

NAME: JEEVITHA K S

REG NO: 727723EUCD022

Retail Sales Performance Analysis:-

- Identify missing values and duplicates in the Sales dataset. What cleaning steps are required?

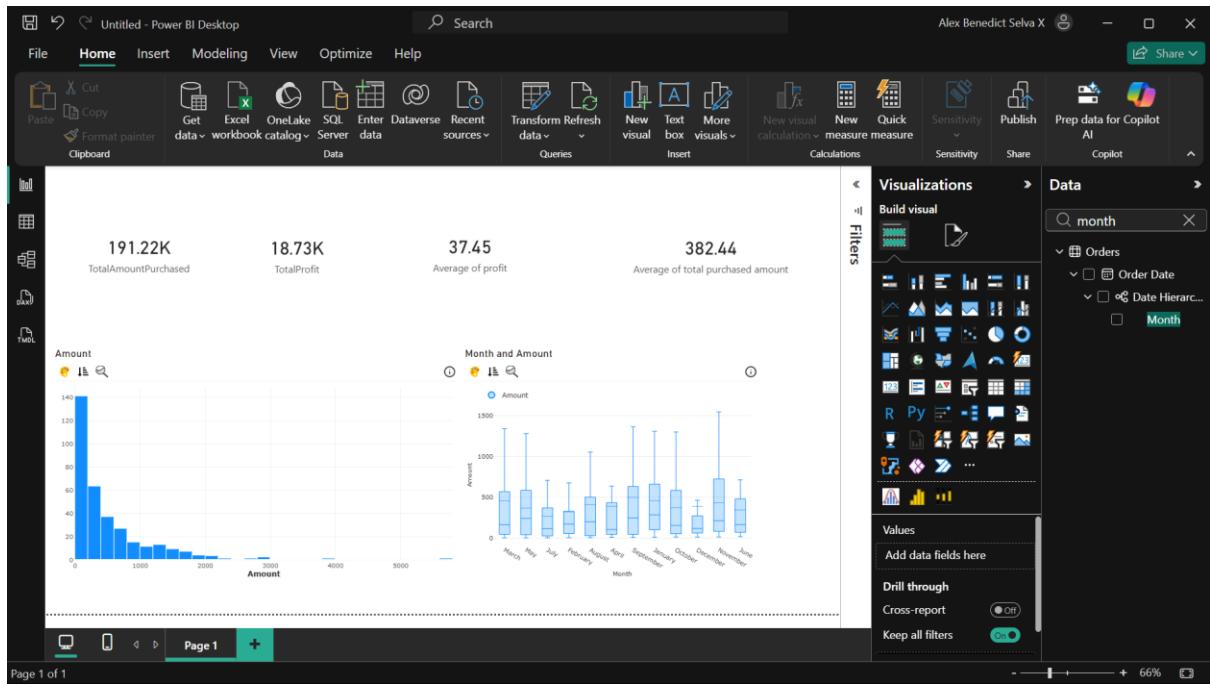
Power Query Editor Screenshot showing a table with the following schema:

Order ID	Amount	Profit	Quantity	Category
B-25666	934	-916	7	Electronics
B-25923	3873	-891	6	Electronics
B-25730	1145	-706	3	Electronics
B-25653	1279	-640	8	Electronics
B-25910	1622	-624	5	Furniture
B-25756	729	-492	5	Furniture
B-25689	469	-459	3	Electronics
B-25909	1622	-448	3	Electronics
B-25768	1582	-443	6	Clothing
B-25729	1549	-439	4	Electronics
B-25688	352	-345	5	Clothing
B-25796	632	-316	6	Clothing
B-25986	749	-307	7	Furniture
B-25712	193	-275	3	Electronics
B-25696	275	-275	4	Clothing
B-25898	857	-274	2	Furniture
B-25617	305	-270	5	Electronics
B-25778	1506	-266	6	Electronics
B-25887	2125	-234	6	Electronics
B-25650	512	-225	5	Clothing
B-25888	646	-213	3	Electronics

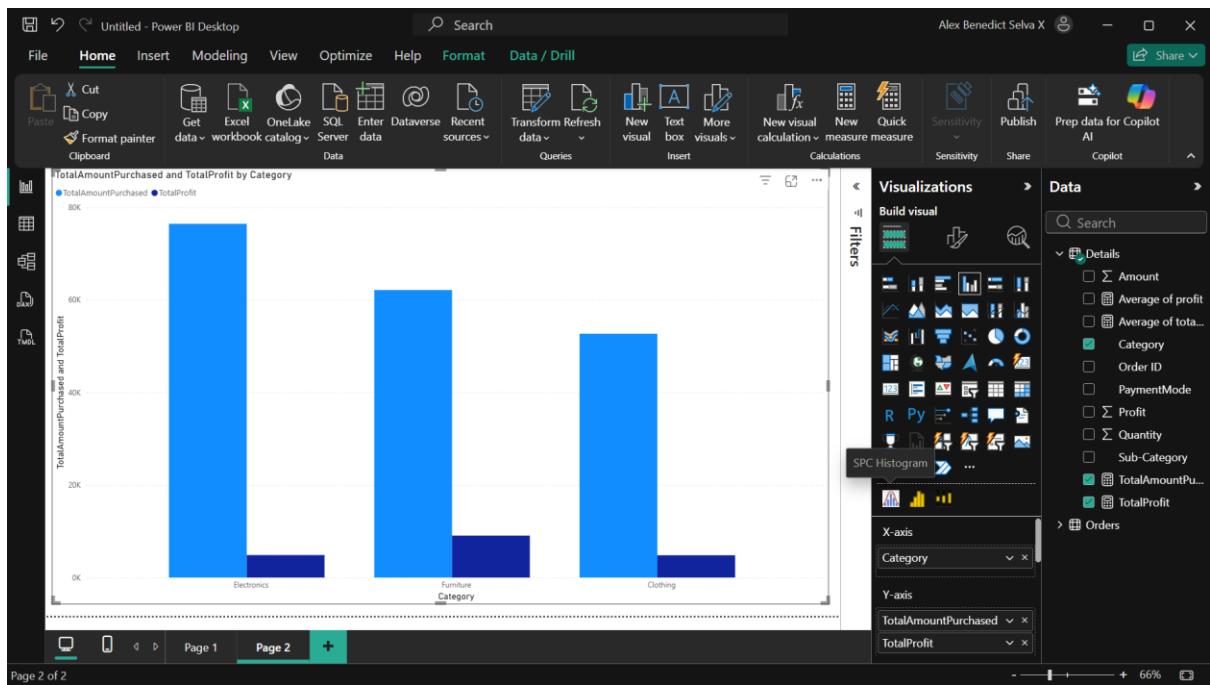
Power Query Editor Screenshot showing a table with the following schema:

Order ID	Order Date	CustomerName	State	City
B-26055	3/10/2018	Harivansh	Uttar Pradesh	Mathura
B-25993	2/3/2018	Madhav	Delhi	
B-25973	1/24/2018	Madan Mohan	Uttar Pradesh	Mathura
B-25923	12/27/2018	Gopal	Maharashtra	Mumbai
B-25757	8/21/2018	Vishakha	Madhya Pradesh	Indore
B-25967	1/21/2018	Sudevi	Uttar Pradesh	Prayagraj
B-25955	1/16/2018	Shiva	Maharashtra	Pune
B-26093	3/27/2018	Sarita	Maharashtra	Pune
B-25798	10/1/2018	Shishi	Andhra Pradesh	Hyderabad
B-25602	4/1/2018	Vrinda	Maharashtra	Pune
B-25858	11/13/2018	Uudhav	Maharashtra	Mumbai
B-25969	1/21/2018	Shreyshi	Gujarat	Surat
B-26099	3/30/2018	Bhishm	Maharashtra	Mumbai
B-25997	2/4/2018	Yogesh	Maharashtra	Pune
B-25881	11/25/2018	Lalita	Uttar Pradesh	Mathura
B-25761	8/25/2018	Madhav	Uttar Pradesh	Mathura
B-25887	12/1/2018	Vishakha	Uttar Pradesh	Prayagraj
B-25823	10/18/2018	Rohan	Maharashtra	Mumbai
B-25853	11/8/2018	Gaurav	Gujarat	Ahmedabad
B-25862	11/15/2018	Amol	Bihar	Patna
B-25830	10/26/2018	Aastha	Himachal Pradesh	Simla

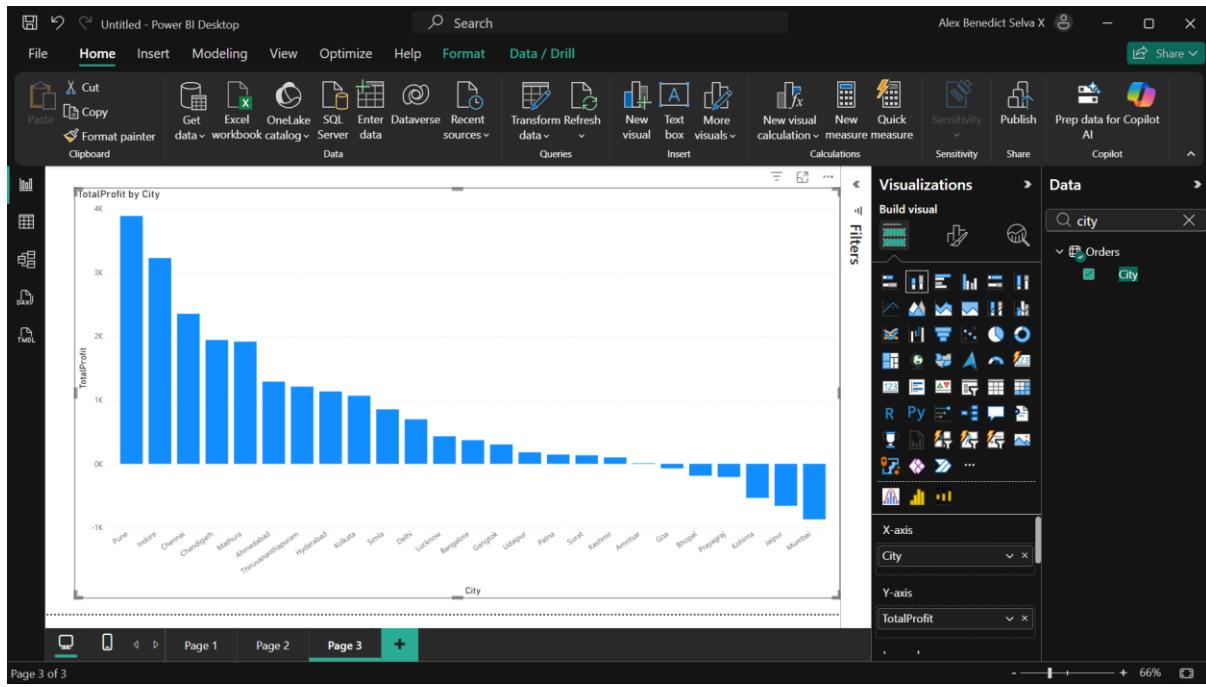
- Perform univariate analysis on Sales and Profit. What distribution patterns do you observe?



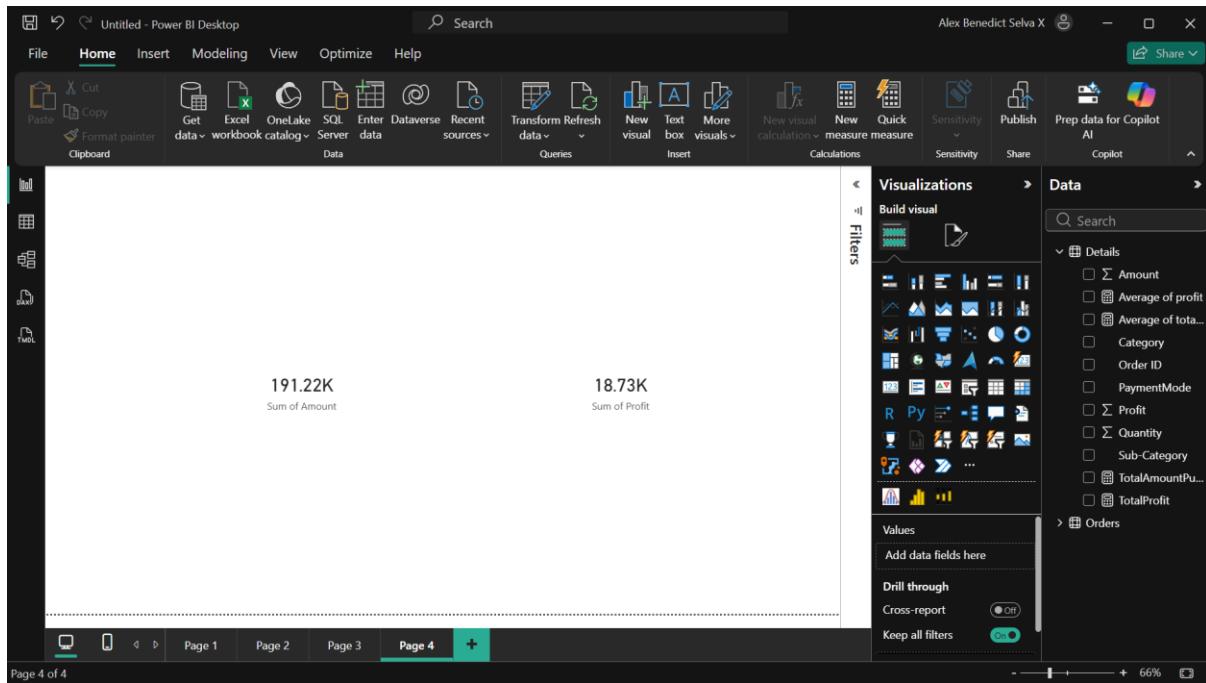
- Which product categories contribute the highest revenue and profit?



- How does sales performance vary across regions?



- Write a DAX measure to calculate Total Sales and Total Profit.



- Calculate Profit Margin (%) using DAX and identify low-margin products.

A screenshot of the Power BI Desktop interface. The ribbon at the top includes Home, Insert, Modeling, View, Optimize, and Help. The Home tab is selected. The main area displays a dashboard with a large value '9.79' labeled 'Profit Percentage'. Below it is a table:

Category	Sum of Amount	Sum of Profit	Profit Percentage
Clothing	52,677.00	4,812.00	9.13
Electronics	76,425.00	4,853.00	6.35
Furniture	62,116.00	9,060.00	14.59
Total	191,218.00	18,725.00	9.79

The right side features the Visualizations pane with various chart and report icons, and the Data pane showing a search bar for 'per' and a list of details including 'Profit Percentage'.

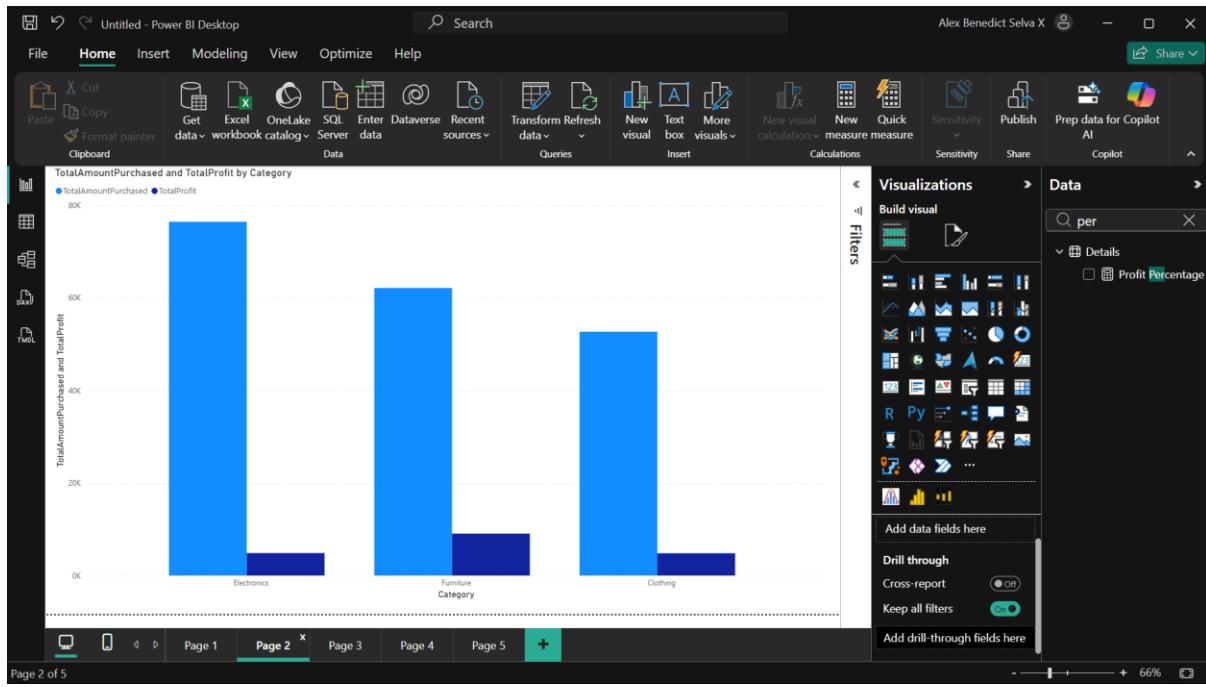
- Design a dashboard to show regional and category-wise performance.

A screenshot of a Sales Dashboard in Power BI Desktop. The ribbon shows Home selected. The dashboard title is 'RETAIL SALES PERFORMANCE ANALYSIS DASHBOARD'. It contains several visualizations:

- A large text '438K' for Total Amount.
- A large text '37K' for Total Profit.
- A large text '5615' for Total Quantity.
- A bar chart for 'Total Amount by State' showing Maharashtra (10K), Madhya Pradesh (8K), Uttar Pradesh (3K), and Delhi (2K).
- A donut chart for 'Total Quantity by Category' showing Clothing (53%), Electronics (21%), Furniture (17%), and Others (19%).
- A bar chart for 'Total Amount by Customer Name' showing Harshav (9K), Madhav (7.8K), Madan Mohan (7.8K), and Shiva (4.3K).
- A donut chart for 'Total Quantity by Payment Mode' showing UPI (21%), Debit Card (19%), Credit Card (12%), and Others (50%).
- A bar chart for 'Total Profit by Sub-Category' showing Printers (4.4K), Bookcases (3.2K), Saree (2.2K), Accessories (1.8K), and Tables (1.4K).

 The right side of the screen shows the Visualizations and Data panes, similar to the first screenshot.

- Which products should be discontinued or promoted based on analysis?



So based on the observations we found that the least profit producing sector was clothing