Global Food Production Analysis (1961-2023)Introduction :

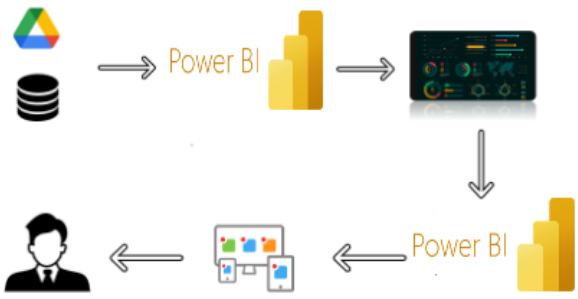
INTRODUCTION:

This project aims to analyze the average time spent by users on various social media platforms using PowerBI. By leveraging data visualization techniques, the project will provide insights into user behavior, platform preferences, and peak usage times. The analysis will enable stakeholders to understand trends, optimize content strategies, and enhance user engagement.

Global food production plays a critical role in sustaining the growing population and ensuring food security worldwide. Over the decades, advancements in agricultural techniques, technological innovations, and improved farming practices have significantly contributed to increased food production. This report analyzes global food production trends from 1961 to 2023, focusing on key commodities such as rice, wheat, maize, coffee, tea, bananas, apples, oranges, and avocados.

The analysis provides insights into production volumes, entity-wise contributions, and yearly trends to understand the evolution of food production across different regions. By examining this data, we can better comprehend the impact of economic, environmental, and technological factors on global agriculture. The findings presented in this report are based on visual representations of production trends, offering a clear perspective on the transformation of food production over the years.

Technical Architecture:



Key Production Statistics

- **Rice Production:** 268.56 billion tonnes
- **Wheat Production:** 282 billion tonnes
- **Tea Production:** 2 billion tonnes

Food Production Trends and Entity-wise Analysis:

1. Coffee Production by Entity:

A comparative analysis of coffee production by different entities (countries/regions) is presented, showcasing the leading producers and their respective output levels.

2. Trends in Wheat, Maize, and Rice Production Over the Years:

A time-series analysis of wheat, maize, and rice production is shown, highlighting production growth trends over the decades.

3. Production of Avocados, Bananas, Apples, and Oranges by Entity:

This section provides a comparative analysis of the production of key fruits by different entities, illustrating variations in production levels.

4. Maize Production Breakdown by Year:

A distribution of maize production over the years is depicted in a pie chart, showing the share of production across different time periods.

Project Flow

To accomplish this, we have to complete all the activities listed below,

- Data Collection & Extraction from Database
    - Collect the dataset,
    - Storing Data in DB
    - Perform SQL Operations

    - Connect DB with Power Bi
- Data Preparation
- Prepare the Data for Visualization
- Data Visualizations
    - No of Unique Visualizations
- Dashboard
    - Responsive and Design of Dashboard
- Report
    - Responsive and Design of Dashboard
- Performance Testing
    - No of Visualizations/ Graphs
- Project Demonstration & Documentation
    - Record explanation Video for project end to end solution
    - Project Documentation-Step by step project development procedure

Connect Data with Power BI

With Power BI, users can seamlessly connect to a wide range of data sources, including databases, cloud services, spreadsheets, and streaming data. This capability allows organizations to consolidate disparate data sources into a single, unified platform, breaking down data silos and enabling holistic analysis.

Explanation video link:

https://drive.google.com/drive/folders/1tgY1OiPpe0KvwyFxADw-MecyO7Q96PVR