Customer Churn Analysis Report

1. Introduction

This report focuses on understanding the reasons and factors contributing to customer churn for a telecom company, using key insights derived from customer demographic, account and service-related data. The objective is to identify key factors influencing churn and developing actionable solutions that can reduce churn and improve customer retention.

Risky customers are defined as those who have not churned but are at a high likelihood of doing so due to their high monthly charges compared to the average of churned customers.

Key metrics:

- **Risky Customers**: 2,097 (29.8% of all customers).
- **Churned Customers**: 1,869 (26.5% of all customers).
- **Non-Risky Customers**: 3,077 (43.7% of all customers).

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2. Key Insights

A. Demographic Insights

1. **Tenure Distribution**:
   - **Risky Customers**:
     - Highest tenure concentration: 6 years (**37.29%**).
     - Short tenure (1–2 years): **26.89%**.
   - **Non-Risky Customers**:
     - Highest tenure concentration: 1 year (**30.35%**).
     - Longer tenure (6 years): **17.29%**.
   - **Insight**: Risky customers with shorter tenures overlap with churn-prone patterns. Senior citizens, especially those with 1-year tenure, are particularly vulnerable.

2. **Demographics**:
    - **Dependents**:
        - Risky: Concentrated in 6-year tenure (**22.08%**).
        - Non-Risky: Concentrated in 1-year tenure (**22.86%**).
    - **Partners**:
        - Risky: Dominantly found in 6-year tenure (**26.92%**).
    - **Insight**: Dependents and partners help stabilize long-term customers, while senior citizens with short tenure remain high-risk.

B. Account Insights

1. **Contract Types**:
   - **Risky Customers**:
     - Monthly contracts dominate (**876 customers, 41.8%**).
   - **Churned Customers**:
     - Overwhelming reliance on monthly contracts (**1,655 customers, 88.5%**).
   - **Insight**: Monthly contracts are a significant risk factor for churn. Yearly and two-yearly contracts improve retention.
2. **Monthly Charges**:
   - Distribution of risky customers by charge bins:
     - **$74–88**: 37.9%.
     - **$88–99**: 28.2%.
     - **$99–120**: 33.9%.
   - Insight: Higher monthly charges correlate with churn risk. Customers paying $74 or more are especially vulnerable.
3. **Payment Preferences**:
   - **Non-Risky Customers**: Prefer mailed checks (**36.3%**), indicating satisfaction with traditional payment methods.
   - **Risky Customers**: Distributed more evenly across electronic check, credit card, and bank transfer.

C. Service Insights

1. **Service Subscriptions**:
   - Risky customers:
     - Underuse **Tech Support (23%)** and **Online Security (24%)**.
     - Minimal adoption of streaming services (**Movies: 15%, TV: 14%**).
   - Non-Risky Customers:
     - Similar reliance on **Tech Support (23%)** and **Online Security (24%)**.
     - Lower engagement with entertainment services.
2. **Service Tiers**:
   - Non-Risky Customers' monthly charges by services subscribed:
     - 1 Service: $20.16.

- - **7 Services**: $69.62.
  - ○ Insight: Customers subscribing to fewer services are cost-sensitive and less engaged.

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3. Key Problems Identified

1. **Short Tenures**: Risky customers with 1–2 year tenures overlap with churn-prone patterns.
2. **Monthly Contracts**: Dominate both risky and churned customer groups, increasing churn likelihood.
3. **Limited Service Engagement**: Low adoption of Tech Support and Online Security among risky customers indicates missed opportunities for retention.
4. **High Monthly Charges**: Customers paying $74 or more are disproportionately at risk.

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4. Recommendations

A. Enhance Contract Retention

1. Transition risky customers on monthly contracts to yearly or two-yearly plans with:
   - ○ Loyalty discounts.
   - ○ Bundled services (e.g., Tech Support, Online Security).
2. Educate customers on cost savings and value stability of longer-term contracts.

B. Promote Value-Added Services

1. Increase adoption of Tech Support and Online Security, especially for customers subscribing to 1–4 services.
2. Develop personalized marketing campaigns showcasing benefits of these services.

C. Segment-Based Retention Strategies

1. **Short-Tenure Risky Customers (1–2 Years)**:
    - ○ Target with early retention offers (e.g., discounted upgrades, free trials).
    - ○ Proactively address concerns through personalized communication.
2. **Senior Citizens**:
    - ○ Tailor packages for simplicity and reliability.
    - ○ Increase outreach and engagement for this vulnerable demographic.

D. Refine Payment Preferences

1. Offer additional incentives for digital payments (e.g., credit card or bank transfer).
2. Highlight ease of use and convenience for customers using mailed checks.

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5. Visual Insights

The following charts support the analysis:

1. **Tenure Distribution: Risky vs. Non-Risky Customers**:
    - ○ Shows higher concentration of risky customers in longer tenures (6 years).
2. **Contract Type Distribution: Risky vs. Churned Customers**:
    - ○ Highlights dominance of monthly contracts in both groups.
3. **Service Tier vs. Monthly Charges**:
    - ○ Illustrates how retention improves as customers subscribe to more services.