

Customer Churn Analysis – Insights & Report

Project Name: **Customer Churn Analysis using Power BI**

Tool Used: **Microsoft Power BI**

Dataset Source: **Telco Customer Churn Dataset (Kaggle)**

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Objective

To analyze telecom customer behavior and identify the key drivers of churn using visual insights, with the goal of recommending actionable strategies for customer retention.

Dataset Overview

- Total Customers: 7,043
- Churned Customers: 1,869
- Features Used: Gender, Senior Citizen, Tenure, Monthly Charges, Services Used, Contract Type, Churn Status

Dashboard Overview

The Power BI dashboard includes the following visuals:

- **KPI Cards:** Display total customers, churn count, and churn rate
- **Line Chart:** Show churn trend over tenure period
- **Bar Charts:** Analyze churn distribution by contract, payment method
- **Histogram:** Understand monthly charges and churn relationship
- **Stacked Bar Charts:** Churn comparison across services used
- **Slicers:** Filter by gender, contract type, payment method, etc.

Key Insights

1. Churn Rate

- Churn Percentage: 26.5%
- Indicates significant customer attrition that must be addressed.

2. Contract Impact

- Month-to-month contracts have the highest churn rate.
- Two-year contracts show the lowest churn rate.

3. Tenure & Loyalty

- Customers with less than 12 months tenure are more likely to churn.
- Churn rate decreases with longer tenure, showing customer loyalty builds over time.

4. Monthly Charges

- Churn is more prevalent among customers paying higher monthly charges (₹80+).
- Suggests dissatisfaction with cost vs service value.

5. Service Usage

- Customers without Tech Support or Online Security churn more.
- Fiber optic internet users churn more than DSL users.

6. Senior Citizen Behavior

- Slightly higher churn among senior citizens, especially those on month-to-month plans.

Conclusion

This Power BI project offers strong evidence that churn is influenced by contract type, tenure, service bundles, and monthly charges. With strategic interventions, customer retention can be significantly improved, especially among short-term and high-risk segments.

Dataset Source

Kaggle: Telco Customer Churn Dataset –

<https://www.kaggle.com/datasets/blastchar/telco-customer-churn>