

ECOMMERCE SALES DASHBOARD

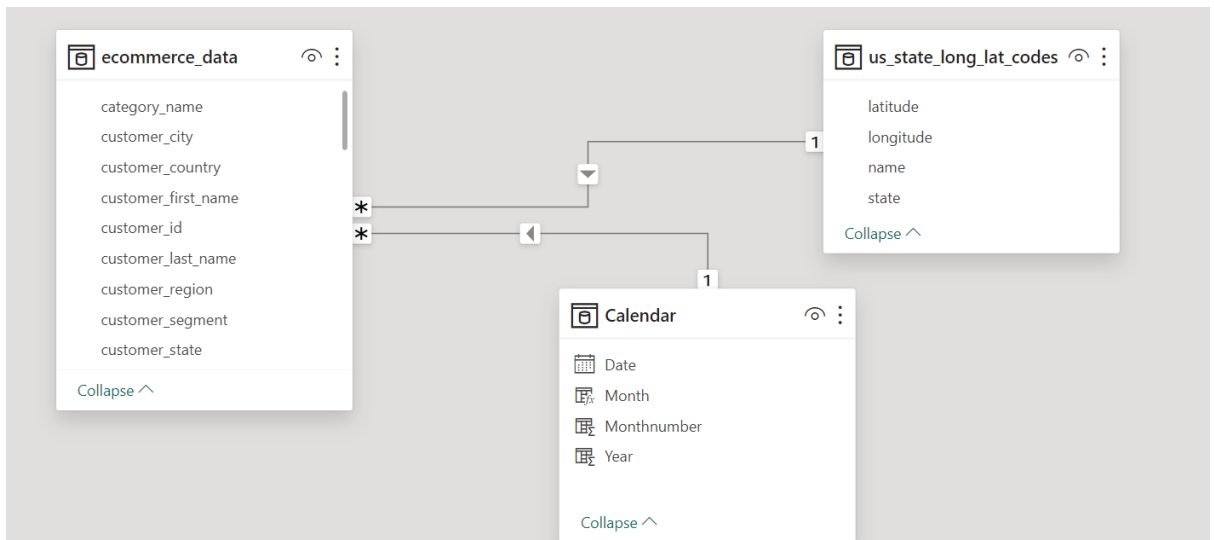
Problem Statement

A US based Ecommerce Sales company wants us to create a Sales dashboard showing information of YTD Sales and generate insights for below scenarios

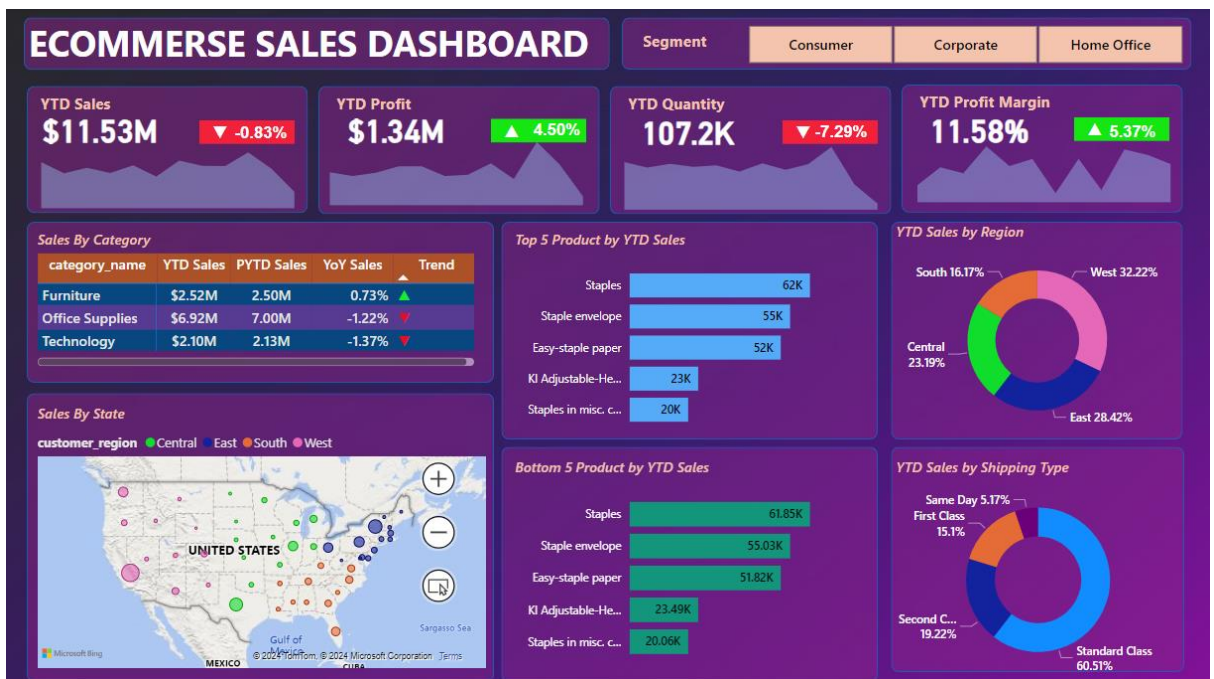
- Create a KPI Banner showing YTD Sales, YTD Profit, YTD Quantity Sold, YTD Profit Margin
- Find Year on Year growth for each KPI and show a YTD Sparkline for each measure in the KPI to understand the monthly trend for each fact
- Find YTD Sales, PYTD Sales, YoY Sales Growth for different customer category. Add a trend icon for each category.
- Find YTD Sales performance 1. by each State
- Top 5 and Bottom 5 Product by sales
- YTD Sales by Region to know best and worst performing region all over country
- YTD Sales by Shipping Type to get the best shipping type percentage.

Steps:-

1. Data cleaning in Excel File:-
 - a. Name correction
 - b. Removed duplicate values
 - c. Data Types correction
 - d. Missing values filled
2. Data Loaded as excel file in Power BI
3. Created new table Calendar
 - a. Created new table calendar with Calendar function which create column date
 - i. `Calendar = CALENDAR(Min(ecommerce_data[order_date]), TODAY())` (use during live data) OR
 - ii. `Calendar = CALENDAR(Min(ecommerce_data[order_date]), Max(ecommerce_data[order_date]))`
 - b. Created new column Year in calendar table
 - i. `Year = YEAR('Calendar'[Date])`
 - c. Created new column month. Using format since month name is required.
 - i. `Month = FORMAT('Calendar'[Date],"mmmm")`
4. Created new relationship between Ecommerce[‘customer state’] and us_stat_long_lat_code[‘name’] – Many to 1
5. Created new relation between Ecommerce[order date] and Calendar[‘Date’] – Many to 1

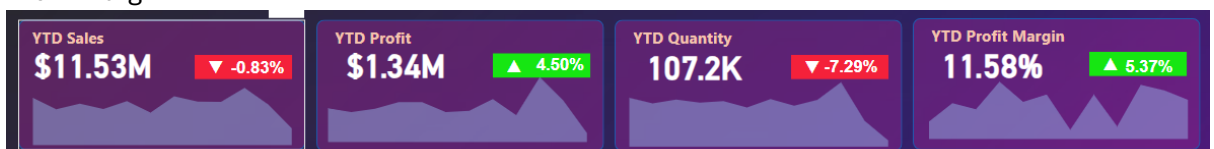


6. Dashboard created



7. Selected the background image >> created cards from rectangle shape for each visualisation background

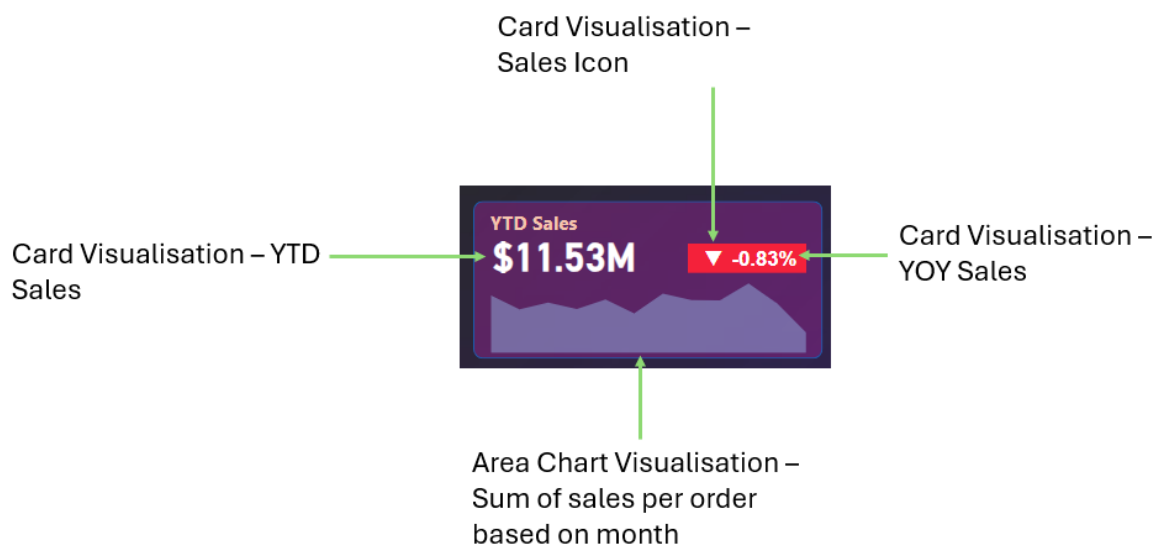
8. Created "Cards Visualisation, Area chart, " YTD Sales, YTD profit, YTD Quantity, YTD Profit Margin



9. Before creating the cards as the table does not contain these columns, In power BI measures were created using DAX. Following are the queries used creating measures:-

- Year to date sales :- YTD Sales = `TOTALYTD(SUM(ecommerce_data[sales_per_order]), 'Calendar'[Date])`

- b. Previous Year to date:- PYTD Sales =
`CALCULATE(Sum(ecommerce_data[sales_per_order]),DATESYTD(SAMEPERIODLASTYEAR('Calendar'[Date])))`
- c. Year over year :- YoY Sales = $([YTD\ Sales] - [PYTD\ Sales]) / [PYTD\ Sales]$
- d. Created for Setting the trend arrow:-
 - i. Trend = `var positive_icon = UNICHAR(9650)`
`var negative_icon = UNICHAR(9660)`
`var result = if([YoY Sales]>0, positive_icon,negative_icon)`
`return result`
- e. Created for icon (▲▼) colors to change:- Sales icon color = `If([YoY Sales]>0, "Green", "Red")`
- f. Created for background of YOY sales percentage :- Sales color = `if([YoY Sales]>0, "Green", "Red")`
- g. Similarly created for YTD Profit, YTD Quantity and YTD Profit Margin
- h. For profit margin created measure :- Profit Margin =
`Sum(ecommerce_data[profit_per_order])/Sum(ecommerce_data[sales_per_order])`



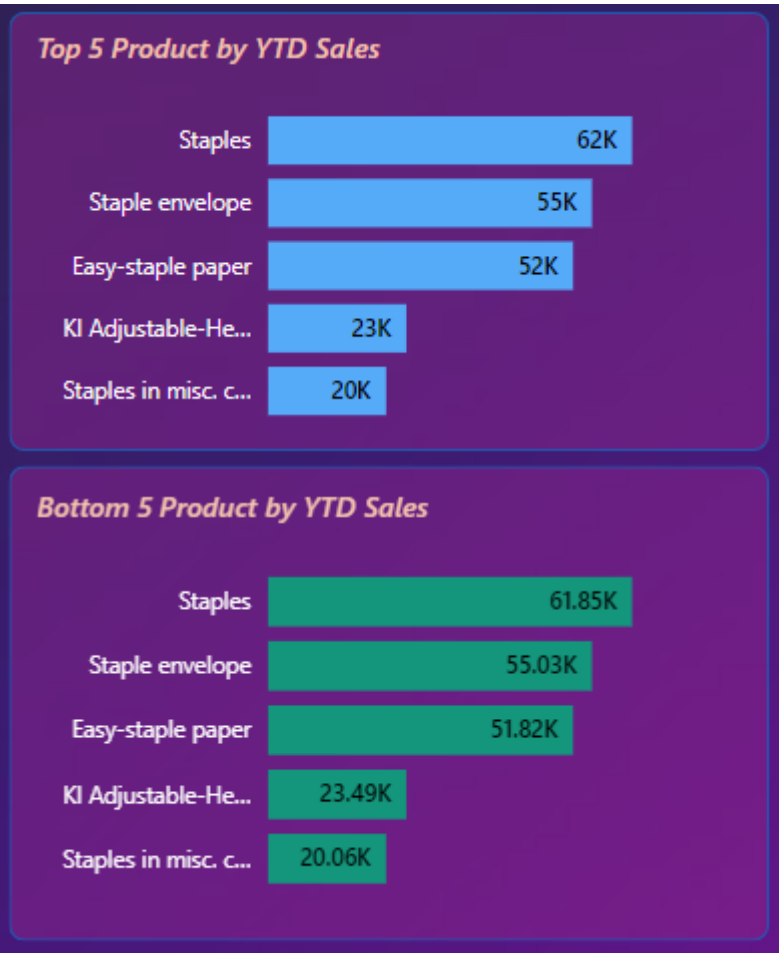
10. Created Matrix visualization for Sales by Category with rows – category_rows and Values YTD Sales, PYTD Sales, YoY Sales, Trend

Sales By Category				
category_name	YTD Sales	PYTD Sales	YoY Sales	Trend
Furniture	\$2.52M	2.50M	0.73%	▲
Office Supplies	\$6.92M	7.00M	-1.22%	▼
Technology	\$2.10M	2.13M	-1.37%	▼

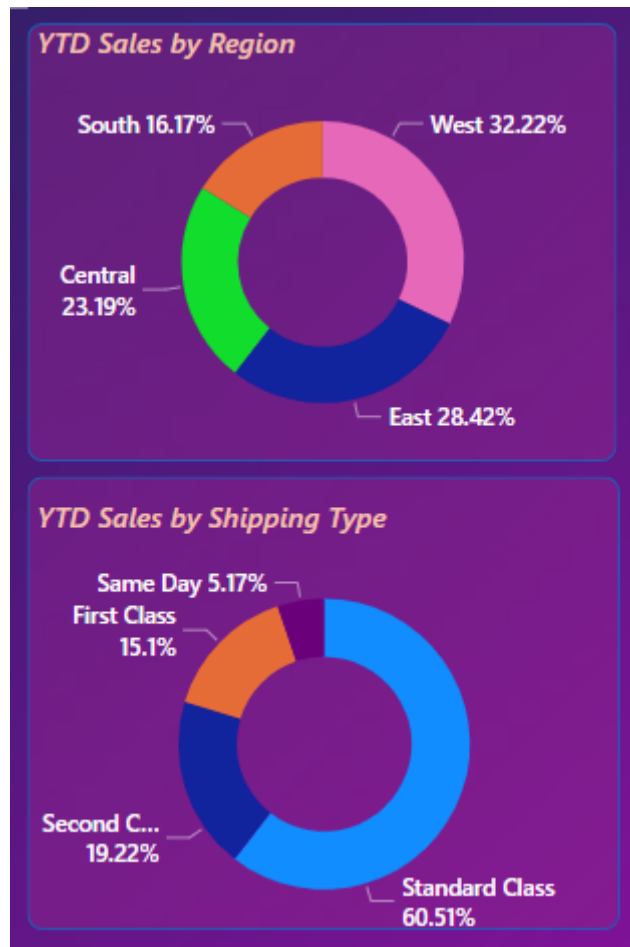
11. Created Map chart visualisation with longitude and latitude having bubbled of YTD Sales marked by customer region:-



12. Created Bar chart for top and bottom 5 products by YTD Sales:-



13. Created donut chart for YTD Sales by region and YTD Sales by Shipping region



14. Created slicer for customer segments to interact with dashboard
15. Edited the interaction between the visualisation on dashboard.
16. Basic changes of general and visual details properties have been changed for every visualisations