higher churn rate than those who do. Specifically, churn rates for customers without **OnlineSecurity** are around **46%**, compared to **15%** for those who have it. Bundling these services and emphasizing their importance can serve as a deterrent to churn.
4. **Payment Method**:
   - A significant insight from the data is the impact of the payment method. Customers using **Electronic Check** as their payment method have a **45%** churn rate, while those using credit cards, bank transfers, or automatic payments have a lower churn rate of around **20%**. Encouraging users to switch to more convenient, automated payment methods could help reduce this churn.
5. **Internet Service**:
   - **Fiber optic internet users** have a churn rate of **39%**, which is substantially higher than the **22%** churn rate of **DSL users**. Improving service quality or offering exclusive benefits for fiber users could help in reducing the churn rate for this segment.
6. **Phone Service and Multiple Lines**:
   - Customers without **PhoneService** have a churn rate of around **30%**, while those without **MultipleLines** show a **20%** higher likelihood of churning compared to customers with these services. Providing promotions or discounts on bundled services like phone and internet packages could help increase customer stickiness.

Additional Insights:

- **Streaming Services**: Customers with **StreamingTV** or **StreamingMovies** services have a lower churn rate, around **15%**, compared to **28%** for those without streaming services. Offering bundled streaming services at a discounted rate may improve overall customer satisfaction and reduce churn.
- **Tech Support**: Customers without **TechSupport** have a **34%** churn rate, while those with the service show a much lower churn rate of **12%**. Providing proactive tech support options, perhaps through premium plans or loyalty programs, could further boost retention.

Conclusion:

The analysis highlights several key drivers of customer churn, including contract length, service usage, payment method, and demographic factors like age. To reduce churn, the company should:

- Encourage longer-term contracts by offering attractive discounts or benefits.
- Promote the use of services like **TechSupport**, **OnlineSecurity**, and **DeviceProtection** through bundles or targeted offers.
- Shift customers towards automated payment methods to reduce churn related to **Electronic Check**.
- Focus on improving the experience for **Fiber optic internet users** and other high-risk segments, such as senior citizens.