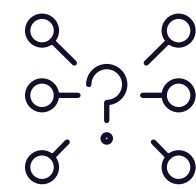




Measuring TV Performance with Competitive Analysis

eHarmony Case Study · January 2018



Basic Competitive Analyses

In TV advertising, it is always useful to keep an eye on competitors' performance. Competitive analyses today are mostly limited to top-level insights such as number of airings across networks, programs, dayparts, or creatives. This type of basic information allows companies to understand what their competitors are focusing on (e.g. which customers they are targeting), and can also be used to extract other insights (e.g. estimating TV marketing spend).

While useful, this information is static. In other words, it doesn't tell advertisers whether their competitors struck gold with TV campaigns. At Tatari, we can go beyond the limits of these basic analyses and actually measure competitors' TV performance.

Measuring TV Performance

In its most basic version, to measure direct-response TV performance, Tatari uses a baseline and lift model.¹ That means we calculate lift by measuring how many people visit the advertiser’s website (install an app, make a purchase, etc.) as a result of seeing a TV ad, but as measured above the baseline (i.e. the number of people who usually visit the website in absence of TV).

As can be seen in Figure 1, for this model to work, we need access to advertiser’s first-party data as well as airings and cost data.

- **First-party data provides real-time information on advertiser’s website visits (app installs, purchases, etc.) and can be acquired through platforms like Google Analytics or AppsFlyer.**
- **Airings data offers timestamps of each ad and can be purchased from third-party providers like Kantar, DRMetrix, or Nielsen.**
- **Cost data is usually expressed as CPM (cost per thousand impressions) and is different for each network and program.**

When all these data sources are combined, we are able to implement the baseline and lift model to measure TV performance.

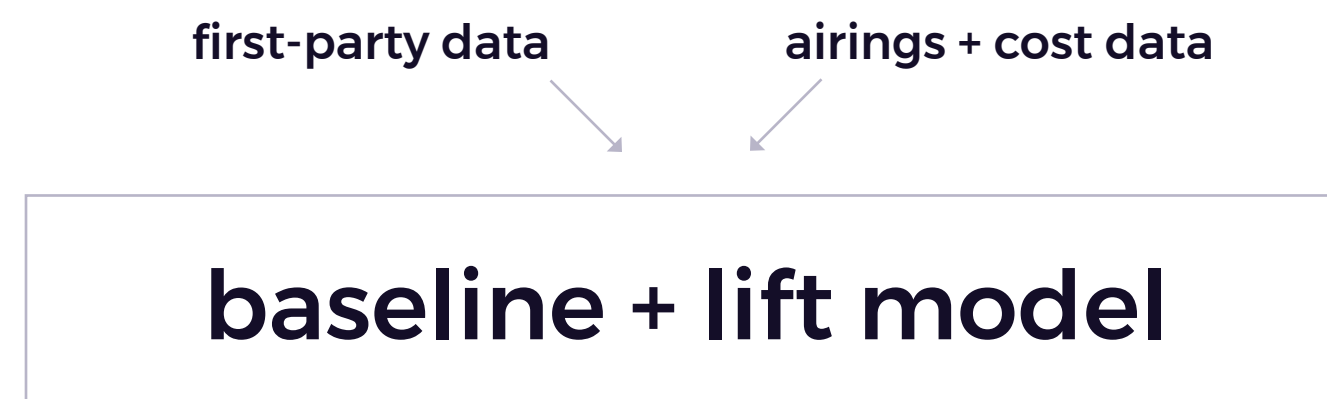


Figure 1 Tatari’s baseline and lift model

For our clients, this model works because we have direct access to their first-party data in addition to airings and cost data. For competitive analyses, we can easily obtain airings data using third-party providers and combine that information with our internal cost data. If, for example, we know a client’s competitor had five airings in the Weekend rotation on National Geographic, for which we usually pay between \$500-\$700,² we can estimate the competitor’s spend for that rotation to fall between \$2,500 and \$3,500.

The remaining challenge is obtaining first-party data because no company would ever publish such proprietary information. To solve this problem, Tatari purchases minute-by-minute clickstream data (i.e. information on search and website traffic) and uses that as a substitute for first-party data (Figure 2).

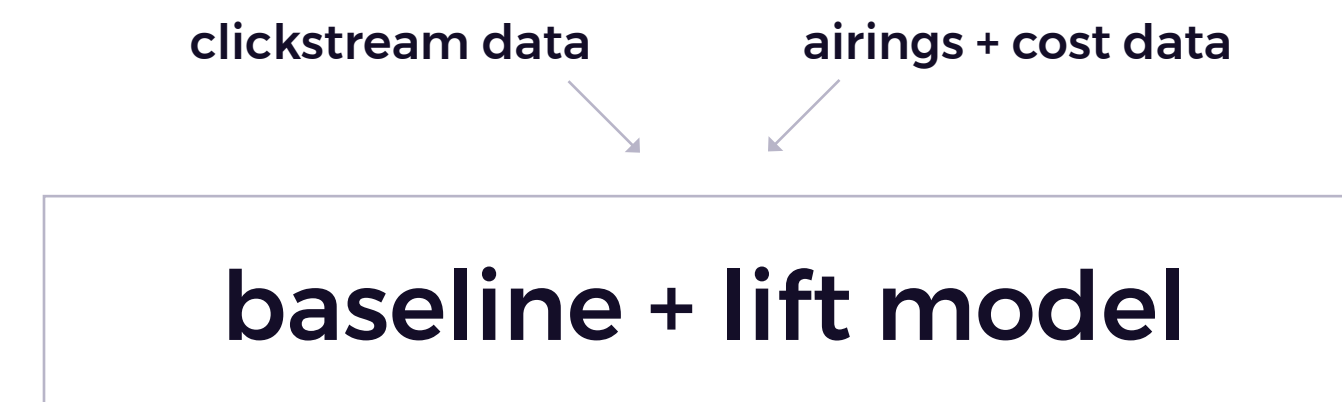


Figure 2 Tatari’s baseline and lift model with substitution

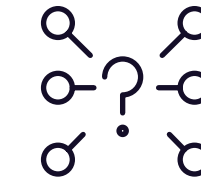
We can then conduct a true competitive analysis, which offers a detailed overview of competitors’ performance on TV. This can be best demonstrated in our competitive analysis of eHarmony’s TV campaign.

¹ For measurement of brand response, we can also send you our “Brand Measurement Study” white paper.

² For the purposes of this white paper, these are hypothetical values.

eHarmony Case Study

Insights From Basic Competitive Analysis



In 2016, we conducted a competitive analysis of eHarmony's TV campaign for the period April 30 to June 20. Before we show what we discovered with our true competitive analysis, it is useful to first look at the scope of findings from basic competitive analysis.

Using third-party airings data and our internal cost data, we were able to see that cable TV was the company's primary focus and that :15s and :30s creatives had equal amounts of spend (Figure 3 and 4).

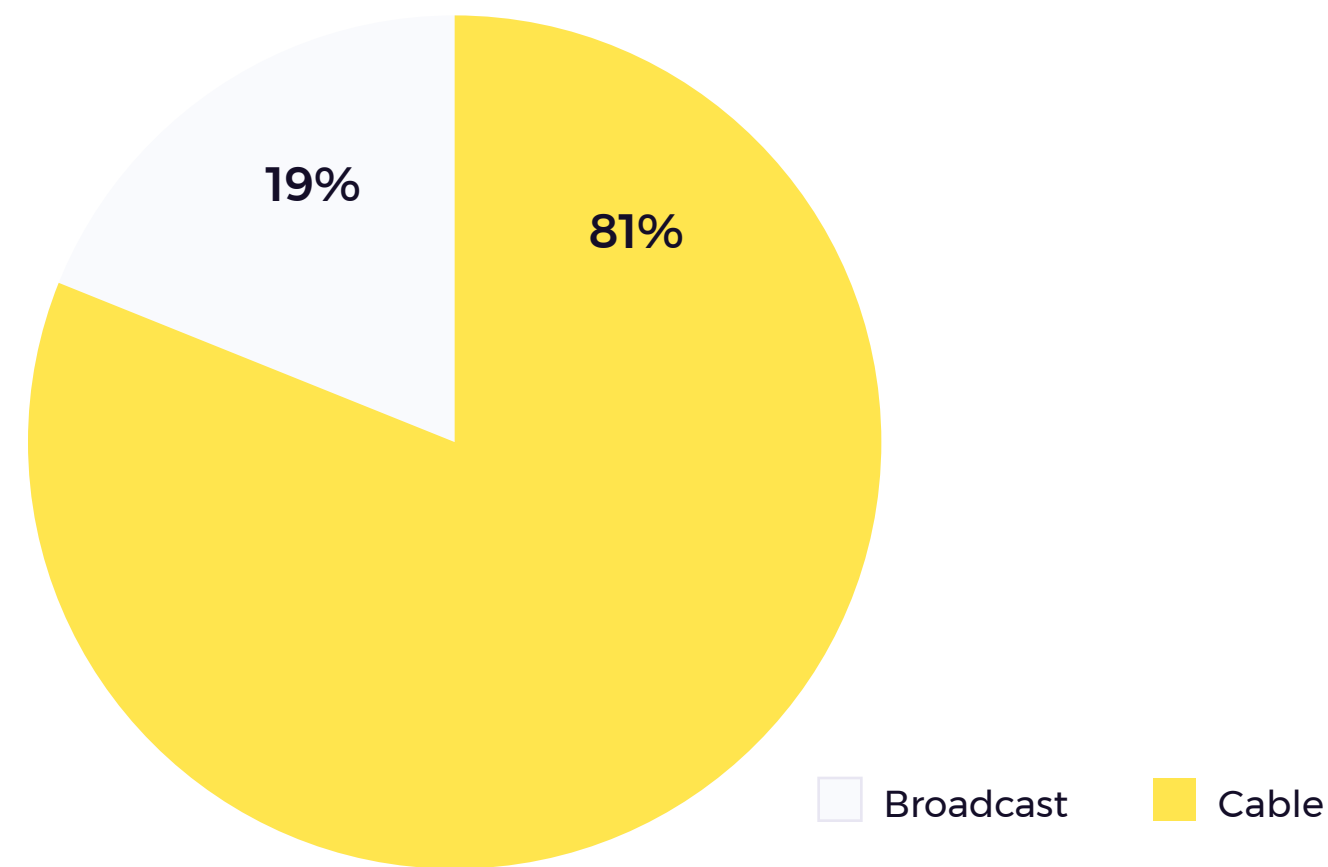


Figure 3 Estimated spend distribution by type of network

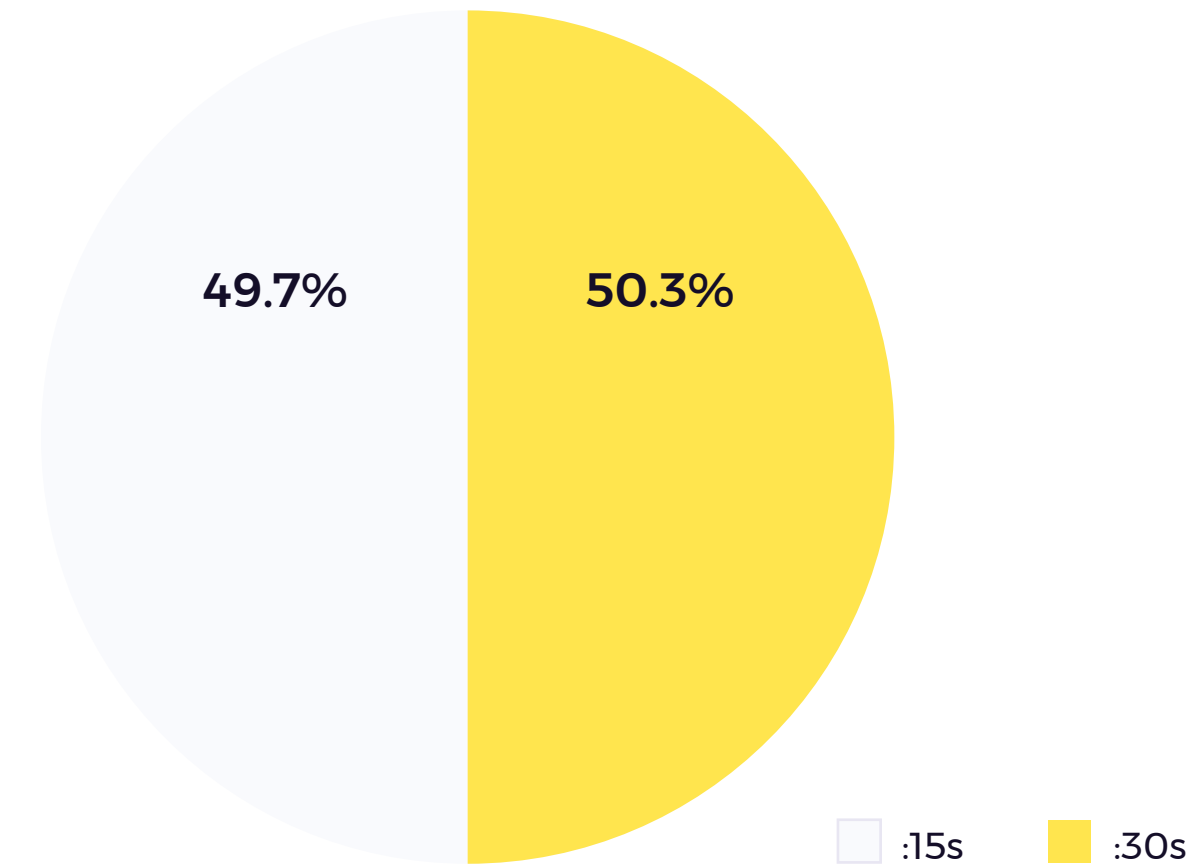
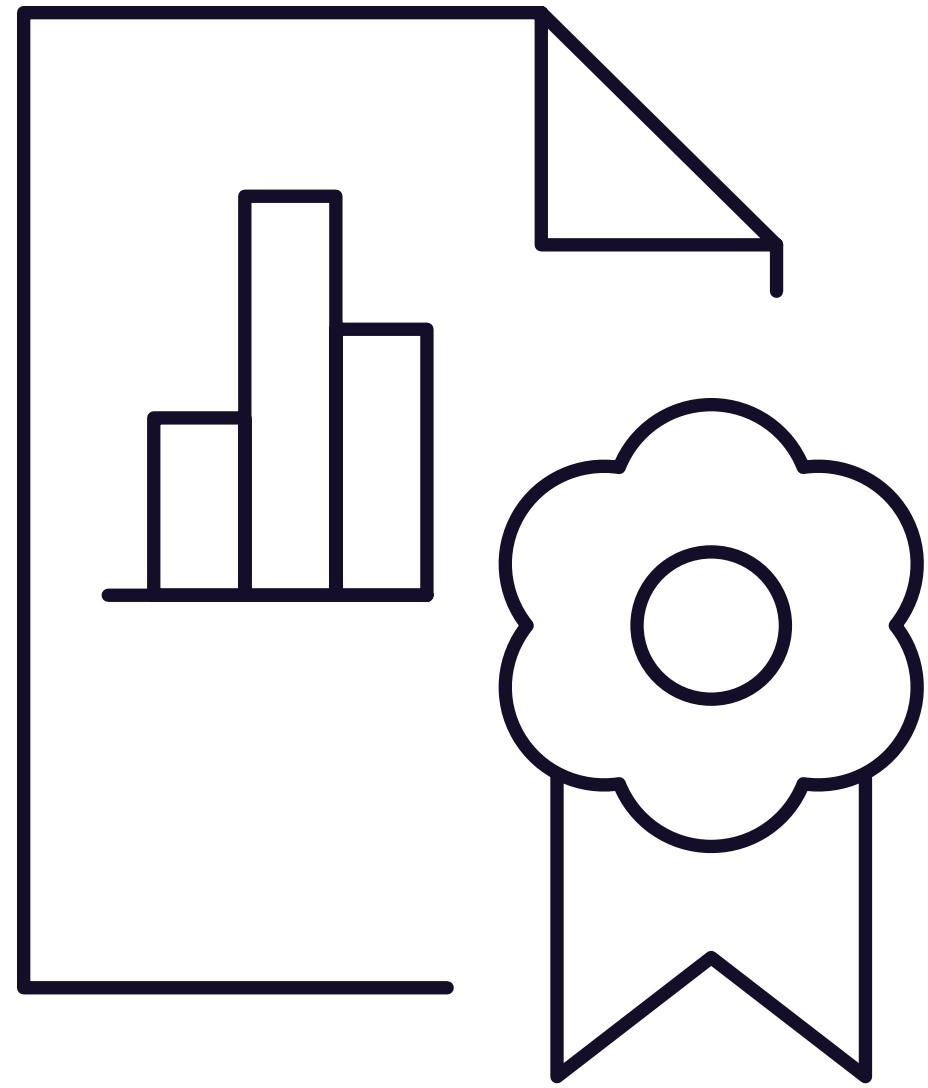


Figure 4 Estimated spend distribution by length of creative

We were also able to see that more than 40% of spend was allocated to six networks: CBS, USA, ABC, E!, TBS, and Bravo.

As mentioned earlier, while useful, this level of competitive analysis does not offer any actionable insight. Did eHarmony's TV campaign drive response? Which creatives resonated better with audiences? Was there any difference in performance across networks or programs? These are questions that all TV advertisers want to know about their competitors. To that extent, Tatari purchased clickstream data as a substitute for eHarmony first-party traffic data.

True Competitive Analysis: Measuring eHarmony's Performance



For eHarmony, our goal was to measure performance using the response rate, a relative metric that is defined as lift per 1,000 impressions.

$$\text{response rate} = \frac{\text{lift}}{1,000 \text{ impressions}}$$

Response rate is often preferred for calculating performance because it extracts (or neutralizes) the element of cost in the campaign. It shows how many people responded to an ad (lift) out of all the people who could have responded to the ad (number of impressions).

Using this metric and clickstream data, we built an algorithm that allowed us to measure the performance of eHarmony's TV campaign.

Network Analysis

We first ranked the networks according to response rate. Figure 5 shows the networks arranged from highest to lowest response rate relative to median, with those above zero outperforming the median response rate, and those below zero underperforming the median response rate.

That means the networks on the left (e.g. Fox Deportes and MTV Channel) recorded the highest response, while those on the right (TBS, USA, CBS, and ABC) recorded the lowest response. Interestingly, CBS, USA, ABC, and TBS were also the top-spend networks respectively.

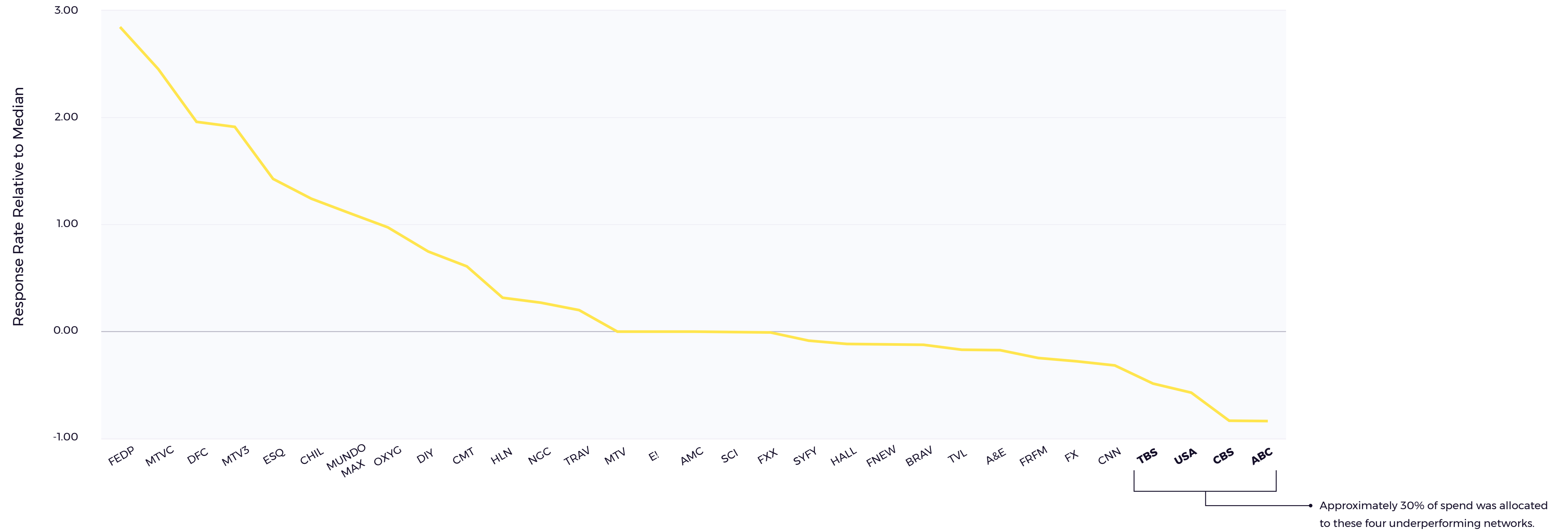


Figure 5 Performance by network

Program Analysis

We also ranked program performance using the response rate (Figure 6). By doing this, we could see that music programming shows (e.g. Metal Mania, 90s Rocked, Rock Fest) were the clear winners with highest response rates.

Comedy-drama and entertainment shows (Mythbusters and Gilmore Girls) followed closely, while reality TV (Shahs of Sunset, Real Housewives NY/OC, 16 and Pregnant, etc.) and crime TV shows (e.g. Blue Bloods, Forensic Files, NCIS, etc.) drove lower response rates.

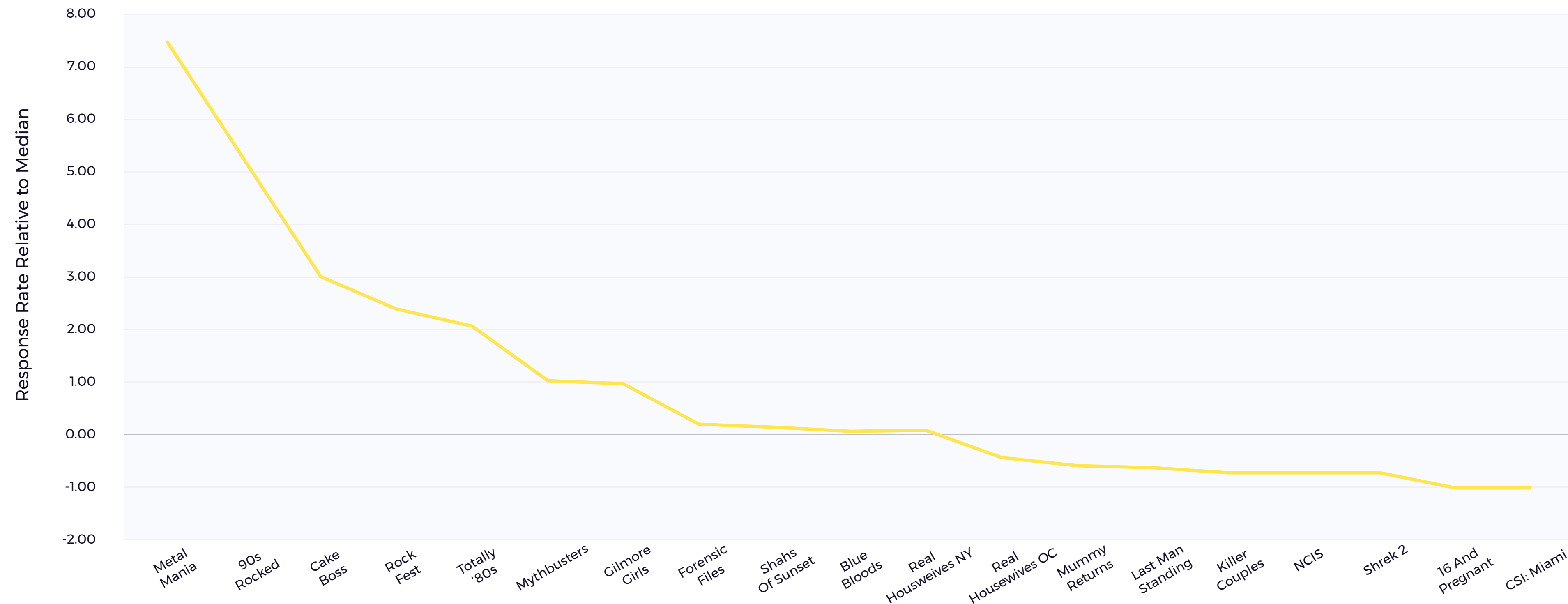


Figure 6 Performance by program

Creative Analysis

Network and program analyses are only one aspect of a true competitive study. Most companies also seek to understand competitors' creative performance.

In this period, eHarmony aired seven :15s and seven :30s creatives as shown in Figure 7.

:15s Creatives	:30s Creatives	Promo
Visioning Board	Visioning Board	No
Free Communication Weekend	Free Communication Weekend	Yes
Three months free: Amor de Vida	Three months free: Amor de Vida	Yes
Buy six months, Get six months	Buy six months, Get six months	Yes
Beth Fast	Beth Fast	No
Angela & Norm		No
	Mia & Anthony	No
Can Get Own		No
	Waitress Tip	No

Figure 7 eHarmony's creatives from Apr 30 to Jun 20
(note: the first five pairs are :15s and :30s versions of the same creative)

We found differences in performance across these fourteen creatives.

- 1 Creatives with promos had the best response. For instance, "Free Communication Weekend" and "Three months free: Amor de Vida" outperformed the weekly median response rate by 40%, while "Buy 6 months, Get 6 months" outperformed by 20%.
- 2 :15s versions had higher response rates than their :30s counterparts.

Product Insight

A true competitive analysis can also deliver actionable and impactful product strategy insights. In the case of eHarmony, for instance, we saw that creatives with free communications and free subscriptions promos outperformed. Understanding what features (or the promotion thereof) drove higher response can help companies prioritize their product roadmap accordingly.

Creative Analysis: Additional Findings

Surprisingly, we also noticed errors in creative management. Particularly, the :15s version of the “Free Communication Weekend” had a validity date until May 30, 2016 (Monday), but continued to air through mid-June. It should come as no surprise that the response rate dropped by approximately 50% in the subsequent weeks. On the other hand, “Three months free: Amor de Vida,” one of the other :15s creatives, had no validity date and held a relatively steady response rate during the same time period (Figure 8).

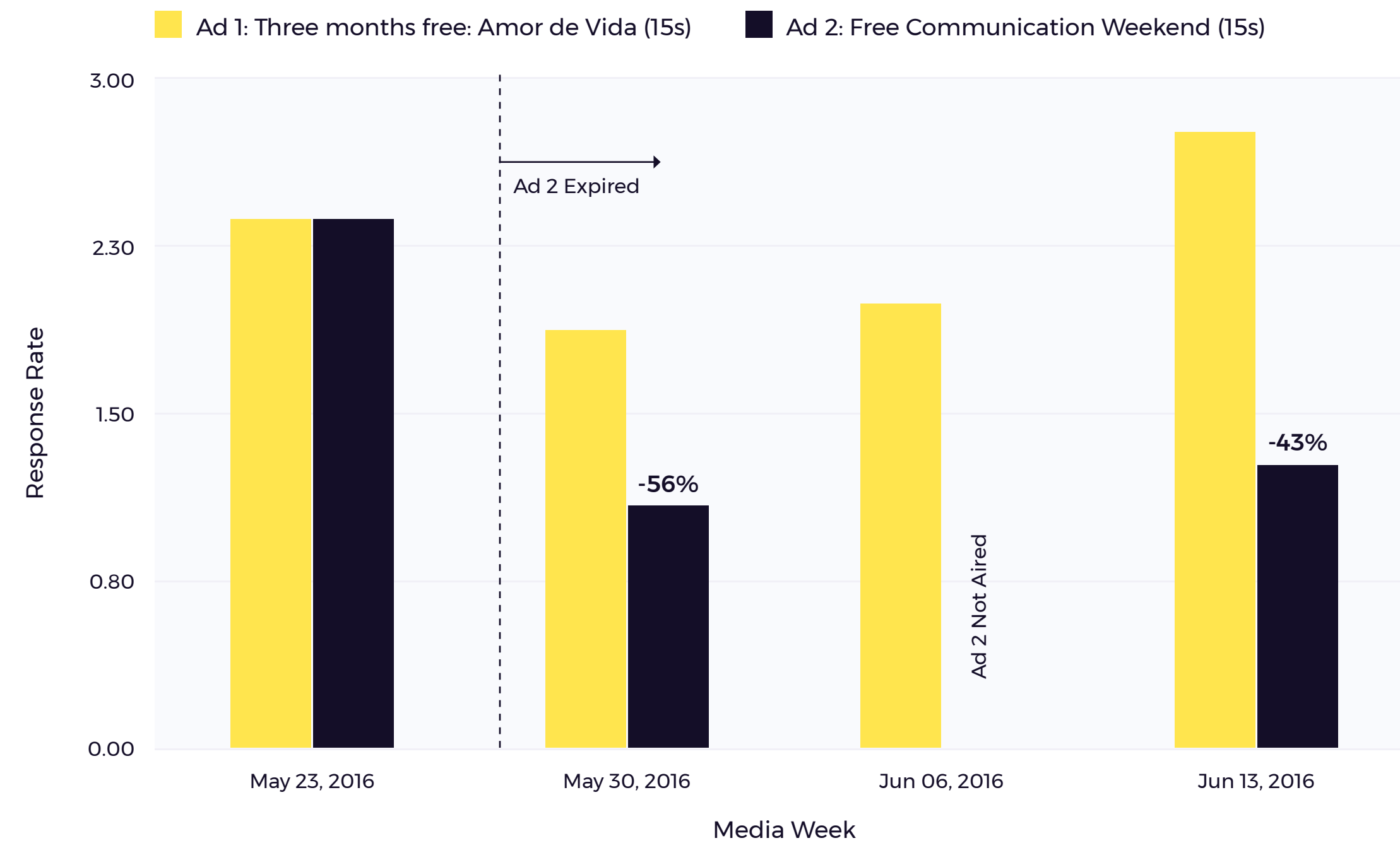


Figure 8 Response rates from May 23 - Jun 13 with :15s version of “Free Communication Weekend” airing erroneously after May 30.

Thank you.

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