

Assignment 2 Power BI (DAX & Data Visualization)

Calculated Columns:

- **Create a Calculated Column for 'Category Type':** Add a calculated column in the Order Details table that combines the 'Category' and 'Sub-Category' columns into a single 'Category Type' column.

The screenshot shows the Microsoft Power BI Desktop interface. The 'Column tools' ribbon is active, displaying options for Name, Data type, Format, Summarization, Data category, Sort by column, Data groups, Manage relationships, and New column. The 'Category Type' column has been added to the 'Order Details' table. The table contains 17 rows of data, each representing an order with columns for Order ID, Amount, Profit, Quantity, Category, Sub-Category, and Category Type. The 'Category Type' column is a calculated column that combines the 'Category' and 'Sub-Category' columns.

Order ID	Amount	Profit	Quantity	Category	Sub-Category	Category Type
B-25602	561	212	3	Clothing	Saree	Clothing Saree
B-25602	119	-5	8	Clothing	Saree	Clothing Saree
B-25603	193	-166	3	Clothing	Saree	Clothing Saree
B-25604	157	5	9	Clothing	Saree	Clothing Saree
B-25605	75	0	7	Clothing	Saree	Clothing Saree
B-25609	25	-5	4	Clothing	Saree	Clothing Saree
B-25610	43	0	3	Clothing	Saree	Clothing Saree
B-25611	160	-59	2	Clothing	Saree	Clothing Saree
B-25613	1603	0	9	Clothing	Saree	Clothing Saree
B-25619	353	90	8	Clothing	Saree	Clothing Saree
B-25622	534	0	3	Clothing	Saree	Clothing Saree
B-25623	149	-87	4	Clothing	Saree	Clothing Saree
B-25625	635	-349	5	Clothing	Saree	Clothing Saree
B-25628	24	-9	4	Clothing	Saree	Clothing Saree
B-25633	711	-8	4	Clothing	Saree	Clothing Saree
B-25635	382	30	3	Clothing	Saree	Clothing Saree
B-25636	637	113	5	Clothing	Saree	Clothing Saree
B-25640	122	-47	4	Clothing	Saree	Clothing Saree
B-25646	20	-8	2	Clothing	Saree	Clothing Saree
B-25647	42	-6	4	Clothing	Saree	Clothing Saree
B-25648	55	-26	4	Clothing	Saree	Clothing Saree
B-25648	130	-41	4	Clothing	Saree	Clothing Saree
B-25650	211	-105	2	Clothing	Saree	Clothing Saree
B-25650	31	-2	2	Clothing	Saree	Clothing Saree
B-25650	512	-225	5	Clothing	Saree	Clothing Saree
B-25650	238	20	2	Clothing	Saree	Clothing Saree
B-25651	23	4	1	Clothing	Saree	Clothing Saree
B-25651	457	-41	4	Clothing	Saree	Clothing Saree

Table: Order Details (1,500 rows) Column: Category Type (17 distinct values)

Calculate Revenue per Order in Order Details Table:

Create a calculated column in the Order Details table to compute the revenue (Amount * Quantity) per order.

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File Home Help Table tools Column tools

Name: Revenue per Order Format: Whole number Summarization: Sum

Data type: Whole number Currency: \$ % 0 Data category: Uncategorized

Structure: Columns: Order ID, Amount, Profit, Quantity, Category, Sub-Category, Category Type, Revenue per Order

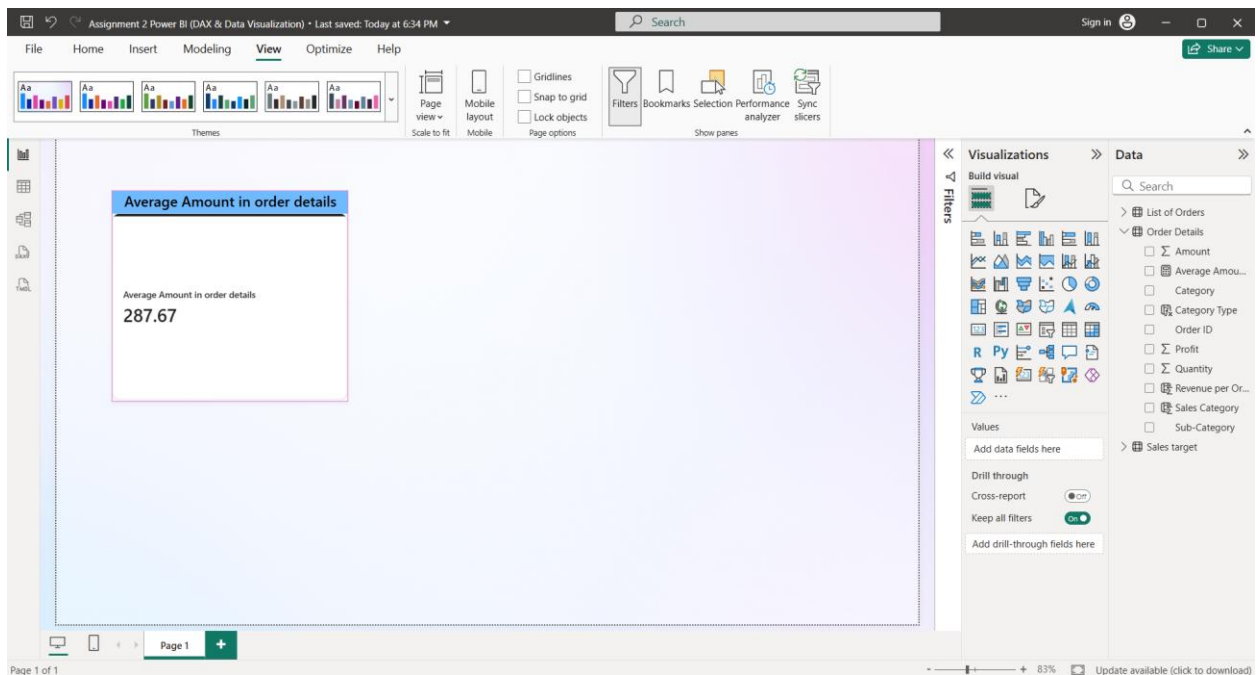
Table: Order Details (1,500 rows) Column: Revenue per Order (845 distinct values)

Order ID	Amount	Profit	Quantity	Category	Sub-Category	Category Type	Revenue per Order
B-25602	561	212	3	Clothing	Saree	Clothing Saree	1683
B-25602	119	-5	8	Clothing	Saree	Clothing Saree	952
B-25603	193	-166	3	Clothing	Saree	Clothing Saree	579
B-25604	157	5	9	Clothing	Saree	Clothing Saree	1413
B-25605	75	0	7	Clothing	Saree	Clothing Saree	525
B-25609	25	-5	4	Clothing	Saree	Clothing Saree	100
B-25610	43	0	3	Clothing	Saree	Clothing Saree	129
B-25611	160	-59	2	Clothing	Saree	Clothing Saree	320
B-25613	1603	0	9	Clothing	Saree	Clothing Saree	14427
B-25619	353	90	8	Clothing	Saree	Clothing Saree	2824
B-25622	534	0	3	Clothing	Saree	Clothing Saree	1602
B-25623	149	-87	4	Clothing	Saree	Clothing Saree	596
B-25625	635	-349	5	Clothing	Saree	Clothing Saree	3175
B-25628	24	-9	4	Clothing	Saree	Clothing Saree	96
B-25633	711	-8	4	Clothing	Saree	Clothing Saree	2844
B-25635	382	30	3	Clothing	Saree	Clothing Saree	1146
B-25636	637	113	5	Clothing	Saree	Clothing Saree	3185
B-25640	122	-47	4	Clothing	Saree	Clothing Saree	488
B-25646	20	-8	2	Clothing	Saree	Clothing Saree	40
B-25647	42	-6	4	Clothing	Saree	Clothing Saree	168
B-25648	55	-26	4	Clothing	Saree	Clothing Saree	220
B-25648	130	-41	4	Clothing	Saree	Clothing Saree	520
B-25650	211	-105	2	Clothing	Saree	Clothing Saree	422
B-25650	31	-2	2	Clothing	Saree	Clothing Saree	62
B-25650	512	-225	5	Clothing	Saree	Clothing Saree	2560
B-25650	238	20	2	Clothing	Saree	Clothing Saree	476
B-25651	23	4	1	Clothing	Saree	Clothing Saree	23
B-25651	457	-41	4	Clothing	Saree	Clothing Saree	1828

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Create a Calculated Column to Categorize Sales:

Add a calculated column named 'Sales Category' in the Order Details table that categorizes each order as 'Above Average' or 'Below Average' based on the Amount value.



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Search

File Home Help Table tools Column tools

Name Sales Category Format Text Summarization Don't summarize

Data type Text Data category Uncategorized Sort by column Sort Data groups Manage relationships New column Calculations

Structure Formatting Properties

1 Sales Category = IF('Order Details'[Amount]<287.67,"Below Average","Above Average")

Order ID	Amount	Profit	Quantity	Category	Sub-Category	Category Type	Revenue per Order	Sales Category
B-25602	561	212	3	Clothing	Saree	Clothing Saree	1683	Above Average
B-25602	119	-5	8	Clothing	Saree	Clothing Saree	952	Below Average
B-25603	193	-166	3	Clothing	Saree	Clothing Saree	579	Below Average
B-25604	157	5	9	Clothing	Saree	Clothing Saree	1413	Below Average
B-25605	75	0	7	Clothing	Saree	Clothing Saree	525	Below Average
B-25609	25	-5	4	Clothing	Saree	Clothing Saree	100	Below Average
B-25610	43	0	3	Clothing	Saree	Clothing Saree	129	Below Average
B-25611	160	-59	2	Clothing	Saree	Clothing Saree	320	Below Average
B-25613	1603	0	9	Clothing	Saree	Clothing Saree	14427	Above Average
B-25619	353	90	8	Clothing	Saree	Clothing Saree	2824	Above Average
B-25622	534	0	3	Clothing	Saree	Clothing Saree	1602	Above Average
B-25623	149	-87	4	Clothing	Saree	Clothing Saree	596	Below Average
B-25625	635	-349	5	Clothing	Saree	Clothing Saree	3175	Above Average
B-25628	24	-9	4	Clothing	Saree	Clothing Saree	96	Below Average
B-25633	711	-8	4	Clothing	Saree	Clothing Saree	2844	Above Average
B-25635	382	30	3	Clothing	Saree	Clothing Saree	1146	Above Average
B-25636	637	113	5	Clothing	Saree	Clothing Saree	3185	Above Average
B-25640	122	-47	4	Clothing	Saree	Clothing Saree	488	Below Average
B-25646	20	-8	2	Clothing	Saree	Clothing Saree	40	Below Average
B-25647	42	-6	4	Clothing	Saree	Clothing Saree	168	Below Average
B-25648	55	-26	4	Clothing	Saree	Clothing Saree	220	Below Average
B-25648	130	-41	4	Clothing	Saree	Clothing Saree	520	Below Average
B-25650	211	-105	2	Clothing	Saree	Clothing Saree	422	Below Average
B-25650	31	-2	2	Clothing	Saree	Clothing Saree	62	Below Average
B-25650	512	-225	5	Clothing	Saree	Clothing Saree	2560	Above Average
B-25650	238	20	2	Clothing	Saree	Clothing Saree	476	Below Average
B-25651	23	4	1	Clothing	Saree	Clothing Saree	23	Below Average
B-25651	457	-41	4	Clothing	Saree	Clothing Saree	1828	Above Average

Table: Order Details (1,500 rows) Column: Sales Category (2 distinct values)

Update available (click to download)

Data

Search

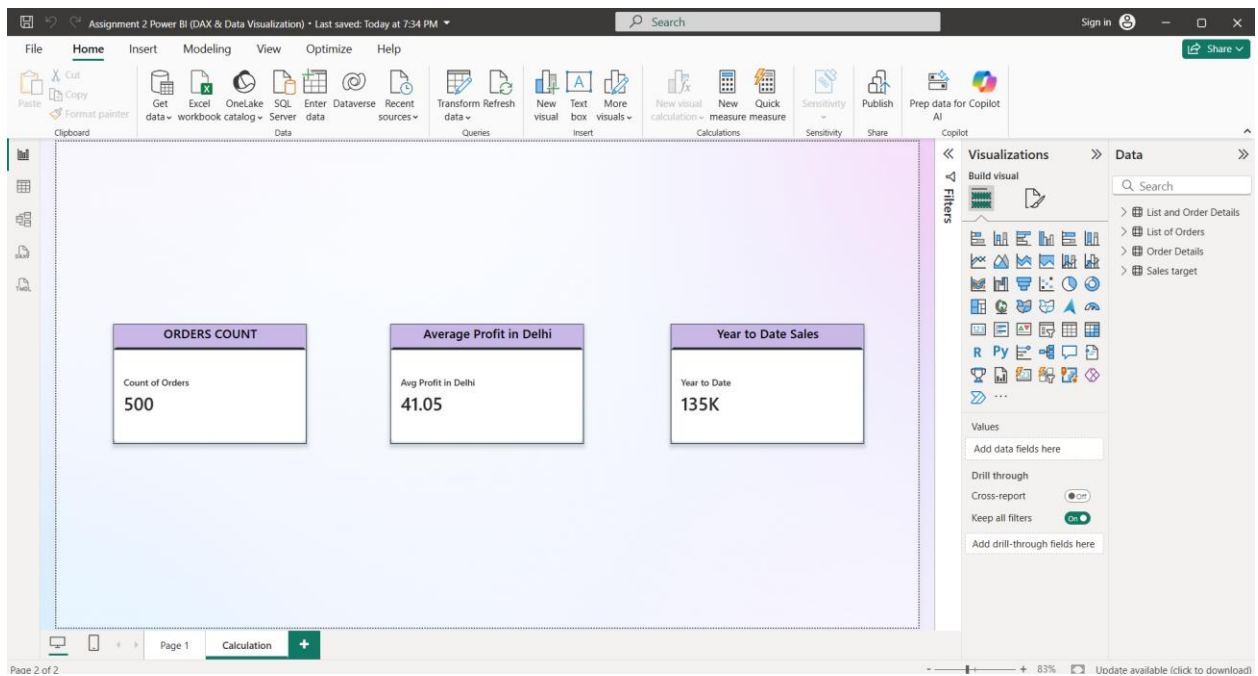
- List of Orders
- Order Details
 - Amount
 - Average Amount in order details
 - Category
 - Category Type
 - Order ID
 - Profit
 - Quantity
 - Revenue per Order
 - Sales Category
 - Sub-Category
- Sales target

Calculated Measures:

Calculate Order Count: Define a measure to count the total number of orders in the Order Details table.

Calculate Average Profit in Delhi: Create a measure to calculate the average profit for orders placed in Delhi.

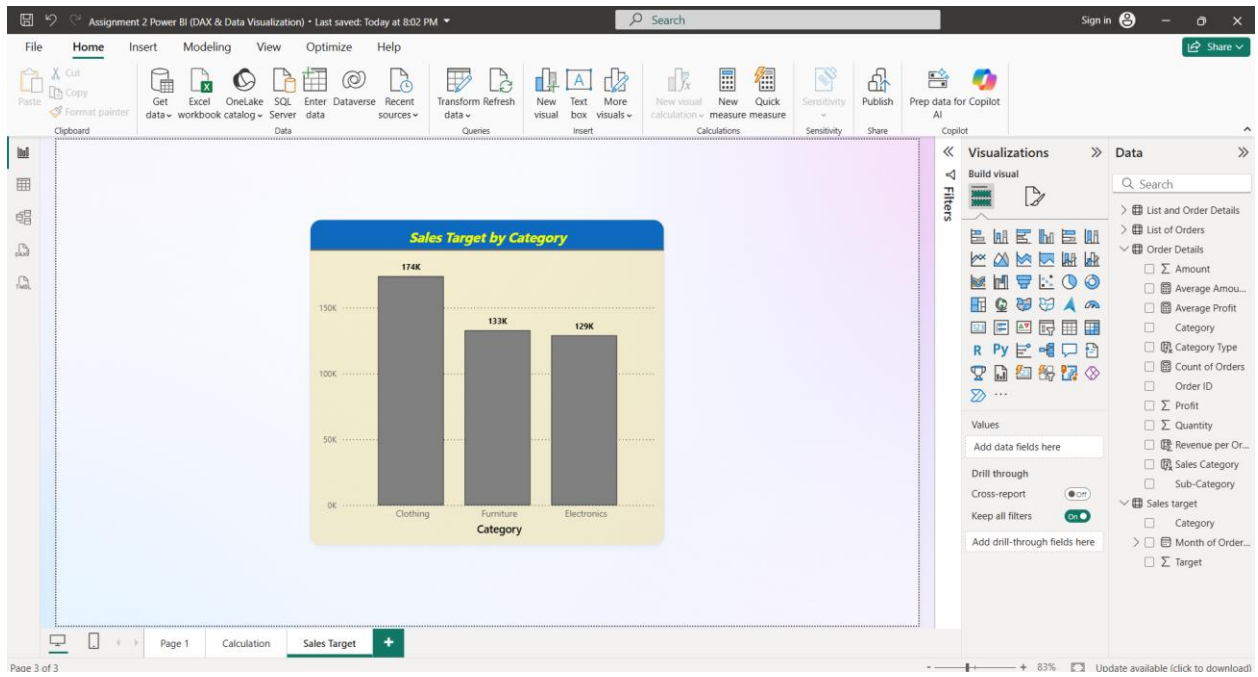
Calculate Year-to-Date (YTD) Sales: Define a measure to calculate the total sales amount accumulated from the earliest order date up to each order date.



Data Visualization:

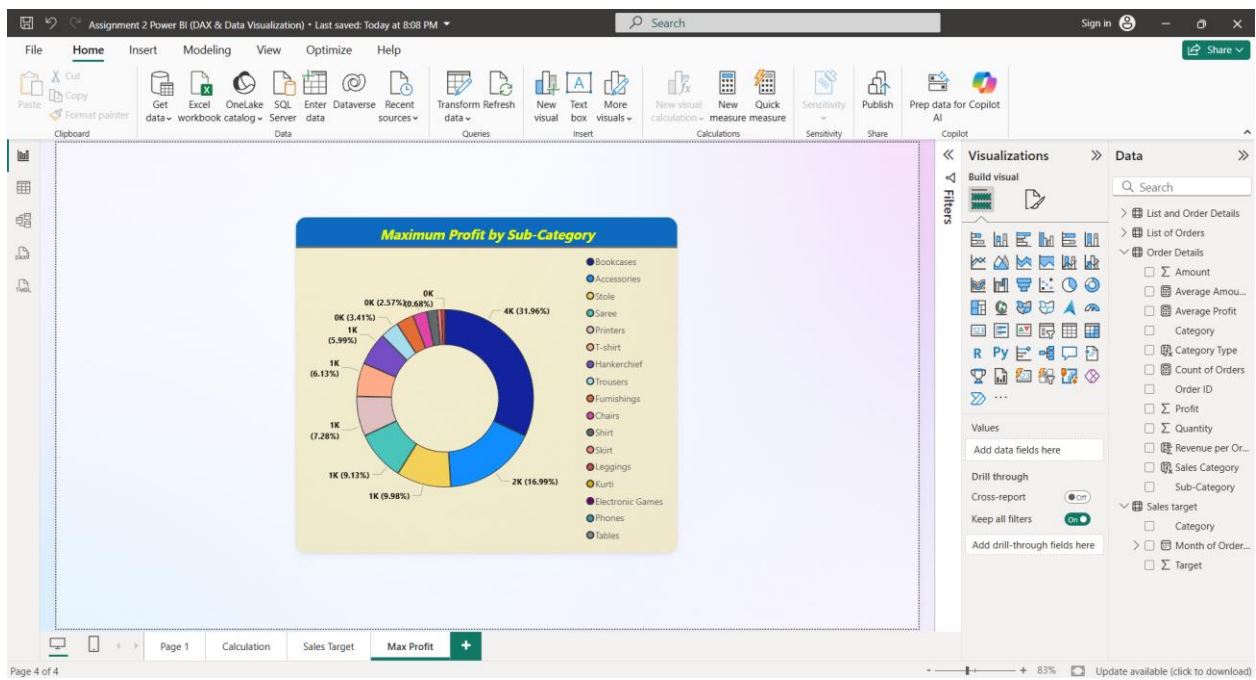
Sales Target Achievement by Category:

Compare actual sales with sales targets by category using a clustered column chart.



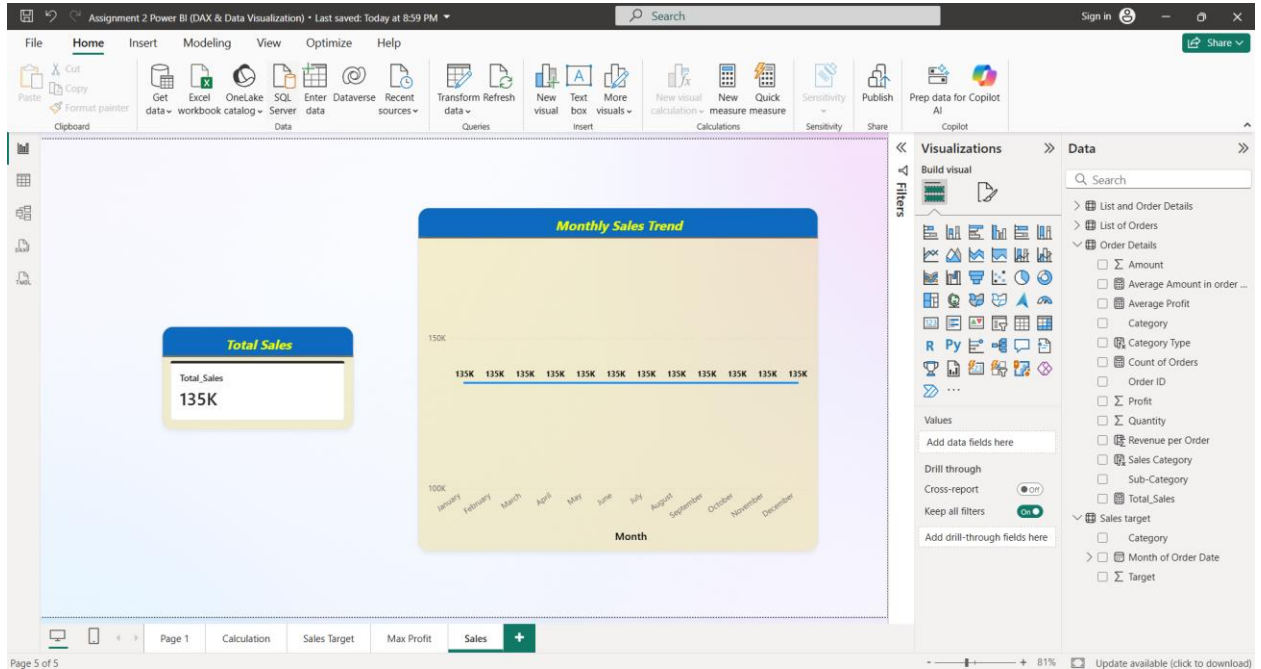
Max Profit Margin by Sub-Category:

Analyze the maximum profit margin for each sub-category of products using a donut chart.



Monthly Sales Trend:

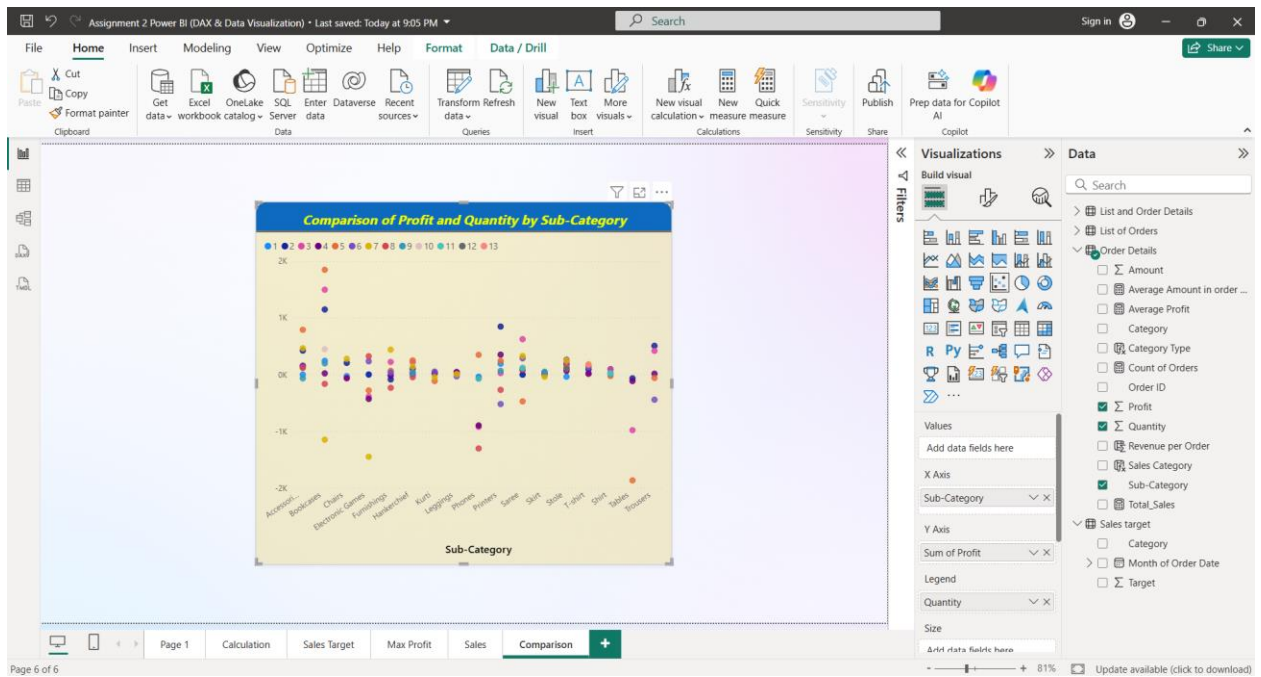
Show the trend of monthly sales over time using a line chart.



I tried a lot to solve this.

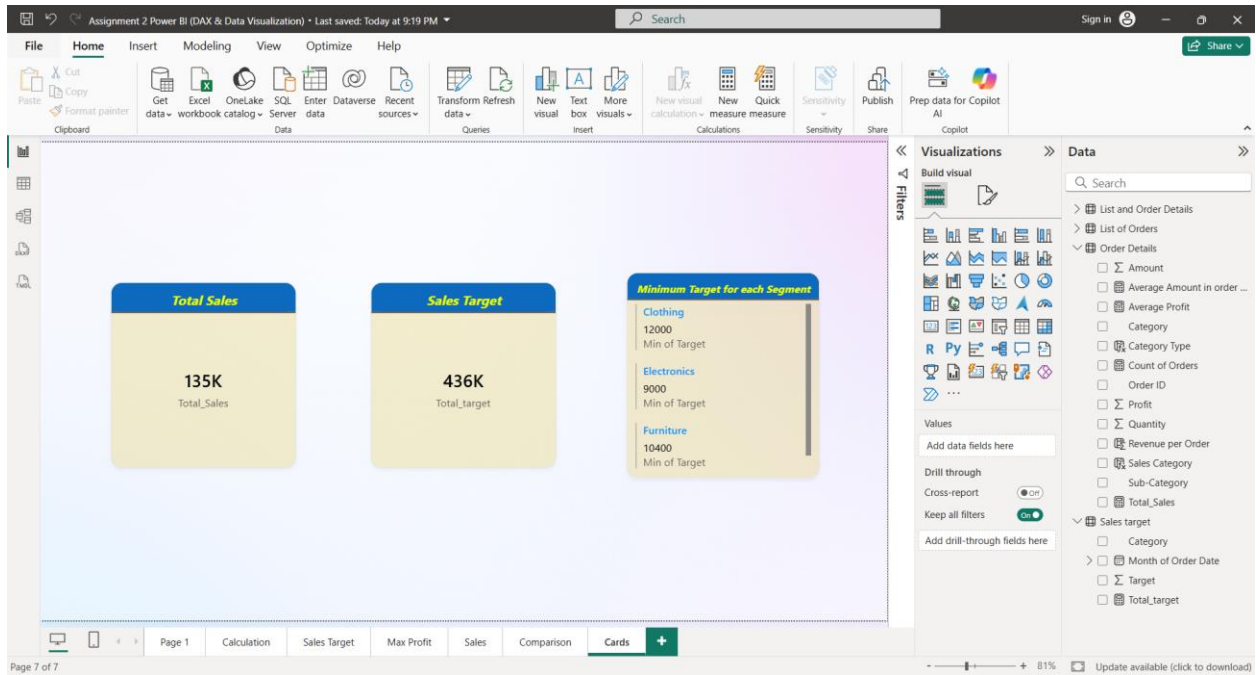
Comparison of Profit and Quantity by Sub-Category:

Compare the relationship between profit and quantity sold for different sub-categories using a scatter chart.



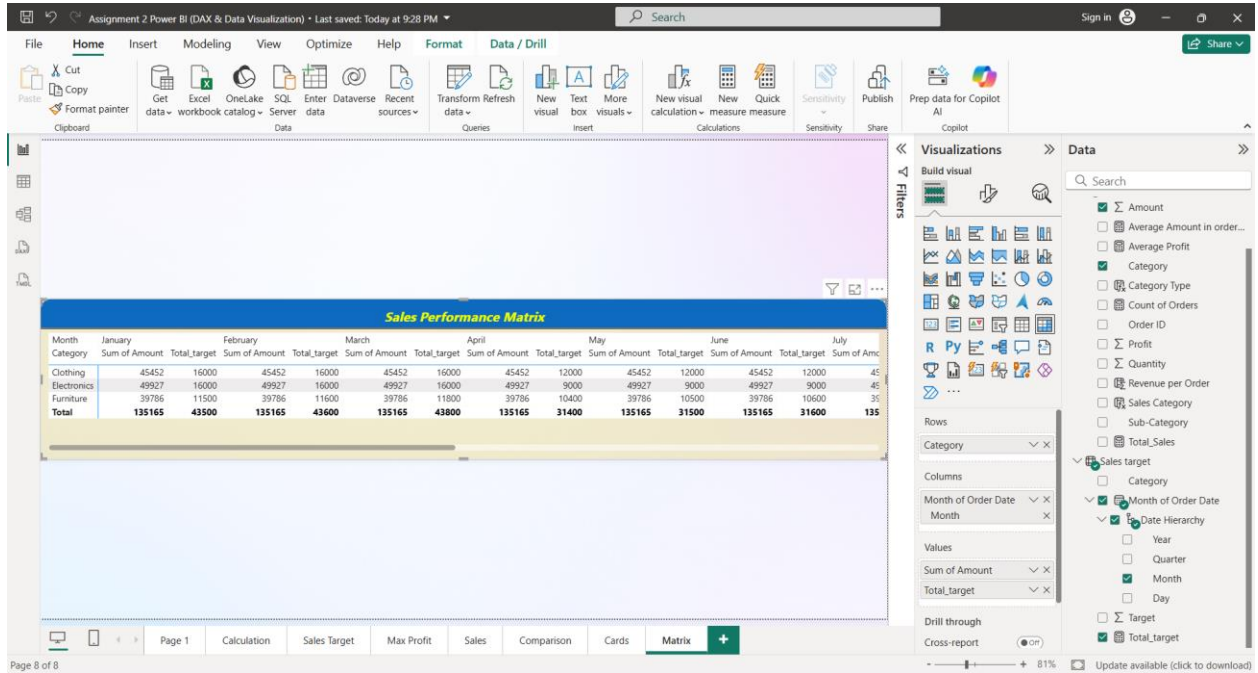
Comparison of Total Sales Amount and Target:

Create cards to succinctly display the total sales amount alongside the sales target for quick comparison and analysis. Also, create a multi-row card to display the minimum target for each segment.



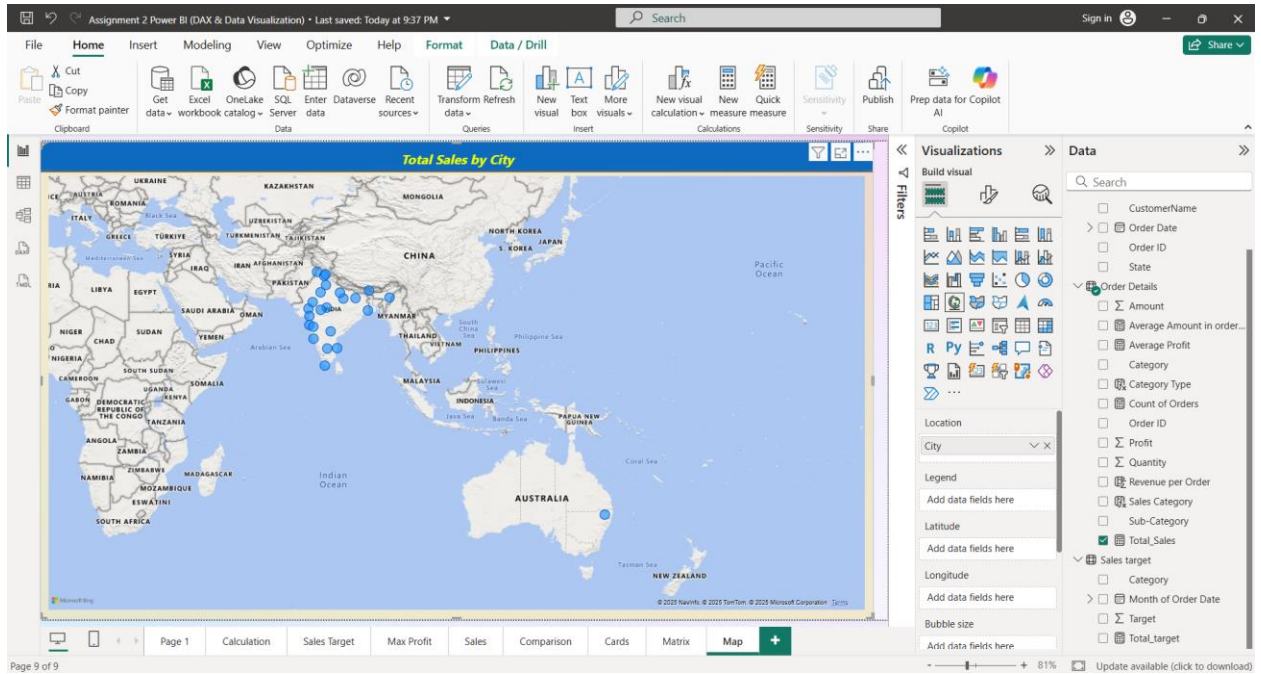
Sales Performance Matrix:

Build a matrix view to analyze how actual sales compare to sales targets across different categories and months.



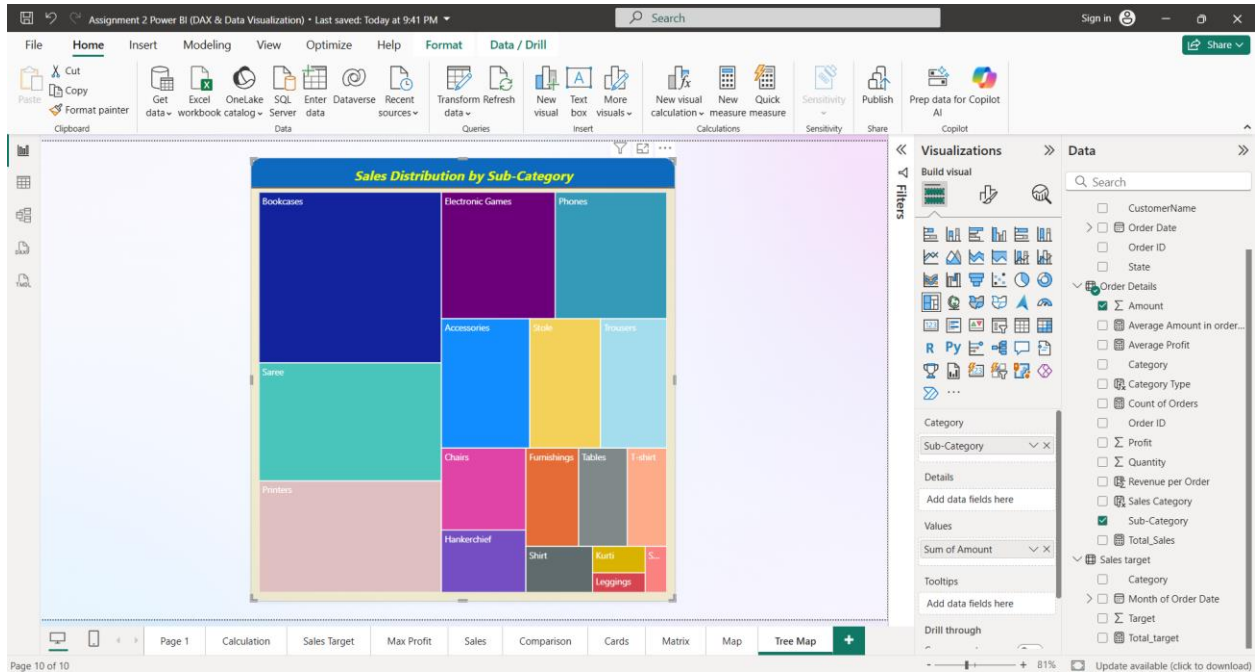
Geographic Sales Analysis:

Visualize total sales on a map by city to identify regional sales patterns.



Sales Distribution by Sub-Category:

Represent the sales distribution across different sub-categories using a tree map.



Order Count Analysis by State:

Create a funnel chart to visualize the distribution of order counts across different states.

