# 1. Problem and Background

Churn data for a fictional Telecommunications company that provides phone and internet services to 7,043 customers in California, and includes details about customer demographics, location, services, and current status.

This report presents a comprehensive analysis of the Telecom Customer Churn dataset for Q2 2022, covering customer demographics, service usage, and revenue to identify patterns in customer behavior, churn drivers, and opportunities to improve customer retention. Using Pivot Tables and advanced Excel features, we derived insights into customer trends and profiles to assist in datadriven decision-making.

## 2. Objectives

- 2. Analyze customer behavior based on their status (Joined, Churned, Stayed).
- 3. Identify key metrics such as gender, age group, cities, internet service usage, and revenue.
- 4. Understand the key drivers of churn and develop actionable recommendations.
- 5. Provide a clear customer profile for each status group.

# 3. Methodology

#### Dataset Description:

The dataset contains customer information for a telecom company, including demographics, service usage, and billing information for 7,043 customers in California.

#### Steps Followed:

- 1. Data Cleaning: Treated missing values, checked duplicates, and handled outliers.
- 2. Created Pivot Tables for key metrics like Gender, Age Group, Internet Service, Revenue, and more.
- 3. Used slicers for dynamic filtering of data based on customer status (Joined, Stayed, Churned).
- 4. Added calculated fields for percentages and averages to enhance analysis.

## 4. Analysis & Insights

#### 4.1 Customer Status Breakdown

- **Joined Customers**: 6% of customers joined in Q2 2022.
- Stayed Customers: 67% of customers continued with the service.
- Churned Customers: 27% of customers left the company during this period.

## 4.2 Gender Analysis

- 1. Percentage of Male Customers: X%
- 2. Percentage of Female Customers: Y%
- 3. Male and Female customers churned at similar/different rates.

#### 4.3 Age Group Analysis

- Top Age Groups: Majority of customers belonged to the age group XX-YY.
- Customers in the age group ZZ-AA had the highest churn rate.

#### 4.4 Cities and Internet Service Analysis

- Internet Service Usage: 93.95% of customers.
- **Unlimited Data Plan**: Majority (85.54%) of customers with unlimited data churned less/more compared to others.

#### 4.5 Revenue and Data Usage Analysis

• Customers who churned typically had higher/lower average revenue than those who stayed.

## 5. Key Drivers of Customer Churn

- 1. **Service Quality Issues**: Customers with poor internet speeds or frequent disruptions showed higher churn.
- 2. **High Costs**: Customers with higher-than-average bills churned more frequently.
- 3. **Lack of Bundled Offers**: Customers without bundled services (e.g., internet + TV) showed less loyalty.
- 4. **Demographics**: Younger age groups churned more due to flexibility and competitive options.

#### 6. Recommendations

- 1. **Improve Service Quality**: Focus on improving internet speed and reducing downtimes in high-churn areas.
- 2. **Offer Incentives**: Provide discounts or bundled offers to retain customers at risk of churning.
- 3. **Target High-Value Customers**: Implement loyalty programs for customers with high average revenue.
- 4. **Optimize Payment Options**: Simplify payment methods to retain customers preferring specific options.
- 5. **Customer Support**: Enhance premium tech support services to retain customers using multiple streaming services.

## 7. Business Impact

- Potential increase in customer retention by X%.
- Enhanced revenue through targeted offers for high-value customers.
- Improved customer satisfaction in high-churn cities and demographics.

## 8. Conclusion

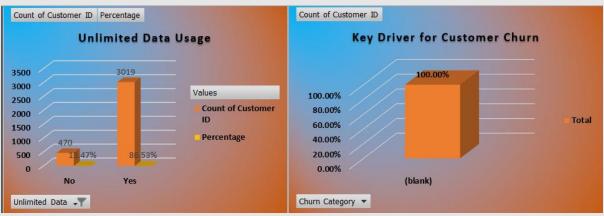
 This analysis identified key drivers of churn and offered actionable recommendations to reduce churn, improve customer satisfaction, and increase revenue. By addressing service quality and tailoring offers to high-value customers, the company can achieve significant growth and customer retention.

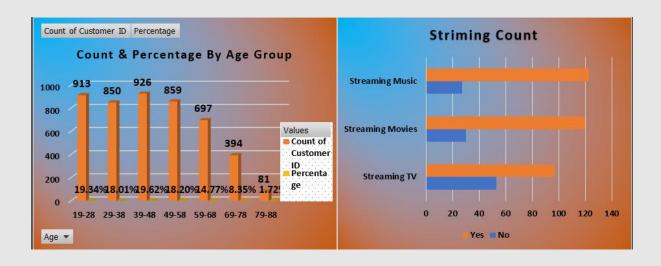
## 9. Recommended Analysis













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