DAX Formulas Learned & Used

Key Measures:

1.ABS Error =

```
SUMX(DISTINCT(dim_date[month]),
    SUMX(DISTINCT(dim_product[product_code]),
        ABS([Net Error])))
```

2.ABS Error % = DIVIDE([ABS Error],[Forecast Qty],0)

3. Ads & Promations = SUM(fact_actuals_estimates[ads_promation_cost])

4. Atliq MS % =

```
CALCULATE([Market Share %], marketshare[manufacturer] = "atliq")
```

5.Forecast Accuracy % =

```
IF('Key Measures'[ABS Error %]<>BLANK(),
    1-'Key Measures'[ABS Error %],BLANK())
```

6. Forecast Qty =

```
var lsalesdate = MAX(LastSaleMonth[LastSaleMonth])

return
    CALCULATE(SUM(fact_forecast_monthly[forecast_quantity]),
        fact_forecast_monthly[date]<=lsalesdate)
```

7. Freight cost $ =SUM(fact_actuals_estimates[freight_cost])

8. GM / Unit = DIVIDE([GM $], [Quantity], 0)

9. GM % = DIVIDE([GM $],[NS $],0)

10.GM $ = [NS $]-[Total COGS $]

11. GM Variance % = [GM BM %] - [GM %]

12. GS $ =SUM(fact_actuals_estimates[gross_sales_amount])

13. Manufacturing cost $ =SUM(fact_actuals_estimates[manufacturing_cost])

14. Market Share % =DIVIDE(SUM(marketshare[sales]),

SUM(marketshare[total_market_sales_$]),0)

15.Net Error = [Forecast Qty] - [Sales Qty]

16. Net Error % = DIVIDE([Net Error],[Forecast Qty],0)

17. NIS $ =SUM(fact_actuals_estimates[net_invoice_sales_amount])

18. NP % = DIVIDE([NP $],[NS $],0)

19. NP $ = [GM $]+[Operational Expense $]

20. NS $ = SUM(fact_actuals_estimates[net_sales_amount])

21. Operational Expense $ =([Ads & Promations $]+[Other Operational cost $])*-1

22. Other cost $ =SUM(fact_actuals_estimates[other_cost])

23. Other Operational cost $ =SUM(fact_actuals_estimates[other_operational_cost])

24. Post Invoice Deduction $ SUM(fact_actuals_estimates[post_invoice_discount_amount])

25. Post Invoice Other Deduction $=

SUM(fact_actuals_estimates[post_invoice_other_deduction_amount])

26. Pre Invoice Deduction $ =SUM(fact_actuals_estimates[pre_invoice_discount_amount])

27. Quantity =Sum(fact_actuals_estimates[sold_quantity])

28.RC % = DIVIDE([NS $],

CALCULATE([NS $],

ALL(dim_market),ALL(dim_customer),

ALL(dim_product)),0)

29. Risk = IF([Net Error]>0, "EI",

IF([Net Error]<0,"OOS",

BLANK()))

30. Sales Qty =CALCULATE(SUM(fact_actuals_estimates[sold_quantity]),

fact_actuals_estimates[date]<=MAX(LastSaleMonth[LastSaleMonth]))

31. Total COGS $ = [Manufacturing cost $] + [Freight cost $] + [Other cost $]

31. Total Post Invoice Deduction $ =[Post Invoice Deduction $] + [Post Invoice Other Deduction $]

31. Last Sales Month Home =

"Sales Data Loaded Until : " & FORMAT(MAX(LastSalesMonth[LastSalesMonth]), "MMM YY")

32.post_invoice_deductions_amount =

```
var res = CALCULATE(MAX(post_invoice_deductions[discounts_pct]),
        RELATEDTABLE(post_invoice_deductions))
return res*fact_actuals_estimates[net_invoice_sales_amount]
```

33.post_invoice_other_deductions_amount =

```
var res = CALCULATE(MAX(post_invoice_deductions[other_deductions_pct]),
        RELATEDTABLE(post_invoice_deductions))
return res*fact_actuals_estimates[net_invoice_sales_amount]
```

Key Measures-Last Year (LY):

1.ABS Error LY = CALCULATE([ABS Error],SAMEPERIODLASTYEAR(dim_date[date]))

2. Forecast Accuracy LY % =CALCULATE([Forecast Accuracy %],
SAMEPERIODLASTYEAR(dim_date[date]))

3. GM LY % =CALCULATE([GM %],SAMEPERIODLASTYEAR(dim_date[date]))

4. Net Error LY = CALCULATE([Net Error],SAMEPERIODLASTYEAR(dim_date[date]))

5. NP LY % = CALCULATE([NP %],SAMEPERIODLASTYEAR(dim_date[date]))

6. NS LY $ = CALCULATE([NS $],SAMEPERIODLASTYEAR(dim_date[date]))

7. P & L LY = CALCULATE([P & L values],SAMEPERIODLASTYEAR(dim_date[date]))

Key Measures-Filters:

1.BM Message =

```
IF([NS BM $] = BLANK() || [GM BM %] = BLANK() || [NP BM %] = BLANK(),
    "BM Target(s) is not available for the selected filters", "")
```

2.Customer/Product Filter Check =

```
ISCROSSFILTERED(dim_product[product]) || ISFILTERED(dim_customer[customer])
```

3. GM Filter % = IF([GM Variance %] >=

```
        SELECTEDVALUE('Target Gap Tolerance'[Target Gap Tolerance]),
    1,0)
```

4. Performance Visual Title = [Selected P & L Row] & " Performance Over Time"

5. Sales Trend Title ="NS $ & GM % for " & SELECTEDVALUE(dim_customer[customer])

6. Top/Bottom title = "Top / Bottom Products & Customers by " &

```
    'Key Measures-P & L'[Selected P & L Row]
```

Key Measures-Bench Mark (BM):

1. GM BM % =

```
SWITCH(TRUE(),
        SELECTEDVALUE('Set BM'[ID])=1,[GM LY %],
        SELECTEDVALUE('Set BM'[ID])=2,[GM Target %])
```

2.NP BM % =

```
SWITCH(TRUE(),
         SELECTEDVALUE('Set BM'[ID])=1,[NP LY %],
         SELECTEDVALUE('Set BM'[ID])=2,[NP Target %])
```

3.NS BM $ =

```
SWITCH(TRUE(),
        SELECTEDVALUE('Set BM'[ID])=1,[NS LY $],
        SELECTEDVALUE('Set BM'[ID])=2,[NS Target $])
```

4. P & L BM =

```
SWITCH(TRUE(),
        SELECTEDVALUE('Set BM'[ID])=1,[P & LY],
        SELECTEDVALUE('Set BM'[ID]) = 2, [P & L Target])
```

Key Measures-P & L

1.P & L Chg =

```
var res = [P & L values]-[P & L BM]
return
IF(ISBLANK([P & L BM]) || ISBLANK([P & L values]),
        BLANK(), res)
```

2. P & L Chg % =

```
 var res = DIVIDE([P & L Chg], ABS([P & L BM]),0)*100
return
IF(ISBLANK([P & L BM]) || ISBLANK([P & L values]),BLANK(),RES)
```

3. P & L Final Value =

```
SWITCH(TRUE(),
SELECTEDVALUE(fiscal_year[fy_desc])=
        MAX('P & L Columns'[Col Header]),[P & L values],
        MAX('P & L Columns'[Col Header])="BM", [P & L BM],
        MAX('P & L Columns'[Col Header])="Chg",[P & L Chg],
        MAX('P & L Columns'[Col Header])="Chg %",[P & L Chg %])
```

4.Selected P & L Row =

```
IF(HASONEVALUE('P & L Rows'[Description]),
        SELECTEDVALUE('P & L Rows'[Description]),
        "Net Sales")
```

5.P & L values =

```
var res = SWITCH(TRUE(),
        MAX('P & L Rows'[Order]) =1,
                [GS $]/1000000,
        MAX('P & L Rows'[Order])  =2,
                [Pre Invoice Deduction $]/1000000,
        MAX('P & L Rows'[Order])  =3,
                [NIS $]/1000000,
        MAX('P & L Rows'[Order])  =4,
```

```
            [Post Invoice Deduction $]/1000000,
        MAX('P & L Rows'[Order]) =5,
            [Post Invoice other Deduction $]/1000000,
        MAX('P & L Rows'[Order])=6,
            [Post Invoice Deduction $]/1000000+
            [Post Invoice other Deduction $]/1000000,
        MAX('P & L Rows'[Order])  =7,
            [NS $]/1000000,
        MAX('P & L Rows'[Order]) =8,
            [Manufacturing Cost $]/1000000,
        MAX('P & L Rows'[Order])  =9,
            [Freight Cost $]/1000000,
        MAX('P & L Rows'[Order])  =10,
            [Other Cost $]/1000000,
        MAX('P & L Rows'[Order])  =11,
            [Total COGS $]/1000000,
        MAX('P & L Rows'[Order]) =12,
            [GM $]/1000000,
        MAX('P & L Rows'[Order]) =13,
            [GM %]*100,
        MAX('P & L Rows'[Order]) =14,
            [GM / Unit],
        MAX('P & L Rows'[Order]) =15,
            [Operational Expense $]/1000000,
        MAX('P & L Rows'[Order]) =16,
            [NP $]/1000000,
        MAX('P & L Rows'[Order]) =17,
            [NP %]*100)
return
IF(HASONEVALUE('P & L Rows'[Description]),
        res, [NS $]/1000000)
```

6. P & L Target =

```
var res = SWITCH(TRUE(),
        MAX('P & L Rows'[Order])  =7,
                [NS Target $]/1000000,
        MAX('P & L Rows'[Order]) =12,
                [GM Target $]/1000000,
        MAX('P & L Rows'[Order]) =13,
                [GM Target %]*100,
        MAX('P & L Rows'[Order]) =17,
                [NP Target %]*100)
return
IF(HASONEVALUE('P & L Rows'[Description]),
        res, [NS Target $]/1000000)
```

Key Measure – Target:

1.GM Target % = DIVIDE([GM Target $],SUM(NsGmTarget[ns_target]), 0)

2. GM Target $ = SUM(NsGmTarget[gm_target])

3. NP Target % = DIVIDE([NP Target $], SUM(NsGmTarget[ns_target]),0)

4. NP Target $ = SUM(NsGmTarget[np_target])

5. NS Target $ =

```
var tgt = SUM(NsGmTarget[ns_target])
return
IF([Customer/Product Filter Check], BLANK(), tgt)
```

NOTE:

1.INDICATE **DAX FORMULA**

2.INDICATE **Calculated Measure**

3.INDICATE **Table or table with columns**