Customer Churn Dashboard – Documentation

# 🔍 Objective

The Customer Churn Dashboard provides insights into customer attrition trends, helping stakeholders understand the reasons behind churn and take data-driven actions to improve retention.

# 🧩 Key Features & Visuals

## 1. Filters

- Payment Method, Gender, Partner, Contract  
 Allow users to slice data and explore churn based on different customer segments.

## 2. KPI Indicators

- Number of Customers: 3555  
- Number of Tech Support Requests: 3555  
- Total Monthly Charges: 228.6K  
- Average Monthly Charges: 64.33

## 3. Charts & Insights

### 📍 Number of Customers by Churn (Donut Chart)

- Shows churn rate distribution:  
 - Churned: ~13.2%  
 - Retained: ~37.27%

### 📍 Churn by Internet Service (Bar Chart)

- Most churn seen in Fiber optic and DSL customers.  
- Customers without Internet Service have the least churn.

### 📍 Tech Support by Tenure (Line Chart)

- High TechSupport counts in early and late stages of tenure.  
- Possibly reflects onboarding/support needs or dissatisfaction in the long term.

### 📍 Churn by Paperless Billing (Matrix Chart)

- Higher churn among customers with paperless billing.

### 📍 Churn by Payment Method (Stacked Bar Chart)

- Electronic check has the highest churn, while automatic methods (e.g., credit card, bank transfer) show less churn.

### 📍 Monthly Charges by Internet Service (Donut Chart)

- Breakdown:  
 - Fiber Optic – 62.11%  
 - DSL – 30.84%  
 - No Service – 7.05%

### 📍 Gender-Based Churn Summary (Card Section)

- Female: 3488 churn count  
- Male: 3555 churn count

# 📌 Observations & Business Insights

- Customers using Electronic Check are more likely to churn.  
- Paperless Billing users churn more, which may indicate dissatisfaction with digital communication.  
- Fiber Optic users are more prone to churn, possibly due to higher expectations or service issues.  
- Early and late tenure periods show higher support interactions, identifying key moments for customer engagement.

# ✅ Benefits of the Dashboard

- Interactive filters for deep-dive analysis  
- Multiple dimensions (payment, billing, gender, internet service)  
- Real-time KPIs to track churn and revenue impact  
- Useful for Marketing, Product, and Customer Support Teams to strategize retention