Summary and Recommendation

Objective : This analysis identifies critical factors influencing customer retention and churn, supported by insightful visualizations and data patterns:

1. **Senior Citizen Churn:** A comparative analysis reveals that senior citizens exhibit a higher churn rate, indicating the need for targeted retention strategies for this demographic.
2. **Service Duration Correlation:**
   - Customers with shorter service durations (1-2 months) tend to churn more frequently.
   - Conversely, long-term users show higher loyalty, suggesting that early-stage customer engagement is vital.
3. **Contract Type Impact:**
   - Month-to-month contracts are strongly correlated with higher churn rates.
   - Customers with 1- or 2-year contracts demonstrate greater retention, underscoring the value of promoting long-term contracts.
4. **Customer Preferences and Behavior:**
   - Popular choices, such as "Yes" for phone services or specific internet service types, provide insights into customer preferences and usage trends.
   - These preferences can guide service enhancements and marketing strategies.
5. **Payment Methods:**
   - Customers opting for electronic checks are more likely to churn, suggesting an opportunity to explore alternative payment incentives to improve retention.

Recommendations

- Develop personalized retention initiatives for senior citizens.
- Strengthen onboarding and engagement efforts for new customers, focusing on the first two months.
- Incentivize long-term contracts to reduce churn associated with month-to-month plans.
- Leverage insights from customer preferences to tailor service offerings and promotional campaigns.
- Offer attractive payment alternatives to customers using electronic checks, potentially reducing churn.

The accompanying charts provide a visual narrative to these findings, enabling a deeper understanding of the data-driven insights.