Coffee Shop Sales Analysis - Measures and Calculations using DAX:

DATE/CALENDAR TABLE:

1. creating date table: (starting date to end date)

Date Table = CALENDAR(MIN(Transactions[transaction_date]), MAX(Transactions[transaction_date]))

2. extracting month from date table: mmm denotes abreviation of month 3 letters eg: Jan

Month = FORMAT('Date Table'[Date],"mmm")

3. extracting month number from date table:

Month Number = MONTH('Date Table'[Date])

4. extracting month and year in new column:

Month Year = FORMAT('Date Table'[Date], "mmm yyyy")

TOTAL SALES ANALYSIS KPI:

1. adding sales column:

Sales = Transactions[unit_price] * Transactions[transaction_qty]

2. calc total sales using dax: new measure

Total Sales = SUM(Transactions[Sales])

MOM INCREASE BASED ON CURRENT AND PREVIOUS MONTH:

TOTAL SALES:

1. calc current month sales for selected month:

CM Sales = VAR selected_month = SELECTEDVALUE('Date Table'[Month])
        RETURN
        TOTALMTD(CALCULATE([Total Sales], 'Date Table'[Month] = selected_month), 'Date Table'[Date])

2. Previous month sales based on current month:

PM Sales = CALCULATE([CM Sales], DATEADD('Date Table'[Date], -1, MONTH))

3. Month on Month growth and difference

MoM Growth & Diff Sales =
   VAR month_diff = [CM Sales] - [PM Sales]
   VAR mom = ([CM Sales] - [PM Sales]) / [PM Sales]
   VAR _sign = IF(month_diff > 0, "+", "")
   VAR _sign_trend = IF(month_diff > 0, "▲", "▼")
   RETURN
   _sign_trend & " " & _sign & FORMAT(mom, "#0.0%" & " | " & _sign &
FORMAT(month_diff/1000, "0.0k")) & " " & "vs LM"

TOTAL ORDERS:

4. current month orders:

CM Orders = VAR selected_month = SELECTEDVALUE('Date Table'[Month])
     RETURN
     TOTALMTD(CALCULATE([Total Orders], 'Date Table'[Month] = selected_month),
'Date Table'[Date])

5. previous month orders:

PM Orders = CALCULATE([CM Orders], DATEADD('Date Table'[Date], -1, MONTH))

6. Month on Month growth and difference for orders:

MoM Growth & Diff Orders =
   VAR month_diff = [CM Orders] - [PM Orders]
   VAR mom = ([CM Orders] - [PM Orders]) / [PM Orders]
   VAR _sign = IF(month_diff > 0, "+", "")
   VAR _sign_trend = IF(month_diff > 0, "▲", "▼")
   RETURN
   _sign_trend & " " & _sign & FORMAT(mom, "#0.0%" & " | " & _sign &
FORMAT(month_diff/1000, "0.0k")) & " " & "vs LM"

TOTAL QUANTITY SOLD:

7. total quantity:

Total Quantity Sold = SUM(Transactions[transaction_qty])

8. current month quantity:

CM Quantity = VAR selected_month = SELECTEDVALUE('Date Table'[Month])
     RETURN
     TOTALMTD(CALCULATE([Total Quantity Sold], 'Date Table'[Month] =
selected_month), 'Date Table'[Date])

9. previous month quantity:

PM Quantity = CALCULATE([CM Quantity], DATEADD('Date Table'[Date], -1, MONTH))

10. MoM difference for quantity:

MoM Growth & Diff Quantity =
    VAR month_diff = [CM Quantity] - [PM Quantity]
    VAR mom = ([CM Quantity] - [PM Quantity]) / [PM Quantity]
    VAR _sign = IF(month_diff > 0, "+", "")
    VAR _sign_trend = IF(month_diff > 0, "▲", "▼")
    RETURN
    _sign_trend & " " & _sign & FORMAT(mom, "#0.0%" & " | " & _sign &
FORMAT(month_diff/1000, "0.0k")) & " " & "vs LM"

CALENDAR HEAT MAP:

1. creating new column "Day name" for date table:

Day Name = FORMAT('Date Table'[Date],"DDD")

2. creating "week number" column in date table

Week Number = WEEKNUM('Date Table'[Date],2)

3. creating "day number" column for calender in date table :

Day Number = FORMAT('Date Table'[Date],"D")

4. creating "week day number" column in date table

Week Day Number = WEEKDAY('Date Table'[Date],2)

WEEKDAY / WEEKEND:

Weekday / Weekend = IF('Date Table'[Day Name] = "Sat" || 'Date Table'[Day Name] = "Sun",
"Weekend", "Weekday")

TOTAL SALES BY STORE LOCATION:

1. creating placeholder for 0 values:

Placeholder = 0

2. Label for store location = SELECTEDVALUE(Transactions[store_location]) & " | " &
FORMAT([Total Sales]/1000, "$0.00k")

DAILY SALES ANALYSIS USING AVERAGE LINE:

1. Daily Avg Sales = AVERAGEX(ALLSELECTED(Transactions[transaction_date]), [Total Sales])

2. Colour For Bars = IF([Total Sales]>[Daily Avg Sales], "Above Average", "Below Average")

SALES BY PRODUCT CATEGORY:

3. Label for Product Category = SELECTEDVALUE(Transactions[product_category]) & " | " & FORMAT([Total Sales]/1000, "$0.00k")

4.New Mom Label =
   VAR month_diff = [CM Sales] - [PM Sales]
   VAR mom = ([CM Sales] - [PM Sales]) / [PM Sales]
   VAR _sign = IF(month_diff > 0, "+", "")
   VAR _sign_trend = IF(month_diff > 0, "▲", "▼")
   RETURN
   _sign_trend & " " & _sign & FORMAT(mom, "#0.0%")

SALES BY PRODUCT TYPE:

1. Label for Product Type = SELECTEDVALUE(Transactions[product_type]) & " | " & FORMAT([Total Sales]/1000, "$0.00k")

SALES BY DAYS AND HOURS:

1. extracting hour from transaction_date and placing in new column:

Hour = HOUR(Transactions[transaction_time])

2. ToolTip for Hour = "Hour No: " & " " & FORMAT(AVERAGE(Transactions[Hour]),0)