Telecom Churn Analysis – Project Documentation

# Project Title

Telecom Churn Analysis Dashboard in Power BI

# Objective

To analyze telecom customer data to identify patterns and key drivers of churn, providing actionable insights that help reduce customer attrition and improve retention strategies.

# Data Source

The dataset contains customer-level information, including demographics, service usage, account details, and churn status.

# Key Metrics Analyzed

- Total Customers

- Churn Rate (%)

- Monthly Charges

- Tenure

- Contract Type

- Payment Method

- Internet Service Type

- Senior Citizen Count

- Gender Distribution

- Partner and Dependents Info

# Dashboard Features

A. Churn Overview

- Total customers and churned customers count

- Churn rate % with card visuals

- Monthly trend of churned customers

B. Demographics

- Gender-wise churn comparison

- Senior Citizen impact on churn

- Churn based on Partner and Dependents

C. Services and Usage

- Internet service type vs churn

- Contract type (Month-to-month, One year, Two year) vs churn

- Payment method vs churn

- Tenure bucket analysis to see retention duration

D. Financial Overview

- Monthly charges and total charges distribution

- Revenue impact due to churned customers

# Insights Derived

- Month-to-month contracts have the highest churn rate.

- Customers with electronic checks are more likely to churn.

- Senior Citizens churn more frequently than younger customers.

- Customers with shorter tenure tend to leave sooner.

- Lack of dependents correlates with higher churn.

# Recommendations

- Provide loyalty benefits for month-to-month contract holders.

- Target at-risk groups (senior citizens, e-check users) with tailored offers.

- Introduce onboarding support for new users to improve initial experience.

# Tools & Technologies

- Power BI for data visualization

- DAX for calculated fields and KPIs

- Excel/CSV as input data format (assumed from file origin)

# Conclusion

This dashboard provides a comprehensive analysis of churn behavior, helping stakeholders identify customer pain points and improve service delivery to reduce churn.