Summary and Recommendations

· **Objective**:
To Analyze customer churn patterns to identify key factors influencing customer retention, focusing on contract types, payment methods, tenure, and demographics.

Key Insights

- **Contract Type**
  Customers on **month-to-month contracts** have a churn rate of **42%**.
  Customers on **1-year contracts** churn at **11%**, and **2-year contracts** at just **3%**.
  → Longer contracts significantly reduce churn.
- **Payment Method**
  Customers using **electronic checks** have the highest churn rate at **45%**.
  Those using **credit cards or bank transfers** churn at **15–18%**.
  → Encourage secure, convenient payment methods to improve retention.
- **Tenure and Churn**
  Customers with **less than 1 year** of tenure churn at **50%**.
  Churn drops to **35%** for 1–3 years, and **15%** after 3 years.
  → Focus on onboarding and engagement in the first year.
- **Internet Service Type**
  Fiber optic users churn at **30%**, while **DSL users** churn at **20%**.
  → Investigate service satisfaction among fiber users.
- **Senior Citizens**
  Senior citizens (65+) churn at **41%**, compared to **26%** for others.
  → Consider personalized support for older customers.

Visualizations

- **Bar charts** and **pie charts** show churn distribution by contract type, payment method, and tenure.
- **Stacked bar charts** highlight churn across service features like online security, tech support, and streaming services.
- → Visuals clearly show which customer segments are at higher risk of leaving.

Recommendations

- **Promote Long-Term Contracts**
  Offer discounts or benefits for customers who choose 1- or 2-year plans.
- **Improve Payment Experience**
  Encourage customers to switch from electronic checks to more secure options like credit cards or bank transfers.
- **Engage Early**
  Focus on customer experience during the first 12 months to reduce early churn.
- **Support for Seniors**
  Launch targeted retention programs for senior citizens, including personalized communication and support.