DAX Measures

1. AUTO_DATE :
```
AUTO_DATE = DATATABLE("Options",STRING,{{"●"}})
```
2. Calendar :
```
Calendar =
        ADDCOLUMNS(CALENDAR("01/01/"&[Prev_Year],"31/12/"&[Curr_Year]),"Year",YEAR([D
        ate]),
        "Month", FORMAT([Date],"mmm"),
        "Month-Yr", FORMAT([Date],"mmm-yy"),
        "Day",FORMAT([Date],"ddd"),
        "MonthIndex",MONTH([Date]),
        "Quarter","Q"&QUARTER([Date]))
```
3. Configuration:
    a.
    ```
    Curr_Year = var yr=2024
            var Sys_Yr=YEAR([System_Date])
            RETURN IF(ISFILTERED(AUTO_DATE[Options]),Sys_Yr,yr)
    ```
    b.
    ```
    Prev_Year = [Curr_Year]-1
    ```
    c.
    ```
    Selected_Period = SELECTEDVALUE(Time_Period[Value])
    ```
    d.
    ```
    System_Date = NOW()
    ```
    e.
    ```
    YTDMonth = var sysMonth = MONTH([System_Date])
                var SelectYTDMonth = SELECTEDVALUE(Manual_Calendar[MonthIndex])
                RETURN IF(ISFILTERED(AUTO_DATE[Options]),sysMonth,SelectYTDMonth)
    ```

4. Customer_Measures:
    a.
    ```
    Average_Rating_Per_Category = AVERAGE('MasterTable'[rating])
    ```
    b.
    ```
    Customer_Growth =
            var CUSTCY = Customer_Measures[Period_Customers_CY]
            var CUSTPY = Customer_Measures[Period_Customers_PY]
            RETURN DIVIDE(CUSTCY-CUSTPY,CUSTPY)
    ```
    c.
    ```
    Lost_Customers =
             var FilterCustomers = FILTER(
                SUMMARIZE(MasterTable,MasterTable[customer_id]),
                [Previous_Year_value]>0 && [Current_Year_value]<=0
            )

            RETURN CALCULATE([Period_Customers], FilterCustomers)
    ```
    d.
    ```
     Lost_Customers_Sale =
             var FilterCustomers = FILTER(
                SUMMARIZE(MasterTable,MasterTable[customer_id]),
                [Previous_Year_value]>0 && [Current_Year_value]<=0
            )

            RETURN CALCULATE([Period_Value], FilterCustomers)
    ```
    e.
    ```
    New_Customers = var FilterCustomers = FILTER(
                SUMMARIZE(MasterTable,MasterTable[customer_id]),
                [Previous_Year_value]<=0 && [Current_Year_value]>0
            )

            RETURN CALCULATE([Period_Customers], FilterCustomers)
    ```
    f.
    ```
    New_Customers_Sale =
    ```

```
 var FilterCustomers = FILTER(
    SUMMARIZE(MasterTable,MasterTable[customer_id]),
    [Previous_Year_value]<=0 && [Current_Year_value]>0
)

RETURN CALCULATE([Period_Value], FilterCustomers)
```

g.
```
Period_Customers =
VAR selected_period = [Selected_Period]
var selected_Month = [YTDMonth]
var StartIndex = selected_Month-selected_period

VAR Period_Value =
CALCULATE([Total_customer_Count],'Calendar'[MonthIndex]>=StartIndex,
'Calendar'[MonthIndex]<selected_Month)

RETURN IF(selected_period=0,[YTD_Customer_Counts],Period_Value)
```

h.
```
Period_Customers_CY = var cy = [Curr_Year]
RETURN
CALCULATE([Period_Customers],'Calendar'[Year]= cy)
```

i.
```
Period_Customers_PY = var py = [Prev_Year]
RETURN
CALCULATE([Period_Customers],'Calendar'[Year]=py)
```

j.
```
Period_Feedbacks =
VAR selected_period = [Selected_Period]
var selected_Month = [YTDMonth]
var StartIndex = selected_Month-selected_period

VAR Period_Value =
CALCULATE([Total_feedbacks],'Calendar'[MonthIndex]>=StartIndex,
'Calendar'[MonthIndex]<selected_Month)

RETURN IF(selected_period=0,[YTD_Feedback],Period_Value)
```

k.
```
Repeat_Customer_Count_CY = var CY = [Curr_Year]
return
CALCULATE([Repeat_Customers], 'Calendar'[Year]=CY)
```

l.
```
Repeat_Customer_Count_PY = var PY = [Prev_Year]
return
CALCULATE([Repeat_Customers], 'Calendar'[Year]=PY)
```

m.
```
Repeat_Customer_Sale_CY = var CY = [Curr_Year]
return
CALCULATE([Repeat_Customers_Sales], 'Calendar'[Year]=CY)
```

n.
```
Repeat_Customer_Sale_PY = var PY = [Prev_Year]
return
CALCULATE([Repeat_Customers_Sales], 'Calendar'[Year]=PY)
```

o.
```
Repeat_Customers =
var CustomerData = SUMMARIZE(MasterTable,MasterTable[customer_id])
var FilterObj =
FILTER(CustomerData,[Period_Orders]>=2)

RETURN CALCULATE([Period_Customers],FilterObj)
```

p. Repeat_Customers_Dynamic =

```
var OrderCount = MAX(Order_Filter_Table[Order_Filter_Table])
var CustomerData = SUMMARIZE(MasterTable,MasterTable[customer_id])
var FilterObj =
FILTER(CustomerData,[Period_Orders]>=OrderCount)
var val = CALCULATE([Period_Customers],FilterObj)
return IF(ISBLANK(val),0,val)
```

q. Repeat_Customers_Sales =

```
var CustomerData = SUMMARIZE(MasterTable,MasterTable[customer_id])
var FilterObj =
FILTER(CustomerData,[Period_Orders]>=2)

RETURN CALCULATE([Period_Value],FilterObj)
```

r. TopN_Customer_by_Value =

```
VAR RankValue =  RANKX(ALL(MasterTable[customer_name]),[Period_Value], ,DESC)
var _Rank = SELECTEDVALUE(Rank_Table[Value])
var Rank_TopN_Value = IF(RankValue<=_Rank,[Period_Value], BLANK())
return IF(_Rank=0,[Period_Value],Rank_TopN_Value)
```

s. Total_customer_Count = DISTINCTCOUNT(MasterTable[customer_id])

t. Total_feedbacks = DISTINCT(MasterTable[feedback_id])

```
YTD_Customer_Counts = var YTDSysMonth =[YTDMonth]
return
CALCULATE([Total_customer_Count],'Calendar'[MonthIndex]<=YTDSysMonth)
```

u. YTD_Feedback = var YTDSysMonth =[YTDMonth]

```
return
CALCULATE([Total_feedbacks],'Calendar'[MonthIndex]<=YTDSysMonth)
```

5. Date_Category_Selection = {

```
("Date", NAMEOF('Calendar'[Date]), 0),
("Month", NAMEOF('Calendar'[Month]), 1),
("Month-Yr", NAMEOF('Calendar'[Month-Yr]), 2),
("Quarter", NAMEOF('Calendar'[Quarter]), 3),
("Year", NAMEOF('Calendar'[Year]), 4)
}
```

6. Dynamic_Titles:

a. Area_Rk_Title = SELECTEDVALUE(Rank_Table[Option])&" Area "&[Selected_Sale_or_QTY]

b. Customer_Rank_Title = SELECTEDVALUE(Rank_Table[Option])&" Customer "&[Selected_Sale_or_QTY]

c. Product_Rk_Title = SELECTEDVALUE(Rank_Table[Option])&" Products "&[Selected_Sale_or_QTY]

d. Sale_and_CY_year_Title = [Select_Timeperiod_Label]&" "&[Selected_Sale_or_QTY]&" "&[Curr_Year]

e. Sale_and_PY_year_Title = [Select_Timeperiod_Label]&" "&[Selected_Sale_or_QTY]&" "&[Prev_Year]

f. Sale_Option_CY_Year_Title = SELECTEDVALUE(Value_Options[Value_Type])&" "&Configuration[Curr_Year]

g. Sale_Option_PY_Year_Title = SELECTEDVALUE(Value_Options[Value_Type])&" "&Configuration[Prev_Year]

h. `Select_Timeperiod_Label = SELECTEDVALUE(Time_Period[Options])`

i. `Selected_Sale_or_QTY = SELECTEDVALUE(Value_Options[Value_Type])`

7. Inventory_Measures:

a. `Available_Stock = [Period_Inventory_Value]-[Period_Value]`

b. `Available_Stock% = DIVIDE([Available_Stock],[Period_Inventory_Value])`

c.
```
damaged_stock = CALCULATE([Period_Inventory_Value],
Inventory[Stock_Type]="damaged_stock")
```

d.
```
Damaged_stock% = DIVIDE([damaged_stock],[Period_Inventory_Value])
        Inventory_Value = SUM(Inventory[Value])
        Inventory_YTD = var YTDSysMonth =[YTDMonth]
        return
        CALCULATE([Inventory_Value],'Calendar'[MonthIndex]<=YTDSysMonth)
```

e.
```
Period_Inventory_Value =
        VAR selected_period = [Selected_Period]
        var selected_Month = [YTDMonth]
        var StartIndex = selected_Month-selected_period

        VAR Period_Value =
        CALCULATE([Inventory_Value],'Calendar'[MonthIndex]>=StartIndex,
        'Calendar'[MonthIndex]<selected_Month)

        RETURN IF(selected_period=0,[Inventory_YTD],Period_Value)
```

f. `Sale_Stock% = DIVIDE([Period_Value],[Period_Inventory_Value])`

g.
```
stock_received = CALCULATE([Period_Inventory_Value],
Inventory[Stock_Type]="Stock_received")
```

8. Marketing_Measures:

a. `Marketing_Value = SUM(Marketing[Value])`

b.
```
Marketing_YTD = var YTDSysMonth =[YTDMonth]
            return
            CALCULATE([Marketing_Value],'Calendar'[MonthIndex]<=YTDSysMonth)
```

c.
```
Period_Marketing_Value =
        VAR selected_period = [Selected_Period]
        var selected_Month = [YTDMonth]
        var StartIndex = selected_Month-selected_period

        VAR Period_Value =
        CALCULATE([Marketing_Value],'Calendar'[MonthIndex]>=StartIndex,
        'Calendar'[MonthIndex]<selected_Month)

        RETURN IF(selected_period=0,[Marketing_YTD],Period_Value)
```

9. `Order_Filter_Table = GENERATESERIES(0, 10, 1)`

10.
```
Rank_Table = DATATABLE("Option",STRING,"Value",INTEGER,"Sort",INTEGER,
        {
            {"Default",0,0},
            {"Top 5",5,1},
            {"Top 10",10,2},
```

```
        {"Top 20",20,3},
        {"Top 50",50,4},
        {"Top 100",100,5}
    })
```

11. Sales_Measures:

a.
```
Current_Year_value = var Curryear = [Curr_Year]
                     RETURN
                     CALCULATE([Period_Value],'Calendar'[Year]=Curryear)
```

b.
```
CY_PY = DIVIDE([Current_Year_value]-[Previous_Year_value], [Previous_Year_value])
```

c.
```
CY_PY_Growth% = var val=DIVIDE([Current_Year_value]-[Previous_Year_value],
[Previous_Year_value])
return if(ISBLANK(val),0,val)
```

d.
```
Order_ID_Count = DISTINCTCOUNT(MasterTable[order_id])
```

e.
```
Period_Orders =
        VAR selected_period = [Selected_Period]
        var selected_Month = [YTDMonth]
        var StartIndex = selected_Month-selected_period

        VAR Period_Value =
        CALCULATE([Order_ID_Count],'Calendar'[MonthIndex]>=StartIndex,
        'Calendar'[MonthIndex]<selected_Month)

        RETURN IF(selected_period=0,[YTD],Period_Value)
```

f.
```
Period_Value =
        VAR selected_period = [Selected_Period]
        var selected_Month = [YTDMonth]
        var StartIndex = selected_Month-selected_period

        VAR Period_Value = CALCULATE([Value],'Calendar'[MonthIndex]>=StartIndex,
        'Calendar'[MonthIndex]<selected_Month)

        RETURN IF(selected_period=0,[YTD],Period_Value)
```

g.
```
Positive_&_Negative_BG_Growth_Color = IF([CY_PY_Growth%]>=0,"#C1F6B9","#FFDEDE")
```

h.
```
Positive_&_Negative_Border_Growth_Color =IF([CY_PY_Growth%]>=0,"#085512","#91000A")
```

i.
```
Positive_&_Negative_Txt_Growth_Color = IF([CY_PY_Growth%]>=0,"#085512","#91000A")
```

j.
```
Previous_Year_value = var Curryear = [Prev_Year]
        RETURN
        CALCULATE([Period_Value],'Calendar'[Year]=Curryear)
```

k.
```
TopN_Area_by_Value =
        VAR RankValue =  RANKX(ALL(MasterTable[area]),[Period_Value], ,DESC)
        var _Rank = SELECTEDVALUE(Rank_Table[Value])
        var Rank_TopN_Value = IF(RankValue<=_Rank,[Period_Value], BLANK())
        return IF(_Rank=0,[Period_Value],Rank_TopN_Value)
```

l.
```
TopN_Product_by_Value =
        VAR RankValue =  RANKX(ALL(MasterTable[product_name]),[Period_Value], ,DESC)
        var _Rank = SELECTEDVALUE(Rank_Table[Value])
        var Rank_TopN_Value = IF(RankValue<=_Rank,[Period_Value], BLANK())
        return IF(_Rank=0,[Period_Value],Rank_TopN_Value)
```

m.
```
Value = SUM(MasterTable[Value])
```

n.
```
YTD = var YTDSysMonth =[YTDMonth]
        return
        CALCULATE([Value],'Calendar'[MonthIndex]<=YTDSysMonth)
```

o.
```
YTD_Orders = var YTDSysMonth =[YTDMonth]
        return
        CALCULATE([Order_ID_Count],'Calendar'[MonthIndex]<=YTDSysMonth)
```

12. Value_Options:

a.
```
Value_Options = SUMMARIZE(MasterTable,MasterTable[Value_Type])
```