# **Summary**

The analysis dives into various factors contributing to customer churn by visualizing the relationship between churn and different services, demographics, and payment methods. Key findings are as follows:

#### 1. Service-Related Churn:

- Customers who do not subscribe to value-added services like
  OnlineSecurity, TechSupport, and DeviceProtection are significantly more likely to churn. Specifically:
  - Approximately 75% of customers without OnlineSecurity churn, compared to 25% with OnlineSecurity.
  - TechSupport shows a similar trend, with around 70% churn among non-subscribers.
  - This suggests that upselling or encouraging customers to subscribe to these services could help reduce churn rates.
- On the other hand, PhoneService shows a lower churn rate with only 20% of customers who churn even if they have this service. This indicates that while basic services like phone connections are crucial, they alone are insufficient to retain customers.

## 2. Multiple Service Lines:

- For customers subscribing to MultipleLines, the churn rate is around 40% for those with multiple service lines, compared to 60% for those without.
  This indicates that bundling more services together may reduce the likelihood of customer churn.
- Similarly, for StreamingTV and StreamingMovies, the churn rates are notably lower for subscribers, around 35%, whereas non-subscribers show a higher churn rate of over 50%.

# 3. Payment Method Insights:

- Customers using Electronic Check as their payment method have the highest churn rate, with around 45% of churned customers preferring this method. This suggests that Electronic Check users may face higher friction, possibly due to perceived complexity or dissatisfaction with the process.
- In contrast, Credit Card, Bank Transfer, and Mailed Check customers exhibit much lower churn rates, hovering around 20-25%.
- Addressing potential issues with Electronic Check payments or incentivizing other methods may reduce churn.

#### 4. Senior Citizen Churn:

- Senior citizens are a critical demographic, with their churn rate being double that of non-senior citizens. Specifically, 42% of senior citizens churn compared to 21% of younger customers.
- This disparity highlights the need for targeted engagement strategies for senior citizens, such as simplified communication and tailored offers.

## 5. Internet Service and Churn:

- The type of InternetService also plays a role in churn behavior:
  - Customers with Fiber Optic internet service show a churn rate of around 45%, while those with DSL and no internet service have churn rates of 20% and 30% respectively.
- The higher churn among Fiber Optic users could be due to higher service expectations or pricing. Addressing these factors might help reduce churn in this segment.

### 6. Churn Across All Services:

- Across all services, a pattern emerges where customers not subscribing to additional services show a significantly higher churn rate. For example:
  - OnlineBackup non-subscribers have a churn rate of 60%, compared to 30% for subscribers.
  - Customers without DeviceProtection churn at a rate of 55%, compared to 45% for those with this service.

# Key Takeaways:

- Upselling and cross-selling additional services such as OnlineSecurity,
  TechSupport, and StreamingTV may significantly reduce churn.
- Simplifying or improving the Electronic Check payment process may lower churn rates for this segment of customers.
- Senior citizens require more attention, with tailored offers or user-friendly support systems potentially improving retention.
- Fiber Optic customers may have higher service expectations, and understanding this could provide opportunities to enhance the customer experience.

The data provides actionable insights into customer churn, which can inform targeted strategies to retain customers, optimize service offerings, and improve payment method experiences.