

Dataset 3 – Weekly Marketing Mix (MMM) Data

Problem Statement: Evaluate how media spends, trade promotions, price, distribution and competitor activity drive weekly Heineken volume and revenue across markets.

Grain (each row represents): One row per market × week.

Notes: Dataset includes missing values in some spend and promo fields, injected volume/revenue outliers, and duplicate rows to mimic real MMM data issues.

Data Dictionary:

Column Name	Type	Example	Description
week_start	Date (week start)	2024-06-03	Start date of the ISO week (weekly data for 2024).
market	Category	India	Market or country (e.g. India, Vietnam).
brand	Category	Heineken	Brand name (here Heineken).
media_spend_tv_inr	Numeric (float)	800000.0	Weekly TV media spend in INR. Contains some missing values.
media_spend_digital_inr	Numeric (float)	600000.0	Weekly digital media spend in INR. Contains some missing values.
media_spend_ooh_inr	Numeric (float)	210000.0	Weekly Out-of-Home media spend in INR.
trade_promo_spend_inr	Numeric (float)	380000.0	Weekly spend on trade promotions (e.g. discounts to retailers).
avg_retail_price_per_unit	Numeric (float)	162.5	Average retail price per unit across the market that week.

avg_promo_depth_pct	Numeric (float)	0.20	Average promotional discount depth across key channels. Contains missing values.
weighted_distribution_pct	Numeric (float)	0.84	Weighted distribution (availability) percentage for Heineken (0–1).
competitor_price_index	Numeric (float)	1.02	Competitor price index relative to Heineken (values >1 mean competitors are more expensive).
competitor_total_spend_inr	Numeric (float)	1150000.0	Estimated weekly total competitor media spend across channels in INR.
seasonality_index	Numeric (float)	1.20	Seasonality factor for that week (>1 in peak season, <1 in low season).
search_interest_index	Numeric (float)	75.0	Index (0–100) for online search interest in Heineken/beer for that market/week.
volume_hl	Numeric (float)	6500.0	Heineken weekly sales volume in hectoliters. Contains some outlier weeks with very high volume.
net_revenue_inr	Numeric (float)	10500000.0	Estimated weekly net revenue for

Heineken in INR,
derived from
volume and price.