### **Executive Summary: Customer Churn Analysis**

## Objective

The analysis explores customer churn patterns, focusing on key factors such as contract types, payment methods, tenure, and demographics. The goal is to identify the strongest churn drivers and provide actionable recommendations for customer retention strategies.

### **Key Findings**

#### **Churn Rate Overview**

- The overall churn rate stands at **26.5%**, highlighting a significant proportion of customers leaving the service.
- Customers with shorter tenure (less than one year) have the highest churn rate at 50%, emphasizing the need for better early engagement strategies.

## Impact of Contract Type on Churn

- Customers on month-to-month contracts exhibit the highest churn rate at 42%.
- In contrast, customers with **one-year** and **two-year contracts** have much lower churn rates at **11%** and **3%**, respectively.
- **Implication:** Encouraging customers to commit to longer-term contracts can significantly improve retention.

#### Influence of Payment Methods on Churn

- Customers paying via **electronic checks** have the highest churn rate at **45%**.
- Those using credit cards, bank transfers, or mailed checks have much lower churn rates, averaging **15-18%**.
- **Implication:** Trust and convenience concerns related to electronic checks may be driving churn. Encouraging alternative payment methods could enhance customer retention.

## **Churn by Internet Service Type**

- Customers using Fiber Optic services show a churn rate of 30%, compared to 20% for DSL customers.
- **Implication:** The higher churn rate for fiber optic customers may indicate dissatisfaction with service quality or price competition. Further analysis of customer feedback is necessary.

## **Churn Trends Among Senior Citizens**

- Senior citizens (aged 65+) have a churn rate of 41%, compared to 26% among non-senior customers.
- **Implication:** Targeted engagement programs, such as personalized customer service and discounts, could improve retention in this demographic.

# **Visual Insights**

 Bar charts and line graphs highlight key disparities in churn across various factors, supporting the need for personalized retention efforts. • **Churn by tenure visualization** confirms a steady decline in churn rates as tenure increases, reinforcing the importance of early-stage customer engagement.

#### Recommendations

- 1. **Encourage Long-Term Contracts:** Offer incentives such as discounts or perks for customers committing to longer contracts.
- 2. **Improve Payment Security & Trust:** Educate customers on secure payment methods and offer promotions for switching away from electronic checks.
- 3. **Enhance Early-Stage Engagement:** Focus on proactive customer support and loyalty programs within the first year to reduce early churn.
- 4. **Senior Customer Retention Programs:** Implement dedicated customer service and tailored offers for senior citizens to improve retention.
- 5. **Monitor Service Satisfaction:** Conduct regular surveys and service evaluations, particularly for Fiber Optic customers, to address potential pain points.

This analysis provides a clear roadmap to mitigate churn by focusing on contractual commitments, payment method optimization, early engagement strategies, and demographic-specific retention efforts.