

## DAX MEASURES

DAX FUNCTION	M-CODE
COUNTROWS ()	Total transactions = COUNTROWS(Sales)
SUM ()	Total sales = SUM (Sales [Revenue])
SUM ()	Total quantity = SUM (Sales [Order Quantity])
SUMX ()	Total cost = SUMX (Sales, Sales [Order Quantity] *Sales [Total Unit Cost])
	Total profits = [Total sales]- [Total cost]
Divide ()	Profit margins = Divide ([Total profits], [Total sales])
TIME INTELLIGENCE MEASURES	
DATEADD () CALCULATE ()	Profit LY = CALCULATE ([Total profits], DATEADD (Dates [Date], -1, YEAR))
DATEADD () CALCULATE ()	Profit margins LY = CALCULATE ([Profit margins], DATEADD (Dates [Date], -1, YEAR))
DATEADD () CALCULATE ()	Sales LY = CALCULATE ([Total sales], DATEADD (Dates [Date], -1, YEAR))
	Sales TY VS Sales LY = [Total sales]- [Sales LY]
CALCULATE () DATESYTD ()	Sales YTD = CALCULATE ([Total sales], DATESYTD (Dates [Date]))
CALCULATE () DATESMTD ()	Sales MTD = CALCULATE ([Total sales], DATESMTD (Dates [Date]))
CALCULATE () DATESQTD ()	Sales QTD = CALCULATE ([Total sales], DATESQTD (Dates [Date]))
INCOME STATEMENTS MEASURES	
SUM ()	Income values = SUM ('Income statement data-2'[Value]) Total revenue = CALCULATE ('Income measure -3'[Income values], 'Income statement data-2'[Type]="Revenues")
	Total revenue LY = CALCULATE ([Total revenue], DATEADD (Dates [Date], -1, YEAR))
CALCULATE ()	Expenses = (CALCULATE ([Income values], 'Income statement data-2'[Type]= "Expenses") + [COGS]) * -1
	Expenses LY = CALCULATE ('Income measure -3'[Expenses], DATEADD (Dates [Date], -1, YEAR))
DATEADD ()	COGS = CALCULATE ('Income measure -3'[Income values], 'Income statement data-2'[Expense Category] ="COGS") *-1  COGS LY = CALCULATE ('Income measure -3'[COGS], DATEADD (Dates [Date], -1, YEAR))

DIVIDE ()	<p>Gross profit = <b>VAR Revenue</b> = CALCULATE ('Income measure -3'[Income values], 'Income statement data-2'[Type]= "Revenues")</p> <p><b>VAR COGS</b> = CALCULATE ('Income measure -3'[Income values], 'Income statement data-2'[Expense Category] = "COGS")</p> <p><b>RETURN</b></p> <p>Revenue – COGS</p>
SELECTEDVALUE ()	<p>Gross Profit LY = CALCULATE ([Gross profit], DATEADD (Dates [Date], -1, YEAR))</p> <p>Gross profit margin = DIVIDE ([Gross profit], 'Income measure -3'[Total revenue])</p> <p>Gross profit margin LY = CALCULATE ([Gross profit margin], DATEADD (Dates [Date], -1, YEAR))</p>
SWITCH (TRUE ())	<p>Net profit = [Total revenue] + 'Income measure -3'[COGS] + 'Income measure -3'[Expenses]</p> <p>Net profit LY = CALCULATE ('Income measure -3'[Net profit], DATEADD (Dates [Date], -1, YEAR))</p> <p>Net profit margin = DIVIDE ([Net profit], [Total revenue])</p> <p>Net profit margin LY = CALCULATE ('Income measure -3'[Net profit margin], DATEADD (Dates [Date], -1, YEAR))</p>
ABS ()	
FILTER ()	<p>Actual's income = <b>VAR Revenue</b> = CALCULATE ([Income values], 'Income statement data-2'[Type] = "Revenues")</p> <p><b>VAR Expense</b> = CALCULATE ([Income values], 'Income statement data-2'[Type] = "Expenses") * -1</p> <p><b>Return</b></p> <p><b>DIVIDE (</b></p> <p><b>IF (SELECTEDVALUE ('Income statement data-2'[Type]) = "Revenues", Revenue,</b></p> <p><b>IF (SELECTEDVALUE ('Income statement data-2'[Type]) = "Expenses", Expense,</b></p> <p><b>Revenue + Expense)), 1000, 0)</b></p> <p>annual totals % =</p> <p><b>VAR Current Item</b> = SELECTEDVALUE ('income statement template'[Income Statement Items])</p> <p><b>VAR Current Summary</b> = SELECTEDVALUE ('income statement template'[Income Statement Items])</p> <p><b>RETURN</b></p> <p><b>SWITCH (TRUE (),</b></p> <p><b>Current Summary = "Total Revenues", 1,</b></p> <p><b>Current Summary = "Total COGS", DIVIDE([COGS], [Total revenue], 0),</b></p> <p><b>Current Summary = "Total Gross Profit", DIVIDE ([Gross Profit], [Total revenue], 0),</b></p> <p><b>Current Summary = "Total Other Expenses", DIVIDE([Expenses], [Total revenue], 0),</b></p> <p><b>Current Summary = "Total Net Profit", DIVIDE ([Net Profit], [Total revenue], 0),</b></p> <p><b>Current Summary = "Net Profit %", [Net Profit Margin],</b></p> <p><b>DIVIDE (CALCULATE ('Income measure -3'[Actual's income] * 1000,</b></p> <p><b>FILTER ('income statement template', 'income statement template'[Income Statement Items] = Current Item)), [Total revenue], 0))</b></p> <p>TY vs PY Actuals =</p>

	<p>VAR Current Item = SELECTEDVALUE ('income statement template'[Items (Normalized)])</p> <p>RETURN</p> <p>SWITCH (TRUE (),</p> <p>    Current Item = "Total Revenues", DIVIDE ([total Revenue] - [total Revenue LY], 1000, 0),</p> <p>    Current Item = "Total COGS", DIVIDE([COGS] - [COGS LY], 1000, 0),</p> <p>    Current Item = "Total Gross Profit", DIVIDE ([Gross Profit] - [Gross Profit LY], 1000, 0),</p> <p>    Current Item = "Total Other Expenses", DIVIDE([Expenses] - [Expenses LY], 1000, 0),</p> <p>    Current Item = "Total Net Profit", DIVIDE ([Net Profit] - [Net Profit LY], 1000, 0),</p> <p>        CALCULATE ([Actual's income], FILTER ('Income statement data-2','Income statement data-2'[Expense Items] ==Current Item))) - CALCULATE (CALCULATE ([Actual's income], FILTER ('Income statement data-2', 'Income statement data-2'[Expense Items] ==Current Item))), DATEADD (Dates [Date], -1, YEAR))</p> <p>TY vs PY Actuals % =</p> <p>VAR Current Item = SELECTEDVALUE ('income statement template'[Items (Normalized)])</p> <p>RETURN</p> <p>SWITCH (TRUE (),</p> <p>    Current Item = "Total Revenues", DIVIDE ([TY vs PY Actuals], [total Revenue LY], 0),</p> <p>    Current Item = "Total COGS", DIVIDE ([TY vs PY Actuals], [COGS LY], 0),</p> <p>    Current Item = "Total Gross Profit", DIVIDE ([TY vs PY Actuals], [Gross Profit LY], 0),</p> <p>    Current Item = "Total Other Expenses", DIVIDE ([TY vs PY Actuals], [Expenses LY], 0),</p> <p>    Current Item = "Total Net Profit", DIVIDE ([TY vs PY Actuals], [Net Profit LY], 0),</p> <p>    Current Item = "Gross Profit %", [Gross Profit Margin] - [Gross profit Margin LY],</p> <p>    Current Item = "Net Profit %", [Net Profit Margin] - [Net Profit Margin LY],</p> <p>        DIVIDE ([TY vs PY Actuals],</p> <p>            ABS (CALCULATE (CALCULATE ([Actual's income],</p> <p>                FILTER ('Income statement data-2', 'Income statement data-2'[Expense Items] =</p> <p>Current Item))),</p> <p>            DATEADD (Dates [Date], -1, YEAR))))))</p>
FINANCIAL MEASURES	
SUM ()	<p>Q1 = CALCULATE ('Financial measures'[Annual Totals], Dates [QUARTER]="Q1")</p> <p>Q2 = CALCULATE ('Financial measures'[Annual Totals], Dates [QUARTER]="Q2")</p> <p>Q3 = CALCULATE ('Financial measures'[Annual Totals], Dates [QUARTER]="Q3")</p> <p>Q4 = CALCULATE ('Financial measures'[Annual Totals], Dates [QUARTER]="Q4")</p>
CALCULATE ()	<p>table data = SELECTEDVALUE ('Income statement visuals'[table details], "Actuals")</p> <p>Annual Totals =</p> <p>VAR Current Item = SELECTEDVALUE ('income statement template'[Items (Normalized)])</p>
DATEADD ()	<p>VAR Actuals = SWITCH (TRUE (),</p> <p>    Current Item = "Total Revenues", DIVIDE ([Total revenue], 1000, 0),</p> <p>    Current Item = "Total COGS", DIVIDE([COGS], 1000, 0),</p>

DIVIDE ()	<p>Current Item = "Total Gross Profit", DIVIDE ([Gross Profit], 1000, 0),</p> <p>Current Item = "Gross Profit %", FORMAT ([Gross Profit Margin], "0.00%"),</p> <p>Current Item = "Total Other Expenses", DIVIDE([Expenses], 1000, 0),</p> <p>Current Item = "Total Net Profit", DIVIDE ([Net Profit], 1000, 0),</p> <p>Current Item = "Net Profit %", FORMAT ([Net Profit Margin], "0.00%"),</p> <p>CALCULATE ([Actual's income],  FILTER ('Income statement data-2', 'Income statement data-2'[Expense Items] =  Current Item)))))</p>
SELECTEDVALUE ( )	<p>VAR saltier = SWITCH (TRUE (),</p> <p>Current Item = "Total Revenues", DIVIDE ([total Revenue] - [total Revenue LY], 1000, 0),</p> <p>Current Item = "Total COGS", DIVIDE([COGS] - [COGS LY], 1000, 0),</p> <p>Current Item = "Total Gross Profit", DIVIDE ([Gross Profit] - [Gross Profit LY], 1000, 0),</p> <p>Current Item = "Total Other Expenses", DIVIDE([Expenses] - [Expenses LY], 1000, 0),</p> <p>Current Item = "Total Net Profit", DIVIDE ([Net Profit] - [Net Profit LY], 1000, 0),</p> <p>CALCULATE ([Actual's income], FILTER ('Income statement data-2', 'Income  statement data-2'[Expense Items] ==Current Item))) - CALCULATE (CALCULATE ([Actual's  income], FILTER ('Income statement data-2', 'Income statement data-2'[Expense Items]  ==Current Item))), DATEADD (Dates [Date], -1, YEAR))</p>
SWITCH (TRUE ( ))	
ABS ()	<p>VAR Pericentre = SWITCH (TRUE (),</p> <p>Current Item = "Total Revenues", FORMAT (1, "0.00%"),</p> <p>Current Item = "Total COGS", FORMAT (DIVIDE([COGS], [Total revenue], 0), "0.00%"),</p> <p>Current Item = "Total Gross Profit", FORMAT (DIVIDE ([Gross Profit], [Total revenue],  0), "0.00%"),</p> <p>Current Item = "Total Other Expenses", FORMAT (DIVIDE([Expenses], [Total revenue],  0), "0.00%"),</p> <p>Current Item = "Total Net Profit", FORMAT (DIVIDE ([Net Profit], [Total revenue], 0),  "0.00%"),</p> <p>FORMAT (DIVIDE (CALCULATE ([Actual's income] * 1000,  FILTER ('Income statement data-2', 'Income statement data-2'[Expense Items] =  Current Item))), [Total revenue], 0), "0.00%"))</p>
FILTER ()	
MAXX ()	<p>RETURN</p> <p>SWITCH (TRUE (),</p> <p>[Table Data] = "Actuals", Actuals,</p> <p>[Table Data] = "vs Last Year", saltier,</p> <p>[Table Data] = "% to Revenue", Pericentre,</p> <p>BLANK ())</p>
AVERAGEX ()	<p>Previous Highest Sale =</p> <p>MAXX (  FILTER (ALLSELECTED (Dates),  Dates [Date] &lt;= MAX (Dates [Date])),  [Total Sales])</p>
TOPN ()	<p>Rolling Average Sale =</p> <p>AVERAGEX (  FILTER (ALLSELECTED (Dates),</p>

VALUES ()	<p>Dates [Date] &lt;= MAX (Dates [Date]), [Total Sales])</p> <p>Top 5 Cities = CALCULATE ([Total Sales], TOPN (5, ALL (Regions [City]), [Total Sales], DESC), VALUES (Regions [City]))</p> <p>Top 5 Customers = CALCULATE ([Total Sales], TOPN (5, ALL (Customer [Customer Names]), [Total Sales], DESC), VALUES (Customer [Customer Names]))</p>
BALANCE SHEETS MEASURES	
SUM ()	<p>BS Values = CALCULATE (SUM ('Balance Sheet Data'[Value]), TREATAS (VALUES (Dates [Year]), 'Balance Sheet Data'[Year]))</p>
CALCULATE ()	<p>BS values LY = CALCULATE ('Balance statement measures'[BS Values], DATEADD (Dates [Date], -1, YEAR))</p> <p>Current assets = CALCULATE ('Balance statement measures'[BS Values], 'Balance Sheet Data'[Category]="Current Assets")</p>
DATEADD ()	<p>Current liabilities = CALCULATE ('Balance statement measures'[BS Values], 'Balance Sheet Data'[Category]="Current liabilities")</p>
DIVIDE ()	<p>Fixed assets = CALCULATE ('Balance statement measures'[BS Values], 'Balance Sheet Data'[Category]="Fixed (Long-Term) Assets")</p> <p>Long-Term Liabilities = CALCULATE ('Balance statement measures'[BS Values], 'Balance Sheet Data'[Category]="Long-Term Liabilities")</p>
SELECTEDVALUE ()	<p>Other Assets = CALCULATE ('Balance statement measures'[BS Values], 'Balance Sheet Data'[Category]="Other Assets")</p> <p>Owner's Equity = CALCULATE ('Balance statement measures'[BS Values], 'Balance Sheet Data'[Category]="Owner's Equity")</p>
SWITCH (TRUE ())	<p>Total assets = 'Balance statement measures'[Current assets] + [Fixed assets] + [Other Assets]</p> <p>Total liabilities = 'Balance statement measures'[Current liabilities] + 'Balance statement measures'[Long-Term Liabilities]</p> <p>Total Liabilities and Owner's Equity = 'Balance statement measures'[Current liabilities] + 'Balance statement measures'[Long-Term Liabilities] + [Owner's Equity]</p>

<p>FILTER ()</p>	<p>B/S Values =  VAR Current Item = SELECTEDVALUE ('Balance Sheet Template'[Balance Sheet Normalized])</p> <p>RETURN  SWITCH (TRUE (),  Current Item = "Total current assets", [Current assets],  Current Item = "Total fixed assets", [Fixed assets],  Current Item = "Total Other assets", [Other Assets],  Current Item = "Total Assets", [Total assets],  Current Item = "Total current liabilities", [Current liabilities],  Current Item = "Total long-term liabilities", [Long-Term Liabilities],  Current Item = "Total owner's equity", [Owner's Equity],  Current Item = "Total Liabilities and Owner's Equity", [Total Liabilities and Owner's Equity],  Current Item = "Debt Ratio (Total Liabilities / Total Assets)", FORMAT (DIVIDE ([Total liabilities] + [Long-Term Liabilities], [Total assets], 0), "0.00"),  Current Item = "Current Ratio (Current Assets / Current Liabilities)", FORMAT (DIVIDE ([Current liabilities], [Total assets], 0), "0.00"),  Current Item = "Working Capital (Current Assets - Current Liabilities)", FORMAT ([Current assets] - [Current liabilities], "0"),  Current Item = "Assets-to-Equity Ratio (Total Assets / Owner's Equity)", FORMAT (DIVIDE ([Total assets], [Owner's Equity], 0), "0.00"),  Current Item = "Debt-to-Equity Ratio (Total Liabilities / Owner's Equity)", FORMAT (DIVIDE ('Balance statement measures'[Total liabilities], [Owner's Equity], 0), "0.00"),  CALCULATE ([BS Values], FILTER ('Balance Sheet Data', 'Balance Sheet Data'[Sub Category] = Current Item)))</p>
CASH FLOWS MEASURES	
<p>SUM ()</p> <p>CALCULATE ()</p> <p>DATEADD ()</p> <p>SELECTEDVALUE ()</p>	<p>Absolute c/f values = ABS ('Cash flow measures'[Cash Flow Values])</p> <p>Cash Flow Values =  CALCULATE (SUM ('Cash Flow Data'[Value]),  TREATAS (VALUES (Dates [Year]), 'Cash Flow Data'[Years]))</p> <p>Cash at the end of year = [net increase in cash]-'Cash flow measures'[Cash at Beginning of Year]</p> <p>Cash At Beginning of Year = CALCULATE ([Cash Flow Values], 'Cash Flow Data'[Cash Flow Sub Category] = "Cash at Beginning of Year")</p> <p>cash paid for -operations = CALCULATE ([Cash Flow Values], 'Cash Flow Data'[Cash Flow Category] = "Cash paid for", 'Cash Flow Data'[Cash Flow Type] = "Operations")</p> <p>Cash paid for Financing Activities = CALCULATE ([Cash Flow Values], 'Cash Flow Data'[Cash Flow Category] = "Cash paid for", 'Cash Flow Data'[Cash Flow Type] = "Financing Activities")</p> <p>Cash paid for- Investing Activities = CALCULATE ([Cash Flow Values], 'Cash Flow Data'[Cash Flow Category] = "Cash paid for", 'Cash Flow Data'[Cash Flow Type] = "Investing Activities")</p>

	cash receipts from customer-operations = <b>CALCULATE</b> ([Cash Flow Values], 'Cash Flow Data'[Cash Flow Category] ="Cash receipts from", 'Cash Flow Data'[Cash Flow Type] ="Operations")
<b>SWITCH</b> (TRUE ( ))	Cash receipts from Financing Activities = <b>CALCULATE</b> ([Cash Flow Values], 'Cash Flow Data'[Cash Flow Category] ="Cash receipts from", 'Cash Flow Data'[Cash Flow Type] ="Financing Activities")
<b>ABS</b> ( )	Cash receipts from Financing Activities = <b>CALCULATE</b> ([Cash Flow Values], 'Cash Flow Data'[Cash Flow Category] ="Cash receipts from", 'Cash Flow Data'[Cash Flow Type] ="Financing Activities")
<b>FILTER</b> ( )	Net Cash Flow - Financing = 'Cash flow measures'[Cash receipts from Financing Activities]-'Cash flow measures'[Cash paid for Financing Activities]
	Net Cash Flow - Financing = 'Cash flow measures'[Cash receipts from Financing Activities]-'Cash flow measures'[Cash paid for Financing Activities]
<b>TREATAS</b> ( )	Net Cash Flow - Operations = 'Cash flow measures'[cash receipts from customer-operations]-'Cash flow measures'[cash paid for -operations] net increase in cash = [Net Cash Flow - Financing] + [Net Cash Flow - Investing] + [Net Cash Flow - Operations]
	Cash flow actual Values = <b>VAR</b> Current Item = <b>SELECTEDVALUE</b> ('Cash Flow Template'[Cash Flow Normalized]) <b>RETURN</b> <b>SWITCH</b> (TRUE ( ), <b>Current Item</b> = "Net Cash Flow from Operations", [Net Cash Flow - Operations], <b>Current Item</b> = "Net Cash Flow from Investing Activities", [Net Cash Flow - Investing], <b>Current Item</b> = "Net Cash Flow from Financing Activities", [Net Cash Flow - Financing], <b>Current Item</b> = "Net Increase in Cash", [Net Cash Flow - Operations] + [Net Cash Flow - Investing] + [Net Cash Flow - Financing], <b>Current Item</b> = "Cash at Beginning of Year", [Cash at Beginning of Year], <b>Current Item</b> = "Cash at End of Year", [Cash at Beginning of Year] - ([Net Cash Flow - Operations] + [Net Cash Flow - Investing] + [Net Cash Flow - Financing]), <b>CALCULATE</b> ([Cash Flow Values], <b>FILTER</b> ('Cash Flow Data', 'Cash Flow Data'[Cash Flow Sub Category] = <b>Current Item</b> )))