**POWER BI QUERIES**

**COFFEE SHOP SALES PROJECT**

**1. NEW TABLE DIM\_DATE**

**DIM\_DATE \_ NEW COLUMN**

1 Dim\_Date = CALENDAR(MIN(Transactions[transaction\_date]), MAX(Transactions[transaction\_date]))

2 Month Number = MONTH('Dim\_date'[transaction\_date])

3 Month = FORMAT('Dim\_date'[transaction\_date],"MMM")

4 Month Year = FORMAT('Dim\_date'[transaction\_date],"MMM YyYY")

5 Day name = FORMAT('Dim\_date'[transaction\_date],"DDD")

6 Week Day Number = WEEKDAY('Dim\_date'[transaction\_date],2)

7 Week Number = WEEKNUM(Dim\_date[transaction\_date],2)

8 Day Number = Format(Dim\_date[transaction\_date],"D")

9 Weekday / weekend = IF(Dim\_date[Day name] = "Sat" || Dim\_date[Day name] = "Sun", "Weekend", "Weekday")

10 Hour = HOUR(Transactions[transaction\_time])

**2.MODELING DIM DATE & TRANSACTION**

**TRANSACTION**

1 New column =.Sales = transaction\_qty \* unit\_price

**MEASURE**

1 Total\_Sales = Sum('transaction'[transaction\_sales])

2 Total\_Qty = Sum('transaction'[transaction\_Qty])

3 Total\_Orders = Count(‘transaction'[transaction\_Id])

**MEASURE**

**MOM \_TOTAL\_SALES**

**CM sales** = var select\_month = SELECTEDVALUE(Dim\_date[Month])

RETURN

TOTALMTD(CALCULATE(Transactions[Total\_sales], Dim\_date[Month] = select\_month), Dim\_date[transaction\_date])

**PM Sales** = CALCULATE( [CM sales], DATEADD(Dim\_date[transaction\_date], -1, MONTH))

**MOM 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, " 0.0")) & " vs LM"

**MOM \_TOTAL\_QTY\_SOLD**

**CM sales** = var select\_month = SELECTEDVALUE(Dim\_date[Month])

RETURN

TOTALMTD(CALCULATE(Transactions[Total\_Qty], Dim\_date[Month] = select\_month), Dim\_date[transaction\_date])

**PM Sales** = CALCULATE( [CM Qty], DATEADD(Dim\_date[transaction\_date], -1, MONTH))

**MOM SALES** =

Var month\_diff = [CM Qty] - [PM Qty]

Var mom = ([CM Qty] - [PM Qty]) / [PM Qty]

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, " 0.0")) & " vs LM"

**MOM \_TOTAL\_ORDERS**

**CM sales** = var select\_month = SELECTEDVALUE(Dim\_date[Month])

RETURN

TOTALMTD(CALCULATE(Transactions[Total\_Orders], Dim\_date[Month] = select\_month), Dim\_date[transaction\_date])

**PM Sales** = CALCULATE( [CM Orders], DATEADD(Dim\_date[transaction\_date], -1, MONTH))

**MOM SALES** =

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, " 0.0")) & " vs LM"

**SALES BY STRORE\_LOCATION**

Step 1: New Measure : **Placeholder** = 0, **Lable For Store Location** = SELECTEDVALUE(Transactions[store\_location]) & " | " & FORMAT([Total\_sales]/1000, "0.00K") >< **Explaination: cam see** [store\_location] & Total\_sales

• Visualize sales data by different store locations.

• Include month-over-month (MoM) difference metrics based on the selected month in the slicer.

• Highlight MoM sales increase or decrease for each store location to identify trends.

USE CLUSTERED BAR CHART

Y - axis = Store\_location

X - axis = Total\_sales & Placeholder = 0

Step 2: Assign value

• Total\_sales = **MOM\_SALES**

• Placeholder = **Lable For Store Location**

**SALES BY PRODUCT CATEGORY & SALES BY PRODUCT TYPE SIMILAR**

**Measure:**

**• Lable For Product Category** = SELECTEDVALUE(Transactions[product\_category]) & " | " & FORMAT([Total\_sales]/1000, "0.00K")

•  **Lable For Product type** = SELECTEDVALUE(Transactions[product\_type]) & " | " & FORMAT([Total\_sales]/1000, "0.00K")

**SALES TREND OVER THE PERIOD**

◦ Daily Sales Analysis with Average Line:

◦ ﻿﻿Display daily sales for the selected month with a line chart.

◦ ﻿﻿Incorporate an average line on the chart to represent the average daily sales.

◦ ﻿﻿Highlight bars exceeding or falling below the average sales to identify exceptional sales days.

Step1: USE STACKED COLUMN CHART

Y - axis = Total\_sales

X - axis = Transaction\_date for Table Transaction

Step 2: **Measure** Daily AVG Sales = AVERAGEX(ALLSELECTED(Transactions[transaction\_date]), [Total\_sales])

Use: Add further analysis to your visual -> constant line -> apply setting to -> line -> value = **Daily AVG Sales**

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

**Explaination: can use change color column ” TOTAL\_SALES” Above Avg** is high value **light color**

**Below Avg** is low value **dark color**

NEW

▪ **Tool Lip - Calendar Chart**

**▪ Tool Lip - Day & Hour Chart**: Measure **TT for Hour** = "Hour No:" & " " & FORMAT(AVERAGE(Transactions[Hour]),0)