# Telcom Customer Churn

Project Introduction

At the heart of every business are its customers. This project helps us understand why some customers choose to leave—so we can learn how to better care for those who stay. By looking at past customer experiences, we built a tool that gently tells us who might need extra attention. Our goal is simple: to make customers feel valued, keep them happy, and grow together with trust and loyalty.

1. For Overall Churn Rate:

"The overall customer churn rate stands at 26.6%, indicating that over a quarter of the customer base discontinued service. This highlights a significant revenue leakage and underscores the critical need for a robust retention strategy to ensure sustainable business growth."
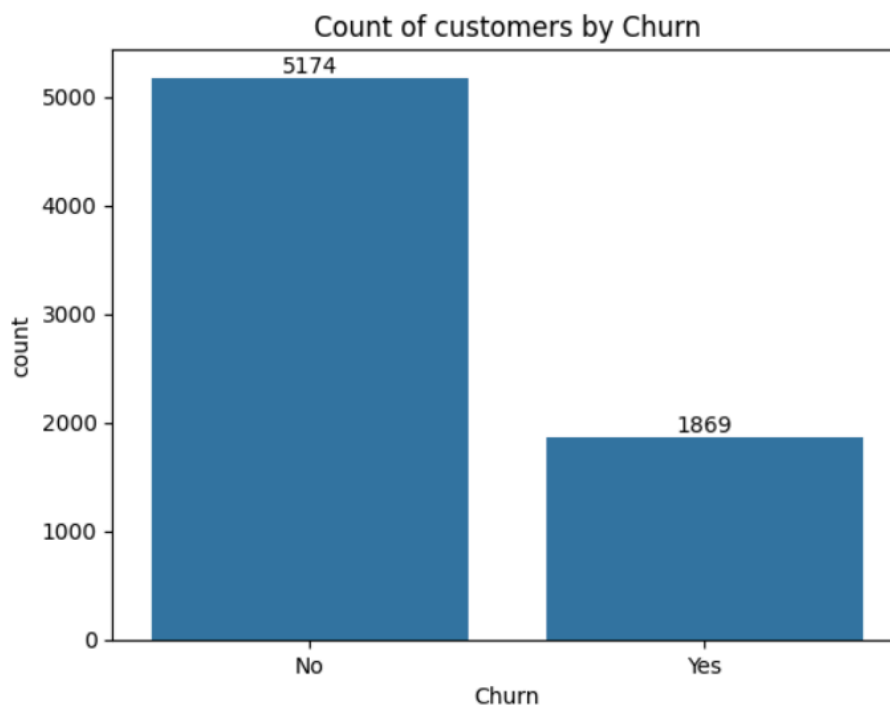
2. For Churn by Contract Type:

"Churn is heavily influenced by contract length, with month-to-month customers churning at 39% compared to just 6% for two-year contracts. This clearly demonstrates that customer commitment is the strongest deterrent against churn, emphasizing the value of incentivizing long-term agreements."
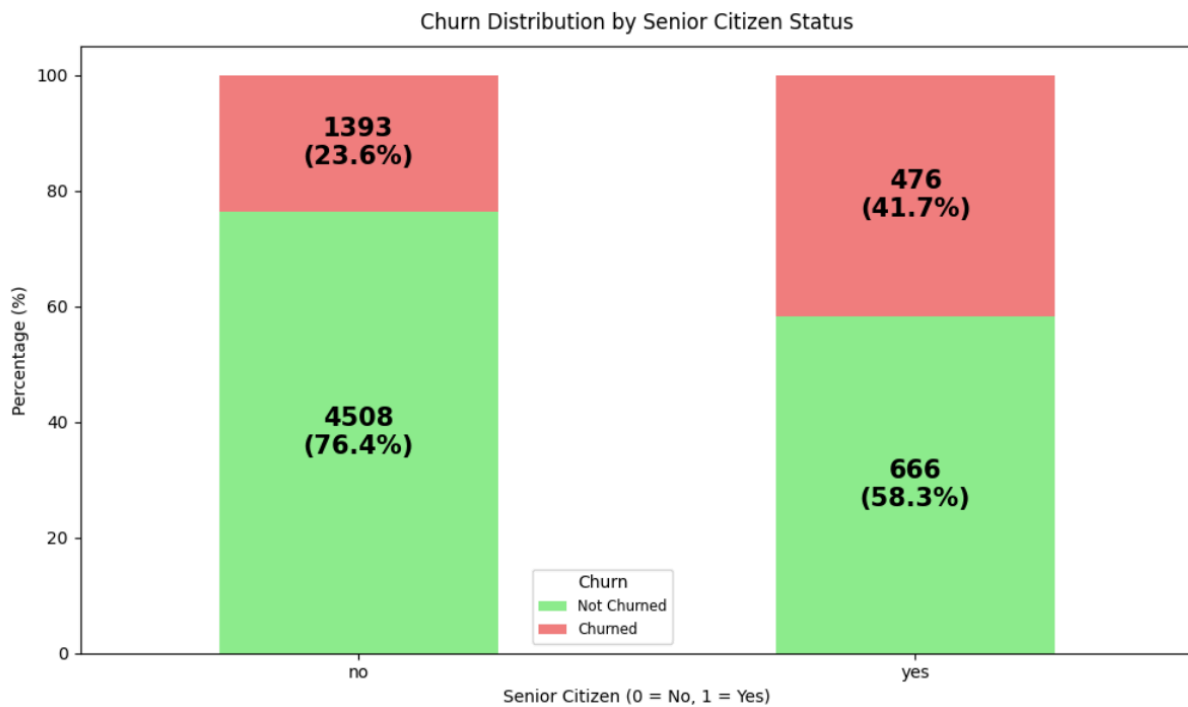

Count of Customers by Contract
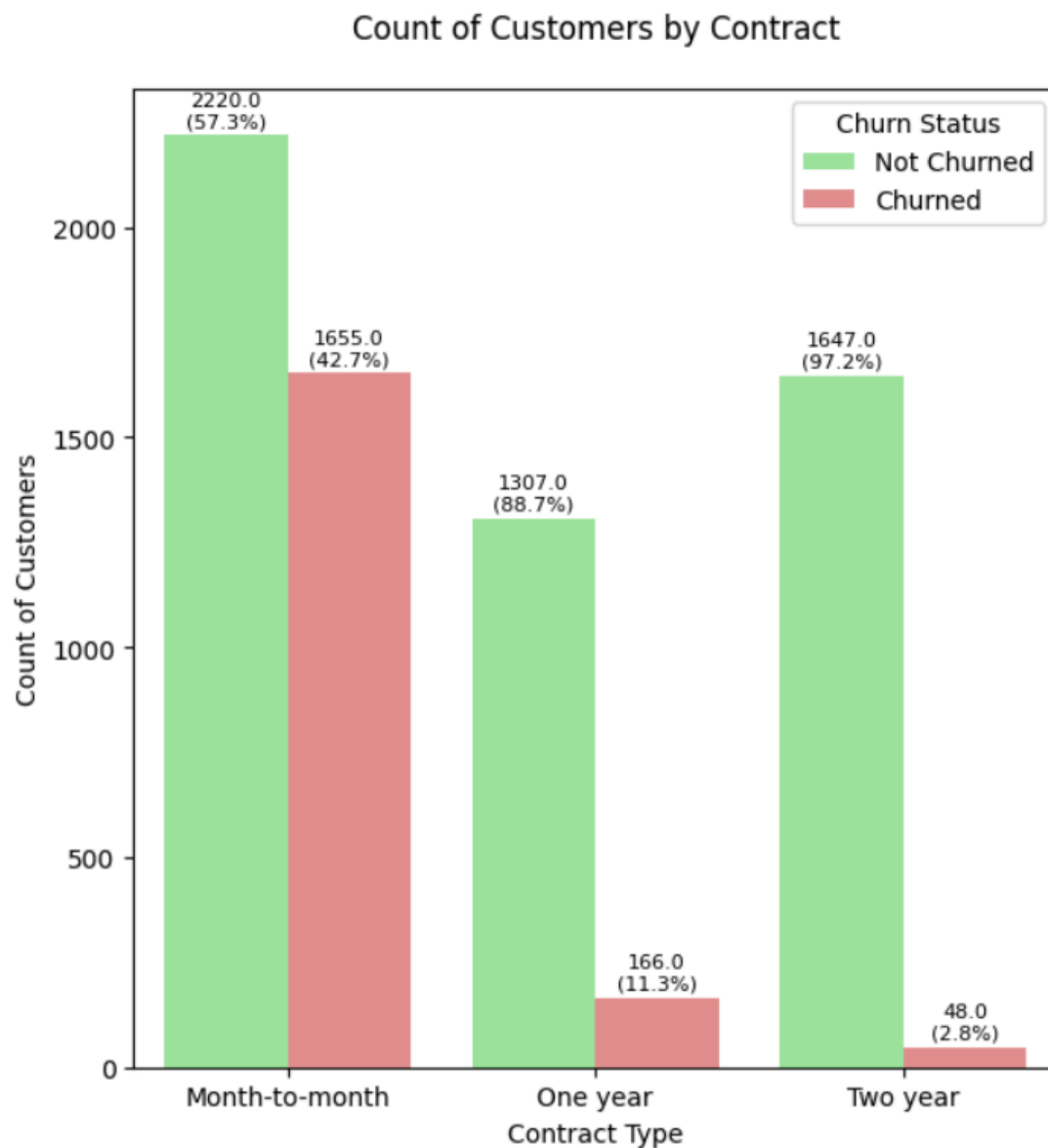
3. For Churn by Tenure:

"The analysis reveals that nearly half of all churn occurs within the first year, making new customers the most vulnerable segment. This identifies the critical 'onboarding period' as the key focus area for implementing proactive retention measures and improving the initial customer experience."


Customer Churn by Tenure Group
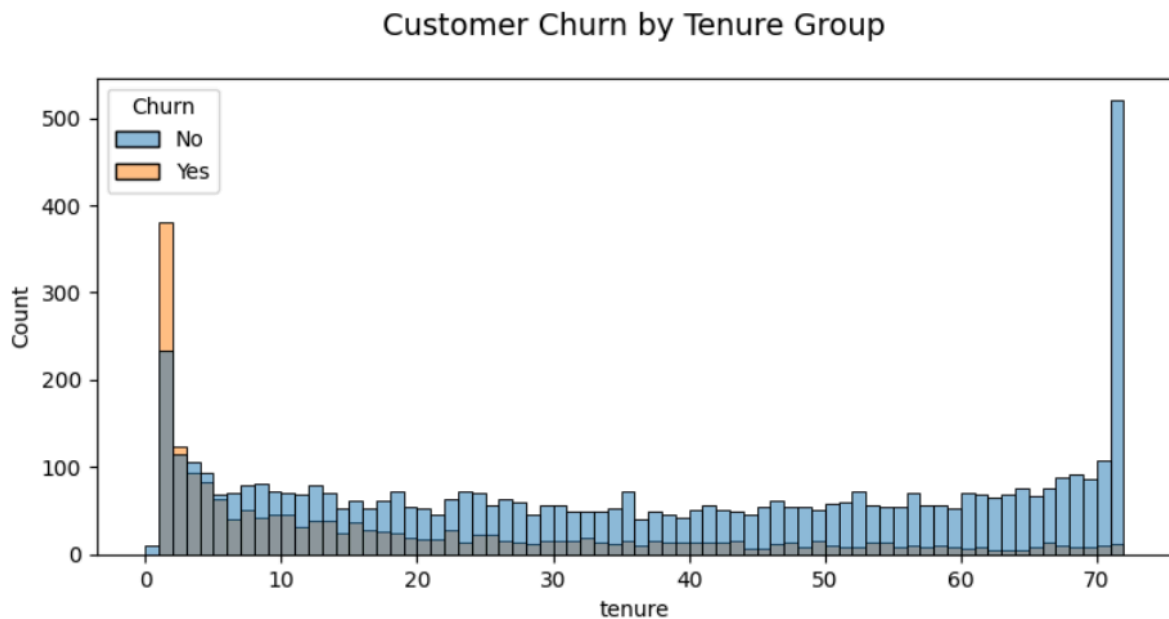
4. For Churn by Senior Citizens:

"Senior citizens exhibit a churn rate of 41.5%, which is 75% higher than non-senior customers. This identifies a high-risk demographic that requires tailored communication, specialized support, or adjusted service packages to improve retention."

Churn Distribution by Senior Citizen Status

5. Count of Customers by Contract Type:

The contract type distribution reveals that the majority of customers are on month-to-month plans, indicating higher flexibility but also greater churn risk. A significant portion have one-year contracts, while two-year commitments represent the smallest segment. This breakdown highlights the need for targeted retention strategies for short-term subscribers.

Churn Distribution by Senior Citizen Status
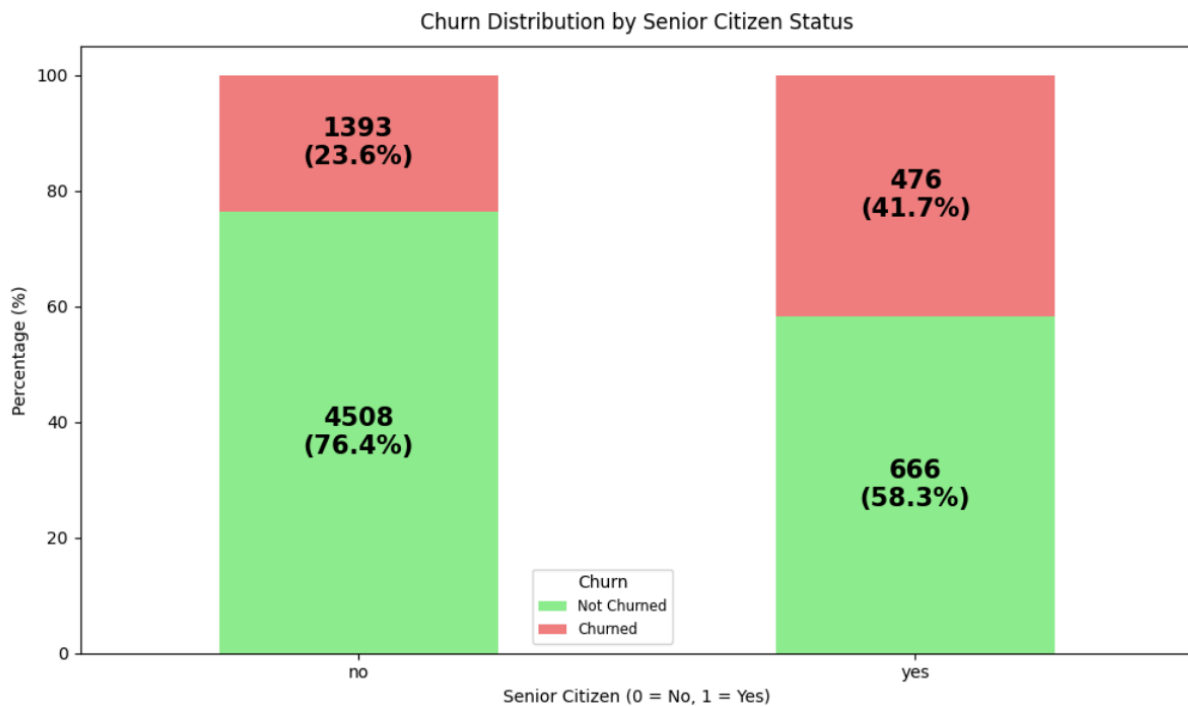
Summary of Service Offerings

The dataset shows that customers primarily subscribe to either DSL or Fiber optic internet services, with Fiber optic users generally having higher monthly charges. While most customers have phone service, the adoption of premium add-ons like Online Security, Tech Support, and Device Protection is relatively low. Additionally, a significant portion of customers enjoy streaming services (TV and Movies), highlighting a modern consumption trend that is closely tied to the type of internet connection they have.