

# Marketing Mix Modeling

### **US-based Consumer Durables Firm**

20% net sales opportunities

IZ.

12.7% improvement in incremental sales

## \$28m

annualized cost savings

16% ROI improvement

#### CLIENT CHALLENGES

- The client, a US CPG firm, wanted to quantify ROI of media vehicles such as DM and DRTV
- » The ROI was to be quantified over a two-year period, for which time series data on marketing spending on these vehicles and total sales through different channels was available
- A multiplicative model was developed to forecast sales and arrive at the ROI from each vehicle

#### OUR APPROACH

- » Identified data elements, e.g. sales, media spending, macro variables
- » Performed sanity checks for variables, e.g. missing values, extreme values, etc.
- Calculated ad-stock functions to arrive at the most appropriate function for decay
- Tested for stationarity and autocorrelation in the sales time series and determined the appropriate differencing, autoregressive, and moving average terms
- » Developed models incorporating alternate sales response functions
- Compared alternate models based on forecast accuracy and model stability
- » Derived ROI the change in sales per unit change in spend based on the model prediction

#### IMPACT DELIVERED

- Enabled the client to estimate and comparatively evaluate the ROI from its various marketing channels
- Both DRTV and DM spending contributed significantly to sales growth (DRTV was a larger contributor than DM and also had superior ROI)

#### About Acuity Knowledge Partners

Acuity Knowledge Partners, formerly part of Moody's Corporation, is a leading provider of bespoke research, analytics, staffing and technology solutions to the financial services sector.

Headquartered in London, Acuity Knowledge Partners has nearly two decades of transformation experience in servicing over 300 clients with a specialist workforce of over 2,500 analysts and delivery experts across its global delivery network.

We provide our clients with unique assistance not only to innovate, implement transformation programmes and increase operational efficiency, but also to manage costs and improve their top lines.

These services are supported by our proprietary suite of Business Excellence and Automation Tools (BEAT) that offer domain-specific contextual technology.

Acuity Knowledge Partners is assisted by Equistone Partners Europe, a leading private equity organisation that backs specialist growth businesses and management teams.