

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:

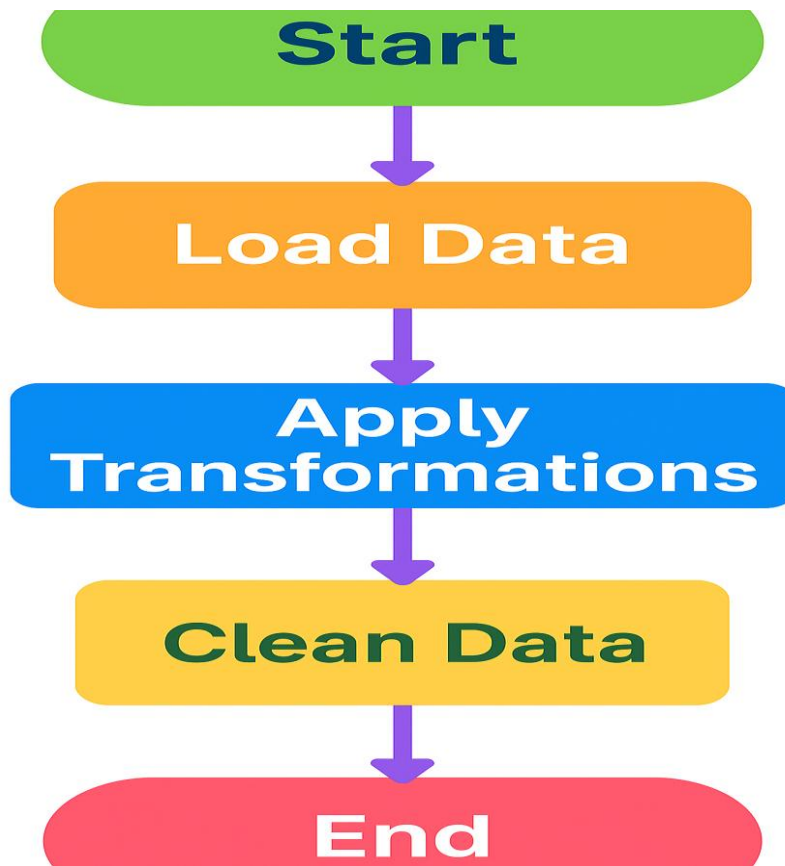
- Country-wise sales insights
- Retailer & product performance
- City-wise analysis
- Inventory trends
- Month-on-Month trend tracking

6.Dataset / Data Preparation : -

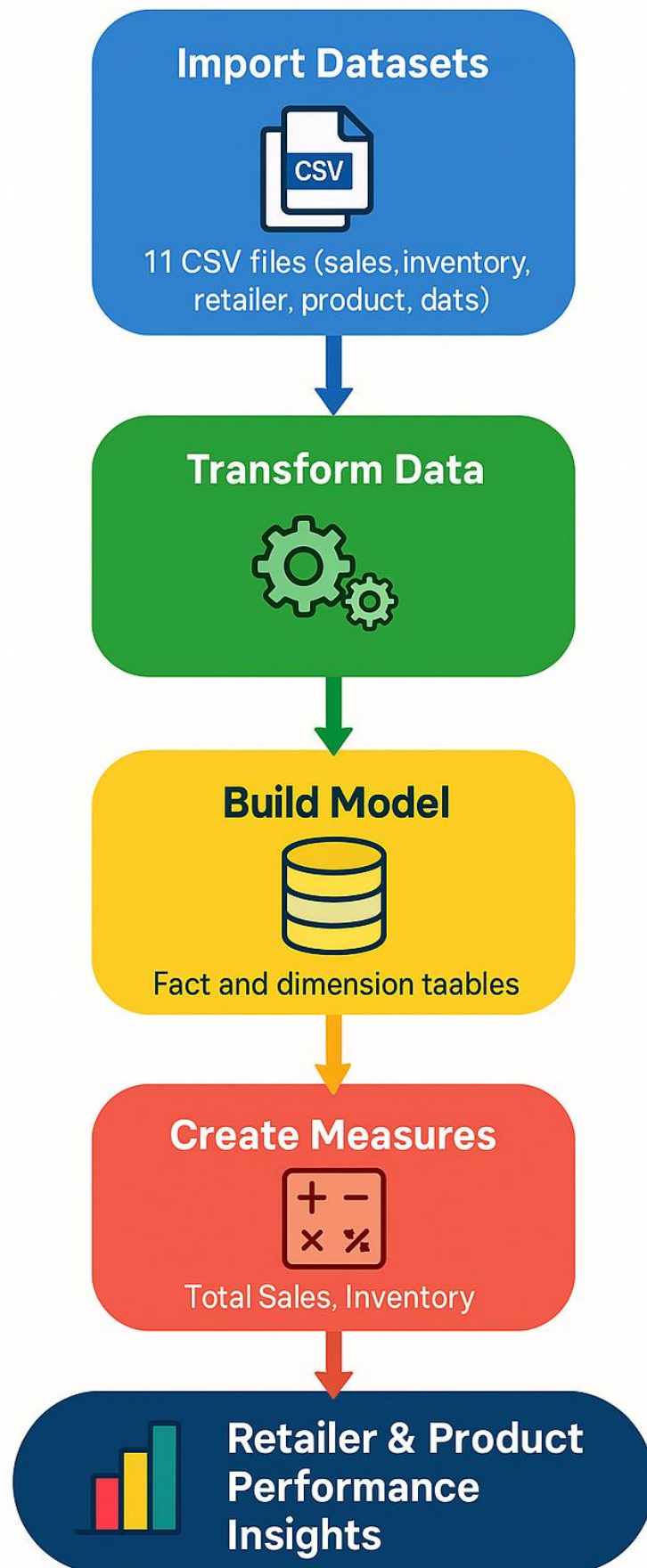
Below is the dataset summary with column names:

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: -

The screenshot shows the Tableau Desktop Public Edition interface. The top menu bar includes File, Data, Window, and Help. The main workspace displays a data source connection diagram for 'TBL_DIM_RETURN_REASON_LKP+'. The diagram shows 'TBL_FACT_INVENTORY.csv' connected to 'TBL_DIM_DATE_TIME.csv', 'TBL_DIM_PRODUCT.csv1', and 'TBL_DIM_WAREHOUSE.csv'. Below the diagram, a preview of the 'TBL_FACT_INVENTORY.csv' data is shown, displaying 12 fields and 53730 rows. The preview table has columns: Inventory Year, Inventory Month, PRODUCT KEY (TBL FACT), and Warehouse. The data shows rows for the year 2004 with various months and product keys.

Inventory Year	Inventory Month	PRODUCT KEY (TBL FACT)	Warehouse
2004	1	240	
2004	1	229	
2004	1	98	
2004	1	40	

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.

The screenshot shows the Tableau Desktop Public Edition interface. The top menu bar includes File, Data, Window, and Help. The main workspace displays a data source connection diagram for 'TBL_FACT_INVENTORY.csv' and 'TBL_FACT_SALES.csv'. The diagram shows 'TBL_FACT_INVENTORY.csv' connected to 'TBL_DIM_DATE_TIME.csv', 'TBL_DIM_PRODUCT.csv1', and 'TBL_DIM_WAREHOUSE.csv'. 'TBL_FACT_SALES.csv' is connected to 'TBL_DIM_ORDER.csv', 'TBL_DIM_PRODUCT.csv', 'TBL_DIM_RETAILER_LK...', and 'TBL_DIM_RETURN_REA...'. The diagram also shows 'TBL_DIM_ORDER.csv' connected to 'TBL_DIM_ORDER_METH...' and 'TBL_DIM_PRODUCT.csv' connected to 'TBL_DIM_PRODUCT_NA...'. Below the diagram, a preview of the 'TBL_FACT_INVENTORY.csv' data is shown, displaying 12 fields and 53730 rows. The preview table has columns: Inventory Year, Inventory Month, PRODUCT KEY (TBL FACT), and Warehouse. The data shows rows for the year 2004 with various months and product keys.

Inventory Year	Inventory Month	PRODUCT KEY (TBL FACT)	Warehouse
2004	1	240	
2004	1	229	
2004	1	98	
2004	1	40	

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:

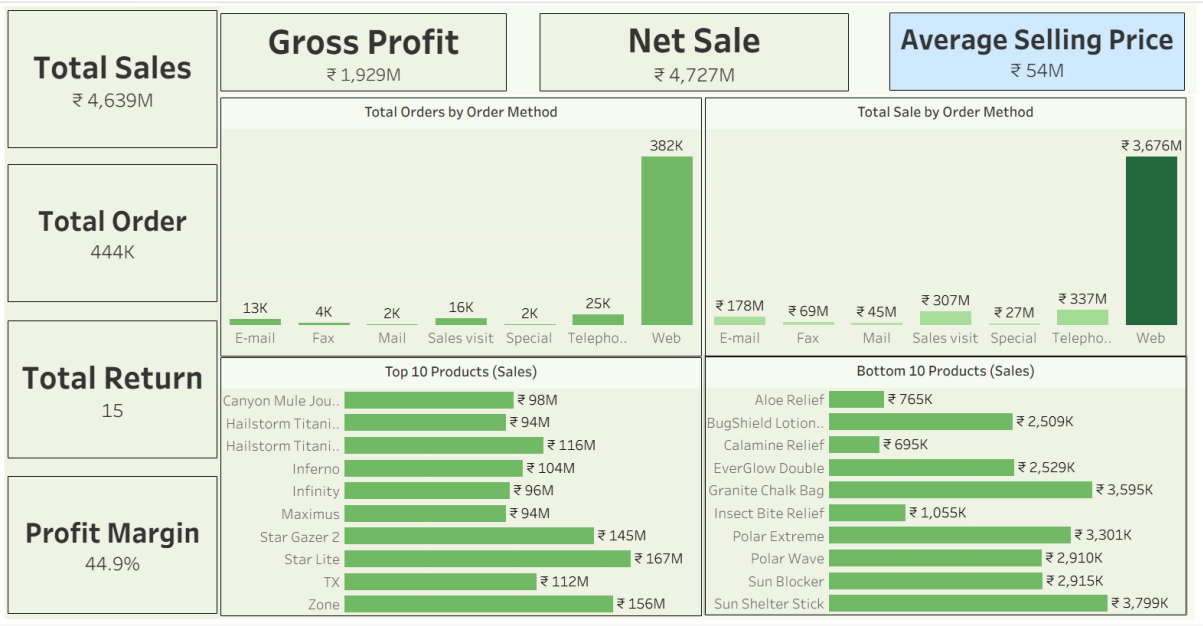
Total Return = SUM([RETURN REASON KEY (TBL DIM RETURN REASON LKP.csv)])

9. Retailer Wise Orders

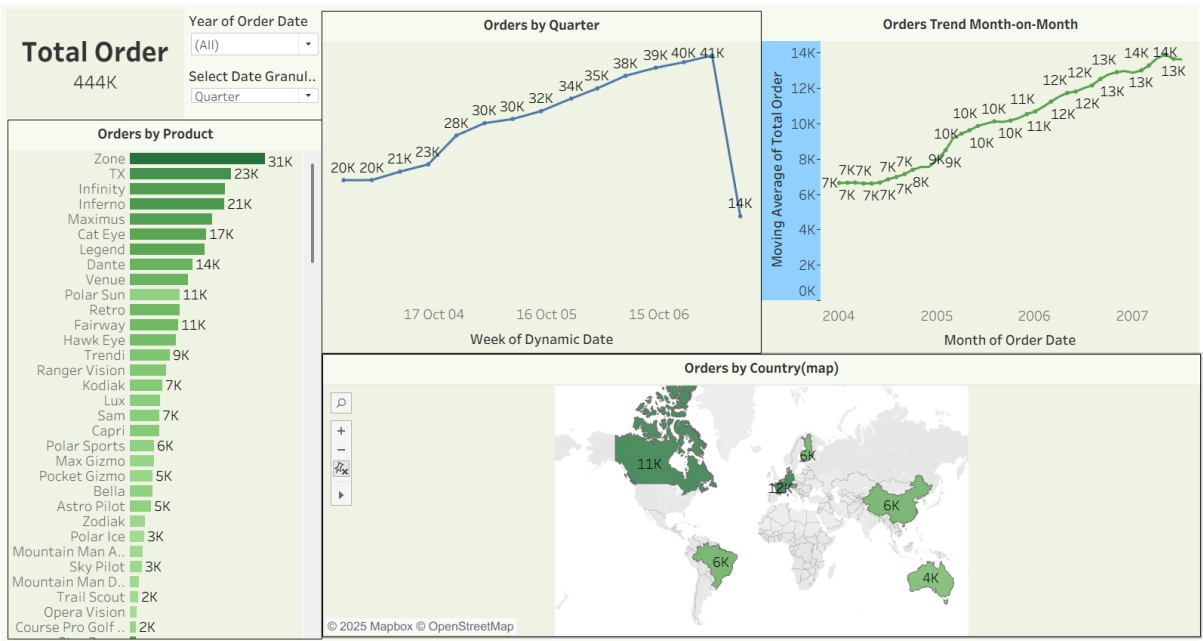
Dynamic Date = CASE [Select Date Granularity]
WHEN "Month" THEN DATETRUNC('month', [Order Date])
WHEN "Quarter" THEN DATETRUNC('quarter', [Order Date])
WHEN "Year" THEN DATETRUNC('year', [Order Date])
END

Dashboard: -

1.Summary Dashboard



2. Orders Analysis



Highest Sales

Star Lite

₹ 167M

Lowest Sales

Calamine Relief

₹ 695K

Top Product After 20% Discount

Star Lite

₹ 159M

Highest Retailer Orders

Caravanserai

737

Lowest Retailer Orders

ActiForme

16

Country Name

(All)

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Measure Names

Closing Inventory Opening Inventory..

PRODUCT N...

Product	Zone	Value
TX	8M	8,603K
Polar Sports	8M	8,603K
Venue	8M	8,603K
Polar Sun	8M	8,603K
Maximus	8M	8,603K
Legend	8M	8,603K
Infinity	8M	8,603K
Inferno	8M	8,603K
Cat Eye	8M	8,603K

Value

Product Color Analysis By Order

Total Order

Summary Dashboard
Orders Analysis
Product and Retailer

Total Order

444K

Year of Order Date
(All)

Select ..
Quarter

Orders by Product

Product	Orders
Zone	31K
TX	23K
Infinity	21K
Inferno	21K
Maximus	17K
Cat Eye	17K
Legend	17K
Dante	14K
Venue	11K
Polar Sun	11K
Retro	11K
Fairway	11K
Hawk Eye	9K
Trendi	9K
Ranger Vision	7K
Kodiak	7K
Lux	7K
Sam	7K
Capri	6K
Polar Sports	6K
Max Gizmo	5K
Pocket Gizmo	5K
Bella	5K
Astro Pilot	5K
Zodiak	3K
Polar Ice	3K
Mountain Man A..	3K
Sky Pilot	3K

Orders by Quarter

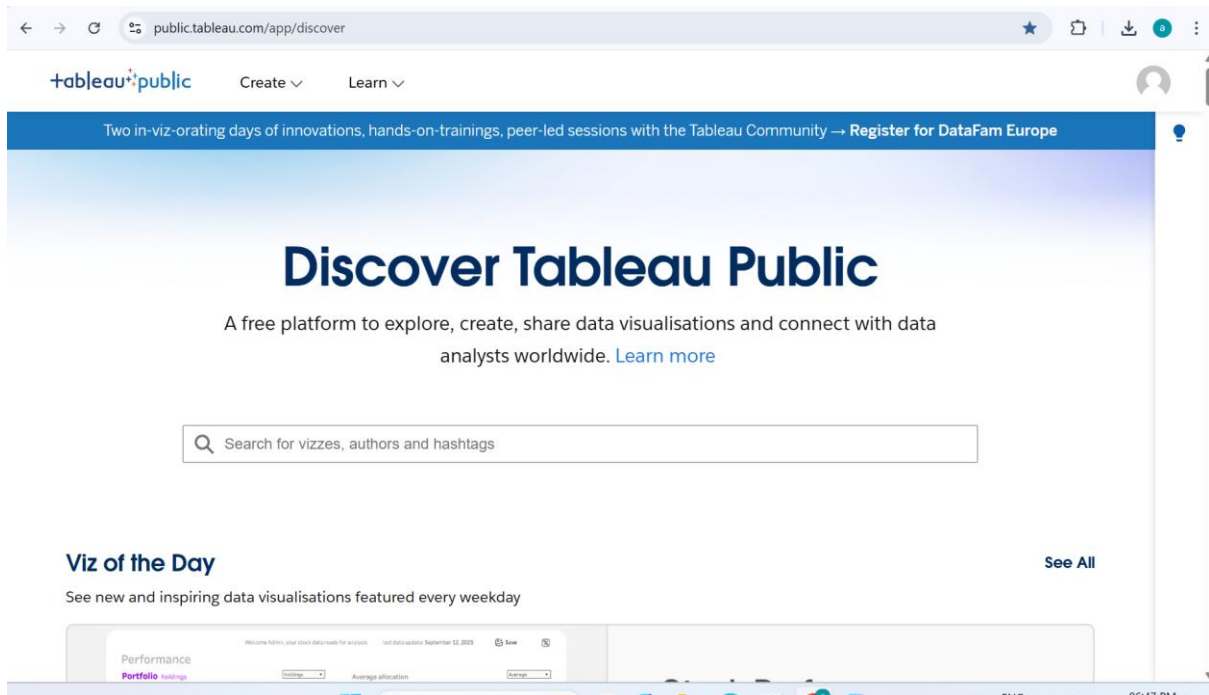
Quarter	Orders
17 Oct 04	20K
20K	20K
21K	21K
23K	23K
28K	28K
30K	30K
30K	30K
32K	32K
34K	34K
35K	35K
38K	38K
39K	39K
40K	40K
41K	41K
14K	14K

Orders Trend Month-on-Month

Month	Orders
2004	7K
7K	7K
7K	7K
7K	7K
7K	7K
8K	8K
9K	9K
9K	9K
10K	10K
10K	10K
10K	10K
11K	11K
11K	11K
12K	12K
12K	12K
13K	13K
14K	14K
14K	14K

Orders by Country (map)

➤ Tableau Service: --



➤ Work Space: --

