



Optimizing your media effectiveness and efficiency

White Paper – Reality Analytics

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Background

In order to understand the effectiveness of media and to increase the ROI on communication spends, the large majority of researchers relate media investments to marketing and sales KPIs. In order to understand the effects of media investments, graphs such as shown in Figure 1 are created. The horizontal axis represents time (generally weeks), and the vertical axis represents a relevant KPIs. The general assumption is that inspecting a graph that pits media investments against KPIs enables us to determine whether or not a campaign has been successful. In additional analyses, we look for the presence or absence of relations between different KPIs and media investments.

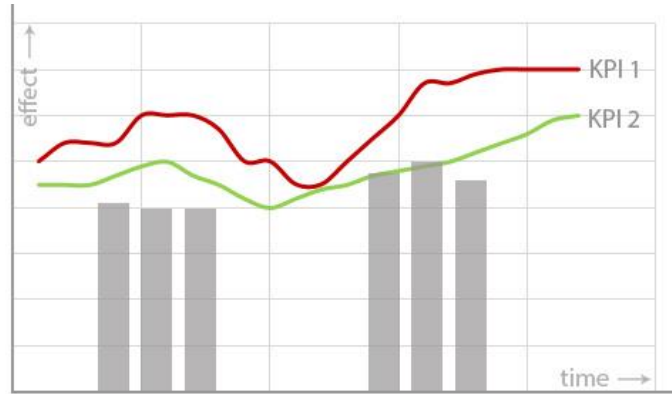


Figure 1. Traditional way of representing data in tracking.

The main problem of this approach and way of working is that it does not integrate learnings from academic research. In other words, **it is a simplistic representation of data without any added intelligence**. The most important shortcomings of the traditional approach to understanding media effects can be summarized as follows:

1. Media differ in their impact: The unique characteristics of each medium make it likely that media channels vary in the likelihood of reaching consumers and making them remember the campaign. For example, viewing an advertisement in the cinema is likely to have a substantially different impact than an ad on a news website.
2. Ad formats matter: Within each channel, the specific format of ads drives their effectiveness. For example, in online advertising, we know that the likelihood of seeing a homepage take-over is much higher than seeing a skyscraper banner.
3. Ads may linger in memory: Merely visually inspecting the effects of weekly investments on relevant KPIs in that same week implies that weeks without media investments should not impact consumers. However, we know that advertising effects generally show a gradual decrease of impact. The size of the decay is dependent on the history and awareness of a brand.
4. Creative execution is pivotal: The creative execution plays a massive role in the effectiveness of advertising. In addition to influencing consumers' overall feelings in response to an ad, we also know that the ad itself impacts whether or not consumers are attentive to an ad. Ads that are not noticed will not have an effect.

Based upon academic research and over 20 years of experience in media planning DVJ Insights has developed an approach where media investments are translated into 'real' contacts. This leads to a new KPI for media effectiveness; the Reality Performance Score (RPS). In the current white paper, we outline how we integrate academic principles and advanced media planning knowledge into a new approach to assessing campaign effectiveness.

1. Media channels differ in their impact

One way to deal with the different impact generated by different media is to assign a value to each media channel that expresses a medium-specific memorization rate. A mathematical approach to account for the difference in degree of memorization for different media channels was developed by Morgensztern's β -coefficient analysis¹. The β -coefficient model can be expressed as follows: $M_n = 1 - (1 - \beta)^n$, where M_n expresses the degree of memorization after n exposures, and where β refers to a medium-specific memorization rate.

In advertising, GRPs or reach express the size of a medium in the campaign. In accounting for medium-specific impact, the β -coefficient model essentially translates GRPs or reach to 'real' contacts. And this is important because it enables direct comparisons between different media channels. Comparing the effectiveness of different media channels without correcting for their idiosyncratic properties is like comparing apples with oranges: it just does not make sense. Worse, it may lead to invalid conclusions about the effectiveness of the media mix, and hence, inefficient media investments. This may have substantial financial implications.

DVJ integrates different knowledge sources and experience to develop and adjust this coefficient to the latest thinking in order to truly take into account the strength of each media channel.

2. Ad formats matter

Each media channel consists of different formats. For example, regarding print advertising, the likelihood of seeing a double page ad is much higher than the likelihood of seeing a small ad on one page. And for online advertising, the likelihood of seeing an ad increases with the intrusiveness of an ad. This difference is only partly reflected in the costs for each medium type. Thus, an analysis of media effects should account for ad format in a more sophisticated manner than looking at mere costs.

Based on academic theory and research,^{2,3} DVJ Insights has created a format impact factor that corrects for the likelihood of seeing an ad based upon that specific medium. For example, for print, we have used the impact factors based upon the Starch readership scores⁴. By integrating the strength of each format we are able to move from Opportunity to See to Certainty to See.

3. Decay and residual effects

In addition to media and formats differing in their impact, marketing efforts also suffer from decay: they gradually lose their effectiveness over time.⁵ At the same time, (parts of) campaigns can remain in consumers' memory, even after the campaign has stopped running. Interestingly, traditional tracking studies do not take this fact into account. They treat consumer memory for a previous campaign as nonexistent as soon as the second campaign starts. In reality, when the next campaign is launched, a substantial amount of consumers may still remember the brand from the previous campaign. Traditional tracking studies neglect such residual effects, potentially causing managers to launch their next campaign too soon. In our tracking tools, we take decay and residual effects into account when we assess the effectiveness of a campaign on any given

moment. This approach makes the results of a tracking study more granular. With the insights generated by the tracking study, marketing managers can optimize the timing and required investment levels of their next campaign.

Academic work has showed that there are over 300 different advertising elasticity models depending on the brand.⁶ Therefore, DVJ Insights calculates a decay score for each brand in each category by applying a substantial back data analysis.

4. Creative Impact

The impact of advertising is closely related to the appeal of an ad. The likelihood of seeing an ad is an important prerequisite for effective advertising. As an illustration of the importance of ad recognition, consider Figure 2. The graph shows two brands from one category. Media investments for both ads were very similar. However, as the graph shows, ad recognition differs massively. For the brand represented by the green line, recognition increases with time. In contrast, recognition of the ad for the brand represented by the red line does not change substantially over time. Thus, the creatively stronger ad achieves higher consumer recognition for the same spend as the inferior ad.

Understanding the creative strength of an ad substantially increases understanding of the ad's effectiveness. Hence, the strength of the creative should be a factor in assessing advertising effectiveness.

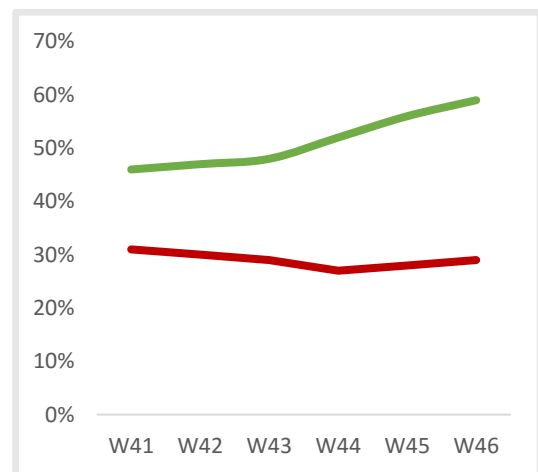


Figure 2. Two brands within the same category. Media investments are highly similar, but ad recognition differs substantially.

DVJ Insights has developed an ad test that assesses the creative strength of ads as they would appear in their natural media environment. Understanding the appeal and recognition of an ad in the cluttered media environment will help understanding its effects, as well as help planning the campaign. The importance of the creative is also significant in realizing advertising effect and should never be neglected.

RPS: The Reality Performance Score

To summarize, the impact of media, the strength of creative pertains to the extent to which consumers memorize the campaign, while accounting for *medium* type. In addition, consumer memory is not only a function of medium type, but also of the unique position of each brand in a specific category. That is, campaigns for certain brands are remembered better and longer than campaigns for other brands. This is known as the patented Net Accumulated Weight of Advertising⁷: the speed of decay/residual effects for the specific *brand*.

We integrate the medium and brand decay effects to form the Reality Performance Score (RPS). The RPS is a unique index that takes into account the idiosyncratic characteristics of each medium type and the unique position of the advertised brand.

RPS leads to new possibilities

Understanding the real impact of media reveals new possibilities for research and optimizing ROI. The most important ones are:

- With a better measurement of real contacts we are able to understand the effectiveness of media investments much better. This helps in understanding the ROI from media compared to other aspects of the marketing mix.
- If we know the RPS, we can also calculate a minimum amount of contacts necessary to create impact. In addition, we are able to calculate a maximum value of the RPS where more media investments will not generate additional impact. If advertisers plan their media campaigns such that RPS remains within a certain bandwidth, the investments are optimally spread over time. A client who followed this strategy for a period of 6 months saw an increase in sales of 14%. Importantly, this increase was established *without* increasing the media-investments.
- We are also able to predict the future RPS based upon each media plan. By predicting potential effects, advertisers are able to steer each campaign and decide on the size and the allocation of the advertising budget.

Conclusion

In order to produce detailed insights into the effectiveness, efficiency, and relative contribution of each media channel in a marketing campaign, marketers need to be able to have precise insights into the impact each medium is likely to generate. The DVJ Insights model allows for translating GRPs and reach into a measure of actual contacts consumers have with the medium. Combining all corrected media and accounting for the amount of memory decay produces the RPS.

The RPS is therefore a new KPI that could be used in media-optimization and planning. By keeping RPS between the optimal bandwidth we are able to generate more impact with the same budget and increase ROI. The RPS is also a substantially better predictor of campaign effectiveness and efficiency than traditional ways of treating different media are. We therefore recommend to integrate RPS calculation in planning each campaign.

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About the company

DVJ Insights is a quality-based research and consultancy agency with a global footprint. we help our clients understanding how to realize growth by identifying relevant drivers, optimizing communication, improving the customer experience and introduce winning products and solutions in organizations.

We believe that research is all about listening. listening to our clients to make sure the research is embedded in the organization and answers the right questions, and listening to consumers by giving them the opportunity to express their feelings and share their stories.

We add value by leveraging the experience and expertise of our seasoned research and consultancy team, and staying true to our innovative mass qualitative philosophy.

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