Telecom Industry

This project aims to analyze customer churn in the telecom industry using a large dataset containing customer demographics, usage patterns, service plans, and billing information. The goal is to identify key factors driving churn and develop actionable insights to improve customer retention and reduce revenue loss.

Dashboard 1:

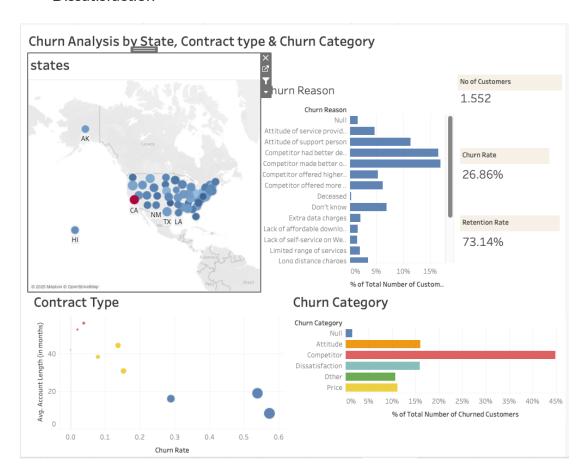
1. What is the churn rate in Alaska for customers on a one-year direct debit contract?

Churn Rate in Alaska for One-Year Direct Debit Contract: 18.18%

2. What are the churn categories for Florida customers on a Month-to-Month credit card contract?

Churn Categories for Florida (Month-to-Month Credit Card):

- Null
- Competitor
- Dissatisfaction



Dashboard 2:

1. What is the highest churn rate, number of customers, and age bin for customers with a One Year contract, paid by credit card only, with an unlimited data plan and no international plan?

Highest Churn rate (1 year contract, credit card payment, unlimited data plan, no international plan): 0.83, age bin- 85, no of customers - 6

2. What is the highest churn rate, number of customers, and age bin for customers with an international plan, unlimited data plan, paying by direct debit, on a one-year contract, and an account length of 72 months?

Highest churn rate, no of customers & age bin: Churn rate 0.23, No of customers- 13, Age bin -40

(international plan, unlimited data plan, direct debit, one-year contract, account length of 72 months)

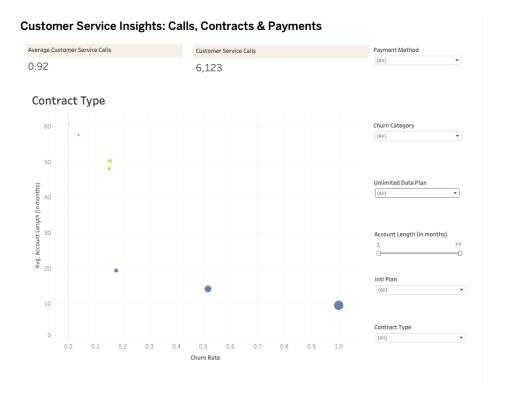


Dashboard 3:

1. What are the number of customer calls and average customer calls for customers with a month-to-month plan, direct debit, an unlimited data plan, and an international plan?

Number of customer calls: 6,123

Average customer calls: 0.92



Consultant Deliverables: Churn Analysis & Recommendations

Key Problem Areas Identified:

- 1. Higher Churn in Alaska with One-Year Direct Debit Contracts (18.18%)

 The churn rate here is significantly high despite a long-term contract. This may indicate dissatisfaction unrelated to contract duration or billing method.
- 2. Churn Categories in Florida Include 'Competitor' and 'Dissatisfaction' Customers are leaving due to better offers or perceived lower service quality.
- 3. Higher Churn in Specific Age Groups (e.g., Age 85 for One-Year Contract, Unlimited Data, No International Plan)

Age-based churn suggests that product offerings or communication strategies might not be age-inclusive.

4. Low Churn (0.23) Among Customers with Long Tenure (72 months), International Plan, and Direct Debit

This segment shows loyalty, possibly due to personalized services or bundled offerings.

5. High Volume of Customer Calls in Month-to-Month, Direct Debit, International + Unlimited Plans

Over 6,000 calls with an average below 1 may indicate a vocal minority or service issues not easily resolved through self-service.

Explanations & Possible Reasons:

- Billing Method Isn't a Silver Bullet: Despite using direct debit (often seen as a loyalty anchor), high churn still occurs in specific demographics and geographies, such as Alaska.
- Competitor Influence: Presence of 'Competitor' as a churn reason in Florida suggests aggressive marketing or better offerings in that region.
- Elderly Segment Needs Attention: Older customers might not find value in unlimited data or lack technical support, contributing to churn.
- Month-to-Month Plans Invite Volatility: These flexible plans attract price-sensitive customers who are more likely to churn if not constantly engaged.

Recommendations to Reduce Churn:

- 1. Targeted Retention Programs for High-Churn Regions (e.g., Alaska):
 - Offer loyalty discounts.
 - Provide regional customer service improvements or perks like local support.
- 2. Win-Back Campaigns in Florida Focused on Competitor Pricing:
 - Analyze competitors' offerings and match or exceed them.
 - Offer short-term promotional bundles with value-added services.
- 3. Segment-Specific Communication Strategies:
- Use age-appropriate education and support for older customers (e.g., simplified plans, personalized help).
- 4. Proactive Outreach to High-Call Customers:
 - Use customer service analytics to identify pain points.
 - Introduce chatbots or knowledge centers for faster resolution.
- 5. Leverage Loyalty from Long-Term Customers:
 - Turn satisfied long-tenure customers into brand ambassadors.
 - Offer refer-a-friend incentives and loyalty rewards.