May 2006

www.doubleclick.com

Best Practices for Optimizing Web Advertising Effectiveness

By Rick E. Bruner, DoubleClick Research Director
with Marissa Gluck, Radar Research

Table of Contents

1. Adopt a Disciplined Framework for Managing Campaigns 3
2. Manage Reach and Frequency 3
3. Manage Reach and Frequency Through Strategic Media Placements.....5
4. Manage Reach and Frequency Through Temporal Targeting 6
5. Avoid Spill by Targeting Geographically 7
6. Use Large Ad Formats 8
7. Use Rich Media and Video Ad Formats 9
8. Target Audiences With Appropriate Creative Treatments 10
9. Track "View-Throughs" 11
10. Measure Effectiveness Scientifically With Control Groups 12

DoubleClick

EMPOWERING ORIGINALS SINCE 1996

Meta EX1026
IPR2024-00612
U.S. Patent No. 8,249,932

Web advertising first appeared in 1994.[1] Eleven years later, in 2005, U.S. companies spent $12.5 billion advertising online.[2] No longer is that the irrational money of venture-backed startups with dubious business models; according to Nielsen//NetRatings, 25% of all display ads in 2005 promoted Fortune 500 companies. Advertisers already spent double the amount online that they spent in 2005 on billboards and other outdoor advertising and roughly half of what they spent respectively on magazine and radio advertising.[3] And after a brief market contraction in 2001 and 2002, the online ad industry has been growing at 30+% for the past two years.

Yet, despite this rapid mainstreaming of online advertising, many advertisers still are not observing a range of established tactics and strategies understood to substantially improve the effectiveness of online ad campaigns. In some cases, this is because advertisers are new enough to the Internet to remain behind on the learning curve. "There are still a wide range of experiences out there," said Arthur Rotberg, ad production manager for CondeNet. "Of course this is rare, but I just got an email from a sales assistant asking if a client could mail their creative on a disk. At that point alarm bells go off. The creative is probably not in the right format for online serving, most likely it's a PDF of an ad the client did for a print campaign."

In other cases, many advertisers have viewed the Internet as a source of "cheap" advertising and therefore do not invest sufficiently in experimentation and research to identify for themselves the tactics that work best. "Sometimes advertisers are pennywise and pound foolish in not running brand effectiveness studies and using the click-through rate to measure the success of a brand campaign," said Yaakov Kimelfeld, director of business intelligence at Beyond Interactive. Brian Eakin, Associate Media Director at Freestyle Interactive, concurs: "While many clients will say that there is value in learning, the clients most in need of actionable research are frequently the companies most connected to a cost-per-sale measure of success, and many of them simply won't allocate investment that doesn't immediately contribute to product sales. The challenge for planners is to extract strategic insight from active campaigns without forcing their clients to choose between sales and learnings."

Online advertising remains new and fast evolving. But after a decade, it has been around long enough for several best practices to emerge. As observed in the popular DoubleClick® paper, "The Decade in Online Advertising," a major trend in recent years is a shift towards a seller's market, as new ad dollars come into the market more quickly than users are generating incremental page impressions. The result is online ad prices are going up, and it may no longer be seen as a "cheap" advertising medium. It remains, however, an effective one. As such, it is more important than ever for advertisers to master the tactics that produce the best results for their online campaigns.

1. See details in DoubleClick's paper "The Decade in Online Advertising" (2005)
2. According to the Interactive Advertising Bureau (IAB) and PricewaterhouseCoopers
3. According to the Outdoor Advertising Association of America, the Radio Advertising Bureau and the Magazine Publishers of America, respectively

© 2006 DoubleClick Inc. All Rights Reserved.

The objective of this white paper is to help advertisers improve their success online by presenting several proven strategies for increasing online advertising effectiveness, substantiated with research and evidence from industry experts. Here are ten best practices for optimizing web advertising effectiveness.

1. Adopt a Disciplined Framework for Managing Campaigns

The most successful online advertisers adhere to a disciplined process. They set clear campaign objectives. They build measurement, targeting and optimization into the campaign process. And they carefully assess the final results to identify what practices could improve the advertiser's next campaign. To that end, DoubleClick advocates this simple four-part framework for structuring every campaign an advertiser conducts online:

1. **Set Clear Objectives:** Identify what business goals the campaign is designed to achieve, and, just as importantly, the metrics by which those objectives will be assessed.
2. **Segment Audiences:** Identify which audience groups are most likely to respond positively to the advertising message on which sections of which websites, in which context, exhibiting which behaviors, and at which times of day, week, month or year.
3. **Optimize Media and Creative:** Plan for campaigns to improve iteratively as you learn, and adjust based on what ad and landing-page creatives best achieve the campaign objectives for which audience segments on which media placements.
4. **Review, Assess and Improve:** At the conclusion of a campaign cycle, perform a rigorous postmortem on the campaign to determine how effectively the campaign achieved its planned objectives, whether those objectives were in fact the right objectives, whether the chosen metrics were effective at measuring the objectives, whether the right audience segments, media placement and creative treatments were used, and what learnings from the campaign could be applied to future advertising initiatives.

"If you ask any online publisher, they'll tell you that the spread between response rates to ads can range from 0.02% to 2%," said Ted Ryan, vice president of sales at NationalGeographic.com. "That's a hundredfold difference. That's what the opportunity is online. Getting best practices right for online ad campaigns isn't about a 10% improvement in results. It's about a tenfold or a hundredfold improvement. You can't afford not to be online. For all that money advertisers invested in TV on brand campaigns, they can get knocked out of the water in five minutes on the Internet by a competitor who does it that much better than they do."

2. Manage Reach and Frequency

Very little will have as dramatic an effect on the success of advertiser campaigns as managing "reach and frequency." Whether a campaign's objectives are more geared towards brand development or direct response, in almost all cases it is in the advertiser's

© 2006 DoubleClick Inc. All Rights Reserved.

best interest to maximize the number of people who see the campaign ("reach") at an optimal number of exposures to the ad per person ("frequency"). All too often, however, when advertisers do not manage their online campaigns closely for this, the result is that a relatively small number of people will see the ads at a tremendously high frequency, wasting many impressions of the campaign.

Reach and frequency have a proportional relationship. Each ad impression in a campaign is shown either to someone who has not yet seen the campaign, thereby expanding its reach, or to someone who has, increasing the campaign's average frequency. The "optimal frequency" – the ideal number of times consumers should be exposed to the campaign's online ads – is ambiguous. Little research exists on the subject, and results will vary according to the product, campaign objectives and other factors. That said, conventional wisdom is that the optimal frequency for most campaigns is around 4-7 ad exposures, and, much beyond that, results hit a point of diminishing returns for both brand and direct response objectives.

One challenge in managing reach and frequency is that not all Internet users consume the same number of pages. In a study DoubleClick conducted with comScore Networks in 2004, "Internet Audience Dynamics," we divided up comScore's panel of 1.5 million research participants into three segments according to how often they went online: those who did more than 19 days a month ("heavy users"), those who did so 11-19 days a month ("medium users") and those who went online 10 or fewer days per month ("light users"). By that classification, 36% were light users, 25% medium users and 39% heavy users. But the heavy users created 73% of all page views, while light users accounted for only 6% of pages visited.

The challenge for marketers, therefore, is to reach effectively that third of the audience generating only 6% of all pages, while avoiding having heavy users consume ad impressions at disproportionately high frequencies.

Figure 1 illustrates the challenge. It graphs a campaign where 37% of the audience sees only one exposure of the ad, 17% sees it twice, 10% sees it thrice, and the distribution gradually diminishes so that only 1% sees the ad 10 times. But then something remarkable happens: 13% of the exposed audience sees the ad 11 or more times. Although we do not propose this actual campaign

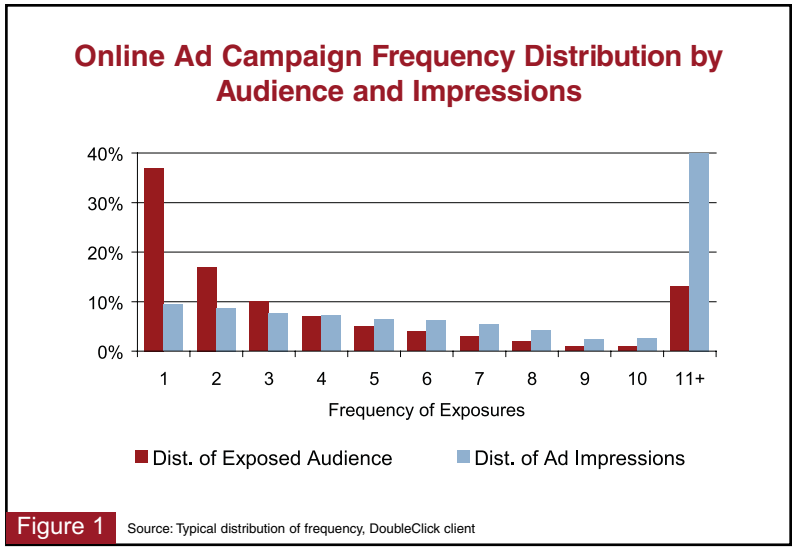

Figure 1 Source: Typical distribution of frequency, DoubleClick client

© 2006 DoubleClick Inc. All Rights Reserved.

represents "the industry average frequency distribution," it does look similar to many distributions we have seen.

Assuming that the last "high frequency" set – 13% of the total exposed audience – has seen the ad an average of 12 times per person, that works out to 40% of the total impressions of the campaign being consumed by this small segment.

By the time someone has seen an online ad 11 times, the odds that further exposure will improve his opinion of the brand, or likelihood to click on the ad, are low. In other words, 40% of the impressions in this campaign represent money largely wasted.

3. Manage Reach and Frequency Through Strategic Media Placements

The critical question then is, "How does one control frequency to maximize reach?" One way is to set a "frequency cap" with the publisher's or advertiser's ad server, using cookies to prevent readers from seeing an ad more than a designated number of times. For a variety of reasons, however, capping frequency via ad servers can be more difficult in practice than in theory.

A more efficient way to control frequency can be through strategic media buying tactics. Back in 2002, the research firm then known as Jupiter Media Metrix demonstrated that an ad campaign of four million impressions could reach an audience at least a third larger when spread evenly over three large sites as opposed to concentrating the same-sized buy on a single site.[4] The key implication was that a broader media buy across several sites was a more efficient way to optimize reach, and moderate frequency, than by concentrating the same number of impressions in fewer sites.

A more recent piece of research by DoubleClick, "Internet Audience Dynamics," based on comScore data, reached a similar conclusion: different types of sites show different patterns of reach and frequency.[5]

Figure 2 is what is known as a "build chart," showing the varying rates at which audiences accumulate to their monthly total (aka "cume") on different types of websites. The comScore data show that the audiences for website "services" (such as web-based email) and portals scale

Site Audiences Build at Different Rates, Indicating Varying Frequency of Visitors

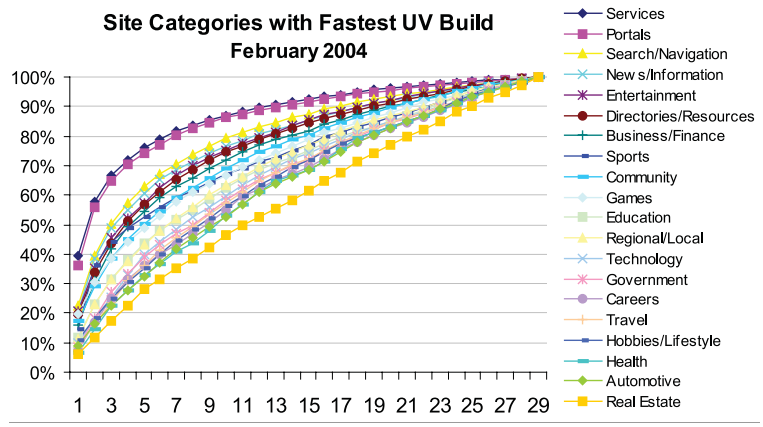

Figure 2 Source: DoubleClick and comScore Networks, "Internet Audience Dynamics," 2004

4. See press release from comScore Networks, May 1, 2002, titled "Advertisers Beware: Media Buys Across Fewer Online Networks Are Inefficient, Reports Jupiter Media Metrix"
5. "Internet Audience Dynamics: How Can You Effectively Use Online as a Reach Medium?" (September 2004)

© 2006 DoubleClick Inc. All Rights Reserved.

very quickly: roughly 80% of the monthly accumulated audience to those sites had already visited by the seventh day of the month. At real estate sites, meanwhile, only 35% of the monthly audience had visited within the same one-week period.

Sites whose audiences build quickly are likely to attract visitors who come back often, meaning advertisers risk burning through a lot of ad impressions at high frequency levels if their ad buys are too concentrated on these types of sites. Sites that are not as "sticky"– with flatter build curves – may have altogether smaller audiences, but campaigns directed towards them will naturally be distributed more evenly across all visitors.

The best strategy, therefore, is not to avoid any type of site, but to spread campaigns over multiple sites in order to most efficiently distribute campaign reach at a lower average frequency.

4. Manage Reach and Frequency Through Temporal Targeting

In broadcast advertising, scheduling ads according to "daypart" is very common: "drive time" for radio and "prime time" for TV command premium prices as the largest audience segments are tuned in then. For some reason, the same concept online has not taken hold broadly, aside from niches such as fast-food companies targeting ads around lunch time or alcohol brands targeting the beginning of the weekend on Friday afternoons.

But targeting by time of day or day of week can be an effective strategy for managing reach and frequency distribution. For example, **Figure 3** shows that Yahoo!'s Movie section receives the highest spikes in unique audience on the weekends, which is natural, as that's when most of us go to the movies.

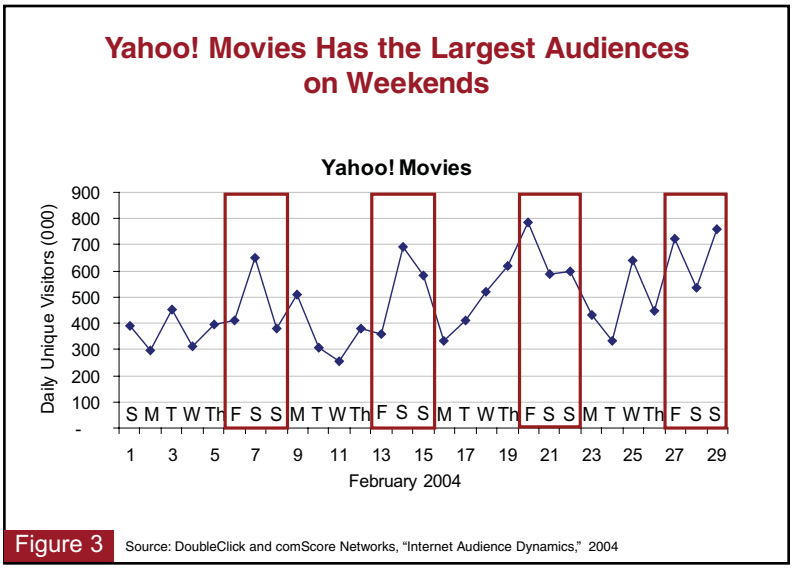

Figure 3 Source: DoubleClick and comScore Networks, "Internet Audience Dynamics," 2004

Think of newspapers: the movie section has ads all week long, but on Fridays and on the weekend is when the largest number of advertisers are promoting films. Online, advertisers typically do not make a distinction about what days during the week, or hours during the day, their ads run, even though all ad servers should have the ability to target this way.

During weekday lulls in unique visitor traffic to Yahoo! Movies – Monday through Thursday – traffic is mostly made up of hard-core movie fans – visitors not looking for a weekend outing

© 2006 DoubleClick Inc. All Rights Reserved.

but mining movie trivia all day long. These are the high-frequency users liable to eat up vast amounts of redundant ad impressions.

Daypart targeting is a similar story. The Internet is the only medium other than radio to have two prime times daily: the middle of the day (it also being the only high-engagement medium with significant access to people during the workday) and again in the evening. By concentrating ad buys to those two times of day, advertisers would again best distribute their impressions to times when the largest number of unique users were likely to see their ads.

5. Avoid Spill by Targeting Geographically

Geo-targeting is a widely practiced form of online targeting. It obviously makes sense to geo-target for companies whose products or services are available only in regional or local markets. But advertisers should also consider what portion of their untargeted advertising is being consumed by international audiences. It is not unusual for many popular U.S. media sites to have 25% or more of their traffic made up of international surfers.

For some dotcom models with borderless services this may be unimportant, but many other companies will have distribution challenges (not to mention regulations, language and other localization issues) when it come to selling internationally. Even for large global companies with international presence, foreign markets are usually serviced from regional offices, in local languages and, more to the point, out of another department's marketing budget.

Companies with such constraints on distribution and marketing responsibilities may be surprised to learn how high is the portion of their advertising being served to geographically irrelevant audience groups.

The term among media buyers for this kind of exposure to unwanted audiences is "spill."

There are a few ways to accomplish geo-targeting. The most basic, but not the most accurate, is to buy media on locally relevant content sites. An advertiser interested in targeting prospective customers in New England might advertise on Boston.com, for example. But a significant amount of that audience may also be made up of former Bostonians keeping abreast of hometown news, international readers attracted to the *Globe's* reputation for excellent news reporting or others ending up there via links from search engines, blogs or other sources. This method of geo-targeting will do little to mitigate spill.

The most reliable, but not necessarily the most practical, means of geo-targeting is through zip codes on sites that require registration. These self-reported data are generally reliable, but because most sites offer unrestricted access to most of their content, finding enough registered zip codes for a sizable media buy can present a challenge.

A useful compromise is IP-based geo-targeting. This technique is not watertight, as certain large networks, such as ISPs and corporate networks, often cluster IP addresses so that all users of the network appear to live in the same town. But the technology has improved in recent years to become generally accurate enough for most purposes.

© 2006 DoubleClick Inc. All Rights Reserved.

Compared to the alternative of no geo-targeting, it is a marked improvement at identifying relevant audiences.

6. Use Large Ad Formats

Bigger is better. Whether an advertiser's objectives are direct response or brand oriented, larger ad units simply perform better in most circumstances.

Aggregated Q1 2006 click-through-rate data for 136 large clients of DoubleClick's DART® for Advertisers (DFA) show a strong correlation between the size of ads and their click-through performance. **Figure 4** shows that, of the standard Interactive Advertising Bureau (IAB) web display ad unit sizes, those with a larger size (i.e., total square pixel area) tend to generate higher click rates than the classic 468x60 "full banner."

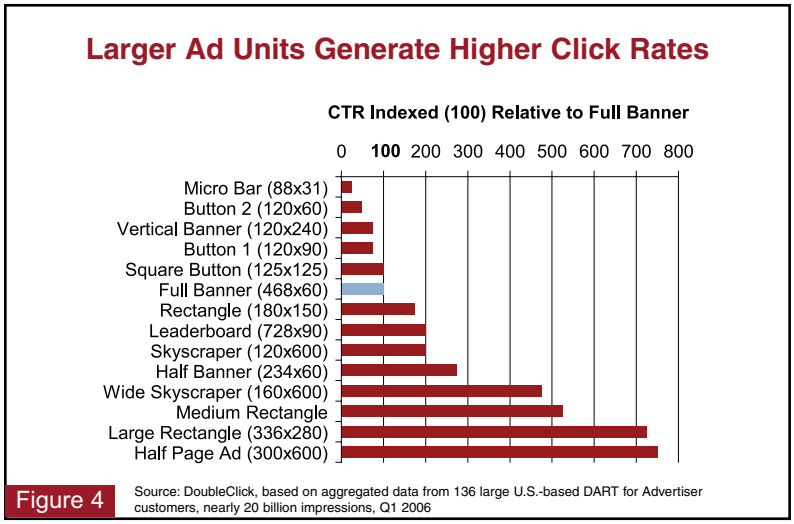

Figure 4 Source: DoubleClick, based on aggregated data from 136 large U.S.-based DART for Advertiser customers, nearly 20 billion impressions, Q1 2006

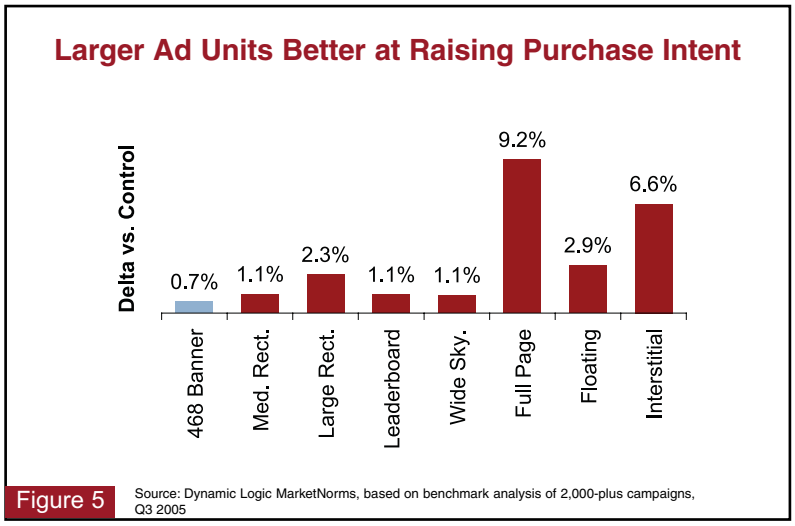

Figure 5 Source: Dynamic Logic MarketNorms, based on benchmark analysis of 2,000-plus campaigns, Q3 2005

Likewise, it stands to reason that larger ad units would be more successful at attracting web users' attention, better impacting their brand attitudes. **Figure 5** shows the effect of several ad sizes on the brand metric of "purchase intent," based on hundreds of Dynamic Logic studies comparing attitudes of visitors variously exposed to test ads or control ads.[6] Larger ads all generated greater purchase intent than the smaller 468x60 banner.

As seen in **Figure 4 and 5**, measuring click-through rate (CTR) and purchase intent respectively, the "large rectangle"(336x280 pixels) was particularly noteworthy in its effectiveness compared to other standard on-page display ad units. Interestingly, the large rectangle is much less popular with advertisers than its slightly smaller but less effective

6. Dynamic Logic's MarketNorms® is a marketing effectiveness database. The results cited have not been adjusted for exposure frequency, demographics, websites, advertiser industry and other factors that may contribute to brand lift. These findings are aggregate in nature, reflect past results and are not a guarantee of future results for individual campaigns.

© 2006 DoubleClick Inc. All Rights Reserved.

cousin, the "medium rectangle" (300x250). Advertisers would be well advised to start buying the large rectangle more often.

In interviews with numerous website publishers in the preparation of this paper, several told us that they were currently phasing out the 468x60 classic banner size altogether, as demand was much stronger now for the larger 728x90 leaderboard format.

7. Use Rich Media and Video Ad Formats

Rich media ads are significantly more effective at engaging users than are standard GIF or JPG image ad formats. These rich media ads are typically formatted in Flash or enhanced-Flash (i.e., specialty rich media ad platforms like DoubleClick's DART Motif[SM]), with features such as the ability to expand outside of standard ad dimensions, to float across the top of web pages, or to play video clips.

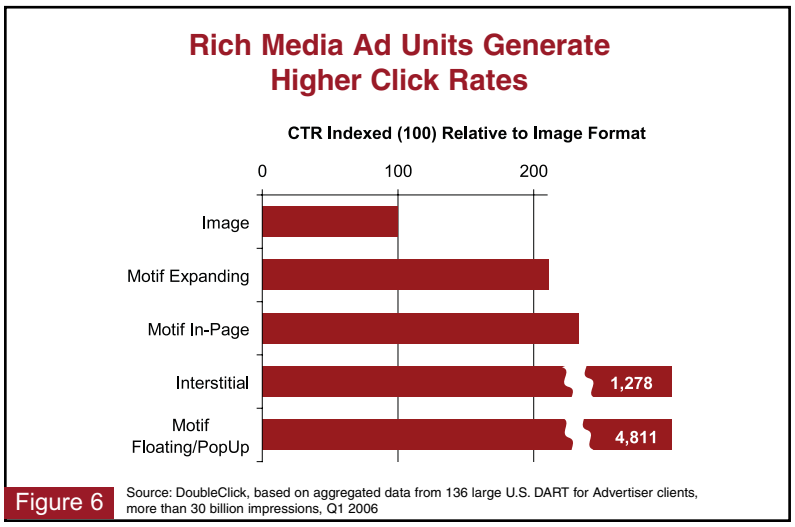

Figure 6 Source: DoubleClick, based on aggregated data from 136 large U.S. DART for Advertiser clients, more than 30 billion impressions, Q1 2006

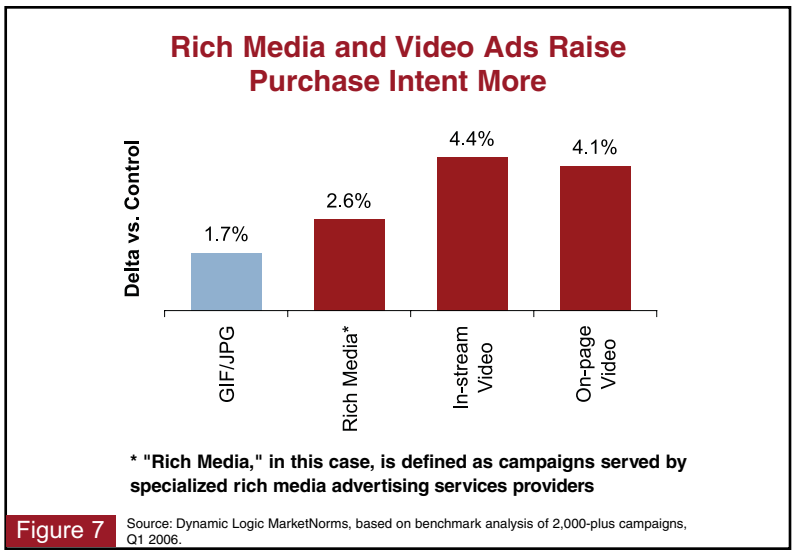

Figure 7 Source: Dynamic Logic MarketNorms, based on benchmark analysis of 2,000-plus campaigns, Q1 2006.

Analysis of DART ad-serving logs shows that more interactive and prominent rich media units have far higher click rates than standard image ads. **Figure 6** shows that ads formatted as expandable or in-page units using DART Motif's rich media platform had more than double the click-rate of image ads, while interstitials (ads, typically large in size, that appear on pages in between two content pages during a user's surfing session) had more than 10-times the click rate. Motif floating and pop-up ads had close to 50-times the click rates of image ads.

To persuade consumers positively towards brand attributes, rich media ad formats (particularly video) are considerably more effective than image ad formats. Campaigns served in the platforms of specialty rich media ad providers were at

© 2006 DoubleClick Inc. All Rights Reserved.

least 50% more effective at improving purchase intent than were GIF/JPG image ads (relative to control groups who saw public service announcements), according again to data drawn from Dynamic Logic's MarketNorms, a pool of hundreds of brand research studies. Video-formatted online ads, meanwhile, outperformed plain image ads by approximately two and a half times, as illustrated in **Figure 7** (see previous page).

8. Target Audiences With Appropriate Creative Treatments

Another challenge for online ad campaigns is that many agencies have one team, or even one subsidiary company, doing the creative design of ads, and another buying placements on media properties. There may be advantages to this kind of division of labor, including concentrating fields of expertise and cost efficiencies. But the trade-off is that the creative is not always ideally suited for the audiences that see it and the environment where they see it. Closing that gap and better aligning creative executions to the right audiences and environments can have a dramatic impact on campaign effectiveness.

"As you would think, the clients who come on our site and talk about exotic travel, outdoors and environmental issues, and have the creative to go with that, their results can go through the roof," said Mr. Ryan of NationalGeographic.com.

"Dolby Laboratories, working with the agency Freestyle Interactive, ran a rich media campaign with us," Mr. Ryan continued. "I looked at the insertion order and said, 'Dolby? Okay great, let's get the business,' but I wasn't sure what they wanted with National Geographic's audience. Then I saw the creative, two interactive ads, one with an electrical storm, and another that morphed from a jungle scene to an ocean with a slider bar that changed the sound. The response rates to the ads were huge, because the ads' theme was highly relevant to our audience."

The campaign metrics, shared by Dolby and Freestyle Interactive, show what Mr. Ryan was talking about, as seen in **Figure 8**. In total, the campaign

Dolby Scores Success With Ads Well Targeted to NationalGeographic.com

Metrics	Overall Campaign	National Geographic
Impressions	22.8 million	1.6 million
CTR	1.62%	2.62%
Interaction rate	12.70%	17.52%
Seconds spent	5.65	7.55
Avg Daily Visits	+152%	

Figure 8 Source: Dolby Laboratories and Freestyle Interactive, 2005

© 2006 DoubleClick Inc. All Rights Reserved.

performed very well, with a CTR of 1.6%, an interaction rate of 12.7%, and users spending an average of 5.6 seconds engaged with the ads. On NationalGeographic.com, however, each of those metrics improved by roughly one- to two-thirds above the overall campaign averages.

9. Track "View-Throughs"

The "click-through" is truly a new paradigm in ad measurement: a mechanism by which consumers can react immediately to ad messages put in front of them. This feature has given rise, however, to the idea that all online ads should aspire to drive users to click on them, and that clicking on them is the basic means of measuring their effectiveness.

The principal aim of many branding campaigns, however, needs not necessarily to be driving clicks. It can instead influence attitudes about brand attributes and stimulate purchase intent. Furthermore, even when an objective of the ad is to drive people back to the advertiser's website, an immediate click is not always how they get there. In many cases, people exposed to ads do not click, but they end up visiting those websites later of their own accord, taking the desired action promoted in the ad. This is known as the "view-through" effect.

Advertisers can track view-throughs easily using cookies and match-back pixels (known as "Spotlight tags" in DART) on the advertiser's site. When someone exposed to an ad in a campaign shows up at the site, the match-back pixel will recognize the exposed cookie. Ad serving logs can then identify whether the person came directly via a click or later on their own. We typically see half or more of the ad-related visits in a campaign being attributed to the view-through effect as opposed to direct clicks.

Many advertisers track view-throughs but still have questions about what percent of those visits should be credited to the ad exposure (as opposed to mere coincidence). After all, an ad campaign may run in multiple channels; maybe it was the TV ad which caught the attention of a visitor in question, prompting her to visit the website, and not the online ad. Or perhaps she was already a loyal customer of the company and had planned to drop by the site, independently of the ad. To address that question, advertisers can use a control group.

Along with Continental Airlines, DoubleClick used a control group in a study we published titled "In-Direct Response to Online Advertising."[7] We monitored the airline's campaign for an entire month, and, along with the ads served in the campaign, we served Red Cross public service ads to a separate segment to track as a control group. We trafficked the campaign carefully to make sure that browsers in the control group were completely unexposed to the test ad. At the end of the month, we analyzed how many people from each group showed up on Continental's site and bought the advertised fare without having clicked on an ad.

The view-through visitors in the group exposed to the ad were three-times more likely to purchase the promotional fare than those who showed up after having been exposed to the

7. "In-Direct Response to Digital Advertising: Best Practices in Measuring Response Over Time; Continental Airlines Case Study" 2004

© 2006 DoubleClick Inc. All Rights Reserved.

Red Cross ad. Therefore, we could ascribe two-thirds of that buying behavior in the test group to the influence of the ad exposure, as opposed to unrelated environmental factors.

"We frequently see advertisers launch new campaign creative and get discouraged that it is not performing as well as some earlier creative," said Jason Bigler, DoubleClick product director for DART for Advertisers. "If they leave it in circulation for another week or two, though, they will often see the performance improve to the level of the earlier creative. This is because of those latent visits, the view-through effect. When advertisers leave that view-through window open for a few weeks, they will usually see post-impression visitations accumulate."

10. Measure Effectiveness Scientifically With Control Groups

Nineteenth century department store magnate, and grandfather of modern advertising, John Wanamaker famously complained, "I know half of my advertising is wasted. I just don't know which half." Too bad he couldn't use control groups.

Control groups, as we remember from seventh grade science class, are at the heart of the "scientific method." To determine whether a particular factor is causing an effect, we can set up a study with two observed groups: one that includes the factor we are testing, and another otherwise identical group that does not include the factor in question. We can then see whether the inclusion of that factor effects the predicted result. Market research studies that use a test/control method are referred to as employing "experimental design."

We can excuse Wanamaker for not using control groups, as it would have been very hard to do so in traditional media. How, for example, could you assure that one group of citizens in Philadelphia was exposed to a newspaper ad for a department store while another was exposed to an ad for the Red Cross? Impractical, if not impossible, in a real-world media environment. Online, however, it is relatively easy to do.

Using cookies to track which web browsers are exposed to which ad units, ad serving platforms can create segments of users, including the ability to track two otherwise identical but mutually exclusive groups (e.g., a test segment and a control segment). It is important that, aside from the different ad units those two groups would be served, the characteristics should otherwise be identical (i.e., the ads should appear on the same media placements, at the same time of day and for the same length of campaign and all other targeting variables should be equal).

So, if an online advertiser truly wants to be convinced her advertising is "working," she should set up a controlled test. What is the lift in sales she can attribute to the ads? How many of the visitors who saw the ads would have come to her site regardless? To what extent are these ads really changing users' attitudes towards her brand? All of these questions and more can be answered at a high confidence level of statistical accuracy by using a control group.

© 2006 DoubleClick Inc. All Rights Reserved.

To set up a control group in DFA, a trafficker would use two separate ads (one for the control, typically a public service announcement, and one for the test ad). In order to serve 10% of the campaign audience a control ad (an appropriate sized control segment for most campaigns), the trafficker would use the Audience Segmentation targeting feature in DFA to create 10 segments. The control ad would be targeted to segment one and would be given a higher priority. The other ad, the test ad (i.e., the actual ad of the campaign), should not be targeted to any segments and should be left at the default priority. This way, one in 10 viewers will be assigned to the control group and the other nine out of 10 viewers will see the test ad.

Further Reading

Of course, the question of best practices for a discipline as new as Internet marketing is constantly changing. Below are some of the better resources for discussion and analysis of these practices as they develop.

Industry News Media

ClickZ – www.clickz.com – one of the earliest online news and opinion resources to focus entirely on Internet advertising

MediaPost – www.mediapost.com – another popular publisher of news and opinions about online advertising (as well as tradition), including numerous email newsletters and two print magazines

iMedia Connection – www.imediaconnection.com – another source of news and opinions about online advertising, plus a popular conference of the same name

Advertising Age – www.adage.com – American's oldest magazine on the world of advertising does a reasonable job of keeping up with trends in the online advertising world

Ad WEEK – www.adweek.com – likewise, Ad Age's traditional competitor also closely follows trends in the online ad world

MarketingVOX – www.marketingvox.com – with a blog-like format, this site (and daily email newsletter) does a good job of aggregating news from all of the sources above and many others to provide a quick overview of industry news and trends

Research Sources

MarketingSherpa – www.marketingsherpa.com – producer of many original reports and case studies about Internet marketing best practices

eMarketer – www.emarketer.com – producer of dozens of reports per year and a large database of articles and charts about trends in online marketing

Forrester Research – www.forrester.com – an independent technology and market research company that provides pragmatic and forward-thinking advice about technology's impact on business and consumers.

© 2006 DoubleClick Inc. All Rights Reserved.

Jupiter Research – www.jupiterresearch.com – the leading syndicated research analyst group focusing on online advertising and other Internet trends

Associations

Interactive Advertising Bureau (IAB) – www.iab.net – the leading representative body of the online advertising sector and producer of much original research and setter of industry standards

Online Publishers Association (OPA) – www.online-publishers.org – another important industry representative body and source for original research about online media and advertising trends

This Paper Brought to You by DART Adapt℠ for Publishers

DART Adapt for Publishers is DoubleClick's new highly advanced optimization solution designed to maximize the performance of online advertising campaigns. The DART Adapt solution provides a powerful combination of sophisticated modeling, technology and consultative services that enable publishers to more effectively help their advertisers reach their campaign goals. Unlike other online advertising optimization solutions, DART Adapt is customizable, automated, adaptive and integrated with the industry's standard third party ad server, DART for Publishers.

About DoubleClick

DoubleClick provides technology and services that empower marketers, agencies and web publishers to work together successfully and profit from their digital marketing investments. Our focus on innovation, reliability and insight enables clients to improve productivity and results.

Since 1996, DoubleClick has empowered the original thinkers and leaders in the digital advertising industry to deliver on the promise of the rich possibilities of our medium. Today, the company's DART and Performics divisions power the online advertising marketplace. Tomorrow, we will continue to enable clients to profit from opportunities across all digital advertising channels as consumers worldwide embrace them.

DoubleClick has global headquarters in New York City and maintains 21 offices around the world to serve its more than 1500 clients.

© 2006 DoubleClick Inc. All Rights Reserved.