**COMMONLY USED DAX EXPRESSIONS/FUNCTIONS**

* **WEEKDAY:**

'Date'[Date],1

* **IF:**
* Age Breakdown =
* IF('Customer'[Age]>=55,"55+",
* IF('Customer'[Age]>=45,"45-54",
* IF('Customer'[Age]>=35,"35-44",
* "18-34")))
* **FORMAT**:

Month Year =

// MM-YYYY

FORMAT(

    'Date'[Date],

    "MM-YYYY")

// You can also do for MMM--JAN or MMMM--JANUARY

// DDD--MON or DDDD--MONDAY

//The above still applies to years

* **RELATED:**
* Temperature Key =
* RELATED('Sales Territory'[Sales Territory Region])
* //OR
* Temperature Key =
* RELATED('Sales Territory'[Sales Territory Region]) & RELATED('Date'[Month Number Of Year])
* **COUNTROWS:**
* Total Transactions =
* COUNTROWS(
* RELATEDTABLE('Internet Sales')
* )
* ) **SWITCH:**

**Region Volume =**

**SWITCH(TRUE(),**

**'Sales Territory'[Total Transactions] >= 7000, "High Volume",**

**'Sales Territory'[Total Transactions] >= 4000, "Medium volume",**

**'Sales Territory'[Total Transactions] >= 1, "Low Volume",**

**"N/A")**

* **MAXX**
* Last purchase Date =
* MAXX(
* RELATEDTABLE('Internet Sales'),
* 'Internet Sales'[Order Date])
* **DIVIDE:**
* Profit Margin =
* DIVIDE(
* [Profit],
* [Total Sales]
* )
* **DATE**
* calender date table =
* CALENDAR("1/1/2015","12/31/2015")
* **CALCULATE:**

**Total Sales (All countries) =**

**//RETURN THE [TOTAL SALES] FOR ALL COUNTRIES**

**CALCULATE(**

**[Total Sales],**

**ALL('Sales Territory'[Sales Territory Country])**

**)**

* **CALCULATE WITH ISBLANK:**
* Total Sales (All countries) =
* //RETURN THE [TOTAL SALES] FOR ALL COUNTRIES
* IF(
* ISBLANK([Total Sales]),
* BLANK(),
* CALCULATE(
* [Total Sales],
* ALL('Sales Territory'[Sales Territory Country])
* ))
* **ALL/REMOVEFILTER FUNCTIONS:**
* **ALL:**
* Total Sales (All countries) =
* //RETURN THE [TOTAL SALES] FOR ALL COUNTRIES
* IF(
* ISBLANK([Total Sales]),
* BLANK(),
* CALCULATE(
* [Total Sales],
* ALL('Sales Territory'[Sales Territory Country])
* ))
* **REMOVINGFILTER:**
* Total Sales (All countries) =
* //RETURN THE [TOTAL SALES] FOR ALL COUNTRIES
* IF(
* ISBLANK([Total Sales]),
* BLANK(),
* CALCULATE(
* [Total Sales],
* REMOVEFILTERS('Sales Territory'[Sales Territory Country])
* ))
* **REMOVINGFILTER(With Removing/ignoring multiple filters)**
* Total Sales (All countries) =
* //RETURN THE [TOTAL SALES] FOR ALL COUNTRIES
* IF(
* ISBLANK([Total Sales]),
* BLANK(),
* CALCULATE(
* [Total Sales],
* REMOVEFILTERS('Sales Territory'[Sales Territory Country]),
* REMOVEFILTERS('Date'[French Day Name Of Week]
* )))

**Instead of using ALL() Function to remove filter you can use the function REMOVEFILTER**

* **REMOVEFILTER**
* Total Sales (All countries) =
* //RETURN THE [TOTAL SALES] FOR ALL COUNTRIES
* IF(
* ISBLANK([Total Sales]),
* BLANK(),
* CALCULATE(
* [Total Sales],
* REMOVEFILTERS('Sales Territory'[Sales Territory Country])
* ))
* Total sales(united states) =
* CALCULATE(
* [Total Sales],
* 'Sales Territory'[Sales Territory Country] == "United States"
* )
* **CAN USE MULTIPLE REMOVE FILTERS:**
* Total Sales (All countries) =
* //RETURN THE [TOTAL SALES] FOR ALL COUNTRIES
* IF(
* ISBLANK([Total Sales]),
* BLANK(),
* CALCULATE(
* [Total Sales],
* REMOVEFILTERS('Sales Territory'[Sales Territory Country]),
* 'Date'[Year]=2007
* ))

**CONDITIONAL FORMATING IN DAX**

* **OR ||**
* Total sales (US & Canada) =
* CALCULATE(
* [Total Sales],
* 'Sales Territory'[Sales Territory Country] == "United States" || 'Sales Territory'[Sales Territory Country] == "canada"
* )

**You can also use IN instead of ||**

* Total Sales (US & Canada) =
* CALCULATE(
* [Total Sales],
* 'Sales Territory'[Sales Territory Country] IN {"United States", "Canada"}
* )
* **TIME SERIES ANALYSIS**
* **YTD(YEAR TO DATE): Adds total sales of jan to feb and for march is jan + feb +march etc**
* Year to Date sales =
* TOTALYTD(
* [Total Sales],
* 'Date'[Date])
* **Fisical YTD: This specifies when our year begins or end. Lets say you have a date column running from jan to dec but when we specify that our financial year ends at June(“06/30”) the sales will begin counting again as if its new financial year from july**
* **fisical YTD sales =**
* **TOTALYTD(**
* **[Total Sales],**
* **'Date'[Date],**
* **"06/30")**
* **TotalYTD (for filtering specific conditions): expl when you want to find YTD sales for only weekday excluding weekends**
* fisical YTD sales =
* TOTALYTD(
* [Total Sales],
* 'Date'[Date],
* 'Date'[Day Number Of Week] IN{2,3,4,5,6})
* **SAMEPERIODLASTYEAR: Takes the current month sales eg June 2005 and goes back to last year and get June 2004 sales**
* Prior Year Sales =
* CALCULATE(
* [Total Sales],
* SAMEPERIODLASTYEAR(
* 'Date'[Date]
* ))
* **SEMIADDITIVE MEASURES: These are balances**
* **LASTDATE: Returns last date of the date**
* Product inventory closing balance(last date) =
* CALCULATE(
* [Product inventory],
* LASTDATE( 'Date'[Date]
* ))
* **LASTNONBLANK: Returns last date that only has values**
* Closing balance (non blank) =
* CALCULATE(
* [Product inventory],
* LASTNONBLANK(
* 'Date'[Date],
* [Product inventory]
* ))
* **OPENINGBALANCEMONTH: goes back to the prior month it gets all the days of the prior month and then grabs the last date of the prior month and then it returns the product inventory for the last day of the prior month, and thats what becomes your opening balance for this month**
* Opening balance month =
* OPENINGBALANCEMONTH(
* [Product inventory],
* 'Date'[Date])

**If you have the blanks in the months use** **PARALLELPERIOD**

* **PARALLELPERIOD**