Sales Insights Dashboard Case Study

You are required to build a Power BI dashboard that meets the following business reporting needs for an FMCG distributor. The report will be used by the **National Sales Head (NSH)** and their team to track sales performance, promotions, and profitability across regions.

The Dataset

1. Quantity Sales Data (Excel Files)

- One file per region: GJ, MH, MP, TG – stored in folder "**Sales Data Table**"
- Each file contains multiple sheets, one for each year (e.g., 2023, 2024)
- Each sheet contains **monthly quantity sold by product**

2. Selling Price Data (CSV File)

- Contains:
  - Product-wise, month-wise **selling price**
  - **Cost Price** per product
  - **Base Price** per product
- Define **Sales Type** based on Base Price:
  - If **Selling Price < Base Price → Promo**
  - Else → **Normal**
- This logic can be implemented in either **Power Query or DAX**
- Your model should support sales analysis by:
  - Sales Type (Promo/Normal)
  - Time Period
  - Region and NSM

3. Sales Team Structure (Excel File)

- Defines reporting hierarchy:

  Sales Rep → Area Manager → Regional Head → NSM

- Use this to enrich the model for team-based reporting and filtering

Dataset Download:

📄 Task1 Sales Dashboard.zip 61.4KB

Deliverables

Prepare a Power BI report with **three key pages**:

1. **Trend Analysis**
2. **Margin and Promo Analysis**
3. **Business Overview**

Each page has its own reporting objective and visual requirements as detailed below.

1. Trend Analysis Page

Design a KPI trend view that includes the following:

- Display **monthly trends** for:
  - **Sales Value**
  - **Gross Profit**
  - **Gross Margin (%)**
  - Include **Year-over-Year (YoY)** comparison for the selected KPI.
- Implement **KPI Selector**:
  - Use a **single chart** that updates dynamically based on the selected KPI.
  - Ensure the **chart title and number formatting** change to match the selected KPI.
- Implement **financial year logic**:
  - The company follows the **Indian Financial Year (April – March)**.
  - All date-based analysis should align with this calendar structure.

2. Margin & Promo Analysis Page

This page focuses on analyzing performance across products and promotional effectiveness.

2.1 Category-Product Sales Table

Create a table that displays the following for each **product category**:

- Total Sales
- **Sales Mix** (% contribution to total sales)
- **Promo Sales Share** (% of sales made at promo price)
- **Top 3 Products** by sales, with their individual sales values

2.2 Margin Segmentation Visual

Include a visual that **buckets products into Gross Margin segments**:

- **Segments:**
  - High Margin: Gross Margin % > 50%
  - Mid Margin: 30% – 50%
  - Low Margin: < 30%
- This segmentation logic should be:
  - **Flexible** – Read threshold values from a user-editable input file
  - **Dynamic** – Automatically adjust based on the selected period (Year & Quarter)
- For each margin bucket, show:
  - Total Sales
  - Revenue Growth % (vs. previous period)
  - Gross Margin %
- The visual should:
  - Cross-filter the **Category-Product Sales Table**
  - Use a visual type appropriate for segment comparison (e.g., stacked column, donut, or matrix)

2.3 Slicers

Add slicers for:

- **Year**

- **Quarter** (to be displayed as Q1, Q2, Q3, Q4)

3. Business Overview Page

This page should give a top-level view of overall performance with a focus on key insights.

- Include visuals that summarize overall sales, margin trends, top-performing regions or categories, etc.
- A **critical insight** to include:
  - **Count of products** sold in the previous year but **not sold** in the selected year
  - **Total lost sales value** from these products

This helps business users identify lost opportunities or dropped SKUs.

Evaluation Criteria

Your solution will be assessed based on:

- **Accuracy** of calculations (e.g., Sales Type, Gross Margin, YoY logic)
- **Efficiency and scalability** of the data model
- **Flexibility** of calculations to respond to user inputs and filters
- **Clarity and effectiveness** of the report design and visuals

Other Instructions

> 💡 Please provide a link to download your solution in the application form or attach the Power BI file in the application form.

> ⚠️ Model should be dynamic and have a provision to provide address to the dataset folder location with same file structure.