**Retail Business Performance & Profitability Analysis – Dashboard Insights Report**

**✅ Dashboard Page 1: Overall Business Performance**

**KPIs Shown:**

* **Total Sales:** 3M (Sum of Total Sales)
* **Total Profit:** ₹617K (Sum of Profit)
* **Profit Margin:** 368.78 (Sum of Profit Margin)

**Visual Insights:**

📊 **Profit by Category**

* "Home and Kitchen " emerged as the most profitable category overall.
* "Clothing" and "Beauty" followed but with significantly lower profit contribution.

📊 **Total Sales by Category**

* Highest sales volume observed in "Home and Kitchen", indicating high movement but lower profitability.
* Categories like "Beauty" had decent sales but comparatively lower profit margins.

📊 **Profit Margin by Sub-Category**

* Sub-categories like **"Cookware"** and **"Decor"** showed exceptionally high margins.
* **"Makeup"** and **"Shirts"** had low margins, signaling potential pricing or cost issues.

🧮 **Slicer: Category**

* Allows dynamic filtering across visuals to analyze performance per category.

**Key Insight:**

High sales ≠ High profit. Focus should be on improving margins in high-volume but low-profit sub-categories.

**✅ Dashboard Page 2: Inventory & Profitability Analysis**

**Slicers Available:** Sub-Category | Category | Region

📅 **Average Inventory Days by Month & Category**

* Notable spikes in average inventory seen during February and November , especially in "Beauty and Home and Kitchen".
* "Electronics" category maintains consistently low inventory days — good stock movement.

📊 **Avg of Avg\_Inventory by Category**

* "Beauty" has highest average inventory — could indicate over-purchasing or slow demand.
* "Sports" and "Clothing" had lean inventory models, supporting faster turnover.

📋 **Table: Inventory Analysis Summary**

| **Category** | **Sub-Category** | **Sum Inventory Days** | **Overstocked** | **Slow Moving** | **Sum Profit** |
| --- | --- | --- | --- | --- | --- |
| Home and kitchen | Decor | 450 | Yes | Yes | ₹8,000 |
| Sports | Fitness | 150 | No | No | ₹20,000 |
| *(Sample format)* |  |  |  |  |  |

**Key Insight:**

Overstocked + Slow-Moving items are draining capital and shelf space — need to reduce procurement or push marketing efforts. Inventory efficiency directly impacts profitability.

**✅ Dashboard Page 3: Seasonal Product Performance**

**Slicers Available:** Region | Category | Season

📈 **Profit by Season**

* **Winter** showed highest overall profit, especially in "Home and kitchen"
* **Summer** had the lowest contribution — marketing or stocking strategies might need review for that period.

📊 **Profit by Sub-Category**

* **Home and kitchen , Sports sub category** peaked during winter.
* **Home and kitchen , Sports sub category** dominated summer sales but had thinner margins.

📊 **Profit by Season and Category (Stacked)**

* "Beauty" maintained consistent performance across seasons.
* Clear seasonal spikes in "Clothing" — supports targeted promotions per quarter.

🧮 **Matrix Table: Season vs Sub-Category (Profit)**

| **Season** | **cookware** | **Decor** | **fitness** | **Jeans** |
| --- | --- | --- | --- | --- |
| Winter | ₹12,000 | ₹2,000 | ₹4,500 | ₹500 |
| Summer | ₹5,000 | ₹1,200 | ₹3,800 | ₹9,000 |

**Key Insight:**

Seasonal trends are very pronounced. Stocking and campaign planning should be aligned with seasonal demand peaks to maximize ROI.

**📁 Deliverables Summary**

* **Power BI Dashboard**  with 3 detailed pages
* **Cleaned & Processed CSVs** (exported from Python)
* **PDF Insight Report** (this document)

**Retail Business Performance – Combined Main Insights**

1. **Sales High ≠ Profit High**
   * *Home & Kitchen* category ne sabse zyada sales aur profit diya, lekin **margin low** hai.
   * *Beauty* aur *Clothing* jaise categories mein sales theek hai, lekin **profitability weak** hai — margin improvement ki zarurat hai.
2. **Sub-Category Level Focus Needed**
   * High-margin: *Cookware*, *Decor*
   * Low-margin: *Makeup*, *Shirts* → Cost control ya price review karein.
3. **Inventory Ka Impact Profitability Par**
   * *Beauty* ka inventory high hai → overstocking ya slow demand.
   * *Decor* jaise items overstocked & slow-moving hone ke bawajood profit kam de rahe hain → capital block ho raha hai.
   * *Sports* aur *Clothing* ne fast-moving, lean inventory model dikhaya — ye efficient strategy hai.
4. **Seasonality Ka Clear Effect Hai**
   * *Winter* mein profit peak karta hai, especially in *Home & Kitchen* aur *Sports*.
   * *Summer* weak season hai → stocking aur marketing strategy improve karni hogi.
   * *Jeans* ne summer mein high profit diya → targeted campaigns ka scope hai.