Modeling OOH Media Effectiveness: Sales and Brand Metric ROI Analysis 2023

Purpose of the study
To investigate and improve effectiveness learnings by category using US marketing mix modelling (MMM) results on sales, and three brand metrics - Brand Awareness, Consideration & Purchase Intent. The brand metric MMMs were built especially for this study, and the sales results were based on Benchmarketing’s database of MMM meta-results of US brands.

How to use the resulting information
The analysis provides findings on the optimal mix allocations for total media and OOH – by category, by size of brand, by each of the four KPIs, for each of three categories. The findings provide data-driven guidance on OOH ad spend recommendations to inform media planning decisions by brands and media agencies.

Project Scope
The project analysis included three categories: CPG Food, Retail Grocery and Automotive using a three-phase process:

- Produce an understanding of the current amount of OOH and other media channel allocations in the mix using Vivvix and SMI data as sources.
- Use standardized MMM results from US brand sales models built over recent years to develop a revenue return on advertising spend (RROAS) database. The reported RROAS data was then modelled to build actual response curves to generate optimization of specific spend levels to deliver the best possible RROAS.
- Build new MMMs of brand awareness, consideration, and purchase intent to produce response curves by media channel for each KPI for each category. Apply the response curves to the average 2022 brand spend and mix, and examine small, medium, large brands (categorized by total spend) to see different media channel mixes by brand size.

Overview of findings
OOH spend levels have recovered after the pandemic, as have other media channels. Total media spend for the Automotive category is in decline, but total spend for the other two categories is increasing. OOH media allocation is high in Retail Grocery at 8 percent. In the other two categories, OOH is at 1 percent.

In each of the three categories, across sales and the three brand metric KPIs, the analysis indicates more spend should be allocated to OOH. This is true even in categories with higher existing levels of OOH spend, such as Retail Grocery.

To fund OOH media increases, the models indicate budget should be shifted away from TV and Digital, both which are found to be over-spent, and from Print, which often has very small effect.

Recommendations
Benchmarketing recommends incremental spending changes in OOH, rather than making large changes in existing levels or usage of OOH as per the optimization recommendations. This “test and learn” best practice advocates for incremental spend shifts, either incremental to the total budget or taking from the channels identified as over-spent, using multiple evaluation / reporting methods, and perhaps running geo-tests for additional evidence. For application to specific brands, the suggested approach is to apply the small, medium, and large budget analysis to identify brands in the respective categories who are under-spending in OOH and have them test OOH at higher levels, ensuring that the OOH content is high quality. It is reasonable to take the recommendations for these categories and apply to “adjacent” categories. For example, the CPG Food analysis could be applied to CPG Beverages, and the Automotive data could be used for other big ticket, infrequent consumer purchases.

The following three pages review the learning from each product category. More detail can be found in the full analysis report, which is available from OAAA, oaaa.org, 202-833-1556.

The Benchmarketing Modeling OOH Media Effectiveness analysis was sponsored by The Foundation for Outdoor Advertising Research and Education (FOARE), a 501 (c) (3) not for profit, charitable organization. Benchmarketing is a UK-based strategic marketing effectiveness consultancy and part of the Omnicom Media Group.
**CPG Food Category – Recommendation is to increase OOH spend for all KPIs**

**Sales KPI:**

The analysis recommends increasing the OOH percent of the mix from the current 1 percent up to a high range of 17 percent. If the full increase is deployed, the effect is an increase of total media revenue return on advertising spend (RROAS) from $0.45 to $0.57, or an improvement in RROAS of +$0.12 or +27 percent. The media mix optimization suggests decreasing TV, Print and a very small amount from Digital spend to fund the increased allocation to OOH. If we look at the differences between small, medium and large brands, the same rule applies, but with small brands, there’s a recommendation to move more spend from Digital to OOH.

**Brand Awareness KPI:**

The Brand Awareness model recommends increasing the OOH percent of the mix from the current 1 percent up to a high range of 11 percent. The 11 percent allocation increases RROAS from $0.40 to $0.46, or an improvement in RROAS of +$0.07 or +17 percent. The media mix optimization suggests decreasing TV, Print and a very small amount from Digital spend to fund the increased allocations to OOH and Radio. If we look at the differences between small, medium and large brands, the same rule applies for each with small differences.

**Consideration KPI:**

The Consideration model recommends increasing the OOH percent of the mix from the current 1 percent up to a high range of 11 percent. The 11 percent allocation increases RROAS from $0.73 to $0.85, or an improvement in RROAS of +$0.12 or +16 percent. The media mix optimization suggests decreasing TV, Print and a very small amount from Digital spend to fund the increased allocations to OOH and Radio. If we look at the differences between small, medium, and large brands, the same rule applies, but with small brands, allocate spend from TV and Print to OOH.

**Purchase Intent KPI:**

The Purchase Intent model recommends increasing the OOH percent of the mix from the current 1 percent up to a high range of 15 percent. The 15 percent allocation increases RROAS from $0.15 to $0.19, or an improvement in RROAS of +$0.04 or +24 percent. The media mix optimization suggests decreasing TV, Print and a very small amount from Digital spend to fund the increased allocation to OOH. If we look at the differences between small, medium and large brands, the same rule applies, but with medium brands allocate more spend from TV to OOH, with small brands allocate more spend from TV and Print to OOH.
Retail Grocery - Recommendation is to increase OOH spend for all KPIs

Sales KPI:
The Sales model recommends increasing the OOH percent of the mix from the current 8 percent up to a high range of 27 percent. If the full increase is deployed, the effect is an increase of total media revenue return on advertising spend (RROAS) from $21.08 to $22.33, or an improvement in RROAS of +$1.25 or +6 percent. The media mix optimization suggests decreasing TV and a very small amount from Radio and Digital to fund the increased allocation to OOH. Reviewing the differences between small, medium, and large brands, the same rule applies, but with small brands, allocate more spend from Print and Radio to OOH.

Brand Awareness KPI:
The Brand Awareness model recommends increasing the OOH percent of the mix from the current 8 percent up to a high range of 21 percent. The 21 percent allocation increases RROAS from $0.67 to $0.69, or an improvement in RROAS of +$0.02 or +4 percent. The media mix optimization suggests decreasing TV and Digital spend to fund the increased allocations to OOH and Radio. Reviewing the differences between small, medium, and large brands, the same rule applies, but with medium brands, there’s a recommendation to additionally fund OOH by taking from Radio. For small brands, also take from Print and Radio.

Consideration KPI:
The Consideration model recommends increasing the OOH percent of the mix from the current 8 percent up to a high range of 11 percent. The 11 percent allocation increases RROAS from $0.45 to $0.46, or an improvement in RROAS of +$0.01 or +3 percent. The media mix optimization suggests decreasing TV and Digital spend to fund the increased allocation to OOH and Radio. Reviewing the differences between small, medium, and large brands, the same rule applies, but with small brands allocate more spend from Print and Radio to OOH.

Purchase Intent KPI:
The Purchase Intent model recommends increasing the OOH percent of the mix from the current 8 percent up to a high range of 10 percent. The 10 percent allocation increases RROAS from $0.12 to $0.14, or an improvement in RROAS of +$0.02 or +9 percent. The media mix optimization suggests decreasing Digital spend to fund the increased allocation to OOH, Print and a small amount to Radio. Reviewing the differences between small, medium, and large brands, with small brands allocate spend from Print and Radio to OOH. With medium brands allocate spend from Radio and Digital to OOH. For large brands allocate spend from TV and Digital to OOH.
**Automotive - Recommendation is to increase OOH spend for all KPIs**

**Sales KPI:**

The analysis recommends increasing the OOH percent of the mix from the current 1 percent up to a high range of 5 percent. If the full increase is deployed, the effect is an increase of total media revenue return on advertising spend (RROAS) from $6.25 to $6.57, or an improvement in RROAS of +$0.33 or +5 percent. The media mix optimization suggests decreasing small amounts from TV and Radio to fund the increased allocations to OOH and small amount to Digital. Reviewing the differences between small, medium, and large brands, the same rule applies, but with small brands, there’s a recommendation to shift more spend from Digital and a small amount from Radio to OOH.

**Brand Awareness KPI:**

The Brand Awareness model recommends increasing the OOH percent of the mix from the current 1 percent up to a high range of 19 percent. The 19 percent allocation increases RROAS from $0.04 to $0.04, or an improvement in RROAS of +$0.01 or +19 percent. The media mix optimization suggests decreasing TV and Digital spend to fund the increased allocation to OOH. Reviewing the differences between small, medium, and large brands, the same rule applies.

**Consideration KPI:**

The Consideration model recommends increasing the OOH percent of the mix from the current 1 percent up to a high range of 14 percent. The 14 percent allocation increases RROAS from $0.06 to $0.07, or an improvement in RROAS of +$0.01 or +11 percent. The media mix optimization suggests decreasing TV and Digital spend to fund the increased allocation to OOH and Radio. Reviewing the differences between small, medium, and large brands, the same rule applies, but with small brands, the recommendation is to give more money from Digital to OOH.

**Purchase Intent KPI:**

The Purchase Intent model recommends increasing the OOH percent of the mix from the current 1 percent up to a high range of 13 percent. The 13 percent allocation increases RROAS from $0.03 to $0.03, or an improvement in RROAS of +$0.01 or +19 percent. The media mix optimization suggests decreasing TV and Digital spend to fund the increased allocation to OOH and Radio. Reviewing the differences between small, medium, and large brands, the same rule applies, but with medium brands, there’s a recommendation to allocate Print spend in addition to TV and Digital to OOH.

![Automotive: Current vs Optimised Budget Allocation by KPIs](image-url)