**DAX Function Used in Power BI Report**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No** | **Metric Name** | **Formula / Logic** | **Description** |
| 1 | **Avg price** | [Avg price] = SUM(car\_data[Price ($)]) / COUNT(car\_data[Car\_id]) | Calculates the **average price** of cars by dividing the **total price** by the **count of car IDs**. |
| 2 | **Avg Price Colour** | [Avg Price Colour] = IF([Avg Price Diff] > 0, "Green", "Red") | Assigns **"Green"** if the **Avg Price Diff** is positive, otherwise assigns **"Red"**.  Used for conditional formatting. |
| 3 | **Avg Price Diff** | [Avg Price Diff] = [YTD Avg Price] - [PYTD Avg Price] | Calculates the **difference in average price** between the **current year-to-date (YTD) average price** and the **previous YTD average price**. |
| 4 | **Cars Sold Colour** | [Cars Sold Colour ]= IF(car\_data[Cars Sold Diff] > 0, "Green", "Red") | Assigns **"Green"** if the number of cars sold has increased; otherwise, **"Red"**. |
| 5 | **Cars Sold Diff** | [Cars Sold Diff] = [YTD Cars Sold] - [PYTD Cars Sold] | Finds the **difference in cars sold** between the **current YTD** and **previous YTD**. |
| 6 | **Max Point on Area Chart** | [Max Point on Area Chart] = IF(MAXX(ALLSELECTED('Calender Table'[Week]), [Total Sales]) = [Total Sales],  MAXX(ALLSELECTED('Calender Table'[Week]), [Total Sales]),  BLANK()  ) | Finds the **maximum sales value** in the selected period and displays it on the area chart. |
| 7 | **MTD Avg Price** | [MTD Avg Price] = TOTALMTD([Avg price], 'Calender Table'[Date]) | Computes the **Month-To-Date (MTD) average price** |
| 8 | **MTD Avg Price KPI** | [MTD Avg Price KPI] = CONCATENATE("MTD Avg price : ", FORMAT([MTD Avg Price] / 1000, "$0.00K")) | Formats the **MTD average price** in **thousands ($K)** for KPI visualization. |
| 9 | **MTD Cars Sold** | [MTD Cars Sold ]= TOTALMTD(COUNT(car\_data[Car\_id]), 'Calender Table'[Date]) | Counts **the total number of cars sold** in the current month. |
| 10 | **MTD Cars Sold KPI** | [MTD Cars Sold KPI ]= CONCATENATE("MTD Cars Sold : ", FORMAT([MTD Cars Sold] / 1000, "$0.00K")) | KPI representation of **MTD cars sold** in thousands. |
| 11 | **MTD KPI** | [MTD KPI] = CONCATENATE("MTD Total Sales :",[MTD Total Sales]) | Represents **MTD total sales.** |
| 12 | **MTD KPI 1** | [MTD KPI 1] = CONCATENATE("MTD Total Sales : ",FORMAT([MTD Total Sales] / 1000000, "$0.00M" )) | KPI representation of **MTD total sales in millions.** |
| 13 | **MTD Total Sales** | [MTD Total Sales] = TOTALMTD(SUM(car\_data[Price ($)]), 'Calender Table'[Date]) | Computes **Month-to-Date total sales.** |
| 14 | **PYTD Avg Price** | [PYTD Avg Price] = CALCULATE([Avg price], SAMEPERIODLASTYEAR('Calender Table'[Date])) | Computes Previous **Year-To-Date (PYTD) average price**. |
| 15 | **PYTD Cars Sold** | [PYTD Cars Sold] = CALCULATE(COUNT(car\_data[Car\_id]), SAMEPERIODLASTYEAR('Calender Table'[Date])) | Counts the **number of cars sold last year** for the same period. |
| 16 | **PYTD Total Sales** | [PYTD Total Sales] = CALCULATE(SUM(car\_data[Price ($)]),SAMEPERIODLASTYEAR('Calender Table'[Date])) | Computes total sales for **the same period last year**. |
| 17 | **Sales Diff Colour** | [Sales Diff Colour] = IF([Sales Difference] > 0, "Green", "Red") | Assigns a color to indicate whether sales have **increased (Green) or decreased (Red).** |
| 18 | **Sales Difference** | [Sales Difference] = [YTD Total Sales]-[PYTD Total Sales] | Computes the difference between **this year's YTD sales and last year's YTD sale**s. |
| 19 | **Total Sales** | [Total Sales] = SUM(car\_data[Price ($)]) | Computes the **total sales of all cars**. |
| 20 | **YOY Avg Price Growth** | [YOY Avg Price Growth] = [Avg Price Diff] / [PYTD Avg Price] | Computes **Year-over-Year (YOY) growth of the average price**. |
| 21 | **YOY Cars Sold Growth** | [YOY Cars Sold Growth] = [Cars Sold Diff] / [YTD Cars Sold] | Computes **YOY growth for the number of cars sold**. |
| 22 | **YOY Sales Growth** | [YOY Sales growth] = [Sales Difference] / [PYTD Total Sales] | Computes **YOY growth for total sales**. |
| 23 | **YTD Avg Price** | [YTD Avg Price] = TOTALYTD([Avg price], 'Calender Table'[Date]) | Computes the **Year-To-Date (YTD) average price.** |
| 24 | **YTD Cars Sold** | [YTD Cars Sold] = TOTALYTD(COUNT(car\_data[Car\_id]), 'Calender Table'[Date]) | Counts the **total number of cars sold this year to date**. |
| 25 | **YTD Total Sales** | [YTD Total Sales] = TOTALYTD(SUM(car\_data[Price ($)]),'Calender Table'[Date]) | Computes **the total sales amount YTD**. |