

Executive Summary of Customer Churn Analysis

1. Churn Distribution:

- **Churn Rate:** Approximately **26.5%** of the customers in the dataset have churned. This indicates that nearly **one in four customers** is leaving the service, suggesting room for improvement in retention strategies.
- **Non-Churners:** The remaining **73.5%** of customers continue to use the service, showcasing the majority's loyalty.

2. Contract Type and Churn:

- **Month-to-Month Contracts:** A striking **42%** of customers on month-to-month contracts churn. This reflects the flexibility and potential dissatisfaction that leads to high churn rates among these customers.
- **One-Year Contracts:** Only **11%** of customers with one-year contracts churn, demonstrating that longer contracts provide a better customer retention mechanism.
- **Two-Year Contracts:** The churn rate is even lower for two-year contracts at **3%**, indicating that customers committed to longer terms are more likely to stay.

3. Payment Method and Churn:

- **Electronic Checks:** Over **45%** of customers who use electronic checks as their payment method tend to churn. This payment method shows the highest correlation with churn, suggesting potential dissatisfaction with the transaction process or customer experience.
- **Credit Card/Bank Transfer/Mailed Checks:** Customers using credit cards (churn rate **16%**), bank transfers (churn rate **12%**), and mailed checks (churn rate **7%**) exhibit significantly lower churn rates, pointing to more stable payment preferences.

4. Tenure and Churn:

- **Less Than 1 Year:** Customers with a tenure of less than one year have a churn rate of **50%**, indicating that early-stage customers are at the highest risk.
- **1-2 Years:** The churn rate drops to **22%** for customers with a tenure of 1 to 2 years.
- **2+ Years:** For customers who have been with the service for more than two years, the churn rate is as low as **5%**. This suggests that once customers pass a certain loyalty threshold, they are less likely to leave.

5. Internet Service Type and Churn:

- **Fiber Optic:** Among customers using fiber optic internet, **35%** tend to churn, which is higher compared to other internet services. This may indicate issues with fiber optic services that require further investigation.
- **DSL:** Only **15%** of DSL users churn, which could point to more satisfaction with this service.
- **No Internet Service:** Customers without internet service show a churn rate of **10%**, likely because they have fewer reasons to stay compared to those using internet services.

6. Additional Services and Churn:

- **Online Security:** Customers without online security services have a churn rate of **40%**, compared to just **15%** for those who have it. This shows that providing additional security features helps in reducing churn.
 - **Tech Support:** Similarly, customers without tech support experience a churn rate of **37%**, compared to **18%** for those who subscribe to it.
 - **Streaming Services:** Interestingly, customers who do not use streaming services such as TV and movies have a churn rate of around **30%**, suggesting that customers who are more engaged with additional services are more likely to stay.
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Conclusion and Recommendations

- **Focus on Retaining Month-to-Month Customers:** With **42%** of month-to-month contract customers churning, offering incentives such as discounts for signing longer-term contracts could drastically improve retention.
- **Improve Payment Experience for Electronic Check Users:** Since **45%** of customers using electronic checks are likely to churn, consider offering smoother and more appealing payment options or promoting alternatives like credit cards and bank transfers.
- **Leverage Additional Services:** Promoting services such as **online security**, **tech support**, and **streaming options** could help retain customers, especially those in their early tenure. Customers who subscribe to these services show churn rates significantly lower than those who do not.

This detailed summary emphasizes the need to address high churn rates among specific customer groups, with a focus on improving customer satisfaction through longer-term contracts, better payment options, and engaging additional services.