

## Project Design Phase

### Solution Architecture

Date	Date 12-03-2025
Team ID	PNT2025TMID06643
Project Name	Project Name Power BI Inflation Analysis: Journeying Through Global Economic Terrain
Maximum Marks	4 Mark

#### Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

#### Architecture Overview: Power BI Inflation Analysis

The **Power BI Inflation Analysis** architecture is designed to process and visualize global economic inflation data efficiently. It follows a structured flow:

1. **Data Sources** – Collects data from **CSV files, APIs (World Bank, IMF), and databases**.
2. **Data Ingestion** – Uses **Power BI Dataflows** and API connectors for seamless integration.
3. **Processing & Transformation** – Utilizes **Power Query (ETL)** for data cleaning and **DAX calculations** for inflation trends.
4. **Data Storage** – Stores processed data in **Power BI Cloud, On-Premises Gateway, or Azure SQL**.
5. **Visualization & Reporting** – Generates **interactive dashboards, KPI metrics, and geographical heatmaps** for insights.
6. **End Users** – Serves **economists, analysts, policymakers, and businesses** for decision-making.

**Example - Solution Architecture Diagram:**

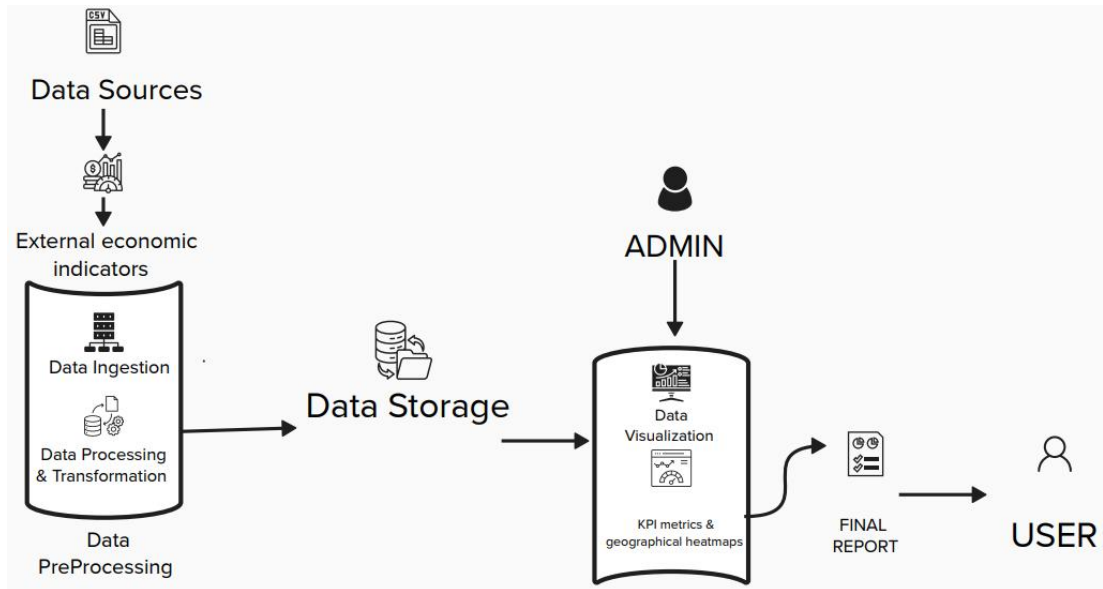


Figure 1:shows **Power BI Inflation Analysis**