**DAX Queries**

1. **DAX Queries for new Date / Calendar Table as required in many Projects**

**Create a DATE/CALENDAR Table**

Date Table = CALENDAR(MIN(Transactions[transaction\_date]), MAX(Transactions[transaction\_date]))

**Create a month column with first 3 initials of the month**

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

**Create a month number column**

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

**Create a column Month Year**

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

**Create a column Day Name**

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

**Create a column Week Number**

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

***# We use 2 as Sunday =1, and Monday = 2 and so on, and the 2 here means count the week from Monday***

**Create a column Day Number**

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

**Create a column Week Day Number**

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

**Create a column Weekday / Weekend**

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

1. **DAX Queries for Transactions Table**

**Create a new Sales column**

Sales = Transactions[unit\_price] \* Transactions[transaction\_qty]

**Create a new measure Total Sales**

Total Sales = SUM(Transactions[Sales])

**Create a new measure CM Sales (Current Month Sales)**

CM Sales = VAR selected\_month = SELECTEDVALUE('Date Table'[Month])

            RETURN

            TOTALMTD(CALCULATE([Total Sales],'Date Table'[Month] = selected\_month),'Date Table'[Date])

**Create a new measure PM Sales (Previous Month Sales)**

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

**Create a new measure MoM Growth & Diff Sales (Month on Month Growth and Difference in sales)**

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"

***# Here, mom = Month on Month, CM = Current Month, PM = Previous Month, LM = Last Month***

**Create a new measure Total Orders**

Total Orders = DISTINCTCOUNT(Transactions[transaction\_id])

**Create a new measure CM Orders (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])

**Create a new measure PM Orders (Previous Month Orders)**

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

**Create a new measure MoM Growth & Diff Orders (Month on Month Growth and Difference in 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"

**Create a measure Total Quantity Sold**

Total Quantity Sold = SUM(Transactions[transaction\_qty])

**Create a new measure CM Quantity (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])

**Create a new measure PM Quantity (Previous Month Quantity)**

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

**Create a new measure MoM Growth & Diff Quantity (Month on Month Growth and Difference in 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"

**Create a new measure Daily Avg Sales**

Daily Avg Sales = AVERAGEX(ALLSELECTED(Transactions[transaction\_date]), [Total Sales])

**Create a new measure Colour for Bars**

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

**Create a new column Hour**

Hour = HOUR(Transactions[transaction\_time])