

Data Collection and Preprocessing Phase

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| Date | 08 December 2025 |
| Team ID | SWUID20250189320 |
| Project Title | Power BI Inflation Analysis: Journeying Through Global Economic Terrain. |
| Maximum Marks | 10 Marks |

Data Exploration and Preprocessing Template

Identifies data sources, assesses quality issues like missing values and duplicates, and implements resolution plans to ensure accurate and reliable analysis.

| Data Collection and Preprocessing | Description |
|-----------------------------------|---|
| Data Overview | Dataset sourced from Kaggle, covering global inflation rates by country and year, includes inflation categories and adjusted values. (Format: CSV, Size:45KB) have originally contains 196 rows and 47 columns . . |
| Data Cleaning | Handle missing values by imputing regional averages or exclusion. Remove duplicates by country/year. Correct outliers using official references. |
| Data Transformation | Use Power Query Editor for filtering, sorting. Create calculated columns for inflation categories. Pivot data for comparative views. |
| Data Type Conversion | Ensure correct data types: country as text, year as integer, inflation as decimal. |

| Data Collection and Preprocessing | Description |
|-----------------------------------|--|
| | Fix any incorrect typing for calculation/filtering. |
| Column Splitting and Merging | Split combined location info into country and region columns. Merge actual and adjusted inflation into one consolidated table. |
| Data Modelling | Establish relationships between inflation and regional tables. Create DAX measures for KPIs: average inflation, category, year-on-year changes. |
| Save Processed Data | Save Power BI file (.pbix) with cleaned and modelled data. Export backup clean CSV for reuse and sharing. |