

Next Issue: [Supply Chain Health Check](#)

Previous Issue: [Retail Analytics](#)

## Allocation of Marketing Investments

In an increasingly competitive world, companies are making huge marketing investments to sustain brand loyalty and competitive advantage. However, the pressure on margins is very intense and hence, **companies need to maximize sales and profitability on every dollar they spend on the key marketing elements** (a mix of advertisement, other promotional measures, trade support, pricing, and distribution).

Allocation of Marketing investments to these elements have largely been based on experience of the marketing managers (what mix has worked historically?), competitor's marketing strategy and a qualitative understanding of customer buying behavior (customer reaction to in-store promotions, advertisement, temporary discounts, etc.). What is lacking is a **scientific way of evaluating past marketing decisions** on a consistent basis, and **using this evaluation to drive future marketing spends**, so as to **maximize the ROI on marketing spends**.

One of the scientific approaches that progressive organizations use today to optimize marketing spend is **Market Mix Models**. These models uncover customer sensitivity to the marketing decisions undertaken in the past by establishing the link between spends and incremental sales. The effect of competitor marketing activities on sales / market share can also be looked at, depending on data availability.



### Measuring return on marketing spends: A Case Study

A consumer products company wanted to build a mechanism to measure the return on its marketing investments. Consequently, the marketing managers could **evaluate the effectiveness of different promotional strategies** and accordingly guide investment.

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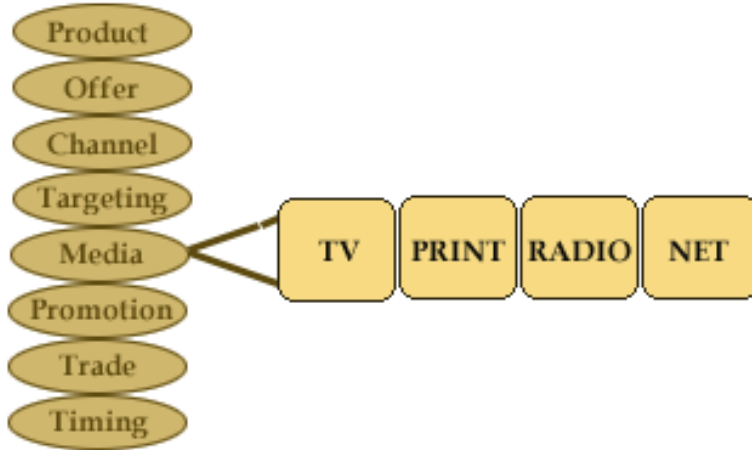
### More Resources

- [Right media mix key to ROI maximization](#)
- [Productivity and ROI](#)
- [Integrating the Promotions Mix](#)

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### About DecisionCraft Analytics

We provide decision-making solutions to improve operational efficiency and business responsiveness. Our consulting



These models help in:

1. **Quantifying marketing spends:** Choosing the right marketing mix by simulating the effect of different marketing strategies on sales
2. **Scheduling marketing spends:** By determining the duration over which the effect of a typical marketing decision lasts, the marketing spends can be scheduled, so as to maximize impact on sales.
3. **Understanding effect of competitor actions:** Modeling effect of competitor policies on margins, sales and profitability. Examples:
  - What is the effect on my brand sales, sales if competitors' cut price on brand x by y %? How can I counter this?
  - If competitor is running an in-store promotion, should I also launch such promotion or should I resort to temporary price discounts?
4. **Understanding effect of cannibalization:** In a multi-brand scenario, with overlapping target customer segments, decisions on marketing spend on one brand may affect sales on other brands in the portfolio. Marketing mix models help determine the brands affected and the extent of cannibalization. Based on this, using these models, managers can figure out, how to make investments so as to counter these effects. (Refer to Point 1 above).

Market mix models have evolved from simple additive and multiplicative models to Multinomial Logit (MNL) models and Multiplicative Competitive Interaction (MCI) models. The **choice of models is problem-specific**. For instance, MCI models have proven superior to other models in multiple brand scenarios, when interaction of competitor brands spends also needs to be looked at. Recently, Artificial Neural Networks have also been used. ANNs are very effective when significant inter-relationships exist between spends on marketing mix elements and / or relationships between spend and sales volume is non-linear.

**The main challenge in developing good marketing mix models is lack of right data.** Consider the problem of measuring effectiveness of advertising on sales. For this, Gross

services employ our strengths in industry knowledge, conceptual rigor, and information technologies. Developed using concepts from decision theory; our solutions use robust optimization, simulation, and statistical engines adapted to our client's focus areas.

## DecisionCraft Services

### Business Diagnostics

We analyze business processes and transactional data to identify underlying patterns, unravel hidden relationships and recommend areas for improvement that can improve ROI and reduce costs.

### Predictive Analytics

We use historical data intelligently to develop a view of future market trends and help our clients focus on the right audiences thereby developing their competitive edge.

### Forecasting

We use advanced time-series and regression techniques for forecasting behavior of critical business variables that allows our clients to plan for their resources intelligently.

Rating Points (GRPs) are typically collected for the target customer segment, for specific programmes and related to sales. However, GRPs by themselves only represent the number of people watching the program. To understand impact, data on the quality of advertisement also needs to be included.

The main limitation of this class of models is that they assume that overall structure of marketing activities and underlying customer behavior remains same. This is because these **models work by uncovering patterns** in past customer spend. This can be countered by running these models on a periodic basis, whenever major changes (new competitors, new kinds of marketing activities, new customer segments) happen.

To conclude, **well-built marketing mix models** help managers prioritize marketing spend, so as to **maximize marketing ROI** through **what-if scenarios**. A side benefit is that they help build a **culture of tracking data** on customer reactions to spend by self and competitors. Over a period of time, they also help organizations make their marketing strategy more effective by aligning it to needs of the market.

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