**Power BI Portfolio Project: Financial Analysis Report**

**Project Overview**

This Power BI project provides a financial performance analysis, focusing on key metrics such as Sales, Profit, Discounts, and Profit Margin % for both Current Year (CY) and Prior Year (PY).

The dashboard is designed with interactive filters and drill-throughs, enabling users to analyze regional trends, discount impact, and product-level profitability.

**Dataset & Data Model**

The analysis is based on financial transaction data, structured into the following tables:

* Financial Data – Contains sales transactions, including revenue, cost, discounts, and product details.
* Dim\_Date – A Date Table created using CALENDAR DAX, ensuring time intelligence calculations.
* Analysis Table – Holds calculated values for Current Year and Prior Year KPIs.

**Data Model Relationships**

* Financial Data is linked to Dim\_Date via Date.
* Other relationships ensure time-based trend analysis and product-level insights.

**Key Features**

* Dynamic KPIs for Current vs Prior Year – Measures year-over-year growth trends.
* Top 3 Products by Sales (Prior Year) – Identifies best-selling products dynamically.
* Profitability Analysis – Tracks Profit, Profit Margin %, and Discount impact.
* Regional & Product-Level Insights – Analyzes performance across countries, segments, and discount bands.

**Visualizations:**

1. KPIs for Current Year (CY) vs Prior Year (PY)

* Sales Amount
* Orders
* Profit
* Profit Margin %
* Discounts Offered

2. Performance Analysis

* Orders by Country – Identifies high-performing regions.
* Profit Margin by Country & Segment – Shows variations in profitability.
* % of Discounts Offered by Discount Band – Highlights discount impact on sales.
* Sales Trend Over Time – Compares monthly performance.

3. Top 3 Products by Sales (PY)

* Identifies best-selling products from the prior year.
* Highlighted in a different color to make them stand out.

**DAX Calculations**

1. Financial Analysis Calculations

Sales Amount = sum(‘Financial data’[Net Sales])

Profit = sum(‘Financial data’[Proft])

Profit Margin % = DIVIDE([Profit], [Sales Amount],0)

1. Top 3 Products by Sales (PY) - dynamically filters the top 3 products and ensures the selection is interactive and adjusts based on applied slicers.

Top 3 Products by Sales = CALCULATE([Sales Amount], TOPN(3, ALLSELECTED('Financial data'[Product]), [Sales Amount], DESC),VALUES('Financial data'[Product]) )

1. Top Highlight (Conditional Formatting for Top 3 Products)

Top Highlight = IF(ISBLANK([Top 3 Products by Sales]), 0, 1)

Purpose: Highlights the Top 3 products in another color using conditional formatting.

**Insights & Findings**

* Sales Performance:
  + Sales increased by +249.46% YoY, reaching $92.3M.
  + Orders grew by 225.36%, reflecting strong demand.
* Profitability & Discounts:
  + Profit Margin declined by -3.97%, indicating a potential impact of increased discounts (up by 229.04%).
  + Discount impact varies by discount band, with high-discount segments underperforming in profitability.
* Top 3 Products:
  + The best-selling products from the prior year are dynamically identified.
  + Highlighting helps compare their contribution to overall sales trends.