# Information Service

## Report Analysis:  Retailer and Product Performance Insights

**Project Assignment Details: -**

| Role | Name/Project | Signature | Date |
|---|---|---|---|
| Author | Akash Badhe | | 21-11-2025 |
| Reviewer | | | |
| Approver | | | |

**Contents:**

**1. Introduction**

This document provides comprehensive technical specifications for the Tableau project titled 'Retail Operations & Market Insights' based on 11 source Excel files. It outlines data preparation, relationships, transformations, logic, and Tableau service deployment.

**2. Purpose of the Document**

- To define the steps, structure, measures, and visuals used in building the dashboard.
- To record all technical logic (data model, RLS, publishing).
- To assist in User Acceptance Testing (UAT).

**4. Project Requirement: -**

**Goal:**
To build a Tableau dashboard that provides insights into sales, inventory, product, and retailer performance using 11 data tables.

**Key Focus Areas:**

- Total sales trends (Month, Quarter, Year)
- Brand and product demand analysis
- 20% discount impact on latest year sales
- Open, close, and current inventory tracking
- Retailer & country-wise performance
- Product color demand
- City and warehouse-level insights

**Security (RLS):**

- Full access for selected users
- Country-specific access for others

**5. Scope**

This dashboard allows:

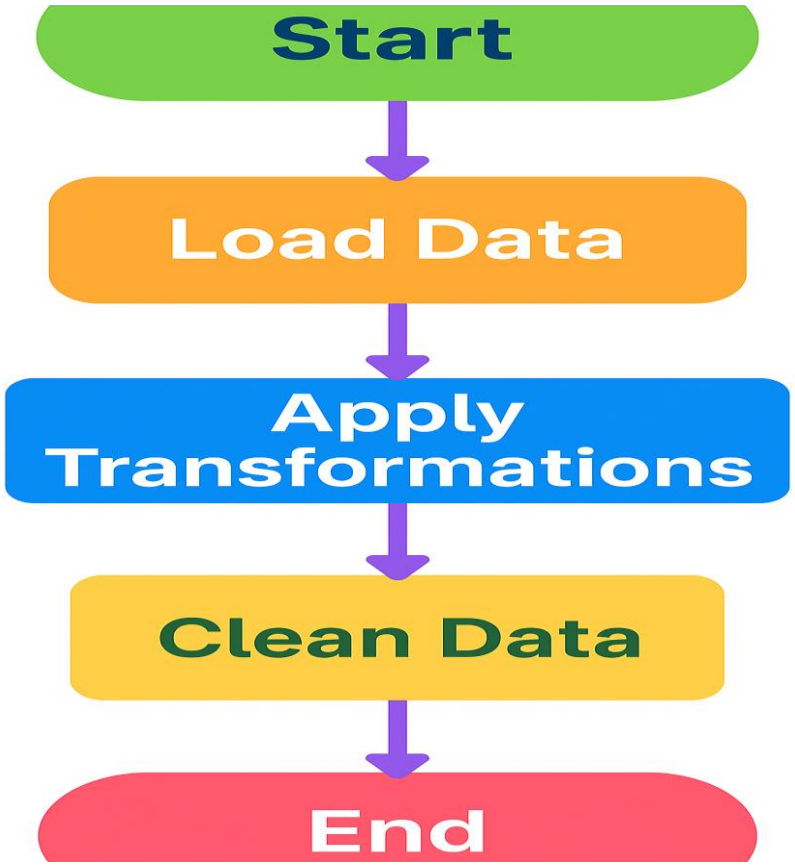
- Country-wise sales insights
- Retailer & product performance
- City-wise analysis
- Inventory trends
- Month-on-Month trend tracking

**6.Dataset / Data Preparation : -**

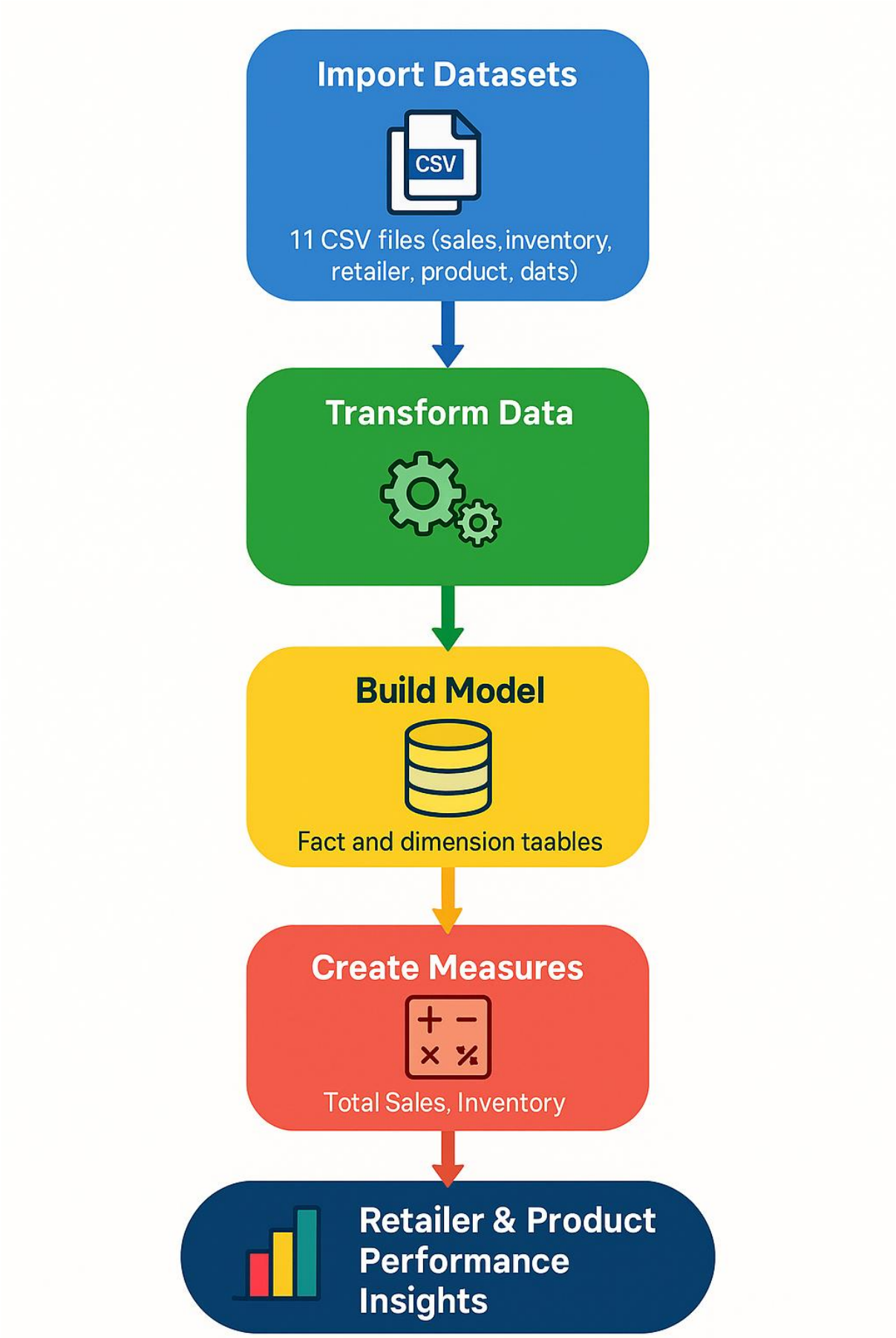
Below is the dataset summary with column names:

| Table Name | Description | Column Names |
|---|---|---|
| TBL_DIM_COUNTRY_LKP | Country lookup table | COUNTRY_KEY, COUNTRY_NAME |
| TBL_DIM_DATE_TIME | Date master | DATE_KEY, DAY_DATE, MONTH, MONTHYEAR, QUARTER_YEAR, CURRENT_YEAR, YEAR |
| TBL_DIM_ORDER | Order header table | ORDER_KEY, PRODUCT_KEY, RETAILER_KEY, ORDER_DATE, QUANTITY, UNIT_SALE_PRICE |
| TBL_DIM_ORDER_METHOD_LKP | Order method lookup | ORDER_METHOD_KEY, ORDER_METHOD_NAME |
| TBL_DIM_PRODUCT | Product master | PRODUCT_KEY, PRODUCT_NAME, COLOR, BRAND |
| TBL_DIM_PRODUCT_NAME_LKP | Product name lookup | PRODUCT_KEY, PRODUCT_DISPLAY_NAME |
| TBL_DIM_RETAILER_LKP | Retailer master | RETAILER_KEY, RETAILER_NAME, CITY, COUNTRY_KEY |
| TBL_DIM_RETURN_REASON_LKP | Return reason lookup | REASON_KEY, REASON_DESCRIPTION |
| TBL_DIM_WAREHOUSE_LKP | Warehouse lookup | WAREHOUSE_KEY, WAREHOUSE_NAME |
| TBL_FACT_INVENTORY | Inventory facts | INVENTORY_KEY, PRODUCT_KEY, WAREHOUSE_KEY, DATE_KEY, INVENTORY_UNITS, UNIT_COST |
| TBL_FACT_SALES | Sales facts | SALES_KEY, PRODUCT_KEY, RETAILER_KEY, ORDER_KEY, DATE_KEY, QUANTITY, UNIT_SALE_PRICE |

7. **Project Execution Procedure: -**

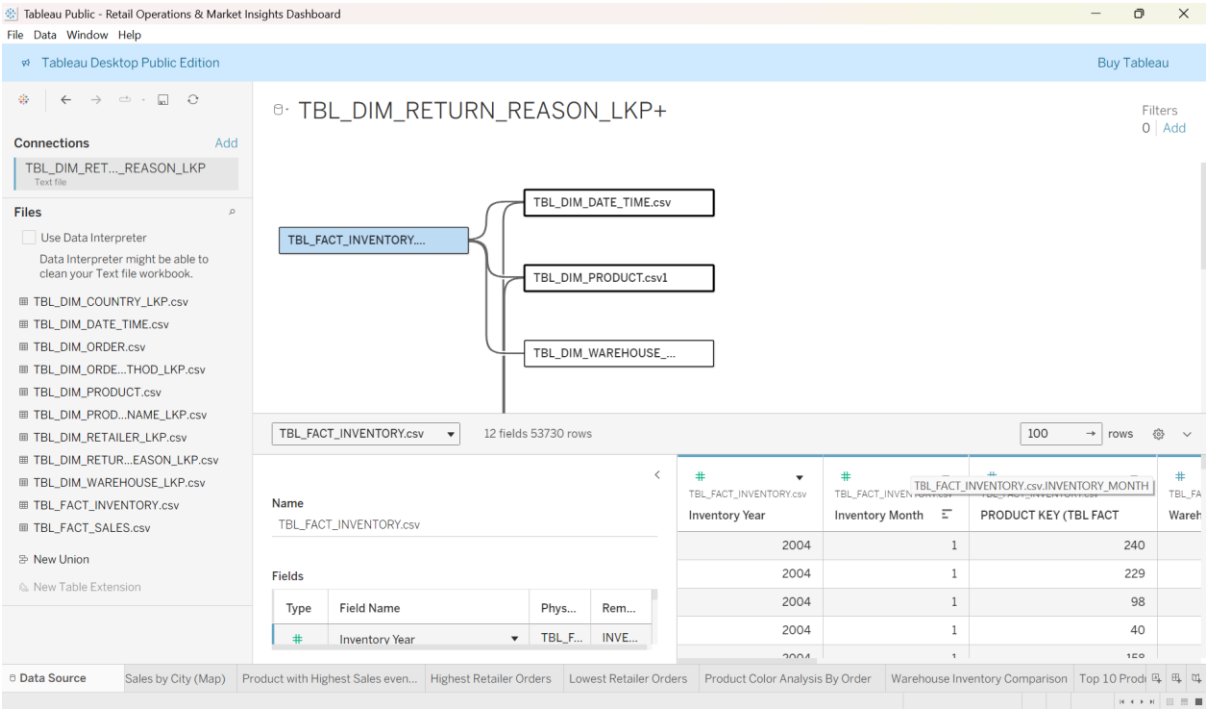


**8. Flowchart :-**


Import Datasets
CSV
11 CSV files (sales,inventory, retailer, product, dats)
Transform Data
Build Model
Fact and dimension taables
Create Measures
Total Sales, Inventory
Retailer & Product Performance Insights

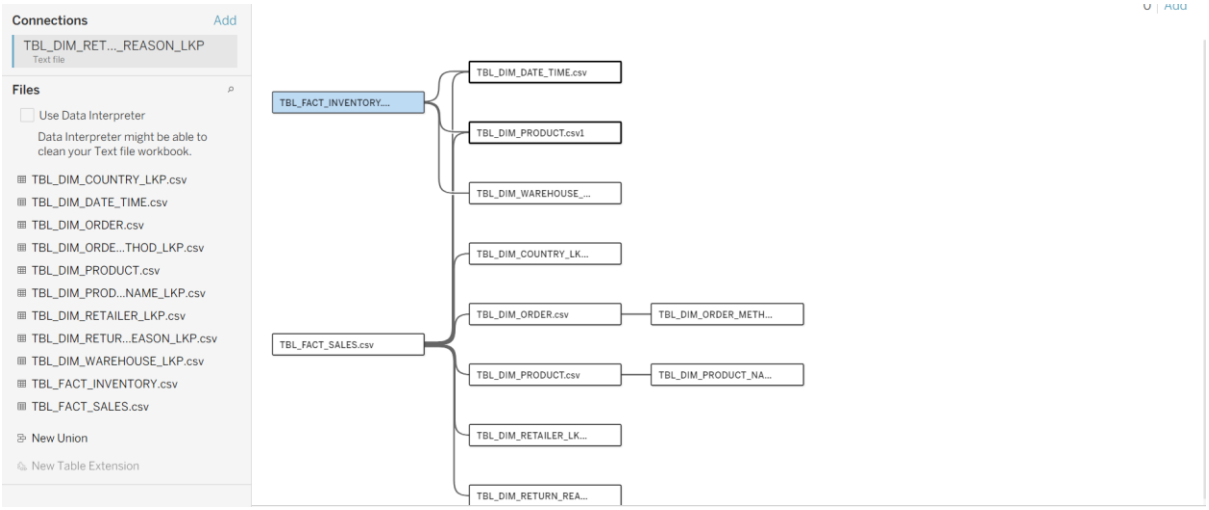
## 12. Tableau Desktop: -

**Flow of Tableau: -**




## 6. Data preparation and Modelling: -

Data is loaded in front end of Tableau desktop and created relationship between these tables. Also checked cardinality between these tables.



**14. Required Calculation**: -

1. Total Sales Amount:

Total Sales = SUM(Sales)

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2. Sales with 20% Discount:

```
Sales with 20% Discount = IF YEAR([Order Date]) = [Latest Year] THEN
                            [Sale Total] * 0.8
                          ELSE
                            [Sale Total]
                          END
```

---

3. Average Selling Price:

Average Selling Price = [Net sale]/[Quantity]

---

4. Total Orders:

Total Orders = COUNTD([Order Key])

---

5. Net sale:

Net sale = [Sale Total]- ([Returned Quantity]- [QUANTITY (TBL DIM ORDER.csv)])

---

6. Gross Profit:

Gross Profit = ([UNIT SALE PRICE (TBL DIM ORDER.csv)]- [UNIT COST (TBL DIM ORDER.csv)])
*[Quantity]

---

7. Latest Year (LOD):

Latest Year = { FIXED : MAX(YEAR([Order Date])) }

---

8. Total Return:

Total Return = SUM([RETURN REASON KEY (TBL DIM RETURN REASON LKP.csv)])

---

9. Retailer Wise Orders

```
Dynamic Date = CASE [Select Date Granularity]
                 WHEN "Month" THEN DATETRUNC('month', [Order Date]
                 WHEN "Quarter" THEN DATETRUNC('quarter', [Order Date])
                 WHEN "Year" THEN DATETRUNC('year', [Order Date])
               END
```

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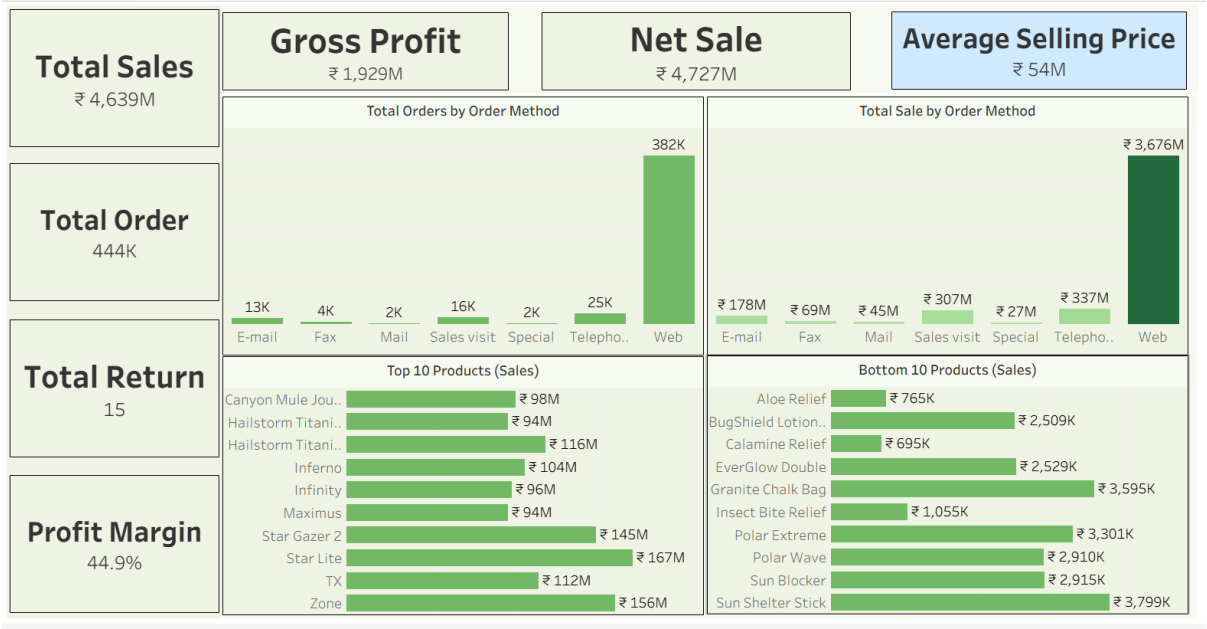
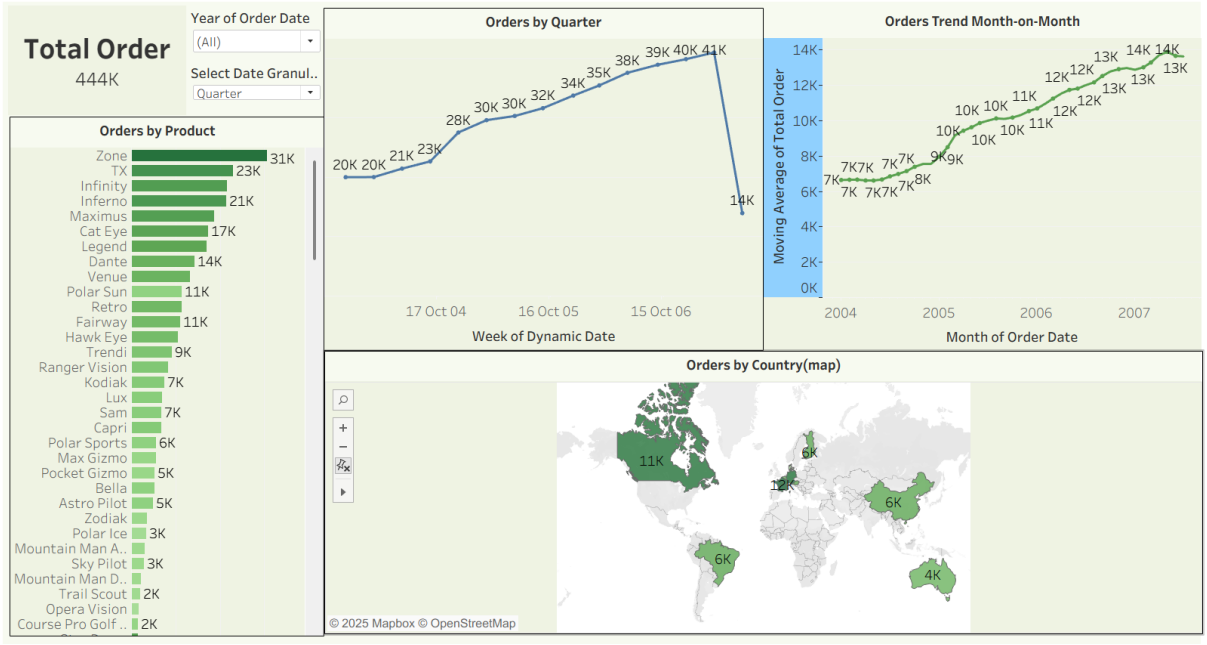
**Dashboard: -**

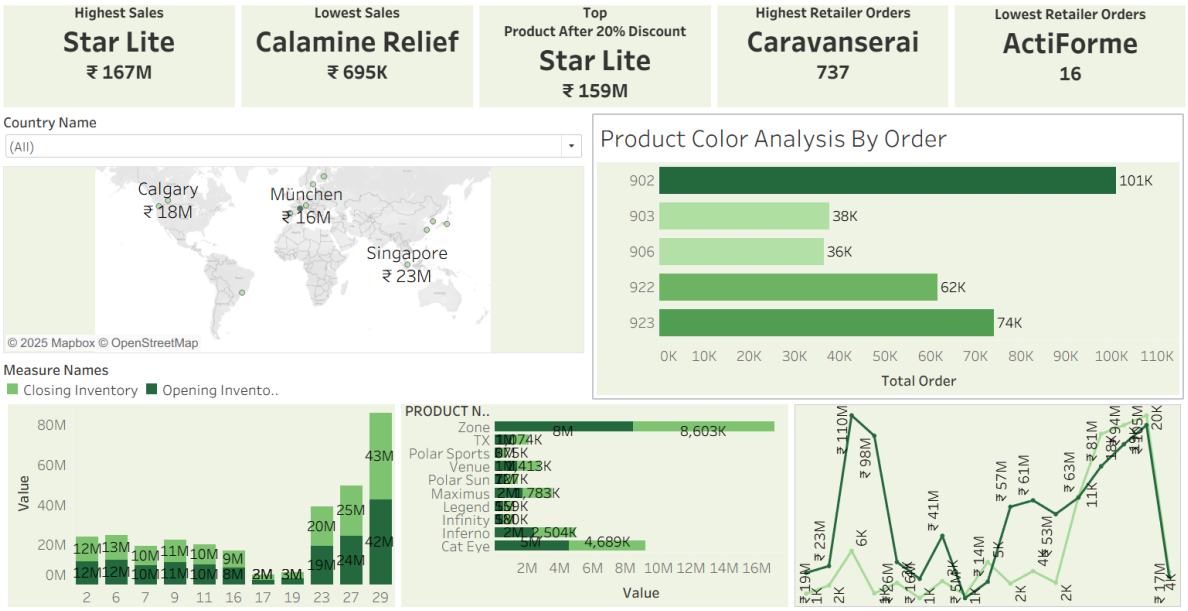
1.Summary Dashboard



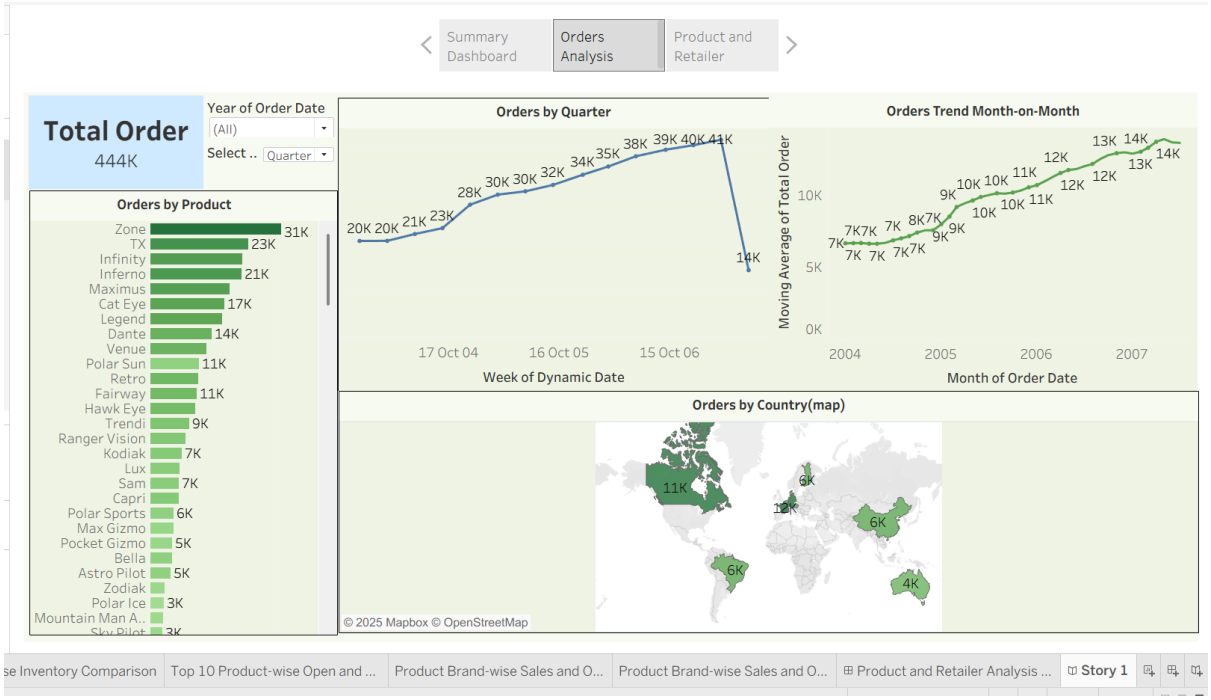

2. Orders Analysis



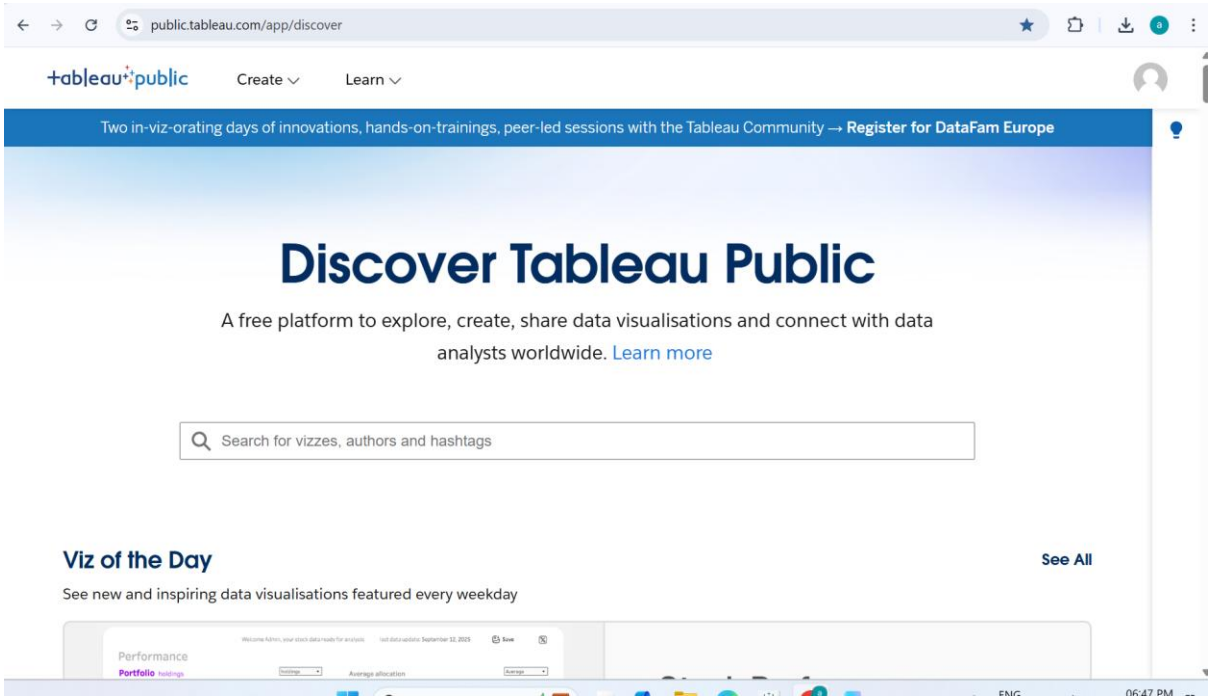
3. Product and Retailer Analysis Dashboard




**15. Story: -**



- Tableau Service: --




- Work Space: --