Executive Summary: Telco Customer Churn Analysis

Objective:

The primary objective of this analysis is to identify key factors influencing customer churn in a telecom company. By analyzing customer demographics, service usage patterns, and contract types, we aim to derive insights that can help reduce churn rates and improve customer retention strategies.

Key Findings:

1. **Overall Churn Rate:**

   - The dataset consists of **7,043 customers**, out of which **approximately 27% (1,869 customers) have churned**.
   - Identifying key drivers of churn is crucial to minimizing customer loss.
2. **Impact of Service-Related Factors on Churn:**

   - **Internet Service:** Customers with **Fiber Optic service show a higher churn rate** compared to DSL or those without internet service.
   - **Online Security & Backup:** Customers **without online security or backup services** have a significantly higher churn rate.
   - **Streaming Services:** Customers who have opted for **Streaming TV or Movies** tend to churn more, possibly due to cost concerns.
3. **Contract Type Influence:**

   - **Month-to-month contracts have the highest churn rate** compared to yearly or two-year contracts.
   - Customers with **longer contracts (1 or 2 years) are more likely to stay** with the company.
4. **Demographic Influence:**

   - **Senior citizens (age 65+) show a higher churn rate** compared to younger customers.
   - Customers **without dependents or partners are more likely to churn**, suggesting a lack of household commitment to the service.
5. **Tenure Analysis:**

   - **Customers with shorter tenure (less than 6 months) are at the highest risk of churn**, indicating the importance of early engagement strategies.
   - **Loyal customers (tenure >24 months) have significantly lower churn rates**, reinforcing the impact of long-term customer relationships.

Conclusion & Recommendations:

- Encourage **long-term contracts** with promotional discounts or bundled offers to reduce churn.
- Improve customer experience for **Fiber Optic users** by addressing potential service quality concerns.
- Offer **loyalty incentives** for new customers to increase retention within the first 6 months.
- Provide **value-added services** like free **security and backup features** to reduce churn in high-risk customer segments.
- Target at-risk segments (e.g., **senior citizens, single customers, short-tenure customers**) with **personalized engagement strategies**.

By leveraging these insights, **Telco** can optimize retention strategies, enhance customer satisfaction, and ultimately reduce churn.