

Information Service

Report Analysis: Retailer and Product Performance Insights

Project Assignment Details: -

Role	Name/Project	Signature	Date
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Reviewer			
Approver			

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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:

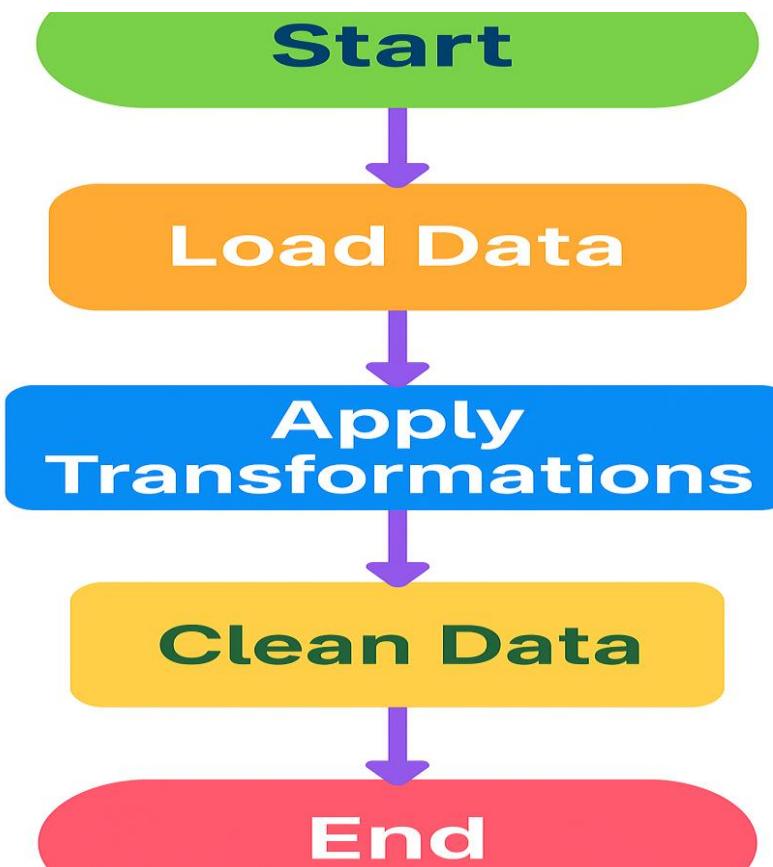
- Country-wise sales insights
- Retailer & product performance
- City-wise analysis
- Inventory trends
- Month-on-Month trend tracking

6.Dataset / Data Preparation :-

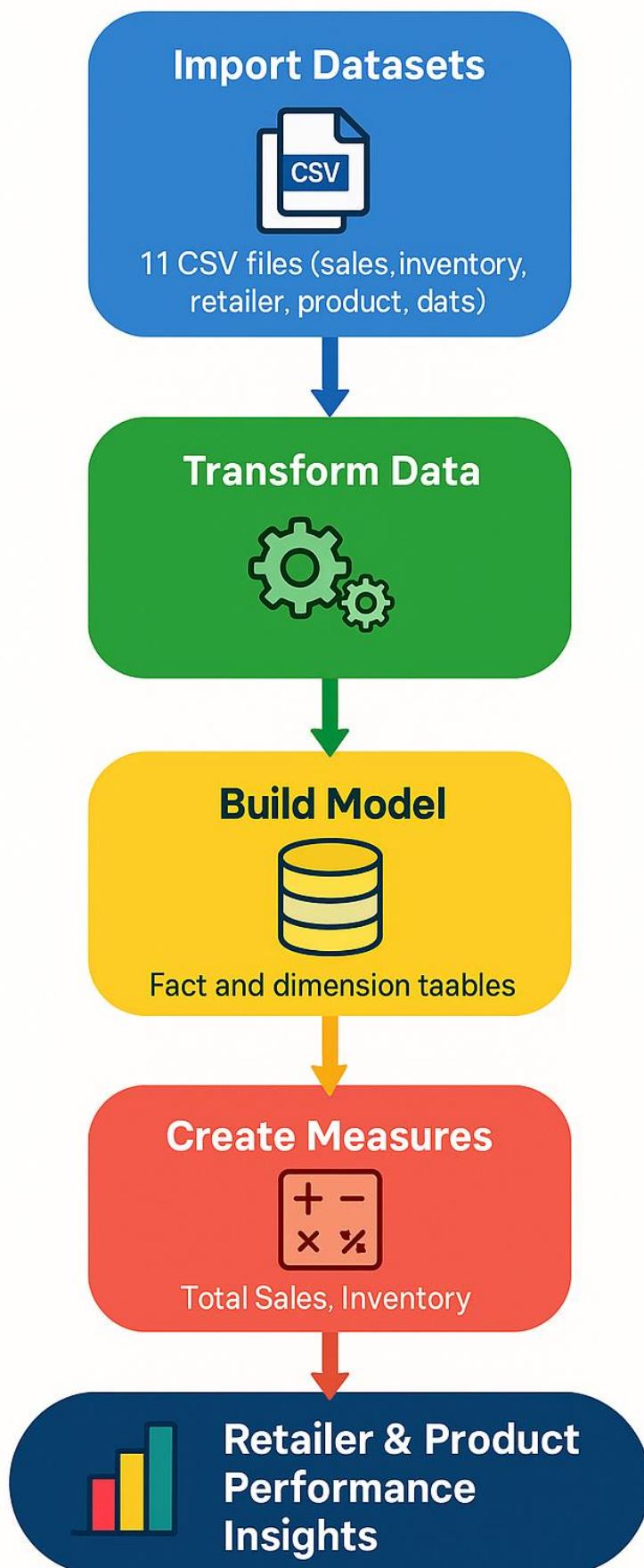
Below is the dataset summary with column names:

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: -

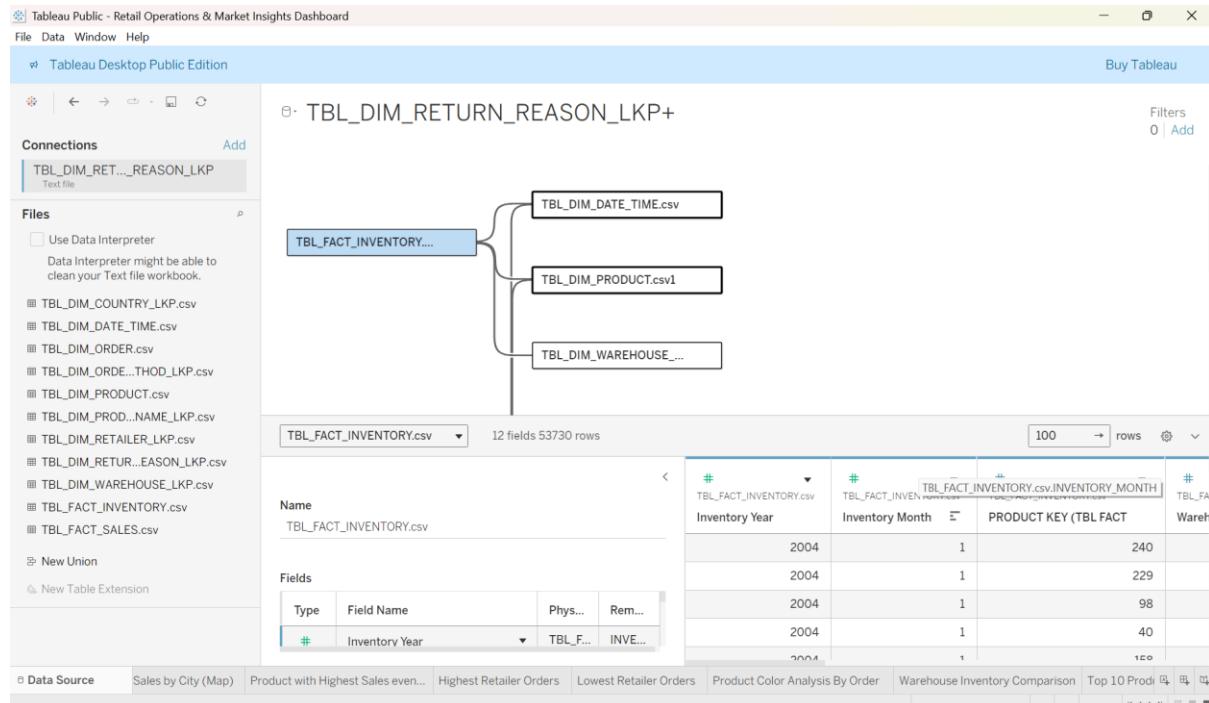


8. Flowchart :-



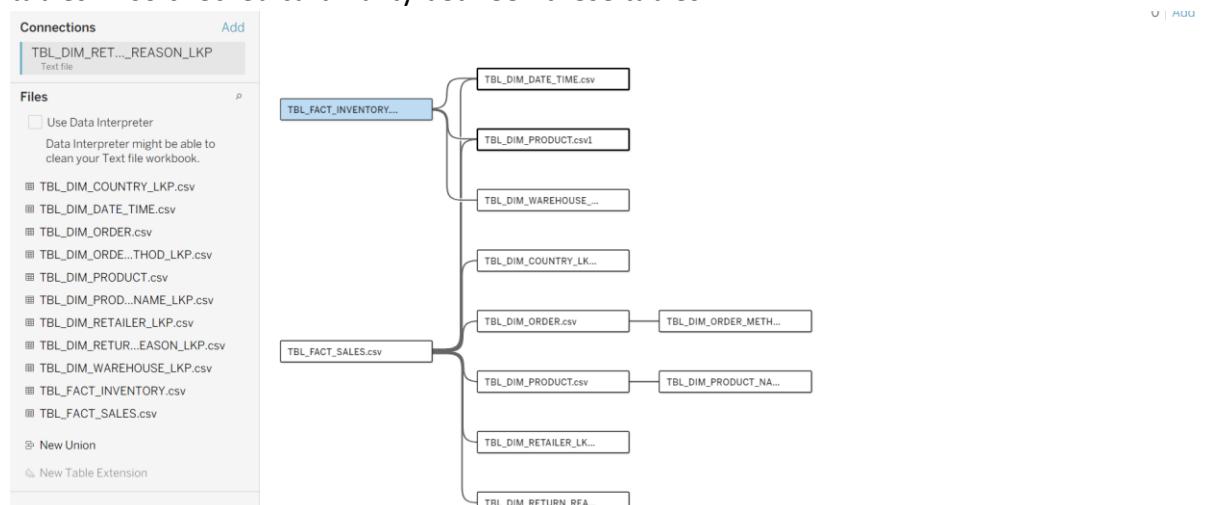
12. Tableau Desktop: -

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)

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:

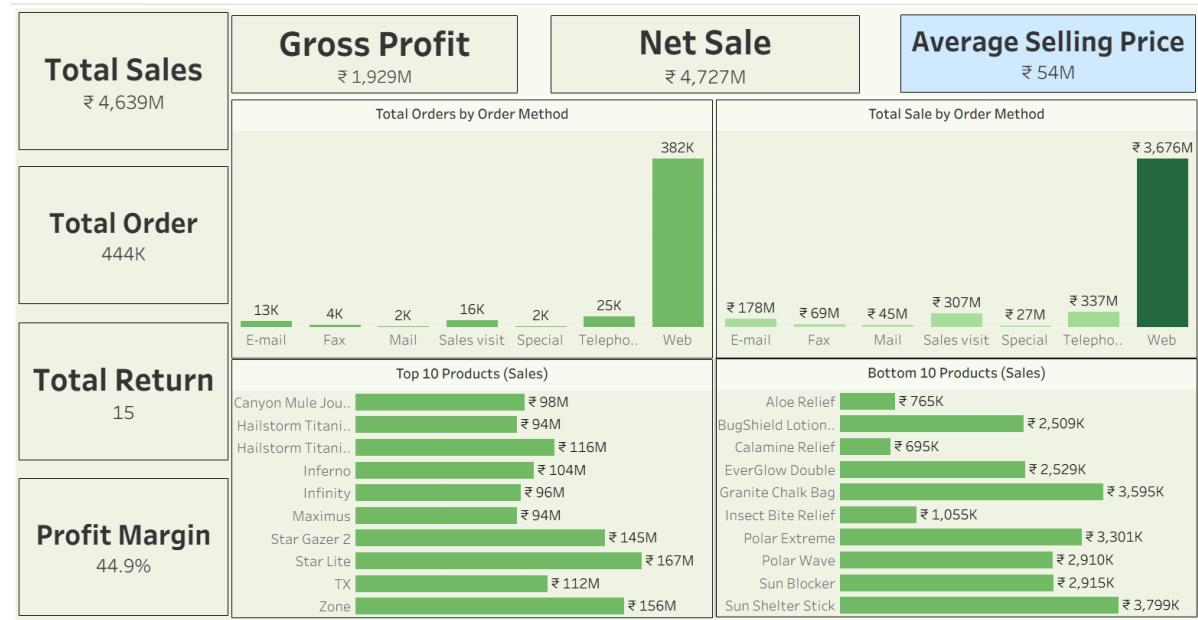
Total Return = SUM([RETURN REASON KEY (TBL DIM RETURN REASON LKP.csv)])

9. Retailer Wise Orders

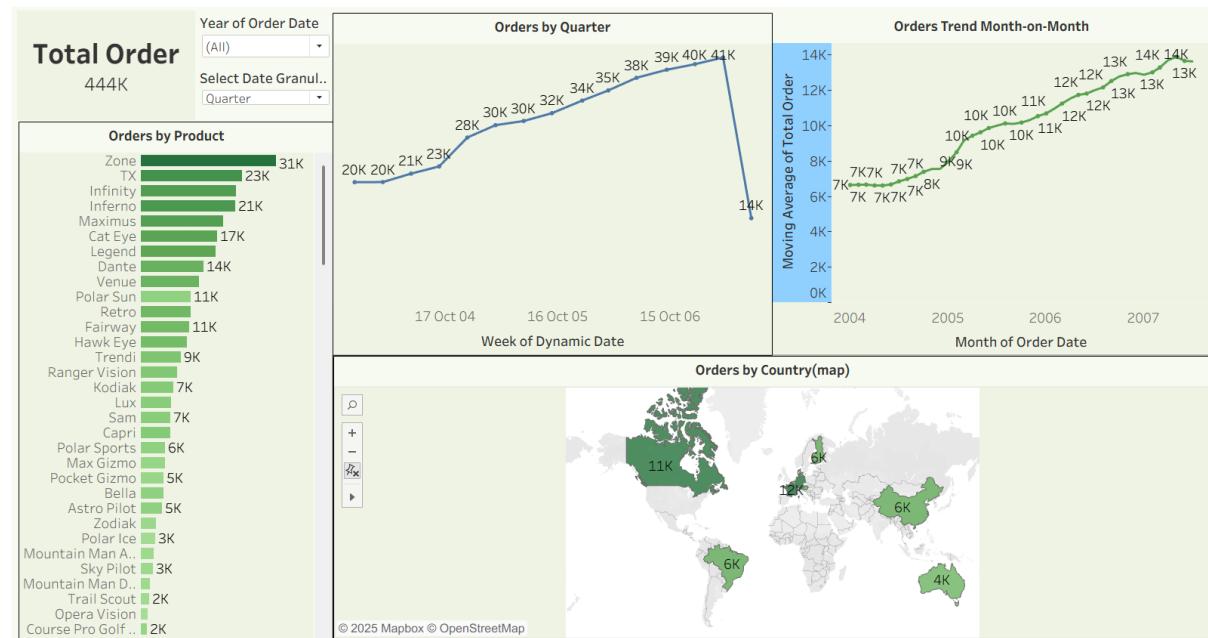
```
Dynamic Date = CASE [Select Date Granularity]  
    WHEN "Month" THEN DATETRUNC('month', [Order Date])  
    WHEN "Quarter" THEN DATETRUNC('quarter', [Order Date])  
    WHEN "Year" THEN DATETRUNC('year', [Order Date])  
END
```

Dashboard: -

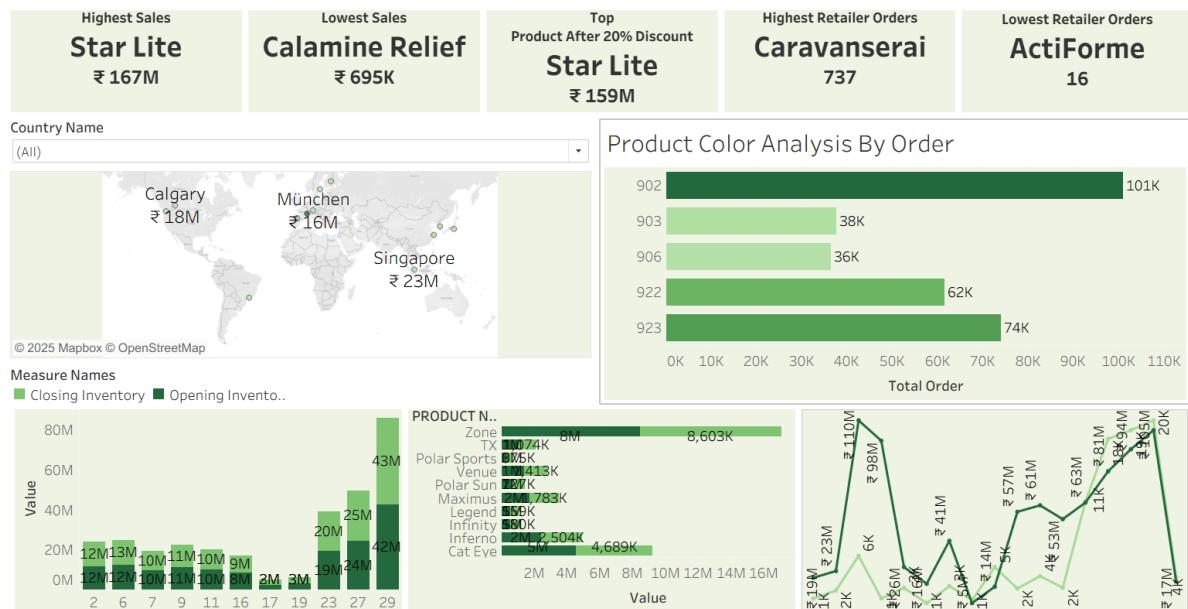
1. Summary Dashboard



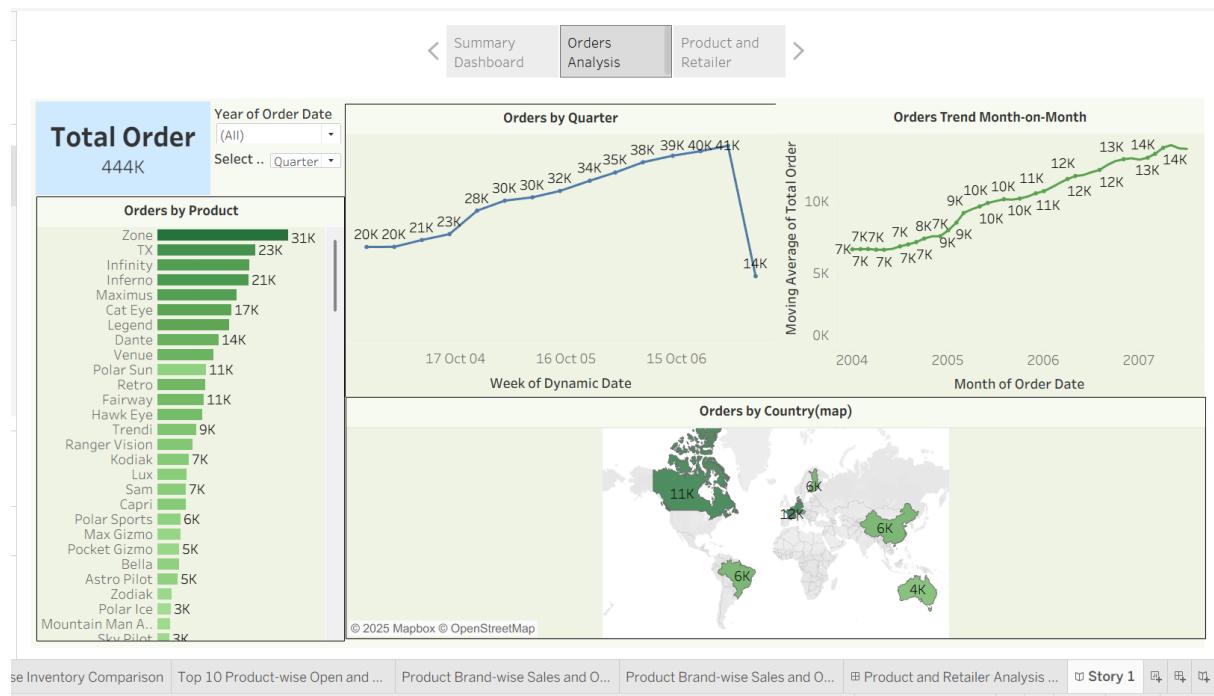
2. Orders Analysis



3. Product and Retailer Analysis Dashboard



15. Story: -



➤ Tableau Service: --

The screenshot shows the Tableau Public homepage. At the top, there's a banner for 'DataFam Europe' with a call to action to 'Register for DataFam Europe'. Below the banner, the main title 'Discover Tableau Public' is displayed in large blue text. A subtitle below it reads 'A free platform to explore, create, share data visualisations and connect with data analysts worldwide.' with a link to 'Learn more'. There's a search bar at the bottom of the main content area. On the left side, there's a sidebar with a section titled 'Viz of the Day' showing a thumbnail of a dashboard and a link to 'See All'. On the right side, there's a small 'See All' button.

➤ Work Space: --

The screenshot shows a Tableau dashboard titled 'Retail Operations & Market Insights Dashboard (Tableau Public)'. The dashboard includes several cards and charts. One card displays 'Star Lite ₹ 167M'. Another card shows 'Calamine Relief ₹ 695K'. A third card shows 'Product After 20% Discount Star Lite 2,965'. Other cards include 'Caravanserai 2,965' and 'ActiForme 110'. A 'Product Color Analysis By Order' chart uses a world map to show order volumes for different countries. A 'Product N...' chart shows product names and values. A 'Warehouse Inventory Comparison' chart compares closing and opening inventory across various locations. The dashboard has a navigation bar at the top with tabs for 'Story' and 'Layout', and a sidebar on the left for managing stories and sheets.