Summary and Recommendation

Objective:To analyze customer churn patterns, uncover key drivers influencing retention, and provide actionable strategies for reducing churn, improving customer satisfaction, and fostering long-term loyalty through data-driven decision-making and targeted interventions.

Key Insights:

1. **Customer Churn Rate**:
    - The churn rate is **26.54%**, indicating that over a quarter of customers are leaving.
    - Analysis of tenure data reveals a clear trend: customers with service durations of **1–2 months** are **50% more likely to churn** compared to those with longer tenures.
    - Conversely, customers with tenures exceeding **24 months** exhibit a churn rate of less than **10%**, highlighting the strong correlation between customer loyalty and tenure length.
2. **Contract Types and Retention**:
    - Customers on **month-to-month contracts** account for approximately **85%** of total churned customers.
    - In contrast, those on **1-year contracts** experience a churn rate of just **11%**, and for **2-year contracts**, this drops further to **8%**.
    - The flexibility of month-to-month contracts appears to contribute to churn, underscoring the importance of promoting long-term contracts.
3. **Payment Method Analysis**:
    - Customers using **electronic checks** have a churn rate of **42%**, significantly higher than those using other payment methods.
    - For comparison:
        - **Credit card payments** have a churn rate of **16%**.
        - **Bank transfers** and **automatic payments** average around **15%** churn rates, making them more reliable methods.

Recommendations:

1. **Retention Strategies**:
    - Implement proactive retention measures during the first 2–3 months of customer onboarding, such as personalized outreach, discounts, or additional perks.
    - Promote longer-term contracts by offering attractive discounts, benefits, or loyalty rewards to customers considering switching from month-to-month plans.
    - Educate customers about the long-term cost savings and additional value associated with 1-year or 2-year contracts.
2. **Payment Method Optimization**:
    - Review the electronic check payment process to identify and resolve potential usability issues or hidden costs.

    - Encourage customers to switch to automated payment methods through incentives like small monthly discounts or bonus services.
3. **Customer Segmentation and Predictive Insights**:
    - Develop machine learning models to predict customers at risk of churn based on tenure, payment method, and contract type.
    - Focus retention efforts on high-risk segments such as new customers, month-to-month subscribers, and electronic check users.
4. **Customer Experience Improvements**:
    - Conduct surveys or feedback sessions to understand customer dissatisfaction points, particularly among short-tenure customers and electronic check users.
    - Provide seamless customer support to address issues early, reducing frustration and increasing satisfaction.

Supporting Data:

- **Tenure-Based Churn**:
    - **1–2 months**: **~50% churn**.
    - **12–24 months**: **~20% churn**.
    - **Over 24 months**: **~10% churn**.
- **Contract-Based Churn**:
    - Month-to-month: **85% of churners**.
    - 1-year contracts: **11% churn**.
    - 2-year contracts: **8% churn**.
- **Payment-Based Churn**:
    - Electronic checks: **42% churn**.
    - Credit cards, bank transfers, and automated payments: **~15–16% churn**.