APPENDIX A

Competitrack Methodology for Estimating Spend of Online Banner and Video Ads

Online Banner Ads

Competitrack methodology for estimating the spend of online banner ads considers three elements: 1) Unit Cost; 2) Unit Factor; and 3) Audience Factor. These are multiplied together to generate a spend estimate \[\text{Spend estimate} = \text{Unit Cost} \times \text{Unit Factor} \times \text{Audience Factor}\].

Unit Costs

Unit Costs have been established on a Cost Per Mille (CPM), otherwise known as cost per thousand (CPT), basis at the level of the site. CPM is a commonly used measurement in advertising and is used as a benchmark to calculate the relative cost of an advertising campaign or message in a given medium. The metric is calculated by dividing the cost of an advertising placement by the number of impressions (per thousand) that it generates. Information on the published CPM rate is combined with feedback from media buyers and third-party vendors in order to obtain an accurate estimate of market activity. Most notably, the rates are discounted to reflect the lower effective CPMs (total cost per thousand impressions for a given ad placement regardless of purchase method) associated with ad networks, which typically have a lower cost per impression because the majority of its inventory is not premium, as well as non-CPM-based activity (flat rate buys, Cost Per Action buys).

Unit Factor

Unit Factors have been established on a dimension basis to measure relative communications value and are assigned as such: 1) Standard ads (50k-125k pixels) are assigned a Unit Factor of
1; 2) Large ads (>125k pixels) are assigned a Unit Factor of 1.25; 3) Smaller ads (10k-50k pixels) are assigned a Unit Factor of 0.75; and 4) Tiny ads (<10k pixels) are assigned a Unit Factor of 0.25.

**Audience Factor**

The Audience Factor is determined by multiplying the Ad Frequency by Page View estimates, which are provided on a monthly basis by comScore Media Metrix. An Ad Frequency metric is determined through summarizing all activity for each given ad per site on a weekly basis.

**Online Video Ads**

Competitrack’s methodology for estimating spend of online video ads considers the same three elements mentioned above (Unit Cost, Unit Factor, Audience Factor).

For video ads, Competitrack uses applicable CPM rates established at the format level based on published research along with feedback from media buyers and third-party vendors. There is less variability with Unit Factor values for online video. Full-motion videos are all assigned a Unit Factor of 1. Slate placements, which typically represent videos presented at the beginning of online episodic programming by Hulu, are assigned a Unit Factor of 0.25. Audience Factor is determined by summarizing all ad activity observed on each domain to calculate a “share of impressions” metric for the ad of interest on a particular site during the week it ran and according to the specific format (i.e. Full-Motion Video vs. Sponsorship Slate). For example, if 1,000 video ad occurrences on hgtv.com played over the course of a given week and 50 of those observations were for a given Tide ad, the Tide ad would be assigned a 5% share.