

Project Design Phase

Solution Architecture

Date	04 March 2025
Team ID	PNT2025TMID02651
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:

1. Data Sources:

- Data imported from Excel, SQL Databases, and Web Data Connectors linked to real-time economic data.

2. Data Transformation & Cleaning:

- Cleaned data using Power Query to manage null values, remove outliers, and normalize inflation rates across regions.

3. Data Modeling:

- Built comprehensive data models utilizing DAX to calculate metrics such as YoY Inflation %, Moving Averages, and Forecasted Trends.

4. Dashboard Design:

- Developed visualizations such as Line Graphs, Heatmaps, and KPI Cards for quick insights.

5. User Interaction:

- Integrated interactive filters for Year, Country, and Economic Indicators to provide customized insights.

6. Deployment & Sharing:

- Deployed using Power BI Service for seamless access to stakeholders, ensuring insights are available across devices.

Example - Solution Architecture Diagram:

