

## Project Design Phase

### Solution Architecture

Date	04 March 2025
Team ID	PNT2025TMID04759
Project Name	Power BI Inflation Analysis: Journeying Through Global Economic Terrain
Maximum Marks	4 Marks

### Solution Architecture:

#### Architecture Overview:

The **Power BI Inflation Analysis** solution is designed to analyze global economic trends by integrating data from trusted sources like the **World Bank**, **IMF**, and **Trading Economics**. It enables users to visualize inflation trends, GDP growth, and other key economic indicators through interactive dashboards.

#### Key Components of the Architecture:

- Data Sources:**
  - Data imported from Excel, SQL Databases, and Web Data Connectors linked to real-time economic data.
- Data Transformation & Cleaning:**
  - Cleaned data using Power Query to manage null values, remove outliers, and normalize inflation rates across regions.
- Data Modeling:**
  - Built comprehensive data models utilizing DAX to calculate metrics such as YoY Inflation %, Moving Averages, and Forecasted Trends.
- Dashboard Design:**
  - Developed visualizations such as Line Graphs, Heatmaps, and KPI Cards for quick insights.
- User Interaction:**
  - Integrated interactive filters for Year, Country, and Economic Indicators to provide customized insights.
- Deployment & Sharing:**
  - Deployed using Power BI Service for seamless access to stakeholders, ensuring insights are available across devices.

## Example - Solution Architecture Diagram:

