

## Analyzing Pakistan Tehreek-e-Insaf (PTI) Performance in the 2024 Elections Using Google Data Studio

### Project Description:

This project involves analyzing the performance of Pakistan Tehreek-e-Insaf (PTI) in the 2024 elections and creating an interactive dashboard using Google Data Studio. The dashboard will display key metrics such as vote counts, voter turnout, and regional performance. This project is designed for interns at Data X to develop their skills in data integration, visualization, and interactive reporting.

### Project Steps:

#### 1. Setting Up the Environment:

- **Gather Data:** Collect election data for PTI from reliable sources such as election commission reports ( Source kaggle for 2024).
- **Prepare Data:** Ensure the data includes vote counts, voter turnout, regional performance, and any other relevant metrics.

#### 2. Data Integration and Connection:

- **Import Data to Google Sheets:** Upload the election data to Google Sheets.
- **Connect to Google Data Studio:** Link the Google Sheets data to Google Data Studio.

#### 3. Data Cleaning and Preparation:

- **Clean Data:** Check for and handle any missing values, duplicates, and inconsistencies in the data ( using google sheet).
- **Create Calculated Fields:** Add calculated fields to derive metrics such as percentage of total regional vote share.

#### 4. Dashboard Creation:

- **Set Up the Dashboard Layout:** Plan the layout of the dashboard, including sections for overall performance, regional analysis, and voter demographics.
- **Create Visualizations:**
  - **Overall Performance:** Use bar charts and pie charts to show overall vote counts and percentage of total votes.
  - **Voter Turnout:** Use line charts and bar charts to illustrate voter turnout trends.

#### 5. Final Touches:

- **Customize Visuals:** Ensure the visualizations are clear, visually appealing, and aligned with the project's theme.

### Data Sources:

- **Election Commission Reports:** Official vote counts and regional performance data.
- **News Articles:** Voter turnout statistics and election coverage.

**3-line Project Description:** Create an interactive Google Data Studio dashboard to analyze PTI's performance in the 2024 elections. This project involves data integration, visualization, and interactive reporting to display key metrics like vote counts and regional performance. The dashboard will provide insights into PTI's election results and voter turnout.

#### **Deliverables:**

##### **1. Google Sheets with Cleaned Data:**

- Ensure the data is cleaned and well-structured.

##### **2. Google Data Studio Dashboard:**

- An interactive dashboard with visualizations for overall performance, regional analysis, and voter turnout.

##### **3. Documentation:**

- A brief report explaining the data sources, methodology, and key insights from the dashboard.

**Data source :** <https://www.kaggle.com/datasets/abdmental01/election-2024> .

#### **Methodology :**

-Understand the Objectives: Start by clearly defining the question that needs to be addressed. Understand the goals, constraints, and requirements.

-Collect and Prepare the Data: Identify the relevant data sources. Clean, transform, and integrate the data as needed to prepare it for analysis.

-Explore and Analyze the Data: Conduct exploratory data analysis to understand the structure, patterns, and relationships within the data.

This may involve using visualizations, statistical techniques, and other analytical methods.

-Build Predictive Models or Derive Insights: Depending on the business objective, build predictive models or derive insights from the data using techniques like regression, classification, clustering.

#### **Key insight :**

- Demographic groups that strongly supported or rejected PTI
- Trends in PTI's performance over time and in comparison to previous elections

Public link for the project :

<https://lookerstudio.google.com/reporting/ff01a6a6-5451-47cb-b111-35cdf2807ee0> .