Telecom Customer Segmentation - Read Me

Introduction

This document provides an overview of the Telecom Customer Segmentation project, outlining the context, objectives, key insights, and visualizations used. The dataset used in this simulation represents real-world telecom customer data to help analyze spending habits, subscription types, and tenure for better marketing and retention strategies.

Context & Purpose

The dataset simulates customer information from a telecom company, focusing on customer demographics, subscription types, and spending behaviors. The objective of this analysis is to:

- Understand customer age distribution and demographics.
- Compare monthly spending behavior across customer types.
- Analyze subscription type preferences.
- Segment customers using clustering techniques to identify behavioral patterns.

Visualizations in the Dashboard

To effectively present insights, the following visualizations were created:

1. Customer Age Distribution (Histogram)

- Displays the age range of customers.
- Helps telecom companies tailor services and marketing strategies to specific age groups.

2. Monthly Spend by Customer Type (Boxplot)

- Compares monthly spending between prepaid and postpaid customers.
- Helps in identifying high-value customers and potential upsell opportunities.

3. Subscription Type Breakdown (Pie Chart)

- Shows the percentage of customers subscribed to prepaid vs. postpaid plans.
- Helps companies assess the popularity of different plan types.

4. Customer Segmentation using Clustering (Scatter Plot)

- Groups customers based on spending behavior and tenure.
- Helps in creating targeted marketing strategies for different customer segments.

Key Takeaways for Executives

- **Customer Demographics**: Identify the primary age groups of telecom users to personalize service offerings.
- **Revenue Insights**: Understand which customer groups contribute the most to monthly revenue.
- **Subscription Trends**: Assess the popularity of prepaid vs. postpaid plans for future marketing strategies.
- **Churn Prevention**: Segment customers based on tenure and spending behavior to implement better retention strategies.

Conclusion

This telecom customer segmentation dashboard provides key insights into customer behavior, allowing telecom executives to enhance service offerings, optimize marketing strategies, and reduce churn. By leveraging these visualizations, telecom providers can make data-driven decisions to improve customer experience and profitability.