

## Executive Summary

### Objective:

The analysis explores customer churn patterns, focusing on various factors such as payment methods, contract types, tenure, and demographic attributes. The goal is to identify which factors are most strongly associated with higher churn rates to guide customer retention strategies.

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## Key Insights & Findings

### • Contract Type and Churn:

- Customers on month-to-month contracts exhibit the highest churn rate, with **42%** of such customers likely to churn.
- One-year and two-year contracts have churn rates of **11%** and **3%**, respectively.
- *Implication:* Longer contract periods serve as a strong retention tool.

### • Payment Methods and Churn:

- Electronic check users have the highest churn rate at **45%**.
- Customers using credit cards, bank transfers, or mailed checks have churn rates around **15–18%**.
- *Implication:* Addressing concerns with electronic checks may reduce churn.

### • Churn by Tenure:

- Less than 1 year: **50%** churn rate
- 1–3 years: **35%**
- Over 3 years: **15%**
- *Implication:* Early engagement is crucial to prevent churn.

### • Churn by Internet Service Type:

- **Fiber Optic:** 30% churn
  - **DSL:** 20% churn
  - *Implication:* Competition or dissatisfaction may drive higher churn in fiber plans.
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- **Senior Citizens and Churn:**
    - Senior citizens (65+) have a **41%** churn rate, versus **26%** for non-seniors.
    - *Implication:* Tailored programs could improve retention for older demographics.
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## Visualizations & Data Insights

- **Charts & Trends:**
    - Churn is almost 3× higher among electronic check users than credit card users.
    - Clear decline in churn with increased tenure, supporting early loyalty initiatives.
  - **Percentage Summary:**
    - **Payment Methods:** 45% churn for electronic checks, 15% for credit cards
    - **Contract Types:** 42% for month-to-month, 11% yearly, 3% bi-annual
    - **Tenure:** 50% (first year), 15% (after 3+ years)
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## Recommendations

- **Promote Long-Term Contracts:** Offer incentives for yearly or bi-annual plans.
- **Address Payment Preferences:** Encourage stable payment methods like cards or bank transfers.
- **Enhance Onboarding Experience:** Engage customers actively in their first year.

- **Support Seniors:** Design outreach and support programs for older customers.