MARKETING EVOLUTION
Customer Connections, ROI Optimized

Multi-Touch Attribution

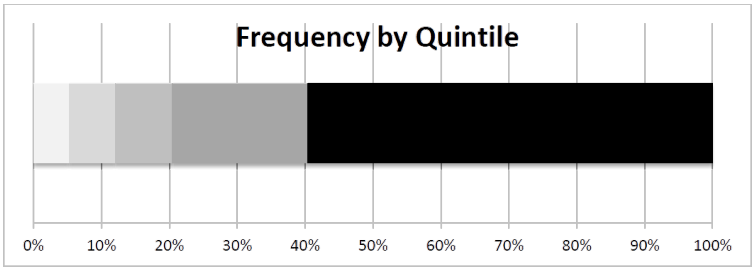
Calculating the Impact of Combinations of Exposure

Some say variety is the spice of life. We like to say that variety is the key ingredient to calculating multi-touch media impact. This paper explains how we use variation in media exposure to calculate the impact of combinations of media.

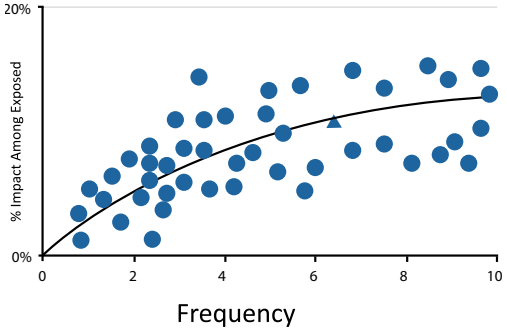
In the US alone, each consumer is exposed to a little more than 20,000 paid ads per month. Marketing Evolution tracks every touchpoint delivered to every consumer, and categorizes over one million distinct touchpoint types. There is tremendous variety in the exposure – and this helps to find patterns in impact.

Consider Television ad exposure. Take a TV campaign with reach 80% of the 231 million adults in the US over the course of a month, and an average frequency of 3.8. Let's take a look at the variety within this campaign:

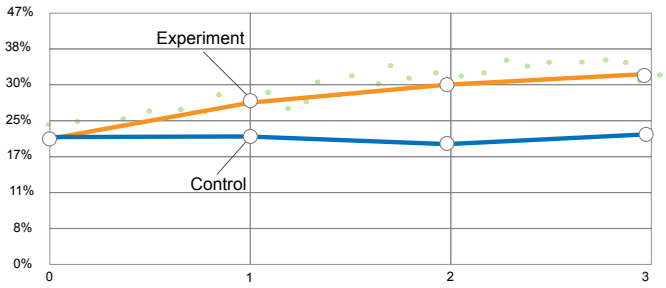
The campaign generated 703 million impressions. 20% of the population saw none of them. Zero. Of the 185 million people (80%) that saw an average of 3.6 exposures, the 20% exposed to the most impressions consumed 422 million of them – that's 60% of all the ads. On average, this heaviest quintile saw an average of 11.4 advertisement while the lightest 20% saw only one.



The analysis examines the differences in the profile of people within each exposure group so that these differences can be controlled statistically. In practice, we look at each person – represented as a dot in the scatter chart, and examine the relationship to the dependent variable, such as sales, or brand perception, controlling for differences in profile. If we see lift, it means more exposure to advertising is related to more sales.

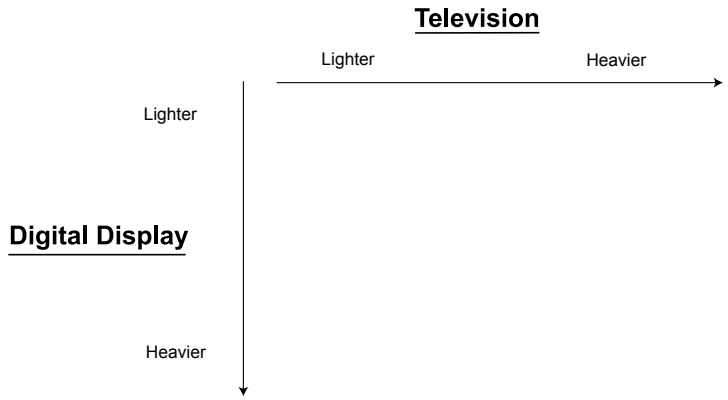


The ideal situation is to have a control group, because it helps create variety in the exposure pattern across different profiles of people. The chart below shows different levels of frequency on the X-axis. The Y-axis is an intent metric, in this case. It can be sales or any dependent metric. The blue line is the control group – which shows no change while the exposed group builds impact with incremental exposure.



Whether using a control group within the advertising delivery design, or by calculating a statistical control of profile diffrences, the analysis looks at more than one media - it looks at multiple media simultaneously.

The chart gives visualization of how multiple media are combined to examine a multi-touch view. We can see if two impressions of TV generate more impact than two impressions of Online. Or, if one impression of TV and one impression of Digital Display is better than two impressions in a single media.



When we see the effect of multiple media having a little more impact than in a single media, that is media synergy, or what we called Surround Sound Marketing in the book *What Sticks*. The resulting math shows us the amount of contribution from different combinations of media.

Whether we're looking at more than one media or more than one campaign, we're able to tease out the performance of each - even if respondents are exposed to both. This is because even though someone might be exposed to both Campaign A and Campaign B, collectively people will be exposed to varying degrees to each campaign. In the view below, imagine everyone has been exposed to both campaigns and the percentages inside are the metric level for that combination. So, 10% of people exposed a low amount to both campaigns were a yes for the metric of interest. Because we have respondents with varying degrees of exposure, we're able to determine that Campaign B performs better than Campaign A with respect to driving metric level.

		Campaign B		
		Low	Medium	High
Campaign A	Low	10%	20%	35%
	Medium	15%	25%	40%
	High	20%	30%	45%

For more information on how the algorithm calculates the recommended media mix, there is a six minute video and white paper available upon request.

Related Whitepapers:

1. Probabilistic & Deterministic Matching
2. MONICA Algorithm for Optimizing Media Mix