

DATA MODEL MEASURE DEFINITIONS

Multi-Channel Marketing Attribution Analysis

1. BASIC AGGREGATIONS:

Measure Name: Total Ad Spend

DAX Formula: `SUM(Fact_Touchpoints[ad_spend])`

Description: Sum of all marketing spend across all touchpoints

Business Use: Track total marketing investment

Measure Name: Total Revenue

DAX Formula: `SUM(Fact_Touchpoints[deal_value])`

Description: Sum of all deal values from closed deals

Business Use: Track total revenue generated from marketing efforts

Measure Name: Total Clicks

DAX Formula: `SUM(Fact_Touchpoints[clicks])`

Description: Sum of all clicks across all campaigns

Business Use: Measure engagement level across channels

Measure Name: Total Impressions

DAX Formula: `SUM(Fact_Touchpoints[impressions])`

Description: Sum of all ad impressions served

Business Use: Track marketing reach and visibility

Measure Name: Total Conversions

DAX Formula: `SUM(Fact_Touchpoints[deal_closed])`

Description: Count of all closed deals

Business Use: Track conversion volume

Measure Name: Total Touchpoints

DAX Formula: `COUNTROWS(Fact_Touchpoints)`

Description: Total number of marketing touchpoints

Business Use: Understand customer journey complexity

Measure Name: Total MQLs

DAX Formula: `SUM(Fact_Touchpoints[mql_generated])`

Description: Sum of Marketing Qualified Leads generated

Business Use: Track top-of-funnel performance

2. AVERAGE CALCULATIONS:

Measure Name: Average CTR

DAX Formula: `AVERAGE(Fact_Touchpoints[click_through_rate])`

Description: Mean click-through rate across all touchpoints

Business Use: Benchmark ad creative effectiveness

Measure Name: Average CPC

DAX Formula: `AVERAGE(Fact_Touchpoints[cost_per_click])`

Description: Mean cost per click across campaigns

Business Use: Monitor cost efficiency of paid channels

Measure Name: Average Deal Value

DAX Formula: `AVERAGE(Fact_Touchpoints[deal_value])`

Description: Mean value of closed deals

Business Use: Understand deal size trends

3. RATIO AND EFFICIENCY METRICS

Measure Name: ROAS

DAX Formula: $\text{DIVIDE}([\text{Total Revenue}], [\text{Total Ad Spend}], 0)$

Description: Return on Ad Spend ratio - revenue generated per dollar spent

Business Use: Primary ROI metric for marketing performance

Target: Greater than 3.0 indicates a healthy return

Measure Name: ROI Percentage

DAX Formula: $\text{DIVIDE}([\text{Total Revenue}] - [\text{Total Ad Spend}], [\text{Total Ad Spend}], 0) * 100$

Description: Return on Investment as a percentage

Business Use: Compare profitability across channels.

Target: Above 200 percent is a strong performance

Measure Name: Conversion Rate

DAX Formula: $\text{DIVIDE}([\text{Total Conversions}], \text{COUNTROWS}(\text{Fact_Touchpoints}), 0) * 100$

Description: Percentage of touchpoints that result in closed deals

Business Use: Measure marketing effectiveness

Target: 10 to 15 percent for B2B SaaS

Measure Name: Cost Per Acquisition

DAX Formula: $\text{DIVIDE}([\text{Total Ad Spend}], [\text{Total Conversions}], 0)$

Description: Average cost to acquire one customer

Business Use: Monitor acquisition efficiency and set channel budgets.

Target: Should be less than one-third of the average deal value

Measure Name: MQL to SQL Rate

DAX Formula: `DIVIDE(SUM(Fact_Touchpoints[sql_generated]), [Total MQLs], 0) * 100`

Description: Conversion rate from Marketing Qualified to Sales Qualified Leads

Business Use: Measure lead quality and sales alignment.

Target: 30 to 50 percent indicates good lead quality

4. TIME INTELLIGENCE MEASURES

Measure Name: Total Revenue LY

DAX Formula: `CALCULATE([Total Revenue], SAMEPERIODLASTYEAR(Dim_Date[full_date]))`

Description: Revenue from the same period last year

Business Use: Year-over-year comparison baseline

Measure Name: Revenue YoY Growth

DAX Formula: `DIVIDE([Total Revenue] - [Total Revenue LY], [Total Revenue LY], 0) * 100`

Description: Year-over-year revenue growth percentage

Business Use: Track annual growth trends and seasonality.

Target: 20 to 40 percent YoY growth for growth-stage SaaS

Measure Name: Total Revenue LM

DAX Formula: `CALCULATE([Total Revenue], DATEADD(Dim_Date[full_date], -1, MONTH))`

Description: Revenue from the previous month

Business Use: Month-over-month comparison baseline

Measure Name: Revenue MoM Growth

DAX Formula: $\text{DIVIDE}([\text{Total Revenue}] - [\text{Total Revenue LM}], [\text{Total Revenue LM}], 0) * 100$

Description: Month-over-month revenue growth percentage

Business Use: Monitor short-term performance trends

Target: Consistent positive growth indicates momentum

5. ADVANCED ANALYTICS

Measure Name: Channel Performance Score

DAX Formula: $([\text{ROAS}] * 0.4) + ([\text{Conversion Rate}] * 0.3) + (100 - [\text{Cost Per Acquisition}] / 100 * 0.3)$

Description: Composite score weighing ROAS at 40 percent, Conversion Rate at 30 percent, and inverted CPA at 30 percent

Business Use: Holistic channel ranking for budget allocation.

Interpretation: Higher scores indicate better overall channel performance

NOTES:

- All DIVIDE functions include zero as the third parameter to handle division by zero errors.
- Time intelligence measures require a proper date table relationship.
- Measures are stored in a centralized _Measures table for organization. All percentage measures are multiplied by 100 for readability

Prepared by: Khalil HajChaieb