



# **Case Study**

## **ON**

# **Global Superstore Sales Analysis**

## **For E-commerce**

**Submitted By --**

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## Global Superstore Data Analysis



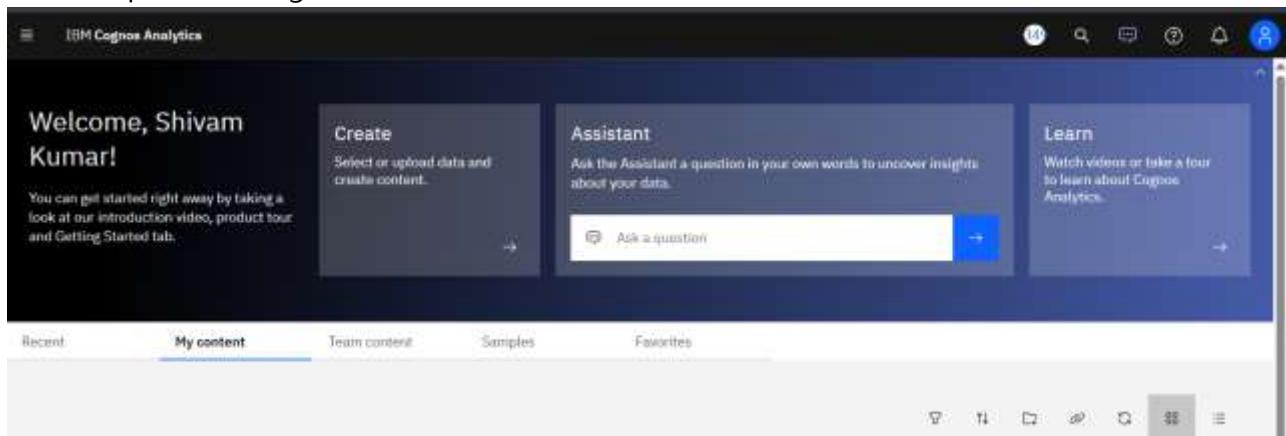
**Agenda/Definition:** The agenda is to **analyse sales performance, profitability, and logistical efficiency** across different product categories, customer segments, and geographical regions. This involves defining key metrics like **Sales, Profit, Quantity, and Shipping Cost**.

**Outcomes/Learning:** Outcomes will include identifying the **most profitable products** and **customer segments**, the **best and worst performing regions/markets**, and the impact of **Discount and Ship Mode** on profit.

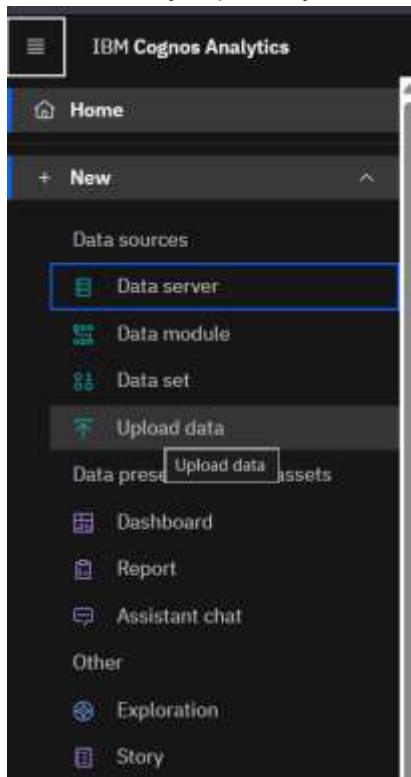
**Required Tool:** IBM Cognos Analytics is required for data manipulation, calculation, and visualization.

**Working:** It involves summarizing data by Category, Region, and Segment, calculating **profit margins**, and creating **visualizations** (e.g., charts, graphs, maps, tables) to highlight trends and anomalies.

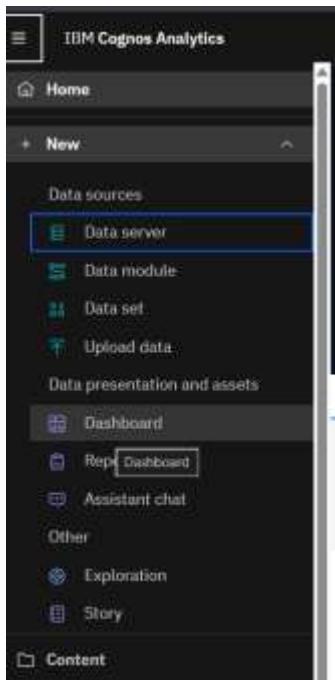
**Step 1 :** Open IBM Cognos & click on Launch.



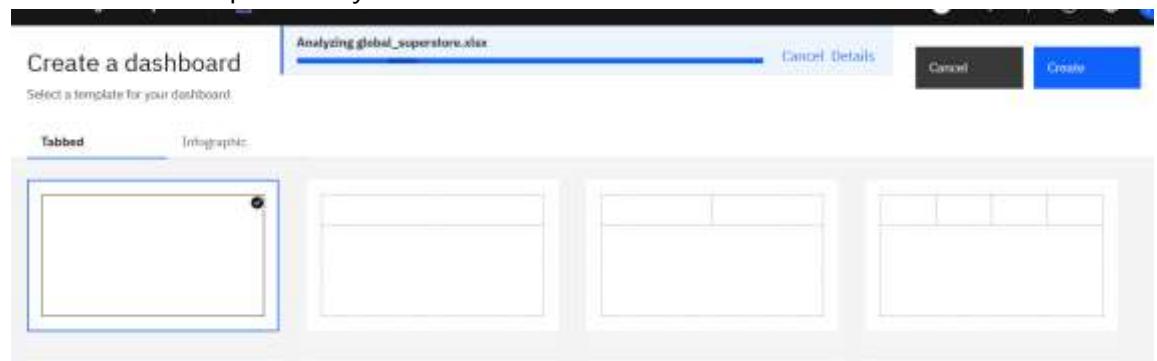
**Step 2 :** Firstly, upload your dataset.



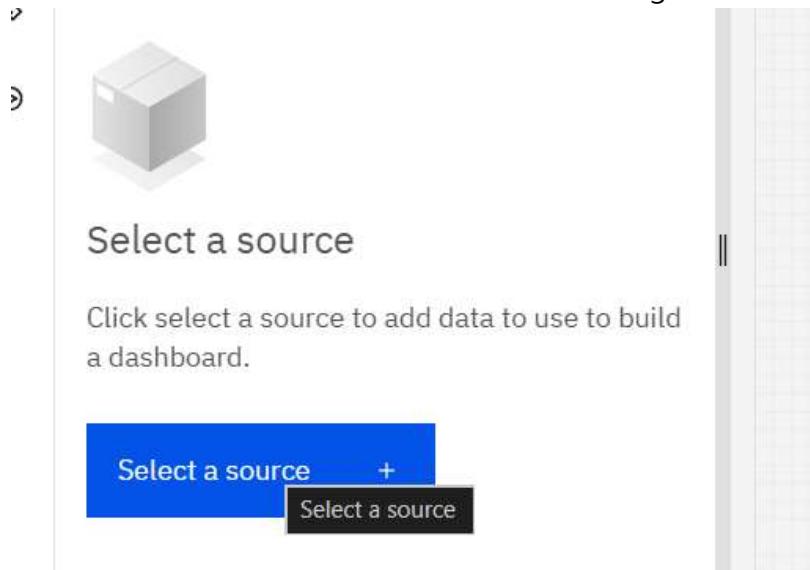
**Step 3 :** Now, click on new & select Dashboard.



**Step 4 :** Select a template for your Dashboard then Create.



**Step 5 :** Now select a source to add data for creating a dashboard.



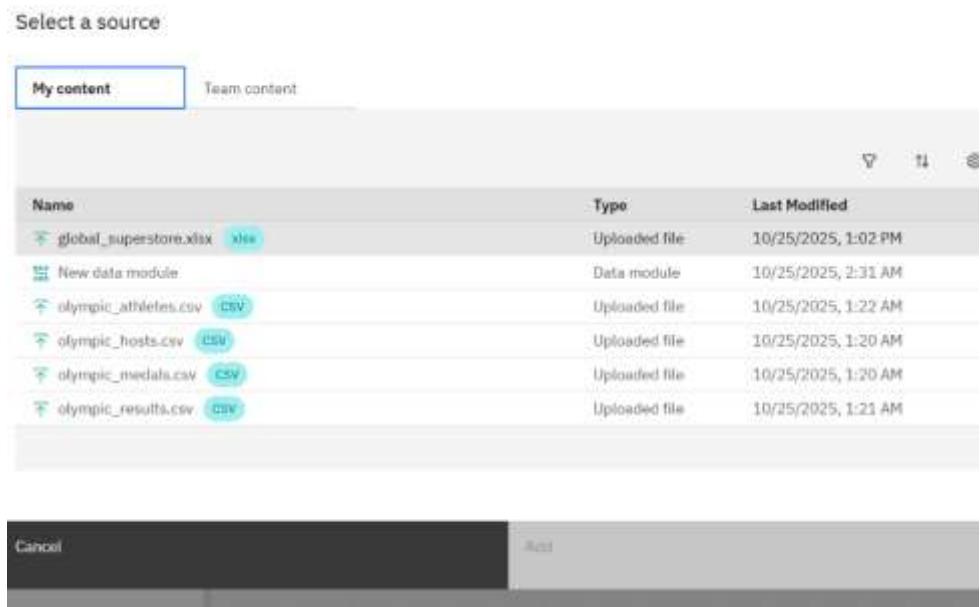
**Step 6 :** Select your source from my content.

Select a source

My content Team content

Name	Type	Last Modified
global_superstore.xlsx	Uploaded file	10/25/2025, 1:02 PM
New data module	Data module	10/25/2025, 2:31 AM
olympic_athletes.csv	Uploaded file	10/25/2025, 1:22 AM
olympic_hosts.csv	Uploaded file	10/25/2025, 1:20 AM
olympic_medals.csv	Uploaded file	10/25/2025, 1:20 AM
olympic_results.csv	Uploaded file	10/25/2025, 1:21 AM

Cancel Add



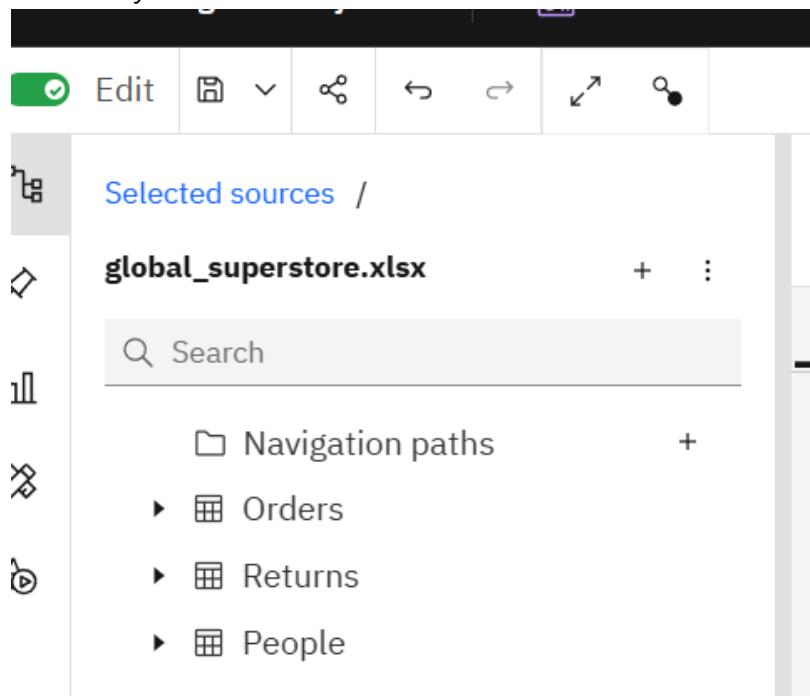
**Step 7 :** Now your source is loaded.

Selected sources /

global\_superstore.xlsx + :

Search

- Navigation paths +
- Orders
- Returns
- People



**Step 8 :** Now adding a text box & two shape on this tab from widgets.

The screenshot shows a dashboard interface with a tab labeled "Tab 1". Inside the tab, there is a title "Sales vs. Shipping Cost" centered between two blue ship icons. The background of the tab has a grid pattern.

This step is about sales, shipping cost & order date. So, heading is given as "Sales vs. Shipping Cost" .

Two ship shapes are also used from widgets on both sides.

**Step 9 :** Now adding a Dual Axes Line & Column from visualizations.

The screenshot shows a dashboard tab titled "Tab 1" containing a dual-axis line chart. The chart is titled "Sales per Order Date" and displays two data series: "Sales (Sum)" (Line 1) and "Shipping Cost (Sum)" (Line 2). The X-axis is labeled "Order Date" and shows dates from 1/1/2012 to 7/2014. The Y-axis is labeled "Sales (Sum)". To the right of the chart is a narrative text box with the following content:

Comparing the total revenue trend against the trend of average shipping expenditure.

The dashboard also includes a header bar with various icons and tabs for "Analytics", "Filters", "Fields", and "Properties".

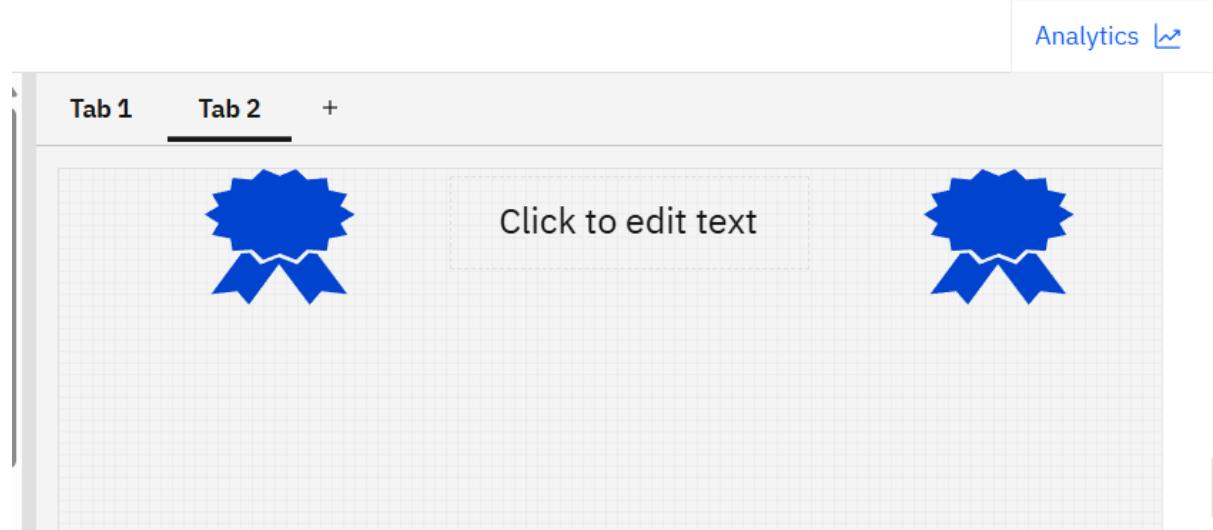
This tab also includes a narrative inside of about Dual Axes Line & Column with a title "Sales per order date.

**X-Axis (Time):** Order Date.

**Y-Axis 1 (Line1):** Sales (Sum).

**Y-Axis 2 (Line2):** Shipping Cost (Average).

**Step 10 :** Now adding a text box & two badge ribbon on this tab from shapes.

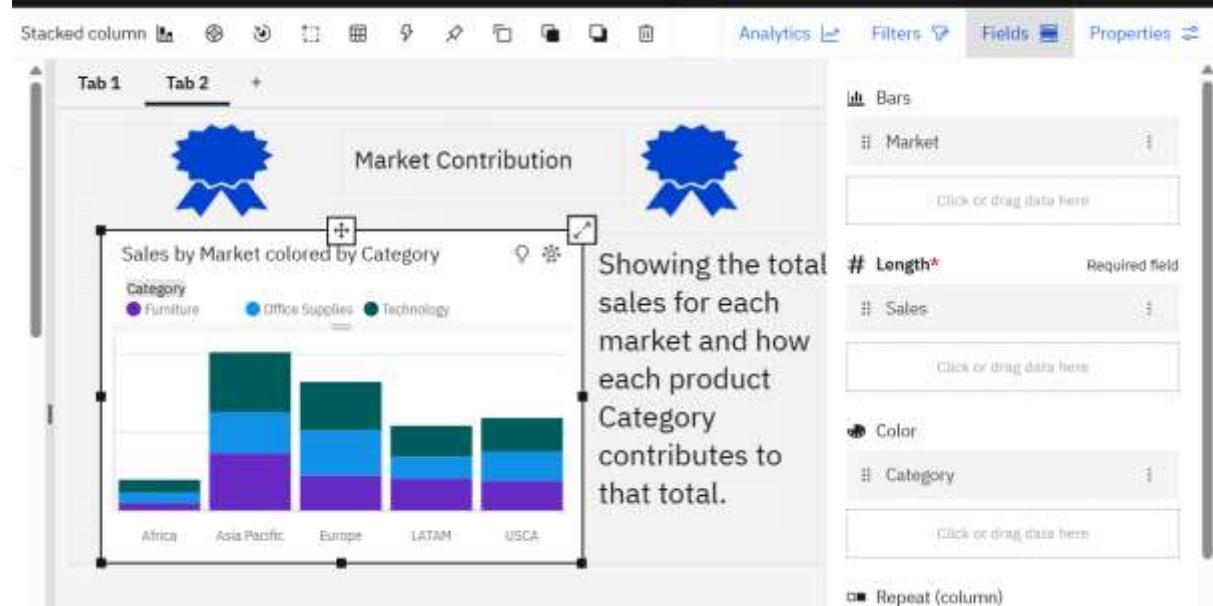


This step is about sales, market & category. So, heading is given as

"Market Contribution" in the empty text box.

Two badge ribbon shapes are also used from widgets on both sides.

**Step 11 :** Now adding a Stacked Column Chart from visualizations.



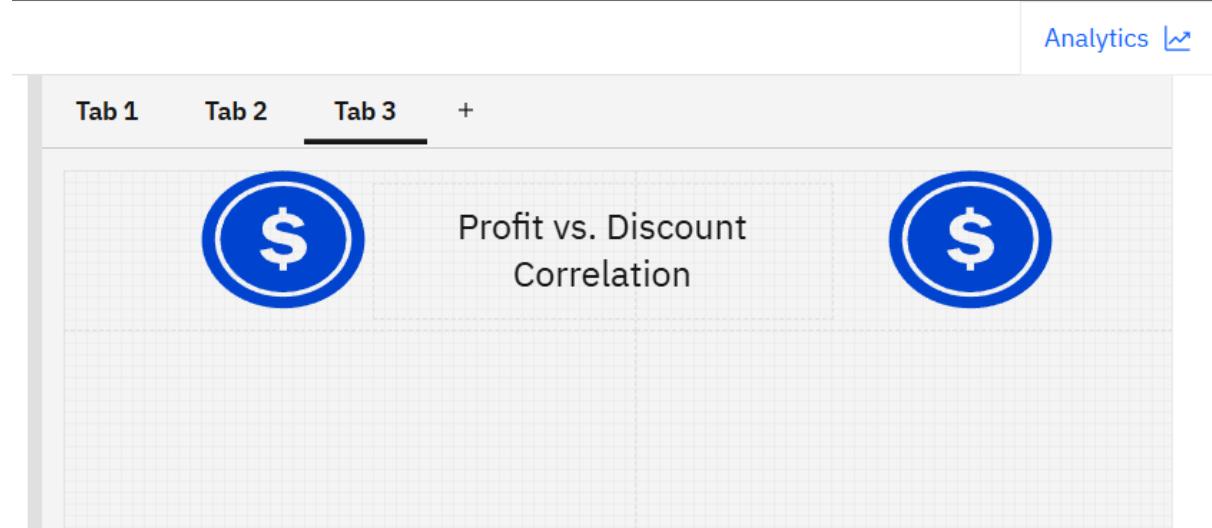
This tab also includes a narrative inside of about Stacked Column Chart with a title of "Sales by Market coloured by Category" .

**Bars:** Market.

**Length:** Sales (Sum).

**Color:** Category.

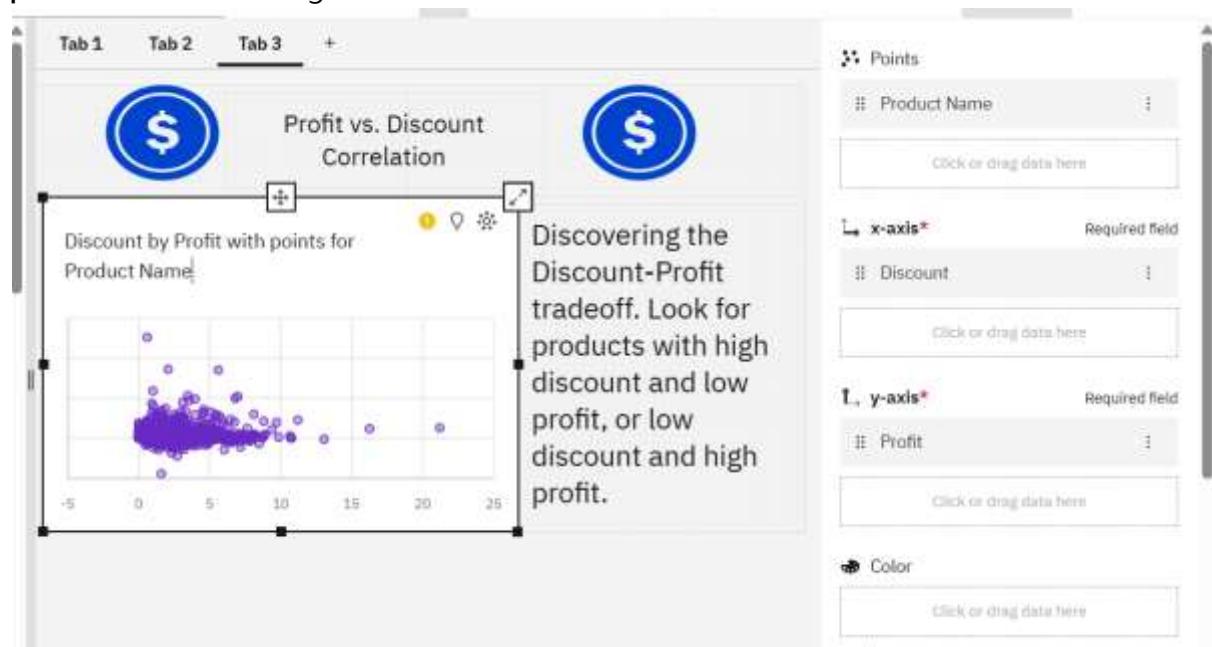
**Step 12 :** This step is about adding a text box & two money coin shapes on this tab.



This step is about discount, profit & product name. So, heading is given as "Profit vs. Discount Correlation" .

Two money coin shapes are also used from widgets on both sides.

**Step 13 :** Now adding a Scatter Chart from visualizations.



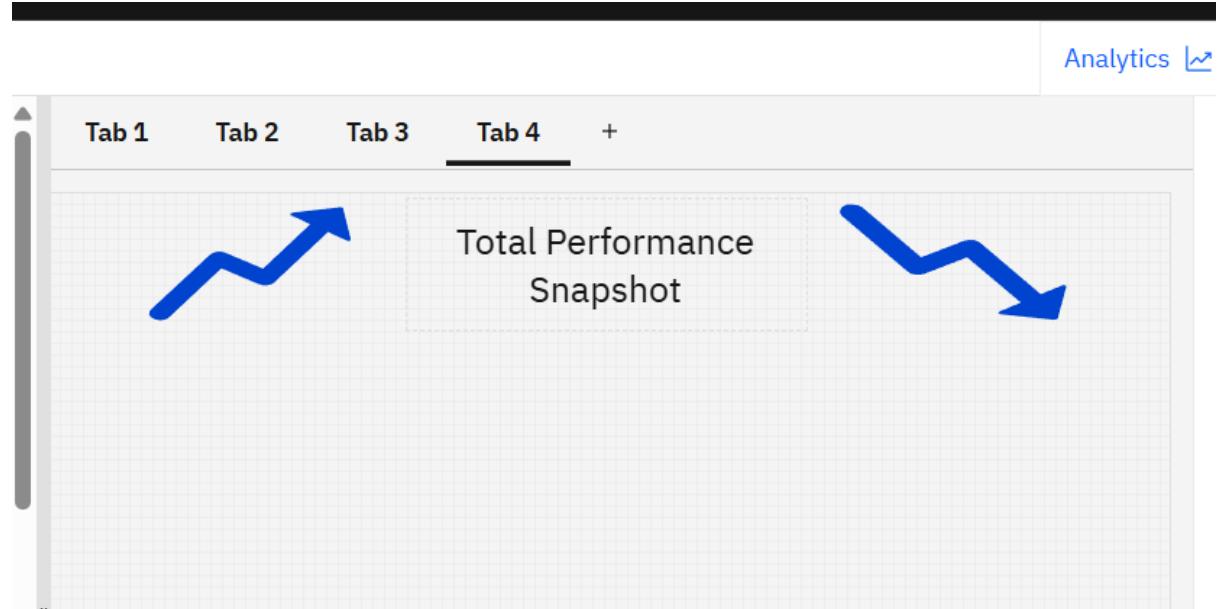
This tab also includes a narrative inside of about Scatter Chart with a title of "Discount by Profit with points for Product Name" .

**X-Axis:** Discount (Average).

**Y-Axis:** Profit (Sum/Average).

**Points:** Product Name

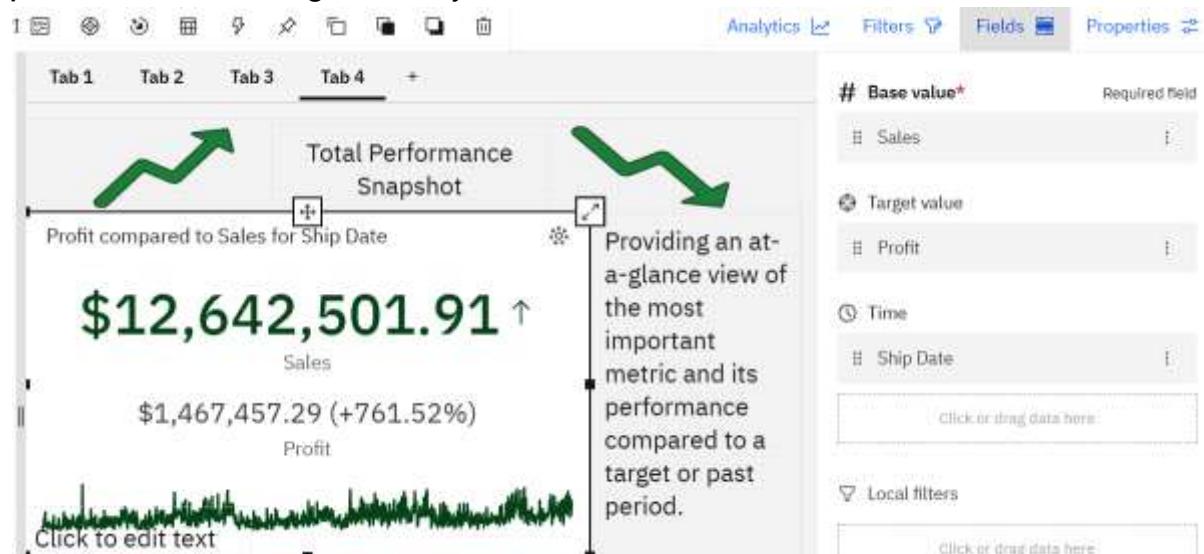
**Step 14 :** This step is about adding a text box & a trending up & down shapes on this tab.



This step is about sales, profit & ship date. So, heading is given as "Total Performance Snapshot".

Two trending up & down shapes are also used from widgets on both sides.

**Step 15 :** Now adding a KPI (Key Performance Indicator) from visualizations.



This tab also includes a narrative inside of about KPI (Key Performance Indicator) with a title of "Profit compared to Sales for Ship Date".

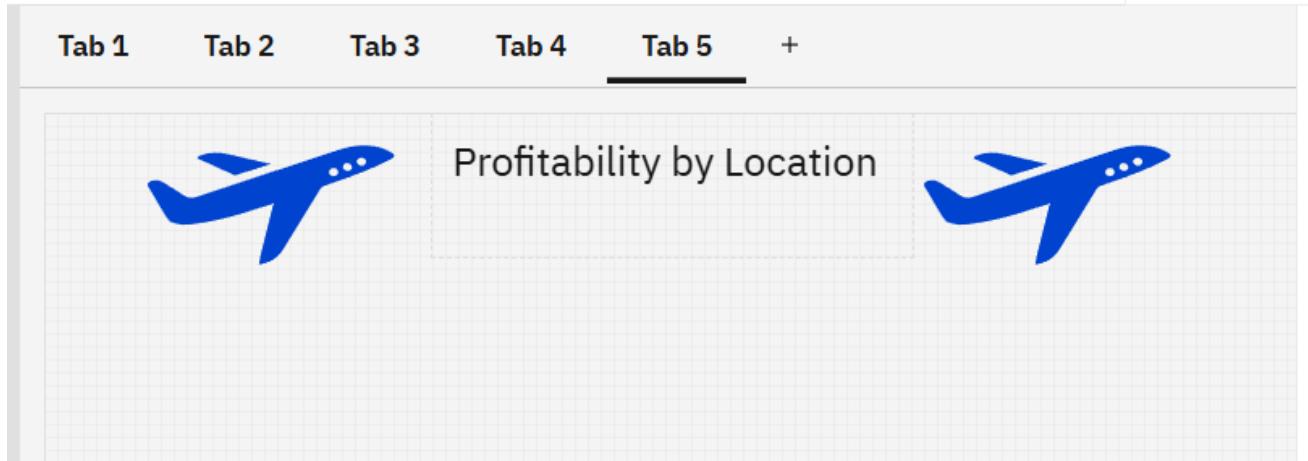
**Base Value:** Sales (Total)

**Target value:** Profit (Total)

**Time:** Ship Date (requires time intelligence features).

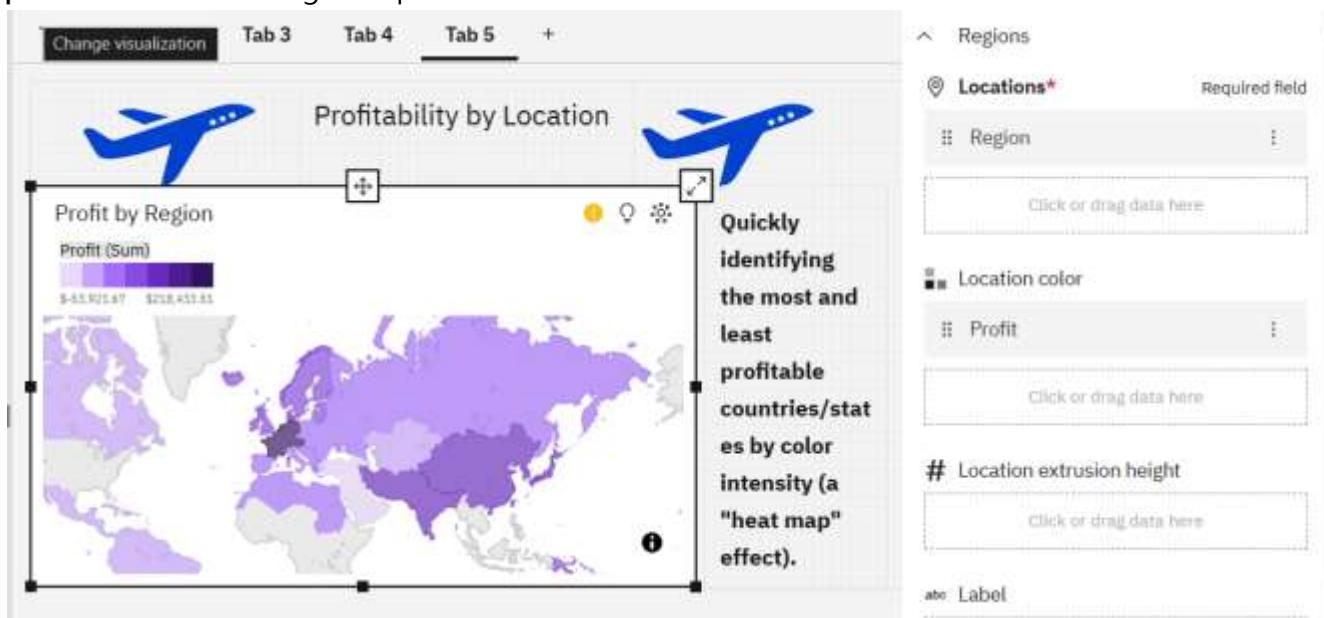
Step 16 : Now adding a text box & two airplane shapes on this tab from shapes.

Analytics ↗



This step is about region & profit. So, heading is given as "Profitability by Location"  
Two airplane shapes are also used from widgets on both sides.

Step 17 : Now adding a Map from visualizations.



This tab also includes a narrative inside of Map with a title of "Profit by Region" .

**Location Slot:** Country or Reion.

**Color/Heat Slot:** Profit (Sum).

Insights like **Region Western Europe** has the highest values of both **Profit** and **Quantity**.

**Step 18 :** Now adding a text box & two shapes on this tab from widgets.

The screenshot shows a dashboard interface with a tab labeled "Tab 1". On the tab, there is a visualization titled "Profitability Trend by Segment". To the left of the visualization is a blue thumbs-up icon, and to the right is a blue thumbs-down icon. The dashboard also features a sidebar with various tabs: "Analytics", "Dashboards", "Canvas", "Layout position", and "Page zoom".

This step is about order date, segment & profit. So, heading is given as "Profitability Trend by Segment" .

Two thumb up & down shapes are also used from widgets on both sides.

**Step 19 :** Now adding a Line chart from visualizations.



This tab also includes a narrative inside of Line chart with a title of "Profit by Order Date coloured by Segment" .

**Order Date (Grouped by Quarter)**

**Series/Color: Segment**

**Y-Axis: Sum of Profit**

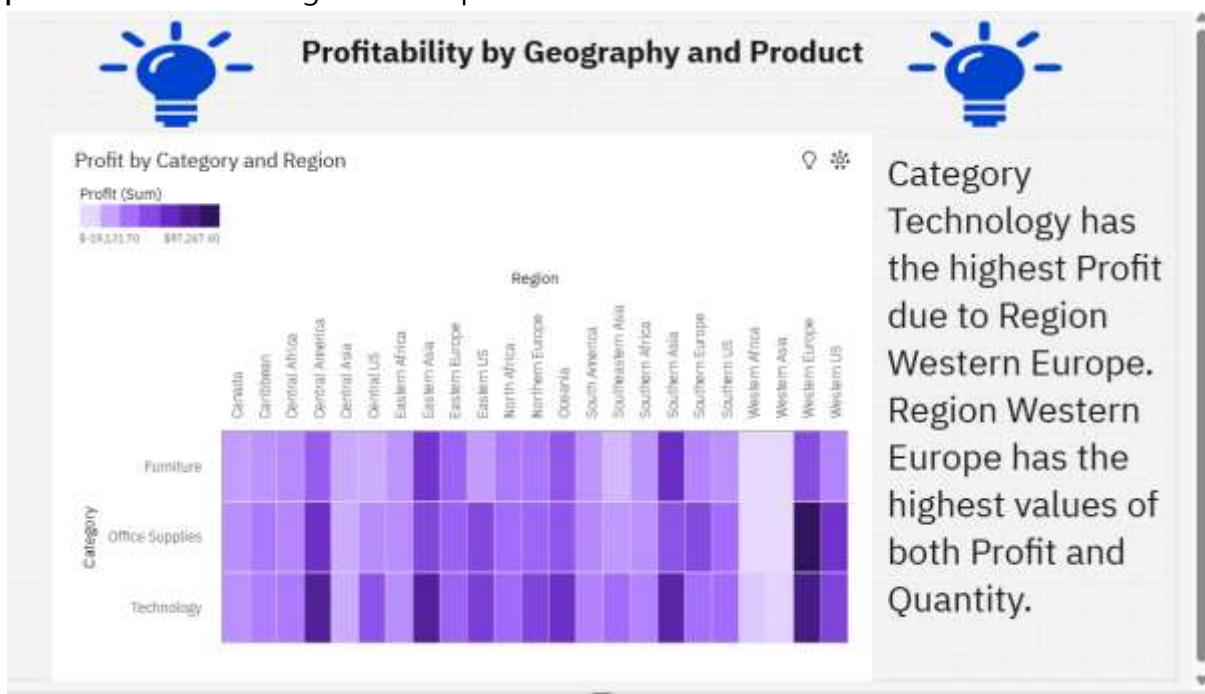
**Step 20 :** Now adding a text box & two shapes on this tab from widgets.



This step is about order region, category& profit. So, heading is given as "Profitability by Geography and Product".

Two shapes are also used from widgets on both sides.

**Step 21 :** Now adding a Heatmap from visualizations.



This tab also includes a narrative inside of Heatmap with a title of "Profit by Category & Region".

**X-Axis (Columns):** Region.

**Y-Axis (Rows):** Category.

**Color Intensity:** Profit.

**Step 22 :** Now adding two text boxes on this tab from widgets.

The screenshot shows a dashboard interface with three tabs at the top: Tab 1, Tab 2 (which is selected), and Tab 3. Below the tabs is a section with a heading and a descriptive text. The heading is **Detailed Review of Worst Performers**. The descriptive text is: **Provides the precise, granular data necessary for business users to investigate individual loss-making products.**

This step is about order Market, Product Name, Quantity & profit. So, heading is given as "Detailed Review of Worst Performers" .

**Step 23 :** Now adding a Table from visualizations.

The screenshot shows a dashboard interface with three tabs at the top: Tab 1, Tab 2 (which is selected), and Tab 3. Below the tabs is a section with a heading and a descriptive text. The heading is **Detailed Review of Worst Performers**. The descriptive text is: **Provides the precise, granular data necessary for business users to investigate individual loss-making products.** Below this text is a table with the following columns: **Quantity**, **Market**, and **Product Name**. The table contains several rows of data, with one row highlighted in grey. A tooltip above the highlighted row says "Africa | Accos Paper Clips, Assorted Sizes". The tooltip also includes the quantity "1".

Quantity	Market	Product Name
1	Africa	Acco Binder Covers, Clear
1	Africa	Accos Clamps, Metal
1	Africa	Accos Paper Clips, Assorted Sizes
Africa   Accos Paper Clips, Assorted Sizes		Accos Push Pins, 12 Pack
Quantity:	1	Accos Push Pins, Bulk Pack
1	Africa	Accos Staples, 12 Pack
1	Africa	Acme Shears, Steel
1	Africa	Advantus Door Stop, Ergonomic
1	Africa	Advantus Light Bulb, Black
1	Africa	Advantus Push Pins, Metal

This tab also includes a narrative inside of table.

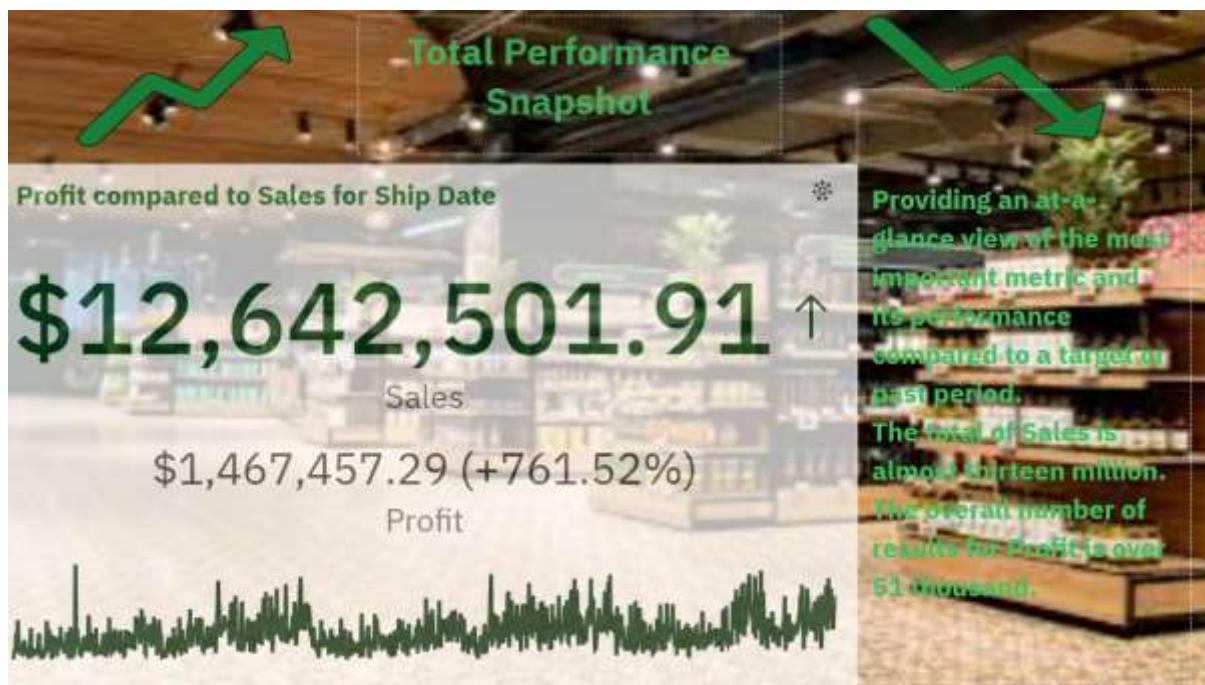
"Provides the precise, granular data necessary for business users to investigate individual loss-making products or segments."

**Columns:** Market, Product Name, Quantity

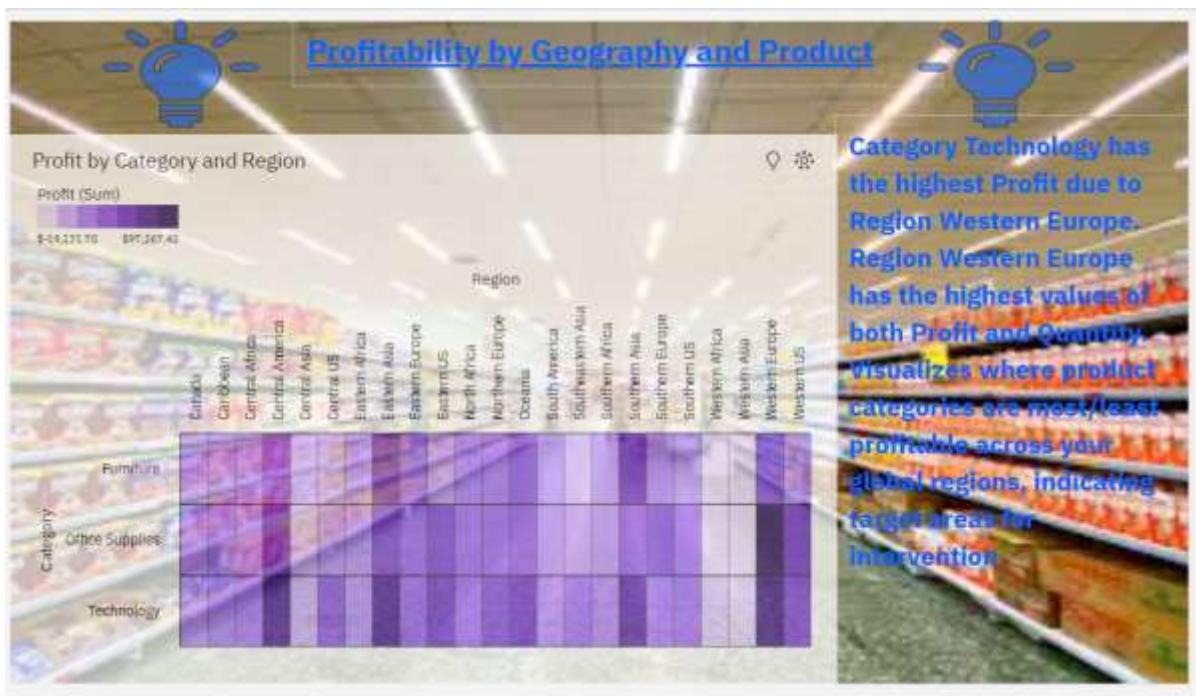
**Sorting:** Profit

- All dashboard tabs with background image & some editing.









### Detailed Review of Worst Performers

Provides the precise, granular data necessary for business users to investigate individual loss-making products.

Market, Product Name and Quantity		
Market	Product Name	Quantity
Africa	Acco Index Tab, Economy	11
	Accos Clamps, 12 Pack	10
	Accos Clamps, Assorted Sizes	8
	Accos Clamps, Bulk Pack	11
	Accos Clamps, Metal	1
	Accos Paper Clips, Assorted Sizes	1
	Accos Paper Clips, Bulk Pack	2
	Accos Paper Clips, Metal	3
	Accos Push Pins, 12 Pack	1
	Accos Push Pins, Assorted Sizes	2