📦 **Shipment Analysis Dashboard – Power BI Project**

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📁 **Project Overview**

This Power BI project provides an interactive and insightful dashboard for analyzing shipment data. It was developed as part of my self-learning journey to strengthen my skills in data modeling, DAX, and data visualization. The goal was to build a robust reporting solution that tracks shipment performance across locations, product categories, and sales personnel over time.

🧱 **Data Model Design**

A star schema was implemented to ensure performance and clarity. The central fact table (Shipments) was connected to multiple dimension tables:

Shipments (Fact Table): Order status, shipment date, product ID, sales ID, region, cost, boxes, and amount

Products: Product ID, Product Name, Category, Cost per Box

People (Sales): Salesperson ID, Name, Picture

Locations: Geographic ID, Region, Geo

Calendar: Date, Month, Year, Weekday (for time-based analysis)

This model allows flexible slicing and aggregation of shipment data across multiple dimensions.

📊 **Dashboard Highlights**

The Power BI dashboard includes:

Shipment Volume and Cost Breakdown

Regional and Product Category Analysis

Salesperson Performance Tracker

Time-series Filtering with a Calendar Table

Box and Amount Metrics by Status (Completed, In Transit, Cancelled)

Dynamic filters enable users to interact with the report and drill down into specific time periods, regions, or product lines.

**🛠 Tools & Technologies Used**

Power BI Desktop

DAX (Data Analysis Expressions)

Star Schema Data Modeling

Excel/CSV (Data Source)

🎯 **Key Learnings**

How to structure an effective star schema for BI reporting

Writing basic to intermediate DAX measures

Using slicers and visuals to enhance user interactivity

Creating KPI cards, bar/line charts, donut charts, and matrix views

Designing a clean, functional layout that tells a story