Power BI Assignment: Supply Chain Data Exploration

Objective

You are provided with multiple datasets representing different aspects of a supply chain. Your task is to explore, model, and analyze the data to uncover meaningful insights and present them in a compelling Power BI report.

Datasets Provided

You will work with the following datasets:

- - Orders_Table.xlsx
- - Products_Table.xlsx
- - Suppliers.xlsx
- - Warehouses.xlsx
- - Calendar.xlsx

Your Challenge

You are expected to:
- Understand the structure and relationships between the datasets.
- Identify key metrics and dimensions relevant to supply chain performance.
- Clean, transform, and model the data appropriately.
- Create meaningful calculations and visualizations.
- Derive insights that could help improve supply chain efficiency.

Guiding Questions (Think & Explore)

Data Understanding

- - What are the core entities in this supply chain?
- - How do the datasets relate to each other?
- - Are there any missing or inconsistent values?

Modeling

- - How would you structure the data model for optimal performance and usability?
- - Which tables should be fact vs. dimension?
- - What relationships need to be created?

Analysis

- - What metrics would a supply chain manager care about?
- - How can you measure delivery performance, cost efficiency, and supplier reliability?
- - Are there seasonal or regional patterns in the data?

Visualization

- - What visuals best represent operational performance?

- • - How can you make the dashboard intuitive and insightful?
- • - What filters or slicers would enhance user interactivity?

Insights

- • - What are the top 3–5 insights you discovered?
- • - What recommendations would you make to improve supply chain operations?

Submission Guidelines

Submit a .pbix file with your completed report.
Include a short write-up (optional) summarizing your approach and key findings.