Finance KPI Dashboard with Power BI

Purpose of the Project

The purpose of this project is to design a **Finance KPI Dashboard** that provides actionable insights into **sales performance** and **variance analysis**. By leveraging **Power BI** and **DAX calculations**, the dashboard enables stakeholders to track key performance indicators (KPIs) like **Total Sales**, **YTD Sales**, and **Variance %**. The final result is an interactive and user-friendly report that supports **data-driven decision-making** for finance and sales teams.

Steps Implemented

1. Data Preparation

- Connected the data sources into Power BI.
- Used **Power Query Editor** for data cleaning and transformation:
    - Removed unnecessary columns.
    - Standardized data formats.
    - Ensured proper relationships between tables (e.g., fact and dimension tables).

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2. Data Modeling

- Created relationships between:
    - **Sales Data** (fact table)
    - **Targets Data** (fact table)
    - **Calendar** (Date table)
    - **dimPeople** (dimension table for Salespeople and Teams).
- Established a **star schema** for optimized performance.

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3. DAX Calculations

- Developed **measures** using DAX for key metrics:

Measure	DAX Formula
Total Sales Actual	`Total Sales Actual = SUM(Actual[Sales])`
Total Sales Target	`Total Sales Target = SUM(Targets[Sales])`
Variance	`Variance = [Total Sales Actual] - [Total Sales Target]`
Variance %	`Variance % = DIVIDE([Variance] , [Total Sales Target])`
YTD Sales Actual	`YTD Sales Actual = CALCULATE([Total Sales Actual] , DATESYTD('Calendar'[Date]))`
YTD Sales Target	`YTD Sales Target = CALCULATE([Total Sales Target] , DATESYTD('Calendar'[Date]))`
Variance	`YTD Variance = [YTD Sales Actual] - [YTD Sales Target]`
Variance%	`YTD Variance % = DIVIDE([YTD Variance] , [YTD Sales Target])`

- These measures allowed for flexible analysis of both **monthly** and **year-to-date (YTD)** data.

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4. Dashboard Visuals

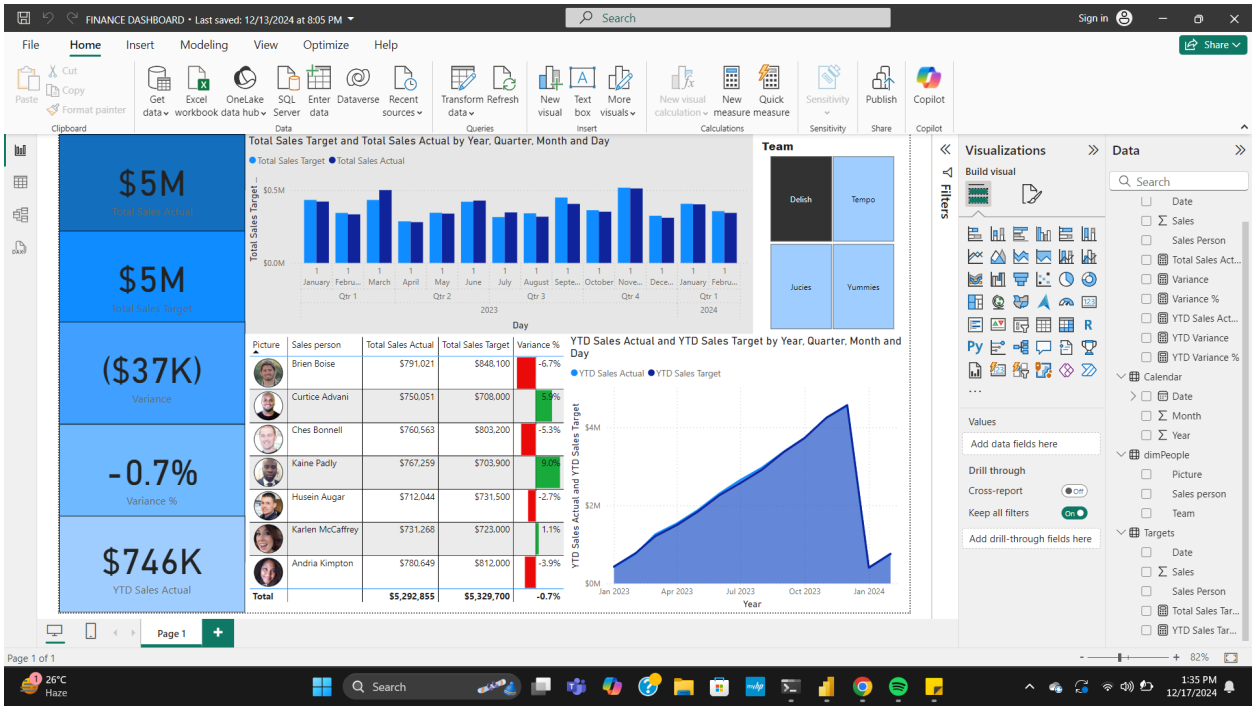
Designed an interactive **KPI Dashboard** using the following visuals:

1. **KPI Cards**:
    - Displayed **Total Sales Actual**, **Variance**, and **YTD Sales**.
2. **Bar Chart**:
    - Compared **Total Sales Actual** vs **Total Sales Target** across months and quarters.
3. **Line Chart**:
    - Showed **YTD Sales Actual** and **YTD Sales Target** trends over time.
4. **Sales Performance Table**:
    - Included sparklines to visualize trends for each salesperson.
    - Added conditional formatting for **Variance %** (green for positive, red for negative).
5. **Smart Narrative**:
    - Leveraged Power BI's AI-generated summaries to provide insights into sales trends.
6. **Custom Labels**:
    - Added **emoji** to variance labels for better readability.

Final Result

The final **Finance KPI Dashboard**:

- Highlights key performance metrics in an executive-friendly format.
- Identifies areas of underperformance through **Variance %** analysis.
- Provides a clear view of monthly and year-to-date sales performance against targets.
- Offers detailed insights into individual sales team contributions.



Key Learnings

1. Using **Power Query** for data transformation.
2. Creating DAX measures for KPIs like **Variance** and **YTD Sales**.
3. Visualizing data with **KPI cards, sparklines, and smart narratives**.
4. Building relationships across multiple tables for efficient data modeling.