

## DAX Formulas

weeknum => weekNum( Date table name)

As per dataset & industry standard  
weekend = Friday & Saturday



In order to do this make a new column

day-type =

var wkd = weekDay( Date table name)

return if (wkd > 5, "weekend", "week day")

! Power BI takes weekday as

x S = 1

wkd > 5 x M = 2

x T = 3

x W = 4

x Th. = 5

✓ Fr. = 6

✓ Sa = 7

so this formula will return weekend value in dayname column if wkd > 5, else it will paste weekday.

To get the total number of days present in the data.

In our case, we have data from May to July. So 92 days.

## Date diff

Has 3 parameters

① Date 1 => Start date

② Date 2 => End Date

③ Interval => This parameter counts the

No. of Occurrence of the argument filled. For eg:

Argument = Year  
return value = 1

{ Date 1 = 01/01/2011  
Date 2 = 15/12/2012 }

Argument = Quarter  
return value = 7

Argument = Integer  
return value = 714 (Showing there are 714 days)

## DAX Code

DateDiff( [A], [B], "D", 1 ) - 1

= DateDiff(Min(date), Max(date)), DAY) + 1

+1 is used to include the min date & max date.

DateDiff() does not include the start & end date.

### Booking % by Platform

DAX code =>  
(consists of 2 parts)

Booking % by Platform = DIVIDE([Total Bookings],  
CALCULATE([Total Bookings],  
ALL(fact\_bookings[booking\_platform]))\*100)



- ① Calculating the total number of bookings for each platform.  
CALCULATE() has 2 arguments :- measure to evaluate  
filter context.

In our DAX, measure to evaluate is Total Bookings. It calculates the total no. of bookings.

Filter Context in our DAX is ALL(fact\_booking[booking-platform]), this means that Calculate() will consider all bookings

### ADR

Average Daily Rate tells the average revenue generated per occupied room in a given period.

$$\text{ADR} = \frac{\text{Total Revenue}}{\text{Occupied Room Nights}}$$

For instance

Hotel generates  $\Rightarrow \$10,000$  (total occupied rooms over a month)

Hotel has 100 occupied rooms per night

$$\text{ADR} = \frac{10,000}{100} = \$100 \text{ per night}$$

### Revenue change %

Week over week.

Revenue WoW change % =

Var selv = IF(HASONEFILTER(dim\_date[wn]), SELECTEDVALUE(dim\_date[wn]), MAX(dim\_date[wn]))

var revcw = CALCULATE([Revenue], dim\_date[wn] = selv)

var revpw = CALCULATE([Revenue], FILTER(ALL(dim\_date), dim\_date[wn] = selv - 1))

return

DAX  $\Rightarrow$  return  
DIVIDE(revcw,revpw,0)-1

## ① what is week over week ?

It is a metric which means comparing data from one week to previous week.

For eg.

Revenue growth of 2%. WoW means that last week had 2% more revenue than previous week.

Comparing WoW means comparing any 7 day period to the previous 7 days.

### Week on Week Generic Formula

$$\text{WoW change} = \left( \left( \frac{\text{Any Metric}}{\text{The same metric in previous week}} \right) - 1 \right) \times 100$$

\* WoW is shown as a %age formula, so  $\times 100$  is used.

## ② Why do we use the $-1$ in the formula

For eg. Case I without using  $-1$

Sales of Current week = 2

" " previous " = 1

By using the formula above we shall get

$$\frac{2}{1} = \text{i.e. } 200\%$$

So statement would be that  
WoW was 200% or "this week  
saw 200% increase in sales"

For eg. Case II using  $-1$

$$\left( \frac{2}{1} \right) - 1 = 2 - 1 = 1$$

So we can say that this week saw 100% increase in sales

```

Revenue WoW change % =
Var selv = IF(HASONEFILTER(dim_date[wn]),SELECTEDVALUE(dim_date[wn]),MAX(dim_date[wn]))
var revcw = CALCULATE([Revenue],dim_date[wn]= selv)
var revpw = CALCULATE([Revenue],FILTER(ALL(dim_date),dim_date[wn]= selv-1))
return
DIVIDE(revcw,revpw,0)-1

```

① selv  $\Rightarrow$  This variable is used to store the current week.

The IF statement checks if there is a filter on dim\_date [wn] table.

If (filter on dim\_date[wn] = true) :

return (selected value of dim\_date [wn])

else :

return ( max(dim\_date [wn]))

② revcw  $\Rightarrow$  variable is used to calculate the revenue for the current week.

It is calculated using CALCULATE() which filters the revenue table to only include rows where dim\_date [wn] = selv

③ revpw  $\Rightarrow$  variable is used to calculate the revenue for the previous week.

It is calculated using CALCULATE() which filters the revenue table to only include rows where dim\_date [wn] = selv-1





