

# THE PLANNER'S DIGITAL DILEMMA: TRADITIONAL BRAND METRICS FOR DIGITAL MEDIA

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## Introduction

Imagine you are a manufacturer of a new shampoo and your market research shows your key demographic is women between the ages of 18 and 24. Since that demographic group spends a lot of time online, you know Internet advertising should be a part of your media strategy. Although existing media planning tools may help identify sites that have the highest concentration of your target audience, the media plans you negotiate with those publishers will be written in terms of ad impressions for placements within their sites. Are the 10 million impressions on one site better or worse at reaching your target audience than the 7 million impressions on another site? Is the plan that nets out to an \$18 CPM better or worse than the \$9 CPM plan? This is the dilemma brand marketers face when planning digital media today. These questions are unanswerable because existing planning tools do not tell you how many impressions will reach your target audience, nor the frequency, nor the cost in audience terms.

This Digital Marketing Insight will examine why marketers are not taking advantage of the Internet's mass appeal to build awareness for their products or services, and presents both near- and long-term solutions for the planner's dilemma: bringing traditional media planning to digital media.

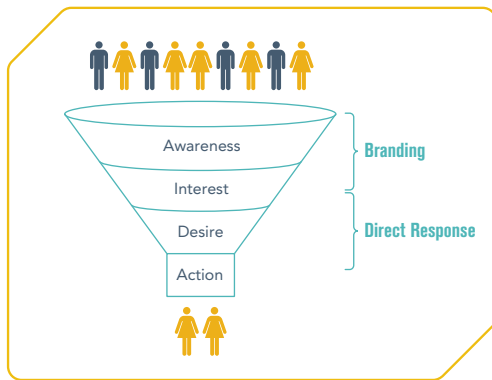


Figure 1:  
Purchase Funnel

Why does it matter? Consider the planner's dilemma through the allegory of the Purchase Funnel – the widely accepted marketing model that describes a series of stages (Awareness, Interest, and Desire) each consumer experiences on their way to ultimately purchasing a product or service (Action). Marketers hoping to influence consumers towards the Action stage know they must first build Awareness in an audience that is many times larger. Building awareness typically means brand advertising through mass media. It should come as no surprise that television – with an almost 100% penetration of US households – has been the prevailing medium for brand advertising, projected to garner 25% of the total US advertising dollars in 2009<sup>1</sup>.

The Internet is regularly used by about two-thirds of the US population<sup>2</sup>. Being the second largest mass medium (by audience and time engaged), you would expect to find brand advertising placed by savvy marketers virtually everywhere on the Internet. Such a large and engaged audience would seem irresistible to brand advertisers. Instead, you mainly find advertisements presenting select offers and being evaluated against direct response measures of success, such as their click-thru or post-click conversion rates. It would appear that brand marketers are not willing to pay for unquantified audience reach.

### Traditional Brand Metrics

The ratings and circulation metrics marketers take for granted when planning broadcast and print advertising have not made their way to digital media. Although panel companies like Nielsen and comScore have developed demographic and population estimates for digital publishers, analogues to traditional ratings and circulation metrics (e.g., Gross Rating Points, Target Rating Points, and Cost per Point) have yet to become a standard part of digital media plans<sup>3</sup>. Digital media plans are missing the denominators required to calculate brand metrics, which in this case is the size of each demographic group being targeted. Thus it is impossible to know if a media plan achieves the planner's campaign goals or if a competing plan has greater merit.

This is not simply an oversight or the result of a conspiracy. To understand the problem, you have to consider how people's use of the Internet differs from their consumption of other media.

<sup>1</sup> Barclays Capital, "Internet Data Book May 2009," provided by eMarketer, (May 2009): 103934.

<sup>2</sup> Phillips, Lisa E., "US Internet Users," eMarketer, (February 2009): 101345.

<sup>3</sup> A Rating Point is a measure of a medium's reach to the total audience. A campaign of one advertisement reaching 20% of the entire media audience would have 20 Gross Rating Points (GRPs). A Target Rating Point (TRP) is a measure of a campaign's reach to the target audience. A campaign of one advertisement reaching 8% of the medium's target audience (e.g., women 18 – 24) would have 8 TRPs. Campaigns with a GRP or TRP greater than 100 are possible because the metrics are a sum of Rating Points for all buys in a campaign. The Cost per Rating Point (CPP) is an effective way to compare the relative merit of multiple media plans in audience terms.

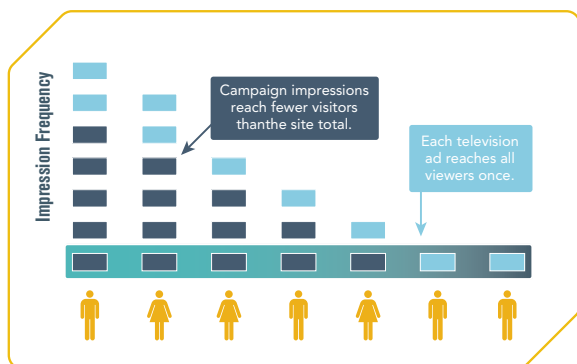


Figure 2:  
Digital ad impressions accumulate over time as frequent and infrequent users consume online media.

When a television show airs, planners assume that the entire audience of viewers for that show will be exposed to their advertisement. If half of the entire audience for a show were a planner's target audience, the size of the target audience reached by an advertisement during the show would be 50% of the total.

The same simple calculation can only be made for digital media if a planner buys all of a site's impressions. Any buy that is smaller than the total number of impressions will reach a smaller audience as a result of high frequency visitors consuming a disproportionate number of the

impressions. Since purchasing all of a site's impressions is undesirable or impossible, the simple calculations used in traditional media planning do not apply online.

### Profile Targeting & Frequency Capping

Attempts to solve the problem through frequency capping and profile targeting have missed the mark. For those few digital publishers with enough profile information on their audience, and a reliable method to cap frequency, the capability has been costly and ineffective. The addressable audience segments, which are limited by the number of cookies associated with profile data, tend to represent a fraction of the total impressions delivered to a real audience. In the same way, frequency capping is limited to only those audience members that a publisher can confidently track at the individual level (which, for technical reasons, is far less than all of their audience).

Although targeting and frequency capping promise a bright future of less media waste, the vast majority of impressions delivered online are neither capped nor targeted. As such, targeting and capping is not a cure-all for brand advertisers who seek to build awareness with the scale of television. What's required is a knowledge of how the unduplicated audience grows as impressions increase for each placement in a media plan. This is not a capability in any of the digital media planning tools available today, even though it is readily available for planning traditional media. Fortunately, the data and analytics exist to deliver the same target reach and frequency forecasts for online advertising.

### The Reach Curve

Each placement on a digital publisher's site, whether it is a 300 x 250 rectangle on the home page or a video placement elsewhere on the site, will incrementally accrue unduplicated reach to an audience over time and at different rates. The accrual can be represented as a non-linear curve on a graph of audience reach by impressions. The curve will flatten as more of the impressions are served to the population of high frequency visitors than are served to infrequent visitors. A larger number of unique audience members accrue per thousand impressions in the beginning of the curve than near the finish.

The shape of the curve explains why doubling the impression size of a buy will not result in doubling the audience for that buy. Additionally, every placement reaches a point where another thousand impressions results in less targeted reach than spending those impressions on a different placement in the publisher's site.

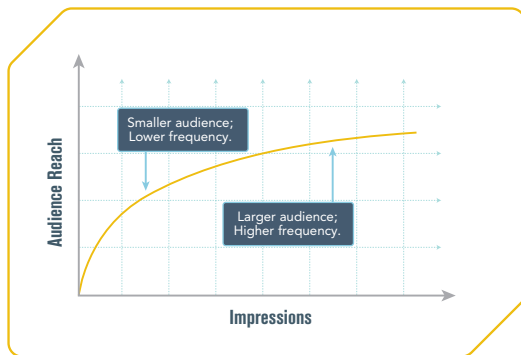


Figure 3:  
Saturation curve for audience reach by impressions.

When reach curves are built for both total audience and for audience segments, such as gender, age, and household income, traditional audience planning metrics become possible for digital media. This has not been commonplace due to the fact that building audience segments into reach curves requires the synthesis of publisher server logs and the demographic analysis of a publisher's audience. Publisher server logs produce accurate reach estimates for the unique audience but do not answer whether that audience is male, female, or of a certain age. Similarly, a demographic analysis that is based on a panel of users may provide a sense for a publisher's unique reach

but says nothing about how that reach grows as impressions accrue on a placement. It is only through the combination of both data sources that the full picture emerges and audience planning metrics become possible. As IAB president and CEO Randall Rothenberg wrote in his response to a *New York Times* article about online audience discrepancies, "Put another way, server logs and panel-based measurement are far more valuable together than they are apart. Server logs – a census counting technique – may be exact, and they should help agency media planners assemble a crank, but they cannot provide us and our advertisers [with] crucial information we need about audience composition."<sup>4</sup> While the audience segment reach curves are not widely available today, planning tools that incorporate the reach curves will emerge within the coming year. Request for proposals that designate demographic targets will receive media proposals with reach, frequency and rating point forecasts for those demographic targets. Until then, planners can use a shorthand technique to estimate audience metrics for digital media plans.

### Shorthand Audience Metrics

Just as the rumors of the Purchase Funnel's death are greatly exaggerated, traditional audience metrics are not impossible for digital media. Target audience metrics can be estimated for a digital media plan through a shorthand technique when the publisher's site audience composition is known<sup>5</sup>. Starting with a calculation of the expected impressions to the target audience and the size of the target audience on the Internet, a planner can estimate a media plan's Target Rating Points (TRPs) – the standard offline metric for a media plan's target audience reach and frequency. For example, a media plan with 10 million impressions on a publisher's site that is said to have an audience composition which is 50% in the target can be assumed to deliver 5 million of those impressions to the target (i.e., 50% of 10 million impressions). That's a big assumption but it's the next

<sup>4</sup> Rothenberg, Randall, "The New York Times Misses Real News: Measurement Discrepancies Will Be Resolved," <http://www.iab.net/iablog/2007/10/new-york-time-misses-real-news.html> (October 2007)

<sup>5</sup> The audience composition for major digital publishers and size of the target audience (e.g., women 18 – 24) online are available through syndicated measurement organizations such as Nielsen and comScore.

best thing to having reach curves for each of the publisher's placements. If the size of that target audience online was 20 million strong, the media plan would have an estimated 25 TRPs (i.e., the ratio of the 5 million impressions and the 20 million members of that audience online when multiplied by 100).

Although media plans with similar budgets and TRPs can have entirely different reach and frequencies, this fact is not unique to digital media. A television campaign with four advertisements during a one hour show would have the same TRPs as a television campaign with only one advertisement during a one hour show that had four times the target audience reach. This is why a media plan's TRPs should be presented along with its reach and frequency, which is unfortunately impossible using the shorthand technique. Despite this limitation, brand marketers will be in comfortable territory just knowing the estimated TRPs for a digital media plan.

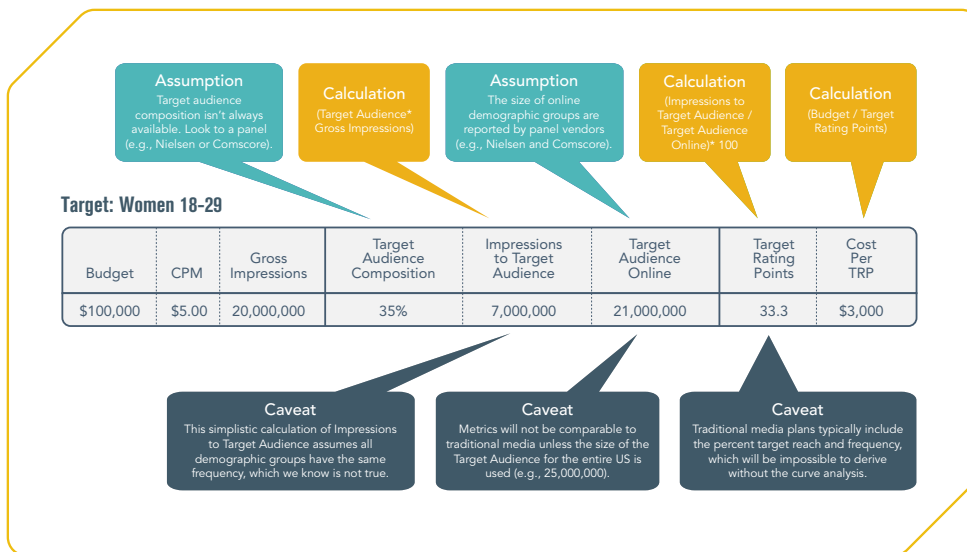


Figure 4: Example of a shorthand technique for calculating digital media plan audience metrics.

A media plan's Target Rating Points permit the calculation of a media plan's Cost per Rating Point (CPP), which is the audience equivalent to the Cost per Thousand Impressions (CPM) metric cited in digital media plans today. The Cost per Point (CPP) metric for digital media plans lets brand marketers compare the cost of impressions across channels in spite of the fact that a Rating Point for television is different than a Rating Point for radio, print, or the Internet.

As newspapers and magazines struggle to retain a viable audience and the television audience becomes more and more fragmented, the ability to plan and optimize digital media on audience metrics will gain value. As written content and video move to the Internet, the ability to plan and optimize digital media on audience metrics will be absolutely necessary. The shorthand technique described in this Digital Marketing Insight can help brand marketers take advantage of the Internet's mass appeal today. It can help them judge whether the 10 million impressions on one site are better or worse than the 7 million impressions on another site for their brand campaigns. It will let brand marketers begin to resolve the planner's dilemma.

## About Microsoft's Atlas Institute

Microsoft's Atlas Institute publishes Digital Marketing Insights (DMIs), a series of publications by digital marketing experts that help our customers improve their digital marketing effectiveness. Many of these findings are also made available to the digital marketing industry at large. Each DMI is designed to help marketers more successfully build value with their customers, throughout the customer lifecycle: from awareness to acquisition and from retention to growth. Microsoft's Atlas Institute also provides education in digital marketing to Atlas customers.

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