

## Dataset 2 – Outlet-Level Monthly Performance Panel

Problem Statement: Analyze outlet performance for Heineken, and identify how execution, facings, footfall and activations drive volume, revenue and margin.

Grain (each row represents): One row per outlet × month.

Notes: Includes missing values in some execution metrics, outliers in volume and revenue, and duplicate records to practice panel data cleaning.

Data Dictionary:

Column Name	Type	Example	Description
outlet_id	String	OUT_0123	Unique identifier for each outlet.
month	Date (month start)	2024-05-01	Month start date; monthly data for 2024.
region	Category	South	Macro region where the outlet is located.
city	Category	Chennai	City of the outlet.
outlet_type	Category	Supermarket	Outlet type: Supermarket, Hypermarket, Bar, Restaurant, Liquor_Store.
channel	Category	Off-Trade	Channel classification based on outlet type: On-Trade vs Off-Trade.
heineken_facings	Numeric (integer)	12	Number of Heineken facings on the shelf.
heineken_shelf_share	Numeric (float)	0.28	Estimated shelf share of Heineken in the beer category (0–1). Contains missing values.
heineken_cooler_share	Numeric (float)	0.35	Estimated share of cooler space

			dedicated to Heineken (0–1). Contains missing values.
monthly_footfall	Numeric (integer)	2200	Estimated monthly customer footfall for the outlet.
activation_flag	Numeric (0/1)	1	1 if a Heineken activation/campaign ran that month in the outlet, 0 otherwise.
execution_score	Numeric (float)	78.0	Execution quality score (0–100), impacted by activation. Contains missing values.
oos_days	Numeric (integer)	3	Number of stock-out days for Heineken in that month at that outlet.
heineken_volume_cases	Numeric (integer)	95	Monthly Heineken volume in cases. Includes some outlier months with very high volume.
competitor_volume_cases	Numeric (integer)	130	Monthly competitor beer volume in cases for the same outlet.
heineken_revenue_inr	Numeric (float)	145000.0	Estimated monthly revenue from Heineken sales in INR. Some outliers are injected.
gross_margin_pct	Numeric (float)	0.30	Gross margin percentage for Heineken at the

outlet level.