

META ANALYSIS – DAX DOCUMENTATION

Project: Meta Ads Performance Dashboard

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Purpose: Complete DAX Reference for Measures, Calculated Columns, Tables, Titles & Dynamic Components

1. DYNAMIC TITLES (For Visual Headings)

1.1 Age Title

Purpose: Dynamic chart title based on selected metric.

```
Age Title = SELECTEDVALUE('Select Dynamic Measures'[Dynamic Title]) & "
by Target Age"
```

1.2 Gender Title

Purpose: Dynamic title for gender charts.

```
Gender Title = SELECTEDVALUE('Select Dynamic Measures'[Dynamic Title])
& " by Gender"
```

1.3 Hourly Trend Title

Purpose: Dynamic title for hourly trend charts.

```
Hourly Trend = "Hourly " & SELECTEDVALUE('Select Dynamic Measures'[Dyna
mic Title]) & " Trend"
```

1.4 Weekly Trend Title

Purpose: Dynamic weekly trend title.

```
Weekly Trend = "Weekly " & SELECTEDVALUE('Select Dynamic Measures'[Dynamic Title]) & " Trend"
```

2. BASIC EVENT MEASURES

2.1 Impressions

```
Impressions = COUNTROWS(FILTER(ad_events, ad_events[event_type] = "Impression"))
```

2.2 Clicks

```
Clicks = COUNTROWS(FILTER(ad_events, ad_events[event_type] = "Click"))
```

2.3 Shares

```
Shares = COUNTROWS(FILTER(ad_events, ad_events[event_type] = "Share"))
```

2.4 Comments

```
Comments = COUNTROWS(FILTER(ad_events, ad_events[event_type] = "Comment"))
```

2.5 Purchases

```
Purchases = COUNTROWS(FILTER(ad_events, ad_events[event_type] = "Purchase"))
```

3. DERIVED & PERFORMANCE MEASURES

3.1 Engagement

```
Engagement = [Shares] + [Clicks] + [Comments]
```

3.2 CTR (Click Through Rate)

```
CTR (Click Through Rate) = DIVIDE([Clicks], [Impressions], 0)
```

3.3 Engagement Rate

```
Engagement Rate = DIVIDE([Engagement], [Impressions], 0)
```

3.4 Conversion Rate

```
Conversion Rate = DIVIDE([Purchases], [Clicks], 0)
```

3.5 Purchase Rate

Purchase Rate = $\text{DIVIDE}([\text{Purchases}], [\text{Impressions}], 0)$

4. BUDGET & COST MEASURES

4.1 Total Budget

Total Budget = $\text{SUM}(\text{campaigns}[\text{total_budget}])$

4.2 Avg Budget per Campaign

Avg Budget per Campaign = $\text{AVERAGE}(\text{campaigns}[\text{total_budget}])$

4.3 Spend Budget

Spend Budget = $[\text{Total Budget}]$

4.4 Cost Per Acquisition (CPA)

Cost Per Acquisition (CPA) = $\text{DIVIDE}([\text{Total Budget}], [\text{Purchases}], 0)$

4.5 Cost Per Click (CPC)

Cost Per Click (CPC) = $\text{DIVIDE}([\text{Total Budget}], [\text{Clicks}], 0)$

4.6 Cost Per Engagement (CPE)

Cost Per Engagement (CPE) = DIVIDE([Total Budget], [Engagement], 0)

5. ROI MEASURE

5.1 Return on Investment (ROI)

Assumed avg revenue per purchase = 1000

Return of Investment (ROI) = [Purchases] * 1000

(You can replace 1000 with your own APV.)

6. DATE/TIME COLUMNS (Calculated Columns)

6.1 Event Date

Event Date = DATEVALUE(ad_events[timestamp])

6.2 Event Hour

Event Hour = HOUR(ad_events[timestamp])

7. CALENDAR TABLE

7.1 Create Calendar

```
Calender table = CALENDAR(MIN(ad_events[Event Date]), MAX(ad_events[Event Date]))
```

7.2 Day Name

```
Day Name = FORMAT('Calender table'[Date], "ddd")
```

7.3 Day Number

```
Day Number = FORMAT('Calender table'[Date], "d")
```

7.4 Month

```
Month = FORMAT('Calender table'[Date], "mmm")
```

7.5 Week Day

```
Week Day = WEEKDAY('Calender table'[Date], 2)
```

7.6 Week Number

```
Week Number = WEEKNUM('Calender table'[Date], 2)
```

8. DYNAMIC METRIC SELECTION (Parameter Table)

8.1 Dynamic Measure Selection Table

```
Select Dynamic Measures = {  
    ("Impressions", NAMEOF('ad_events'[Impressions]), 0),  
    ("Engagement", NAMEOF('ad_events'[Engagement]), 1),  
    ("Clicks", NAMEOF('ad_events'[Clicks]), 2),  
    ("Shares", NAMEOF('ad_events'[Shares]), 3),  
    ("Comments", NAMEOF('ad_events'[Comments]), 4),  
    ("Purchases", NAMEOF('ad_events'[Purchases]), 5)  
}
```

9. CUSTOM TABLES FOR CHARTS

9.1 Budget Flow Table

Used for Waterfall Chart

```
Budget Flow =  
UNION(  
    ROW("Stage", "Total Budget", "Value", [Total Budget]),  
    ROW("Stage", "Spent Budget", "Value", [Spend Budget]),  
    ROW("Stage", "ROI Value", "Value", [Return of Investment (ROI)])  
)
```

9.2 Campaign Funnel Table

Used for Funnel Chart

```

Campaign Funnel =
VAR baseTable =
    SUMMARIZECOLUMNS(
        campaigns[campaign_id],
        campaigns[name],
        "Impressions", CALCULATE(COUNTROWS(FILTER(ad_events, ad_events
[event_type] = "Impression"))),
        "Clicks", CALCULATE(COUNTROWS(FILTER(ad_events, ad_events[event_
type] = "Click"))),
        "Purchases", CALCULATE(COUNTROWS(FILTER(ad_events, ad_events[ev
ent_type] = "Purchase"))))
    )
RETURN
UNION(
    SELECTCOLUMNS(baseTable, "Campaign Name", [name], "Stage", "Impres
sions", "Value", [Impressions]),
    SELECTCOLUMNS(baseTable, "Campaign Name", [name], "Stage", "Clicks",
"Value", [Clicks]),
    SELECTCOLUMNS(baseTable, "Campaign Name", "Stage", "Purchases", "V
alue", [Purchases])
)

```