

IS THERE SUCH A THING AS... THE IDEAL CAMPAIGN DURATION?

This is the first in a series of new research articles we will publish on our blog. These innovative topics will shed a light on attributes that are expected to be highly decisive for the performance of a TV campaign. Join our econometrists into their research journey and take a glance at the complexity of TV performance measurement.

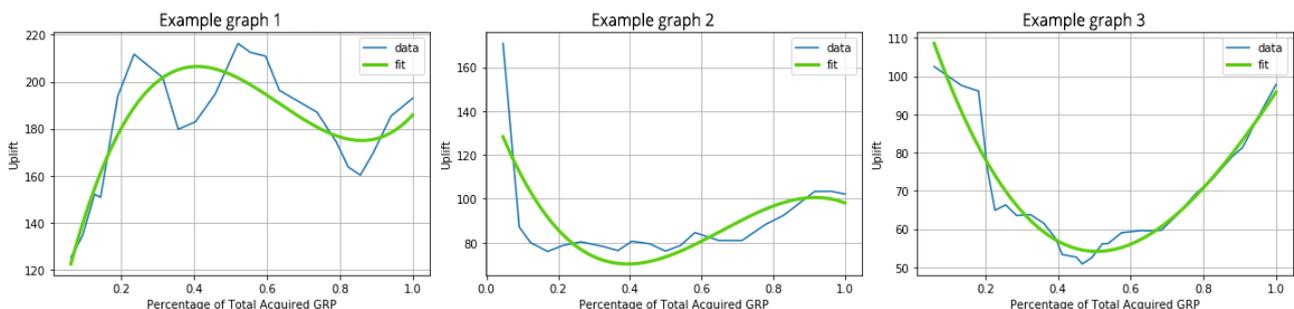
Imagine you have the proper tools to reveal the direct effect of your TV campaign. You might discover that at a certain point in the campaign, the direct effect is at its maximum before it starts to decline. You might even learn that only 80% of your spend is just about right for your campaign objectives. To find that valuable insight we started a search for one of the big questions in TV planning: what is the optimal campaign duration?

Campaign duration versus total uplift

We started this research by using the same datasets as we use for Spotalytics. This means that we have information on different campaigns for one single brand. This particular data is provided as detailed as daily spend per media type. We plotted the online uplift against the campaign duration for every campaign. The expectation was that this plot would be similar to a log-normal distribution. In theory consecutive TV commercials will bring more traffic to your website, due to the cumulative effects of the campaign. Ultimately this extra traffic will fade out when the campaign has stopped. However when we plotted this data, nothing similar to a log normal distribution came up.

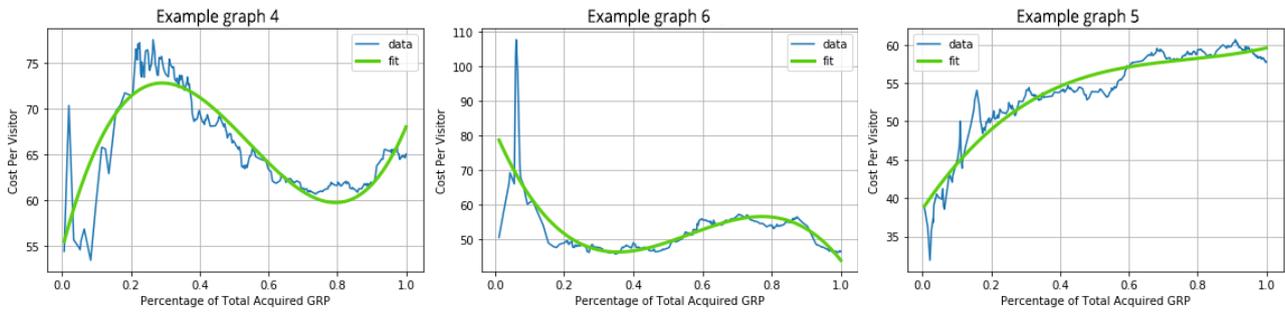
Proportional GRP-distribution versus total uplift

We changed the approach and used equal GRP-distribution as the progressive factor instead of the campaign duration. We created graphs for every campaign, in which the daily visitor uplift was plotted against the share of total GRPs for that day. Since the traffic on a website is very volatile and there is quite some noise, it is challenging to detect obvious trends. To solve this, we smoothed out the graph by finding a univariate spline that fits the data the best. The results did not provide a clear trend in the different plots, as can be seen from a selection of the graphs below.



Proportional GRP-distribution versus cost per visitor

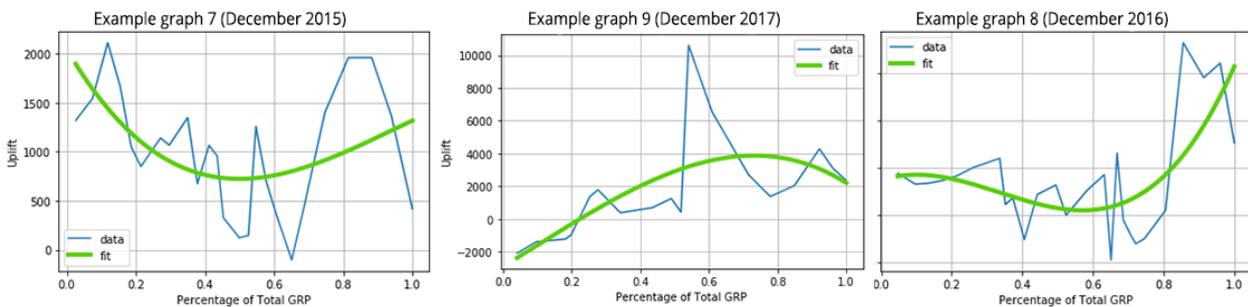
We then had another hunch. Since the uplift might be too volatile to see any trends, maybe the cost per visitor could give better insights. In this approach we assume the cost per visitor to be a dependent variable of the campaign duration. This variable is a bit more stable than the uplift, since it is summed up and recalculated after every commercial. The plots of the cost per visitor against the sum of GRPs is shown below. It would be optimal to stop a campaign when the cost per visitor is at its lowest point.



We located these local minima and compared their locations to each other. For one brand we found that the local minimum was in between 60% to 80% of the total acquired amount of GRPs in 10 out of 26 cases. Furthermore, there were 6 cases where the local minimum was in between 40% and 60% of the total acquired amount of GRPs. There were 4 cases where no local minimum was found because the plot was strictly descending or ascending. Because the results showed such a wide spread, we could not make any conclusions from this.

Seasonality effects on uplift per GRP

At this time, we started to think that there might only be a similar trend in similar periods of time. To review this, we collected data on campaigns from the same brand that all took place in the same season, but in different years. This resulted in the graphs below. Unfortunately, no noticeable trend could be discovered. It appears that seasonality is not the issue that keeps us from uncovering the optimal duration of a TV campaign.



Zooming in, by studying uplift per airing

Because all of the applied methods did not provide the definite answers we were looking for, we fine-tuned our microscope and used data per spot airing instead of daily totals. This means that we performed the same type of analyses that are described above, but now on data per airing. This provided no different results as with the other data, and no final conclusion could be made.

Summary: there is no ultimate formula

Working on a project like this, it is always more satisfying when you eventually come with a solid answer, the ultimate formula. Not only does it clearly mark the end of the research efforts, it provides a tangible result as well. Of course, the absence of that magical formula does not make this research redundant.

We tried to find consistent effects based on:

- *Campaign duration*
- *GRP build up*
- *Seasonality*
- *Finally, we refined our view to a per spot effect*

The provisional conclusion is that there is no single, predictable optimal duration or GRP point for TV campaigns. The effects between campaigns differentiate too much.