Project Initialization and Planning Phase

Date	11 November 2025
Team ID	VIP-C3
Project Title	Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 Using Power BI
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

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 conduct a comprehensive study of global food production trends from 1961 to 2023 and develop an interactive Power BI dashboard for strategic decision-making.
Scope	Analysis of key agricultural commodities including rice, wheat, maize, tea, coffee, and major fruits (apples, avocados, bananas, oranges, grapes) across different global regions.
Problem Statement	
Description	Fragmented agricultural data makes it difficult to track historical growth trajectories and regional production shifts over a 60-year period.
Impact	Solving this provides ABC Company with clear insights into global supply scales and food security trends, reducing uncertainty in strategic planning.
Proposed Solution	
Approach	Use Power BI to create data visualizations including area charts for trends, gauge charts for scale, and stacked bar charts for regional comparisons.

Key Features	Real-time filtering by year and entity; comparative analysis of 203B tonnes of wheat vs 206B tonnes of rice; and regional coffee production breakdowns.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	Standard Business Laptop/Workstation	4-core CPU (e.g., Intel i5/i7 or equivalent)
Memory	System RAM	16 GB (Recommended for large Power BI datasets)
Storage	Local and Cloud Storage	256 GB SSD for local files and logs
Software		
Frameworks	Data Visualization Platform	Power BI Desktop / Power BI Service
Libraries	Data Transformation	Power Query (M Language) and DAX for measures
Development Environment	IDE, version control	e.g., Jupyter Notebook, Git
Data		
Data	Source, size, format, Global Agricultural Production Dataset	e.g., Kaggle dataset, 10,000 images, CSV/Excel format covering 1961–2023 production volumes