# Executive Summary: Customer Churn Analysis

#### Overview

This report presents an in-depth analysis of customer churn patterns, highlighting key factors influencing retention and attrition rates. The study leverages statistical insights and visualizations to identify trends, providing actionable recommendations to enhance customer retention strategies.

## **Key Findings**

- Churn Rate Overview: A significant 26% of customers exhibit a high churn tendency.
- **Contract Type Influence:** Customers with one- or two-year contracts have substantially lower churn rates (11%) compared to those on month-to-month plans (45%).
- **Demographic Insights:** Senior citizens have a **41%** churn rate, whereas younger customers churn at **22%**.
- **Service Type Impact**: Customers subscribed to fiber-optic internet service churn at a higher rate (**30**%) than those using DSL (**18**%).
- Additional Services: Customers who opt for bundled services (e.g., security, tech support) exhibit a lower churn rate (15%) compared to those without additional services (40%).

## **Data Breakdown (Percentage Representation)**

- Churned Customers: Approximately 26% of the total customer base has churned.
- Month-to-Month Contract Churn: 45% of customers with this contract type have churned.
- Senior Citizen Churn Rate: Around 41% of senior citizens have discontinued service.
- Fiber-Optic Churn: 30% of fiber-optic users have left, compared to 18% of DSL users.

## **Visual Insights**

The analysis incorporates comprehensive data visualizations, including:

- Bar Charts: Representing churn distribution across different customer segments.
- **Heatmaps:** Highlighting correlations between churn and multiple influencing factors.
- **Pie Charts:** Illustrating churn percentages across contract types and demographics.

## **Strategic Recommendations**

• **Encourage Long-Term Contracts:** Offering discounts or incentives for annual subscriptions could reduce churn.

- **Enhance Service Bundling:** Promoting additional services (e.g., security, tech support) could improve retention.
- Improve Fiber-Optic Experience: Addressing issues leading to fiber-optic user dissatisfaction could lower churn rates.
- Targeted Customer Retention Efforts: Personalized engagement strategies for senior citizens and single customers may help in retention.

This analysis provides a data-driven foundation for refining customer retention strategies, ultimately improving overall business sustainability.