Customer Churn Analysis – Power BI Case Study

Objective:

To analyze customer churn behavior and identify key drivers of churn for a telecom company using Power BI, enabling data-driven decisions for retention strategies.

Dataset Name: Teleco Churn Data

Key Fields:

Churn, MonthlyCharges, TotalCharges, customerID

Demographic: gender, SeniorCitizen, Partner, Dependents

Services: PhoneService, InternetService, StreamingTV, TechSupport, etc.

Contract & Billing: Contract, PaymentMethod, PaperlessBilling, etc.

Derived Measures: Churn Rate, Churned Revenue

Page 1: KPI Overview

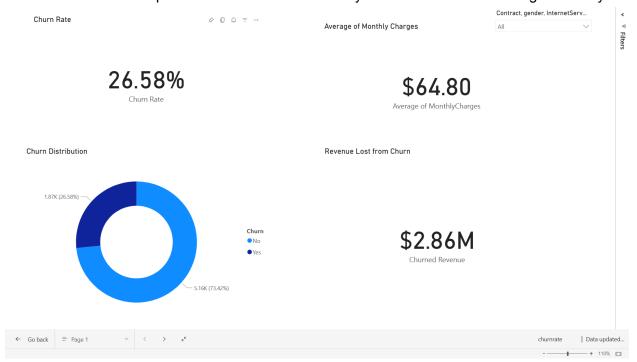
Visuals:

- 1. Churn Rate Card: 26.58% of customers churned.
- 2. Average Monthly Charges Card: \$64.80.
- 3. Donut Chart: Churn Distribution 73.42% retained vs. 26.58% churned.
- 4. Revenue Loss Card: \$2.86M in churned revenue.

Slicer (Dropdown): Allows filtering by Contract, Gender, and Internet Service.

Insight:

- The churn rate is significant, and revenue impact is high.
- This dashboard provides an executive summary and can be filtered for targeted analysis



Page 2: Demographic Breakdown

Visuals:

Stacked/100% Stacked Columns by:

SeniorCitizen, Partner, Dependents, and Gender with Churn

Insights:

- Senior Citizens and customers without dependents/partners show higher churn.
- Gender has little impact on churn.



Page 3: Services & Contracts

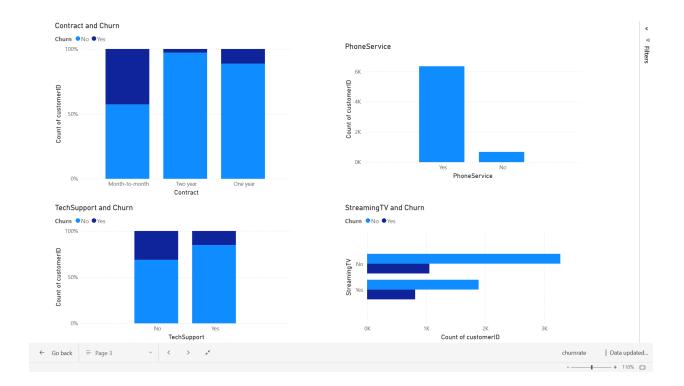
Visuals:

Clustered/Stacked bar/column charts:

Contract, PhoneService, StreamingTV, TechSupport by Churn

Insights:

- Month-to-month contracts show highest churn.
- Customers without TechSupport or StreamingTV are more likely to churn.
- Majority have PhoneService; those without churn less, possibly due to fewer services.



Page 4: Financial Metrics & Tenure

Visuals:

Clustered Column: Average of TotalCharges by Churn

100% Stacked Column: Binned Tenure vs. Churn

Insights:

- Customers who churn have lower average TotalCharges (i.e., newer customers).
- Tenure is strongly correlated with retention longer tenure = lower churn.

