

Sales Dashboard

Overview

Global Super Store is an online supergiant store that has worldwide operations. This store takes orders and delivers products across the globe and deals with the entire major product categories like furniture, office supplies and technology, and so on.

As a sales manager of this store, you want to analyze the sales of the products based on provided data; this analysis will help you to plan your inventory and business processes accordingly. Also, to know product's and customer's behavior.

Objective

- 1) Analyze sales performance, profit margin, and customer behavior.
- 2) Create an interactive Power BI dashboard for stakeholders to gain actionable insights.

Data Understanding

https://github.com/PrajaktaBille/PowerBi/blob/main/superstore_sales_data.xlsx

Dataset containing 3 tables Orders, Returns and People and another date table so going through all the tables for understanding.

Data Cleaning and Preparation

- 1) Load data from the data source (excel workbook).
- 2) Perform the required transformation in Power Query Editor Window.
- 3) For Returns table promote first row as header.
- 4) For People table remove top row and then promote first row as header.
- 5) Check data type of each column and also check duplicate.
- 6) Remove extra column from fact tables to keep the data model size reduced.
Columns like ship date, postal code etc.
- 7) Load data in the Power BI Desktop and load Date table file.

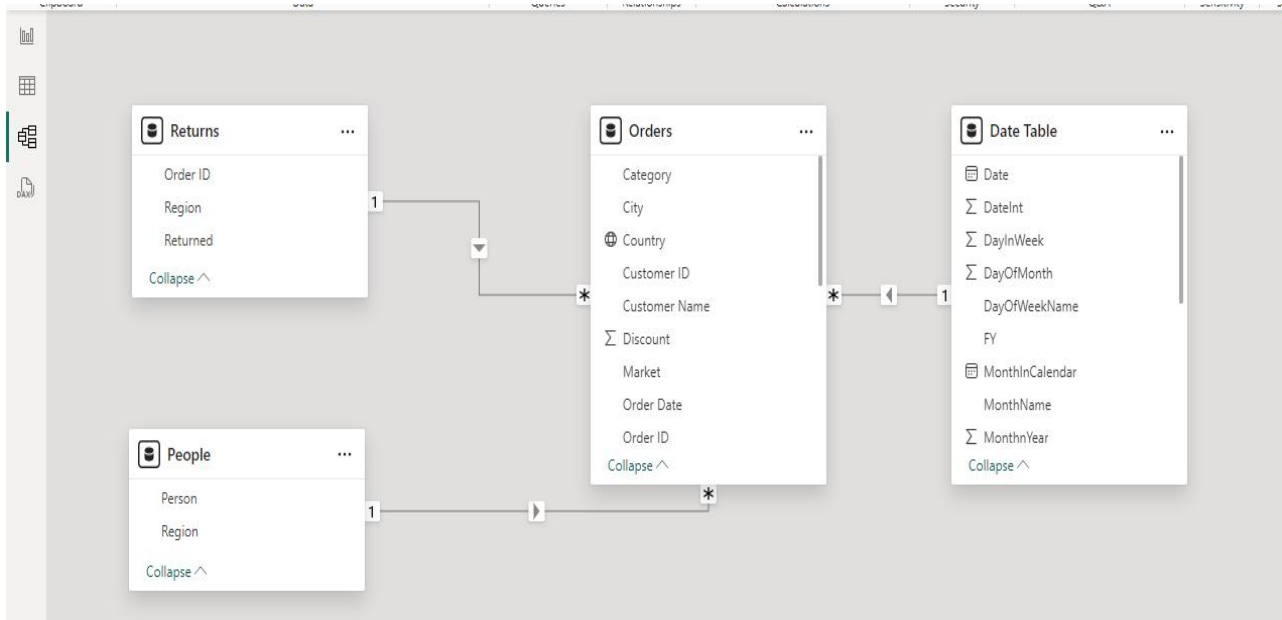
Manage the table relationships

Create relationships between tables:

1) Fact Table: Orders

2) Dimension Tables: People, Returns, Date table

This table should be linked like below model.



Manage relationships						
+ New relationship		Autodetect	Edit		Delete	Filter
From: table (column) ↑	Relationship		To: table (column)		Status	
Orders (Order Date)	* — 1		Date Table (Date)		Active	...
Orders (Order ID)	* — 1		Returns (Order ID)		Active	...
Orders (Region)	* — 1		People (Region)		Active	...

Create the required measures

The below formula will be used to create these measures in visualizations on the report page.

1) Total Sales = SUMX (Orders, Orders [Unit Price] * Orders [Quantity])

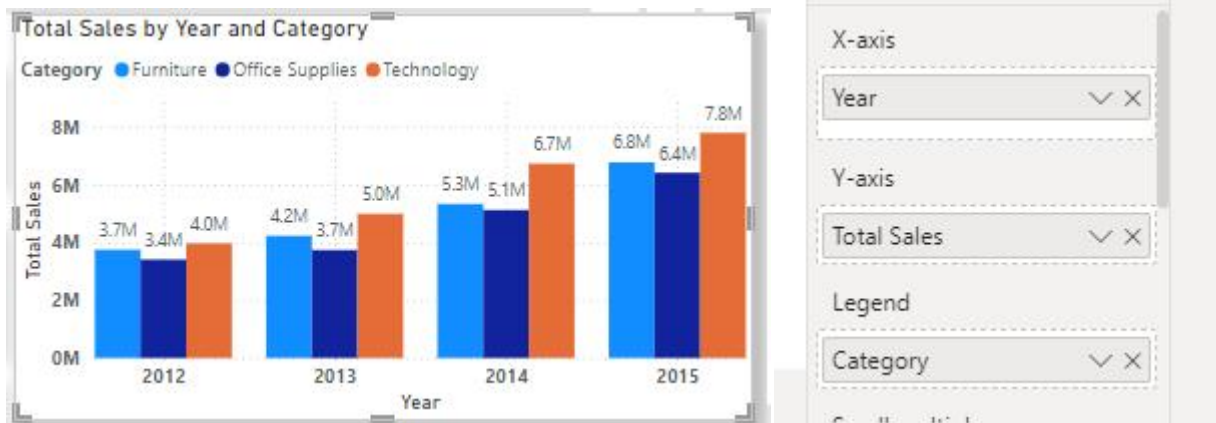
2) Total Profit = SUM (Orders [Profit])

3) Profit Ratio = DIVIDE ([Total Profit], [Total Sales], 0)

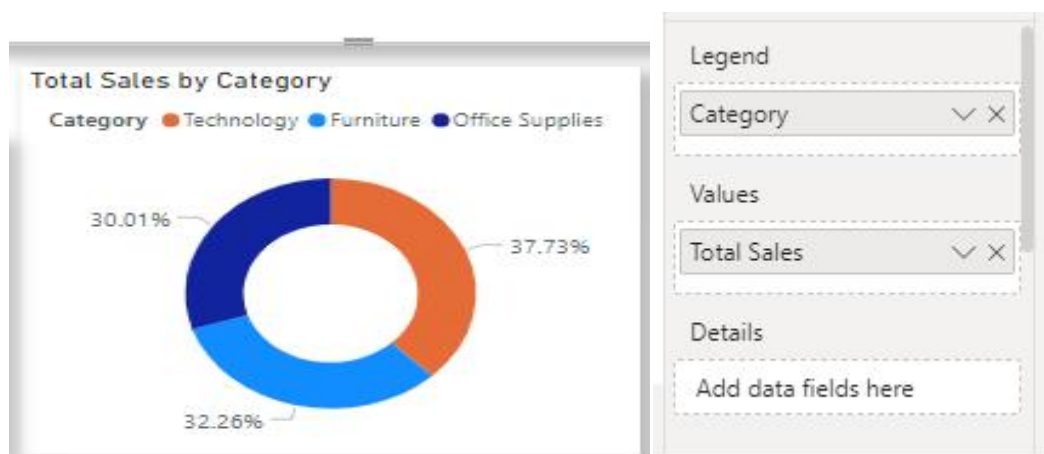
4) As of Date = “Report as of date: “& Max (Orders [Order Date])

Add Visualization

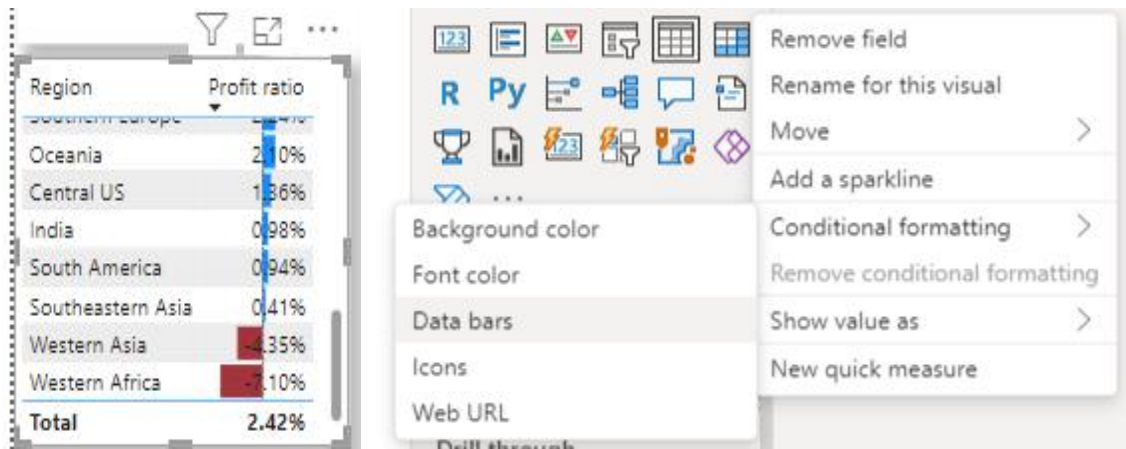
- Card visuals to show Total Sales, Total Profit, Profit Ratio.
- Clustered column chart to show “Total Sales by Year and Category”.



- Donut Chart to show “Total sales contribution by Category”.



- Add table visual from the visuals list to show “Region contribution in Profit”. Applying Conditional formatting of Profit Ratio by using bars.

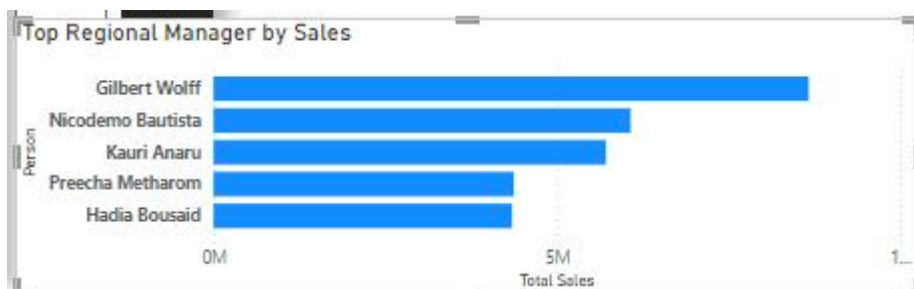


- Another table visual for the below information and apply conditional formatting on Profit field.

Sales.Profit & Profit Ratio by Sub Category

Sub-Category	Total Sales	Total Profit	Sum of Profit	Profit ratio
Accessories	\$3,805,275.44	\$129,626.31	129,626.31	3.41%
Appliances	\$5,026,141.12	\$141,562.59	141,562.59	2.82%
Art	\$1,822,214.31	\$97,825.19	97,825.19	5.37%
Binders	\$2,288,962.65	\$72,433.15	72,433.15	3.16%
Bookcases	\$7,061,788.56	\$161,924.42	161,924.42	2.29%
Chairs	\$7,446,715.27	\$140,396.27	140,396.27	1.89%
Copiers	\$7,174,849.35	\$258,567.55	258,567.55	3.60%
Total	\$62,267,865.16	\$1,507,454.43	1,507,454.43	2.42%

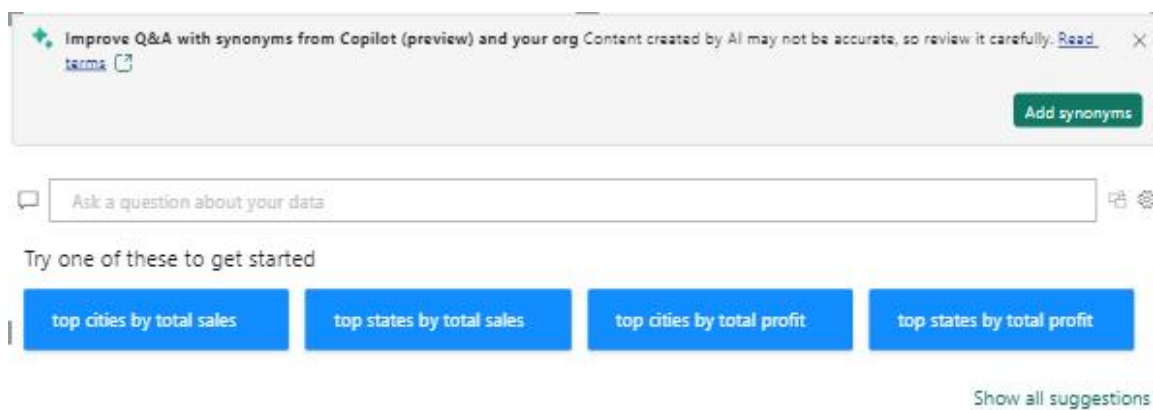
- Stacked bar chart : Top 5 Regional Manager by Sales



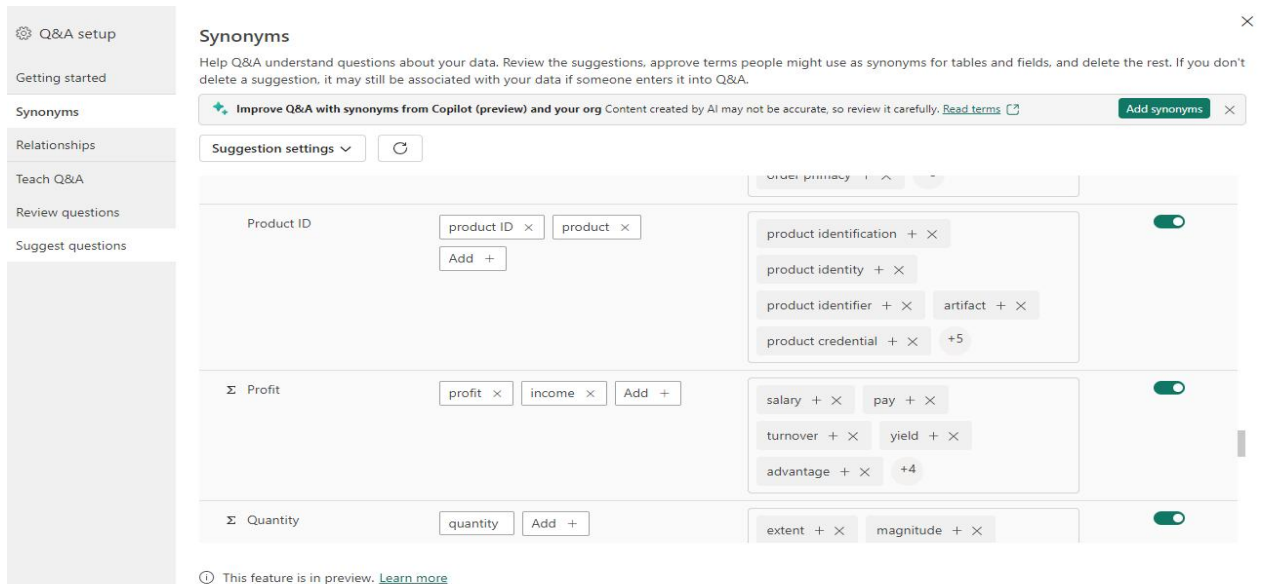
- Using the bookmark feature to create the below functionality to switch values between sales and profit by clicking on the button on Sales and Profit.



- Create a new page using the duplicate page feature for “Q&A Analysis”. Remove all the visuals except the header part. Now add a Q&A visual on the new report page which will display suggested questions automatically.



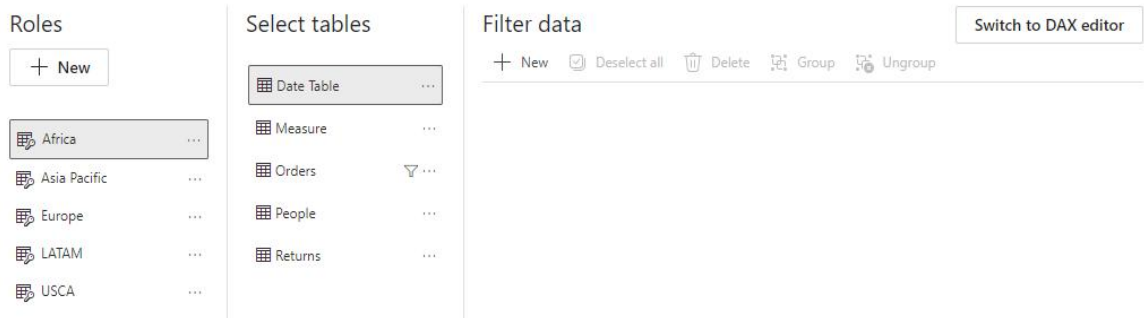
- To train the Q&A data model, click on the settings icon on this visual and then choose to add synonyms option.



- Managers should have restricted data access as per their market allocation by the organization. So we implementing RLS.

Manage security roles

Create new security roles and use filters to define row-level data restrictions.



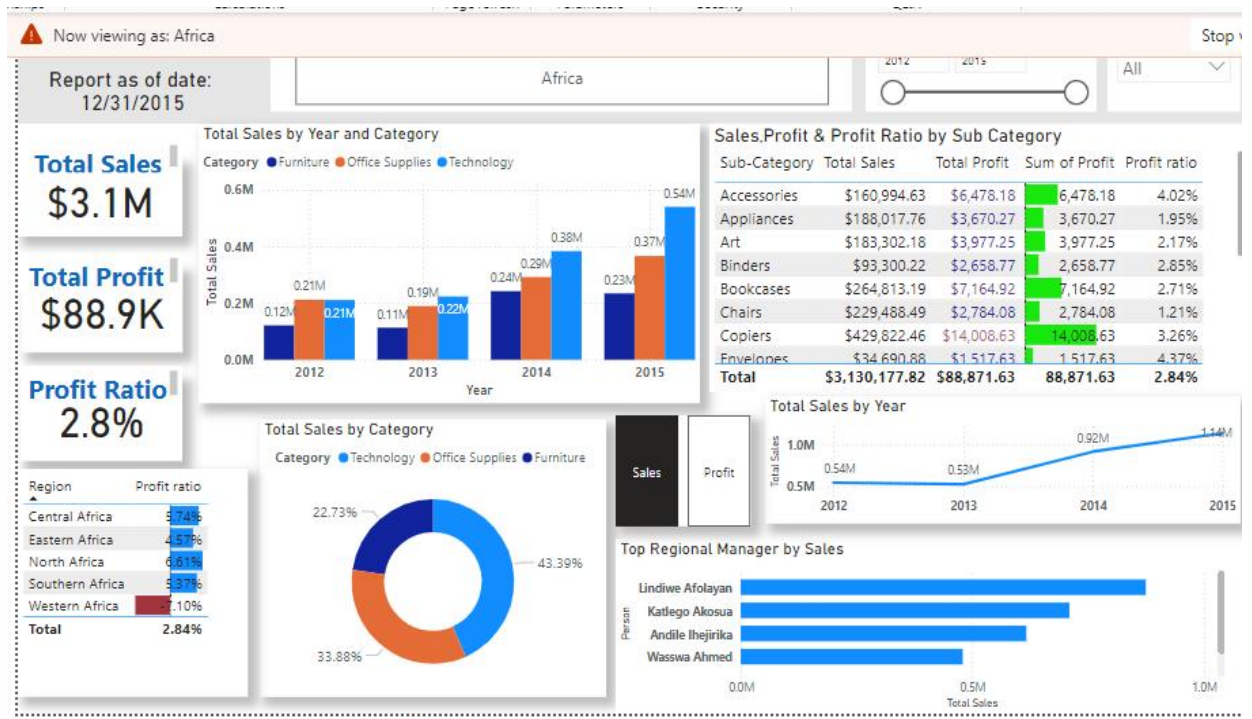
- View role:

View as roles

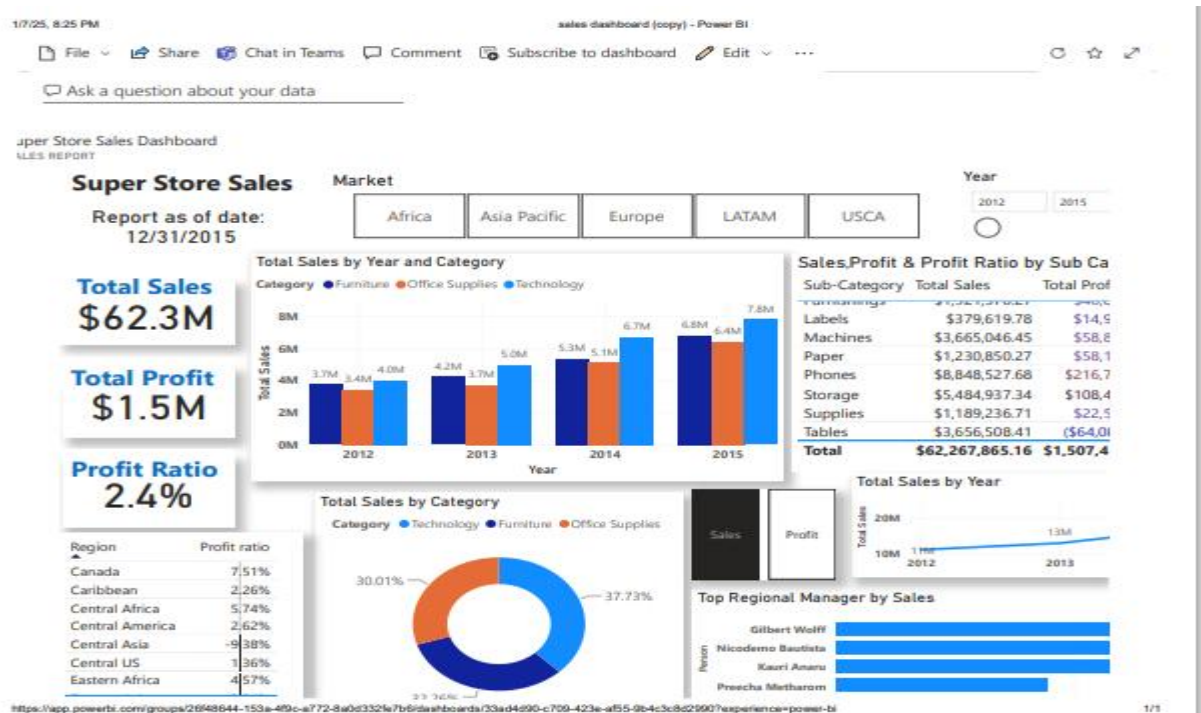
- ☒ None
- ☐ Other user
- ☐ Africa
- ☐ Asia Pacific
- ☐ Europe
- ☐ LATAM
- ☐ USCA

OK Cancel

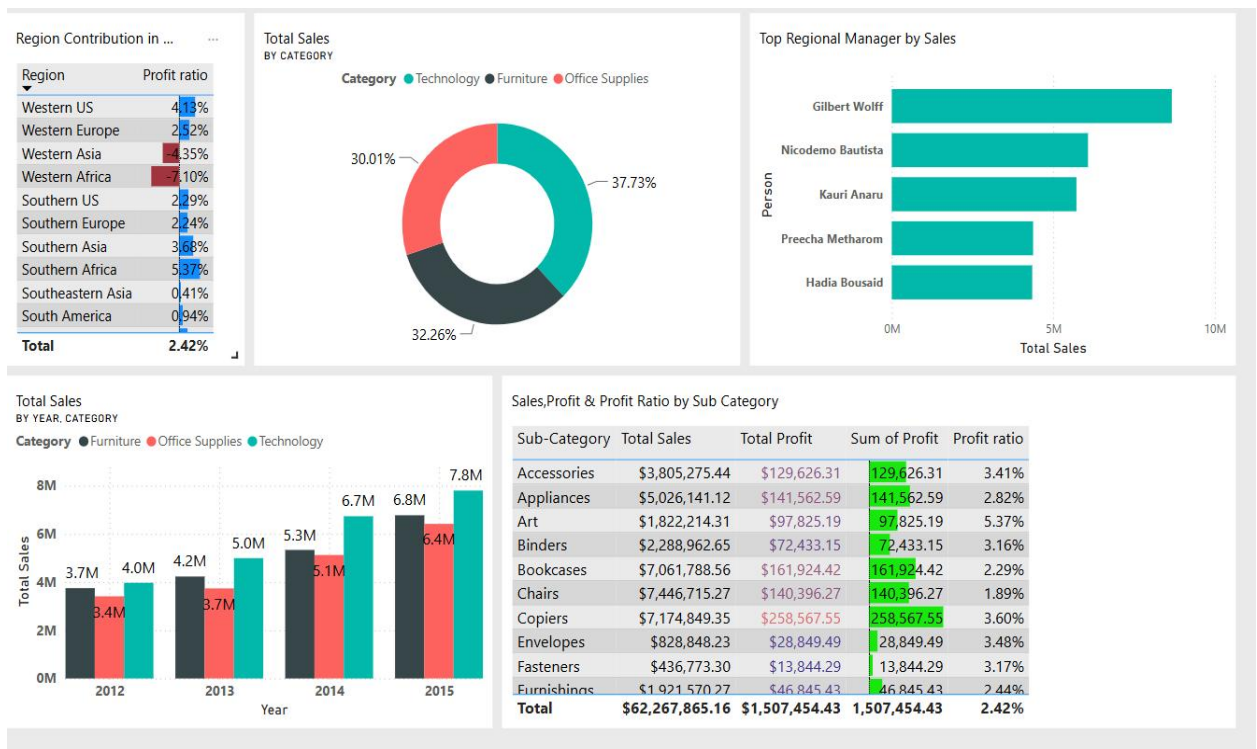
For Africa Market:



- Publish report into Power Bi Service in the workspace. Pin entire report to a dashboard.



- Otherwise , Create new dashboard and pin visuals from report and new dashboard looks like below:



Outcomes

- Clear understanding of sales trends, Category wise sales, high performing regions.
- Identification of underperforming products regions with actionable insights.
- A professional, interactive dashboard for stakeholders to make data-driven decisions.