

Summary

Objective:

This analysis focuses on understanding why customers leave (churn) and identifies patterns related to payment methods, contract types, tenure, and customer demographics. The goal is to pinpoint factors linked to higher churn rates and offer actionable recommendations to improve customer retention.

Key Insights:

1. Contract Type and Churn:

- Customers with **month-to-month contracts** are most likely to leave, with a **42% churn rate**.
- Those with **one-year contracts** have an **11% churn rate**, and **two-year contracts** only **3%**.
- **Takeaway:** Longer contracts significantly reduce churn, as customers with extended commitments are less likely to leave.

2. Payment Methods and Churn:

- **Electronic check users** have the highest churn rate at **45%**, compared to **15%-18%** for credit card, bank transfer, or mailed check users.
- **Takeaway:** Customers might feel electronic payments are less reliable or secure. Encouraging other payment methods could improve retention.

3. Tenure and Churn:

- Customers who have been with the company for **less than a year** are the most likely to leave (**50% churn**).
- Those with **1-3 years of tenure** have a **35% churn rate**, while customers with **3+ years** drop to **15% churn**.
- **Takeaway:** Retaining customers in their first year is crucial for reducing churn.

4. Internet Service Type and Churn:

- Customers using **Fiber Optic services** have a **30% churn rate**, compared to **20%** for DSL users.
- **Takeaway:** Dissatisfaction with fiber optic services, possibly due to speed or reliability, may drive churn.

5. Senior Citizens and Churn:

- **Senior citizens (65+)** have a higher churn rate (**41%**) than younger customers (**26%**).
- **Takeaway:** Offering tailored support and programs for senior citizens could help retain this group.

Visualizations and Insights:

- **Bar and Line Charts:**

- Showed that electronic check users churn almost three times more than credit card users.
- Highlighted the steady decline in churn as customers' tenure increases.

- **Churn Percentage by Factors:**

- Payment Methods: **45% churn** for electronic checks; **15%** for credit cards.
- Contract Types: **42% churn** for month-to-month, **3%** for two-year contracts.
- Tenure: **50% churn** in the first year, dropping to **15%** after three years.