Explanation

The first step is to check the quality of the Data. This can be done in Power BI by: *transform data -> View -> Column quality & Column Distribution*

Sometimes, it is needed to create a Calendar table. In this table, you will have all the days listed from the minimum date to the maximum date. It ensures completeness and consistency and is also useful when working with time series. This can be done by:

*New Table -> CALENDAR(MIN(Date), MAX(Date))*

*Month = FORMAT(Date, “MMMM”)*

Now, it can be interesting to add new columns that are better suited for analysis. I decided to create multiple new columns that will be useful for the visualization later.

* YTD Total Sales: Year-to-Date Total Sales is the cumulative sum of sales made during the year. This is the total revenue generated within the year.
* PYTD Total Sales: Previous-Year-to-Date Total Sales.

*PYTD Total Sales =*

*CALCULATE(SUM(Price), SAMEPERIODLASTYEAR(Date))*

* Sales difference: It helps assess the growth or decline in revenue. It is essential for financial planning…

*Sales difference = YTD – PYTD*

* YoY Sales Growth: Year-over-Year Sales Growth measures the percentage change in sales from one year to the next.

*YoY Sales Growth = Sales Difference / PYTD Total Sales*

* MTD Total Sales: Month-to-Date Total Sales represent the total sales accumulated during a month.

*MTD Total Sales = TOTALMTD(SUM(Price), Date)*

* MTD KPI: It offers a concise and actionable measure of sales performance.

*MTD KPI = CONCATENATE(“MTD Total Sales”, FORMAT((MTD Total Sales)/1’000’000, “$0.00M”))*

* AVG Price:

*AVG Price = SUM(Price) / COUNT(Car\_id)*

* *YTD AVG Price = TOTALYTD(AVG Price, Date)*
* *PYTD AVG Price = CALCULATE(AVG Price, SAMEPERIODLASTYEAR(Date))*
* AVG Price Diff and AVG Price Color
* *YoY AVG Price growth = AVG Price Diff / PYTD AVG Price*
* *MTD AVG Price = TOTAL MTD(AVG Price, Date)*
* *MTD AVG Price KPI = CONCATENATE(“MTD AVG Price”, FORMAT(MTD AVG Price/1000, “$0.00K”))*
* Same idea for Car Sold: YTD Cars Sold, PYTD Cars Sold, Cars Sold Diff, Car Sold Color, YoY Cars Sold Growth, MTD Cars Sold
* *MTD Cars Sold KPI = CONCATENATE(“MTD Cars Sold”, FORMAT(MTD Cars Sold/1000, “$0.00K”))*

!! Date used are the dates of the calendar table !!

In power BI, a useful feature is the ability to dynamically change the color of a visual based on the result: for instance, displaying it in green for positive results and in red for negative ones. How:

*New measure -> Sell Diff color = IF(Sales diff> 0, “Green”, “Red”)*

Then *formal visual -> Callout value -> fx -> Rules -> Sales Diff Color*

Graphs and Visuals

AREA CHART

* X-axis = week
* Y-axis= Sum of Price -> filter year basic filtering ->2023
* delete background
* can change the range of X and Y axis
* delete grid lines
* Highlight maximum point -> TOTAL Sales = SUM(Price) -> New measure -> Max point area chart = IF(MAXX(ALLLSELECTED(week, Total Sales) = Total Sales, MAXX …, BLANK())
* Legend off
* Markers -> max point
* Data labels -> on -> max point

DONUT CHART

* Legend -> colour
* Value -> YTD Total Sales

MAP

* Location -> dealer region
* Bubble size -> YTD Cars Sold
* Map setting -> dark
* Category labels -> on
* Bubbles -> data range

TABLE

* Columns -> company, YTD AVG Price, YTD Cars Sold, YTD Total Sales, %YTD Total Sales
* Style presets -> minimal
* YTD Cars Sold -> cond formatting -> Data bars
* Setting to -> YTD AVG Price -> Thousands, YTD Total Sales -> Millions
* SLICER  
  Field -> body style
* Options -> drop down