Key Measures for Space Optimization

1. Sales per Square Meter (or Square Foot):

Formula: Sales per Square Meter=Total Sales/Space Allocated​

* + Purpose: Measures the revenue generated for each square meter of space. Higher values indicate better utilization.

1. Footfall Conversion Rate:

Formula: Conversion Rate= (Sales Transactions/Footfall)×100

Purpose: Shows the percentage of visitors making purchases, helping to identify underperforming or overperforming spaces.

1. Profitability per Square Meter:

Formula: Profitability per Square Meter=Profit/Space Allocated ​

Purpose: Focuses on profit rather than just sales, factoring in costs like inventory and space rent.

1. Traffic Density:

Formula: Traffic Density=Footfall/Space Allocated​

Purpose: Helps determine how effectively the space attracts customers, particularly for promotional displays or high-traffic zones.

Additional Metrics

1. Category Performance by Space:
   * Analyze which product categories generate the highest revenue per unit of space. This informs decisions on whether to expand or reduce their allocated space.
2. Dwell Time per Category:
   * Measure the time customers spend in a category’s section using footfall sensors or observation. Longer dwell times often correlate with better engagement and sales.
3. Stock Turnover Rate:
   * Indicates how frequently products are sold and replaced within a space. Higher turnover suggests more efficient space use.
4. Space Utilization Ratio:

Formula: Space Utilization Ratio=(Space Used for Display/Total Allocated Space)×100

Purpose: Ensures space isn’t wasted, such as by over-allocating to low-performing categories.

1. Promotion Impact:

* Measure the lift in sales or footfall during promotional events to evaluate if the flexible space (like pallets or plinths) is effective in driving sales.

Analyzing Profitability:

* Profit Margin per Category:
  + To further evaluate profitability, you can calculate the profit margin for each category.
  + Formula: Profit Margin=(Profit/Sales)×100
* Profitability per Square Meter:
  + Combine the Profit and Space Allocated to assess the profitability of space allocation.
  + Formula: Profit per Square Meter=Profit/Space Allocated ​

This enhanced dataset will allow you to evaluate how well the space in each store is utilized to generate profit, as well as how the price and cost structures impact overall profitability.