**DAX MEASURES**

**CREATION OF A DEDICATED TABLE TO STORE MEASURES**

OPTION 1: Table View > Table Tools > New Table > **Measure Table (DAX) =** **{“”}**

OPTION 2: Report View > Home > Enter Data > Name Table: **Measure table** > Load

1. Create new measures named "Quantity Sold" and "Quantity Returned" to calculate the sum of quantity from each data table. Total Quantity Sold = 833,489 and Total Quantity Returned = 8,289





1. Create new measures named "Total Transactions" and "Total Returns" to calculate the count of rows from each data table. 269,720 transactions and 7,087 returns





1. Create a new measure named "Return Rate" to calculate the ratio of quantity returned to quantity sold (format as %). Overall return rate of 0.99%

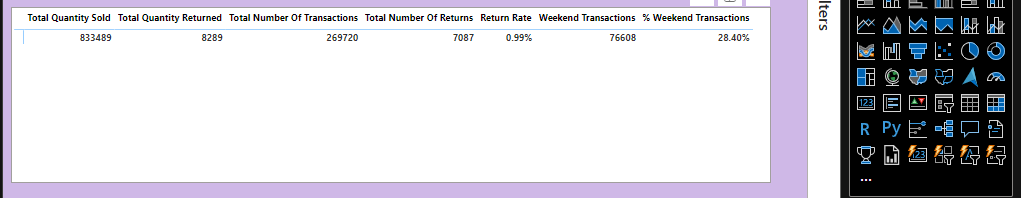


1. Create a new measure named "Weekend Transactions" to calculate transactions on weekends. 76,608 total weekend transactions



1. Create a new measure named "% Weekend Transactions" to calculate weekend transactions as a percentage of total transactions (format as %). I should see 28.4% weekend transactions





1. Create new measures named "All Transactions" and "All Returns" to calculate grand total transactions and returns (regardless of filter context). I should see 269,720 transactions and 7,087 returns across all rows (test with product\_brand on rows)

ALL Transactions = CALCULATE([Total Number Of Transactions], ALL(Transaction\_Data))

ALL Returns = CALCULATE([Total Number Of Returns], ALL(Return\_Data))

1. Create a new measure to calculate % Total Count of Returns and % Of Total Count of Transactions

% of Number of Transactions = [Total Number Of Transactions] / [ALL Transactions]

% of Number of Returns = [Total Number Of Returns] / [ALL Returns]

A screenshot of a table

Description automatically generated

1. Create a new measure to calculate the AVG Retail Price

AVG Retail Price = AVERAGE(Products[product\_retail\_price])

1. Create a new measure to calculate the Overall AVG Retail Price

Overall AVG Retail Price = CALCULATE([AVG Retail Price], ALL(Products))

1. Create a measure called High tickets Transactions that will calculate the Total Count of Transactions, **but only for products > than the average price**. So, I want to see the # of transactions for product prices higher than Overall AVG priced items.

**In order to make the measure more flexible in case the data set is updated and we refresh in due course, better then to use the FILTER expression**

High Tickets Transactions = CALCULATE([Total Number Of Transactions], FILTER(Products, Products[product\_retail\_price] > [Overall AVG Retail Price]))

**A table with numbers and numbers

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1. Create a new measure to calculate "Total Revenue" based on transaction quantity and product retail price, and format as $. I should see a total revenue of $1,764,546

Total Revenue = SUMX(Transaction\_Data, Transaction\_Data[quantity] \* RELATED(Products[product\_retail\_price]))

1. Create a new measure to calculate "Total Cost" based on transaction quantity and product cost, and format. Spot check: I should see a total cost of $711,728

Total COGS = SUMX(Transaction\_Data, Transaction\_Data[quantity] \* RELATED(Products[product\_cost]))

1. Create a new measure named "Total Profit" to calculate total revenue minus total cost, and format as $. Spot check: I should see a total profit of $1,052,819



1. Create a new measure to calculate "Profit Margin" by dividing total profit by total revenue calculate total revenue (format as %). Spot check: You should see an overall profit margin of 59.67%

Profit Margin % = [Total Profit] / [Total Revenue]

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1. Create a new measure named ‘Count Of Unique Sales Customer’

Count Of Unique Sales Customers = DISTINCTCOUNT(Transaction\_Data[customer\_id])

1. Create a new measure to calculate the ‘AVG Revenue per Customer’

AVG Revenue Per Customer = DIVIDE([Total Revenue], [Count of Unique Sales Customers])

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1. Create a new measure named "Unique Products" to calculate the number of unique product names in the Products table. Spot check: I should see 1,560 unique products

Unique Products = DISTINCTCOUNT(Products[product\_name])

1. Create a new measure named "YTD Revenue" to calculate year-to-date total revenue, from the beginning of the year(fiscal or calendar) up to now. Format as $. Spot check: Create a matrix with "Start of Month" on rows; i should see $872,924 in YTD Revenue in September 1998

YTD Revenue = CALCULATE([Total Revenue], DATESYTD('Calendar'[date]))

**OR**

YTD Revenue = TOTALYTD([Total Revenue], 'Calendar’[Date])

1. Create a new measure named "60-Day Revenue" to calculate a running revenue total over a 60-day period (for the last 60 days since the last date of the data set), and format as $. Spot check: Create a matrix with "date" on rows; i should see $97,570 in 60-Day Revenue on 4/14/1997

60-Day Revenue = CALCULATE([Total Revenue], DATESINPERIOD('Calendar'[date], MAX('Calendar'[date]), -60,DAY))

**OR**

60-Day Revenue = CALCULATE([Total Revenue], DATESINPERIOD('Calendar'[Date], LASTDATE('Calendar'[Date]), -60,DAY))

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1. Create new measures named "Previous Month Transactions", "Previous Month Revenue", "Previous Month Profit", and "Previous Month Returns". Spot check: Create a matrix with "Start of Month" on rows to confirm accuracy

Previous Month Transactions = CALCULATE([Total Number Of Transactions], DATEADD('Calendar'[date],-1,MONTH))

Previous Month Revenue = CALCULATE([Total Revenue], DATEADD('Calendar'[date],-1, MONTH))

Previous Month Profit = CALCULATE([Total Profit], DATEADD('Calendar'[date],-1,MONTH))

Previous Month Returns = CALCULATE([Total Number Of Returns], DATEADD('Calendar'[date],-1,MONTH))

**OR**

Previous Month Revenue = [Total Revenue] - CALCULATE([Total Revenue], PREVIOUSMONTH('Calendar'[Date]))

1. Create a new measure named "Revenue Target" based on a 5% lift over the previous month revenue (assuming that the Company wants me to maintain 5 % Revenue growth every single month moving forward. In other words, the Revenue Target is the Previous Month’s Revenue plus 5%). Format as $. Spot check: I should see a Revenue Target of $99,223 in March 1998

Revenue Target = [Previous Month Revenue] \* 1.05

1. Create a new measure named “Revenue Target Gap”

Revenue Target Gap = [Total Revenue] - [Revenue Target]

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1. Create a new measure named “Profit Target”

Profit Target = [Previous Month Profit] \* 1.05

1. Create a new measure named “Profit Target Gap”

Profit Target Gap = [Total Profit] - [Profit Target]

1. Create a new measure named “Transaction Target”

Transaction Target = [Previous Month Transactions] \* 1.05

1. Create a new measure named “Transaction Target Gap”

Transaction Target Gap = [Total Number Of Transactions] - [Transaction Target]