India's Export, Import and GDP analysis

Power BI Dashboard Project Proposal

1. **Executive Summary:**

   This project aims to develop interactive and insightful dashboards using Power BI to analyse the export and import of goods in India and their contribution to GDP. The dashboards will provide visual representations of key economic indicators to facilitate informed decision-making.

2. **Problem Statement:**

   Background: Limited visibility into real-time economic indicators hinders timely policy and business decisions in India.

   Objective: Develop dashboards to monitor and analyze export and import trends, GDP contributions, and related economic metrics.

   Scope: Initial focus on trade volumes, sectoral contributions, and GDP impact analysis across different time periods.

3. **Data Sources:**

   - **Primary Data:** Export and import data, GDP figures, and economic indicators from government databases (eg. apis of data.gov.in)
   - **Secondary Data:** Economic reports, sector-specific data, and international trade statistics from global databases (e.g., WTO, IMF).

4. **Methodology:**

   - **Data Integration:** Extract, clean, and integrate data from various sources into Power BI.
   - **Dashboard Design:** Collaborate with stakeholders to identify key metrics (e.g., trade balance, sectoral exports) and design visually appealing dashboards.
   - **Interactivity:** Implement interactive features for drill-down analysis, trend comparison, and scenario modelling.

5. **Expected Outcomes:**

   - Interactive dashboards providing real-time insights into export and import trends and their impact on GDP.
   - Enhanced understanding and analysis of sectoral contributions to the economy.
   - Improved decision-making capabilities through visual representation of economic data.

6. **Tools and Technologies:**
    - Power BI for dashboard development and visualisation.
    - SQL for data extraction and transformation.
    - Collaboration tools for stakeholder feedback and iterative dashboard refinement.
7. **Risks and Challenges:**
    - **Data Integration Challenges:** Ensuring accurate and timely data integration from diverse sources.
    - **Data Accuracy:** Validating data accuracy and consistency across different datasets.
    - **User Adoption:** Training stakeholders unfamiliar with Power BI to effectively use the dashboards.
8. **Conclusion:**

    This project aims to empower decision-makers with comprehensive insights into India's trade dynamics and their economic impact. By leveraging advanced visualisation techniques, the dashboards will facilitate proactive decision-making and policy formulation based on real-time economic data. The project will foster a data-driven culture, enhancing strategic planning and operational efficiency in economic analysis.