



# Modeling Communication Effectiveness in a Digital Environment

## Overview

With its rich data stores and high level of control, digital marketing provides a sound foundation for modeling the success of communication initiatives. The data collected from online advertising, search, video, and other sources of outreach provide a level of detail unmatched by more traditional marketing venues (print, television, radio), and numerous analytic tools exist to tap and manipulate these website data streams. However, merely tracking clicks or page views individually does not provide insight into the level of engagement a customer encounters with any given communication campaign, which makes predicting the value of a new campaign a challenge. A commitment to measuring communication effectiveness as a function of Customer Engagement, and the cost of that engagement, will result in the most effective allocation of marketing resources for a firm.

# Defining Customer Engagement

Customer Engagement can be considered a function of two types of digital advertising:

1. Exposure – those forms of advertising that collectively build exposure to and create an awareness of a company's brand, such as pop ups, banner ads, and other similar formats; and
2. Action - those forms of advertising that compel a viewer to actively engage with the company in some manner, such as click-thru s, video views, downloads, and other steps proactively taken by stakeholders to engage with a company.

Customer Engagement can be defined in many ways using different types of data. Determining when/how engagement occurs is the first step and should rely completely on the data available. An Engagement Threshold should also be set to ensure the scope of engagement can be quantified. For example, if downloading a white paper is the definition of engagement, a threshold determines success as a measure of how many downloads occurred—if white papers are being downloaded, engagement has occurred. The ratio of exposure and action elements that comprise any one company's Customer Engagement score will be uniquely associated with the goals of their particular campaign.

## Customer Engagement Data Elements

The data elements that determine Customer Engagement include those pieces that can be controlled via digital performance metrics and website analytics. Websites use analytics software to collect and report activity, relying on its server logs and click data. Such analytics can capture simple data like a pattern of clicks to complex metrics such as path analysis or sales cart optimization. Complex website functions such as e-commerce, secure financial transactions or domain management will add another level of complexity, but also a richness of data to analyze. Website activity can be monitored and interpreted for successful outcomes, and when coupled with cost data can help measure ROI.

Digital display advertising offers many variables to measure and interpret. Metrics such as reach, interaction, click, and click through capture ad performance while a campaign is in the field. Each of these metrics can register information about the performance of specific piece advertising or a whole campaign. More specialized measurements include ad video, ad video that rolls before a website video, and mobile ads. This data usually originates from a third-party ad monitoring services and can provide metrics by day or by ad placement, in accordance with an advertising plan.

Paid search, ads served by search engines, provide some of the same metrics as display ads, however reach is less controlled relying on search keywords, and search engine results. Due to the high level of search activity on the Internet, paid search can provide a higher return on investment than other forms of digital advertisement but with limited message delivery

A more recent form of outbound messaging, Social Media, offers measurement mechanics that are fairly straight forward—capturing subject frequency and tone of message. But as social media services proliferate, measurement and control will need more sophisticated forms of data collection. Proactive messaging through social media, such as blogging or Tweeting, provides a lower cost communication tool.

## Valuing Customer Engagement

Communication effectiveness considers both total engagement and the cost of that engagement, and provides a company with a way to identify its best performing websites, stories, and ad formats. Once Customer Engagement metrics have been determined, applying the cost of messaging provides the next step toward developing ROI. Assigning a value to engagement outcomes—based on costs of messaging—yields an effectiveness metric that can be used to predict outcomes.

For example, ad clicks from one website yield an Engagement Score of 50. For another website, the Engagement Score is 25. Results indicate that website 1 may surpass website 2 in engagement success. However, once value is assigned to the engagement score metrics can change. Website 1 has a value multiplier of 1.5 (a low score) and website 2 has a value multiplier of 4 (medium score). Results are restated to show that website 1 has a total score of  $25 \times 4 = 100$ . Website 2 has a total score of  $50 \times 1.5 = 75$ . Now that the two elements are combined into a Communication Effectiveness Score, it has the ability to measure the success of current campaigns using existing media costs allowing for identifying high value and low value elements such as the websites above—an ROI measuring communication success.

## Scenario Examples

Two scenarios illustrate how the model and its components work together in different environments.

### *Low Complexity*

An electronic components company seeks to increase awareness among its customer base for a new feature of their largest selling product. The company requires a customer to provide contact information to download a new specification fact sheet. Acquiring this customer contact information is the engagement metric with an average of 20 contacts per day for 30 days as a threshold.

Analysis shows that digital advertising on a specific trade website drives a higher level of performance than any other. It further shows that when a company website visit originates from this specific trade website it yields the highest Engagement Score. Combined with the costs to message to that website creates a high Engagement Value. The visitors from this trade website are more valuable because of efficiency to engagement (Engagement Score) and high value of the cost of messaging (Engagement Value).

## *High Complexity*

A consumer package goods company is launching a new global brand campaign. In addition to print and TV, digital advertising plays a large role in the media plan. In an effort to understand which media drives traffic to the company website, coupons are issued for the company's top selling retail product. Each coupon identifies from which media it came. For digital advertising, engagement is measured as a coupon redeemed, originating from a digital promotion. Because of the broad reach of the company's audience, an engagement threshold value is loosely set for digital media redemption to exceed redemption from other media. During the promotion period, total coupon redemption exceeded all goals. Since this was a global launch engagement was measured across multiple countries.

Analysis shows that while digital advertising had the highest engagement in the US, print advertising had a higher engagement rate worldwide. However, it further indicated that digital advertising provided a higher Engagement Score than other media. Because more data was available to analyze, digital marketing provided a platform to measure engagement outcomes and value when compared to the cost of other mediums. Using this analysis, the company learned that while digital advertising did not have the largest reach, it had the correct elements to demonstrate a high Engagement Value—higher than the ones for TV and print.

## Additional Considerations and Conclusion

There are a number of conditions that should be considered in assembling a communications effectiveness model.

- The communication elements you used may have an inadequate quantity of data for a full-scale model. Applying a qualitative value to these types of data will allow it to be part of the model without compromising model accuracy.
- In many cases the data will contain errors that make it difficult to use. The quality of the model output will be directly related to the quality of data received. A data cleaning step may be needed prior to analysis.
- Data may not be available from all sources. Understanding the value of missing data source and evaluating whether it is required for model development is critical.
- Data will often not be available for every time period or time increment necessary for analysis. Whatever time increment is used in the model, developing a methodology for filling in missing time data overtime should be established at the outset.
- Some data may not provide the necessary level of control to make it useful. Data from affiliates, promotion partners, and channel partners can be more difficult to control.

An Engagement Score is meaningful only within the context of the current data parameters. Applying the cost of messaging provides a step that assigns a value to engagement outcomes—based on costs of messaging, and yields a more meaningful value-based metric that can be used to assess current performance and predict future outcomes.