Ensembles and Simulation Replace the Single Best-Fit Model

One of the world's largest food and beverage companies · operations across 130+ countries · three categories under local-brand pressure

THE MANDATE

Increase market share and topline sales in three categories facing intense competition from local brands, and allocate budget across digital, e-commerce, influencer and television for maximum gain

AI AND AGENTIC AI APPLIED

MODELS Millions of ensemble models across specifications and priors, scored on impact to brand sales and brand sales and share, with billions of simulations searching the budget space

AGENTS The platform builds, scores and selects the ensemble itself, then re-runs the optimisation each cycle optimisation each cycle — a search no analyst team could execute manually

WHY THIS IS THE EVOLUTION

A single model specification masks uncertainty, leaving clients with a point estimate and little little visibility into how robust it is. An ensemble carries that uncertainty through the analysis, turning analysis, turning each recommendation into a distribution rather than a single number thus making thus making weekly decision-making more reliable and defensible

DEPLOYMENT

Delivered as a live platform in a flat two weeks, refreshing at monthly grain across brands and categories.

+3X
return on marketing investment

~2.5%
growth in retail sales

90%+
monthly forecast accuracy

2 weeks
to full deployment

Millions
Ensemble Models Powered by Causal AI &Agentic Optimisation

Billions
Simulations Run to Optimise Media Mix, Powered by Causal AI &Agentic Optimisation