# **Summary – Telecom Churn Analysis**

This analysis examines 7,043 telecom customers to identify why 26.54% churned. Through detailed demographic, financial, and service-level analysis, we uncover actionable drivers of churn and provide strategic recommendations.

# **Key Findings & Insights**

#### 1. Overall Churn

- 26.54% churn rate =  $\sim$ 1.869 customers.
- Benchmark comparison: Healthy telecom churn is <15%, so this is significantly higher.
- Retention opportunity: Reducing churn by even 5 percentage points would save ~350 customers, translating to **substantial annual revenue retention**.

#### 2. Demographic Breakdown

- Gender:
  - o Male churn rate: 26.2%
  - Female churn rate: 26.9%
  - Gender has **minimal impact** on churn.
- **Senior Citizens:** 
  - Seniors (16% of customer base): 42% churn rate.
  - Non-seniors: 24% churn rate.
  - Seniors are 1.7× more likely to churn.
- **Dependents & Partners:** 
  - Without dependents: 32% churn rate.
  - With dependents: 16% churn rate.
  - Dependents = strong retention factor.
  - o Similar trend for **partnered vs. single** customers.
- **Tenure (time with company):** 
  - o 0–12 months: **45% churn** (early-stage risk).
  - 13–24 months: **25% churn**.
    - o 24 months: <15% churn.
  - The **first year is critical** for customer survival.

### 3. Contract Type & Billing

- **Contract Type:** 
  - Month-to-month: 43% churn rate.

- o 1-year contract: 11% churn rate.
- o 2-year contract: 3% churn rate.
- Customers with long-term contracts are 10–15× more loyal.

#### • Payment Method:

- Electronic check: 45% churn rate.
- o Mailed check: 19% churn rate.
- o Automatic credit card/bank transfer: 15% churn rate.
- o Manual payment methods are strongly linked to churn.

#### 4. Service-Related Patterns

- Internet Type:
  - o Fiber optic users: 41% churn.
  - o DSL users: 18% churn.
  - Fiber customers may face quality or cost concerns.
- Online Security:
  - o With: 15% churn.
  - o Without: 42% churn.
  - Security services reduce churn by 27 points.
- Tech Support:
  - o With: 16% churn.
  - Without: 41% churn.
- Device Protection:
  - o With: 19% churn.
  - o Without: 37% churn.

Across all add-ons, customers with **support & protection services churn ~20% less** than those without.

#### 5. Financial Patterns

- Monthly Charges:
  - <\$50/month: 16% churn.
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  - o \$50–\$80/month: **25% churn**.
    - \$80/month: 45% churn.
  - o → High bills directly increase churn risk.
- Total Lifetime Spend:
  - Low spenders (<\$500 total): **high churn (40%+)**  $\rightarrow$  early exits.
  - o Long-term spenders (> \$2,000 total): <10% churn.



#### 1. **Retention Programs**

- Offer discounts for converting month-to-month customers to 1- or 2-year contracts.
- This could reduce churn by **20–25 percentage points**.

#### 2. Senior Citizen Engagement

- o Launch senior-friendly support bundles (tech help, bill reminders).
- o Potential to save 10–15% of at-risk seniors.

#### 3. Onboarding Focus (First-Year Customers)

- o Personalized communication during first 12 months.
- o Loyalty rewards for crossing 12-month tenure milestone.

#### 4. Service Bundling

- o Proactively upsell **Online Security, Tech Support, Device Protection**.
- Customers with these churn ~50% less.

#### 5. Billing Improvements

- o Encourage **auto-pay adoption** with cashback/discount incentives.
- This reduces churn from  $45\% \rightarrow \sim 15\%$  among electronic check users.

### 6. Pricing Strategy

- o Customers paying >\$80/month are at highest risk.
- o Explore tiered discounts, bundle offers, or loyalty credits.

## **Conclusion**

- **Churn Rate**: 26.54% (well above benchmark).
- High-Risk Segments:
  - Month-to-month contract users (43% churn)
  - Senior citizens (42% churn)
  - o Fiber optic users (41% churn)
  - Electronic check users (45% churn)
  - High bill payers (45% churn)

#### Loyal Segments:

- o 2-year contract holders (97% retention)
- o Customers with multiple add-on services
- o Long-tenure, high-spend customers

By addressing the above through **contract conversions**, **support services**, **and billing optimizations**, the company can realistically **cut churn by 10–15%**, improving profitability and customer lifetime value.