From Classical MMM to Always-On Decision Intelligence

Leading foods and CPG major · 6 categories, 30+ brands, 8 regional markets · one nested portfolio, refreshed monthly

THE SHIFT IN SIX DIMENSIONS

CLASSICAL APPROACH		SKEWB ALWAYS-ON DECISION INTELLIGENCE
An annual or bi-annual wave	→	**Monthly refresh on a three-week data lag**
One flat model per brand	→	**Nested masterbrand → category → brand → KPI**
Correlational regression	→	**Bayesian causal inference with competitive and macro controls**
A single best-fit model	→	**Millions of ensemble models, billions of simulations**
A retrospective report	→	**Prescriptive self-serve simulation on live models**
An analyst-run refresh cycle	→	**Agent-run estimation, validation and alerting**

OUTCOME — SAME BUDGET, REBUILT WITH AI AND AGENTIC INTEGRATION

+11%
sales improvement from reallocation, on the same budget

49%
of media budget moved across brands, markets and channels

95%
forecast accuracy sustained across refresh cycles

WHAT CAUSAL SEPARATION CHANGED

- Competitive price index and rival advertising pressure are sized separately, so the media read never silently carries them
- Macro conditions are modelled explicitly rather than absorbed into media effects
- Television drives the most volume at the lowest return, 1.4x, while digital brand at 3.5x and CRM at 2.2x buy efficiency
- Festive and seasonal windows lift media effectiveness by as much as 1.4x

AI AND AGENTIC AI APPLIED

MODELS Bayesian causal MMM in a four-level nested hierarchy, ensembled across specifications, with price index, rival ad pressure and macro conditions controlled explicitly.

AGENTS Estimation, validation and refresh agents rebuild roughly thirty models every month on a three-week lag, raise drift alerts and serve simulation directly to planners.