Project Analytics Dashboard

Project Overview

1. GitHub project metrics
2. Financial data analysis
3. Project costs and activities

Data Architecture

The project utilizes a three-layer data modeling approach using DBT:

Staging Layer: Raw data cleanup from GitHub and financial sources
Intermediate Layer: Transformed metrics and combined data points
Mart Layer: Business-ready views for dashboard consumption

Data Analysis Components

1. GitHub Project Analysis

Tracks repository and issue metrics from raw_github schema.
Key Metrics: Monthly issue creation trends, Issue status distribution, Repository activity levels

2. Financial Analysis

Monitors project costs from raw_finance schema.
Key Metrics: Department-wise spending, Currency distribution, Monthly cost trends

Dashboard Components

Grafana Setup: Configure PostgreSQL data source, Import dashboard JSON, Verify data connections.

1. Monthly Trends Dashboard

Purpose: Track spending patterns over time
Visualization: Time series graph
Data Source: Financial transactions
Results: Shows financial patterns, Currency-wise breakdown, Time-based analysis

2. Department Analysis Dashboard

Purpose: Monitor department-wise costs
Visualization: Bar chart
Data Source: Department spending data
Results: Department-wise costs, Transaction counts, Spending patterns

3. Currency Distribution Dashboard

Purpose: View cost distribution across currencies
Visualization: Pie chart
Data Source: Currency-based transactions
Results: Currency-wise totals, Proportion analysis, Distribution patterns

All code has been placed in the respective directory.

Limitations

Currency conversion not implemented as it can change in real-time, Historical data limitations.