

Project Initialization and Planning Phase

Date	28 July 2025
Project Title	Inflation Analysis
Maximum Marks	3 Marks

Project Proposal:

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	To design an interactive and insightful Power BI dashboard that visualizes and compares global inflation trends, highlighting post-COVID impacts and country-specific patterns.
Scope	The dashboard focuses on global inflation data from 1980 to 2024 across multiple countries and regions. It includes YoY analysis, before/after COVID impact, inflation categorization, stability, and regional comparisons. The project excludes forecasting and real-time data integration.
Problem Statement	
Description	<p>Global inflation has seen unprecedented fluctuations in recent years, notably due to the COVID-19 pandemic. However, inflation is also driven by broader economic factors such as:</p> <ul style="list-style-type: none">• Rising energy and food prices• Supply chain disruptions• Geopolitical tensions (e.g., wars, trade restrictions)• Monetary policy changes by central banks (e.g., interest rate hikes)• Currency depreciation in developing economies <p>These factors make it difficult for governments, economists, and businesses to identify patterns, forecast risks, and plan policies. Current static reports and spreadsheets often lack the interactivity and depth required for proper analysis.</p>
Impact	<p>A comprehensive, interactive visualization will help:</p> <ul style="list-style-type: none">• Identify high-risk countries and regions

	<ul style="list-style-type: none"> Analyse inflation volatility over time Compare pre- and post-pandemic inflation trends Support better monetary and fiscal policy decisions Inform investment strategies based on macroeconomic stability
Proposed Solution	
Approach	Build a Power BI dashboard using historical inflation data. Key steps include: <ul style="list-style-type: none"> Data cleaning and preprocessing (Power Query) Data modelling and relationships Creating DAX measures for average, standard deviation, YoY change, etc. Designing interactive visuals and slicers (Region, Year, Inflation Type)
Key Features	Bar Chart: Top 5 Inflated Countries in 2024 Line Chart: YoY Inflation Analysis per Country Country-wise Inflation Drop Analysis Map Visual: Region-wise inflation with slicers Longest streak of high inflation countries Year with Highest Inflation by Country Most Stable Countries (Lowest Std Dev) Pre- vs Post-COVID Average Inflation Comparison

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	Required for Power BI processing	Standard laptop with Intel i5/i7, 4+ cores
Memory	RAM for efficient report rendering	Minimum 8 GB
Storage	Data and Project storage	1 TB SSD
Software		

Frameworks	BI Development	Microsoft Power BI Desktop
Libraries	DAX	Built-in (no extra installation needed)
Development Environment	BI platform, version control	Power BI Desktop, GitHub (for versioning)
Data		
Data	Kaggle	Yearly inflation data, ~5 MB CSV and Country-Region mapping data