

A Forrester Consulting Thought Leadership Paper Commissioned By AdMeld

Media Buying Goes Real Time

How Dynamic Optimization Of Online Media Buying Will Affect Advertisers, Publishers, Agencies And Ad Networks

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FORRESTER

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Executive Summary

The online advertising market is aflutter over an emerging data-driven approach to display media buying as well as the technologies — dubbed “demand-side platforms” — that enable buying this way. In December 2009, publisher yield optimization platform AdMeld commissioned Forrester Consulting to study the rise of real-time media buying and its effects on advertisers, publishers, agencies and ad networks. How will these constituents adopt, ignore, or prepare for real-time media buying in 2010? And specifically, how should publishers evolve in a new approach to media buying?

Key Findings

Forrester’s study yielded the following key findings:

- **Media buying today is inefficient and can’t keep pace with the growing volume of online inventory.**
- **Dynamic media buying optimization (DMBO) can improve the efficiency and effectiveness of media buying decisions.**
- **Early experiments with DMBO are from enterprise marketers on direct response efforts.**
- **Publishers must buy in to a new approach to media buying.**
- **Optimization will redefine media buying across channels.**

Online Display Advertising Holds Untapped Potential

Display advertising will grow at a CAGR of 17% to reach almost \$17 billion by 2014, despite a 2009 drop in spend as recession-constrained marketers reallocate branding dollars to direct response media (see Figure 1). Forrester expects this increased investment to come as advertisers gravitate toward rich media and online video formats and get smarter about planning and measuring display buys.

Media Buying Needs A Change

Despite its heavy usage and expected growth, online advertising doesn’t currently function as efficiently as possible. In fact, more than 30% of marketers expect the effectiveness of display media to decrease over the next three years (see Figure 2).¹ The time for change is at hand. Three factors prime the online advertising economy for a new way to buy:

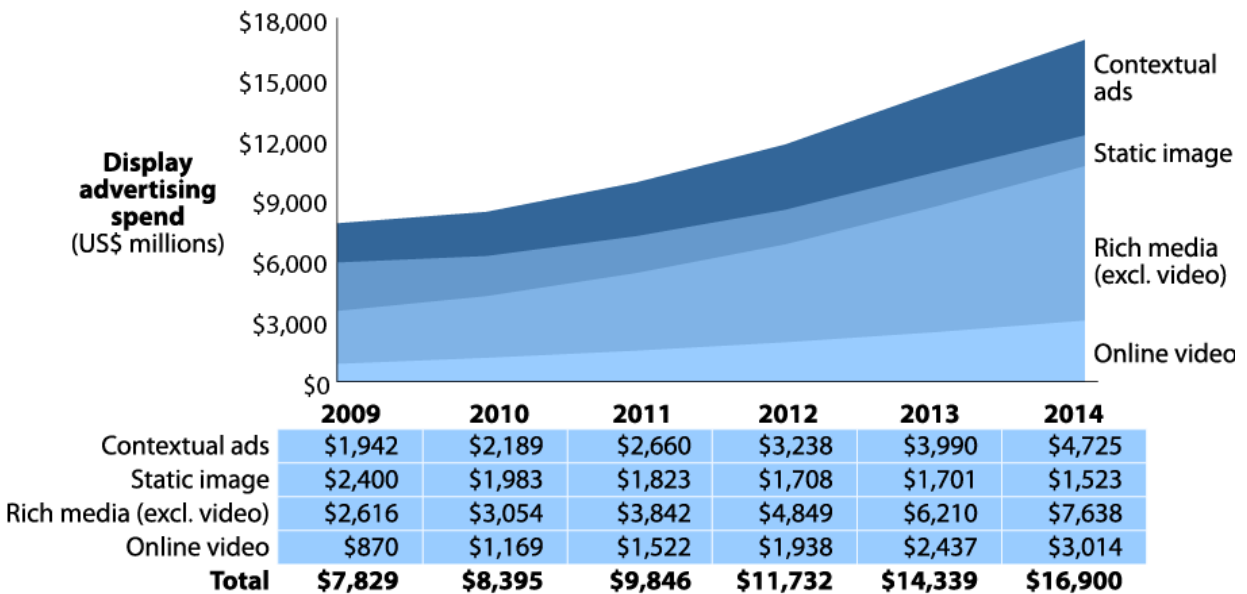
- **Marketers embrace bid-based ad buying.** Before paid search ads, marketers bought online ads just like they did offline ads, on a cost per thousand impressions (CPM) basis. But now, performance-based ads make up more than half of all online media buys.² Marketers fluent in cost-per-click deals where ad placement depends on bid price are ready to optimize display ad buys.
- **Online media supply is skyrocketing.** Online media has always been more plentiful than offline. Now, user-generated blogs, photos, videos, and podcasts introduce millions of new places where marketers can buy ads.

However, burgeoning media are hard to navigate and quality inventory is tough to locate through existing online ad-buying models.

- **Current options fall short.** While online media buying has grown more dependent on technology, most agencies still rely on relationship-based sales approaches which work offline but can't scale to the vastness of online media. And ad networks that do enable scale often fall short when it comes to transparency on pricing and inventory allocation. One agency explained, "Not too many people love networks, so they are compelled by an opportunity to accomplish all you can through a network in another way."

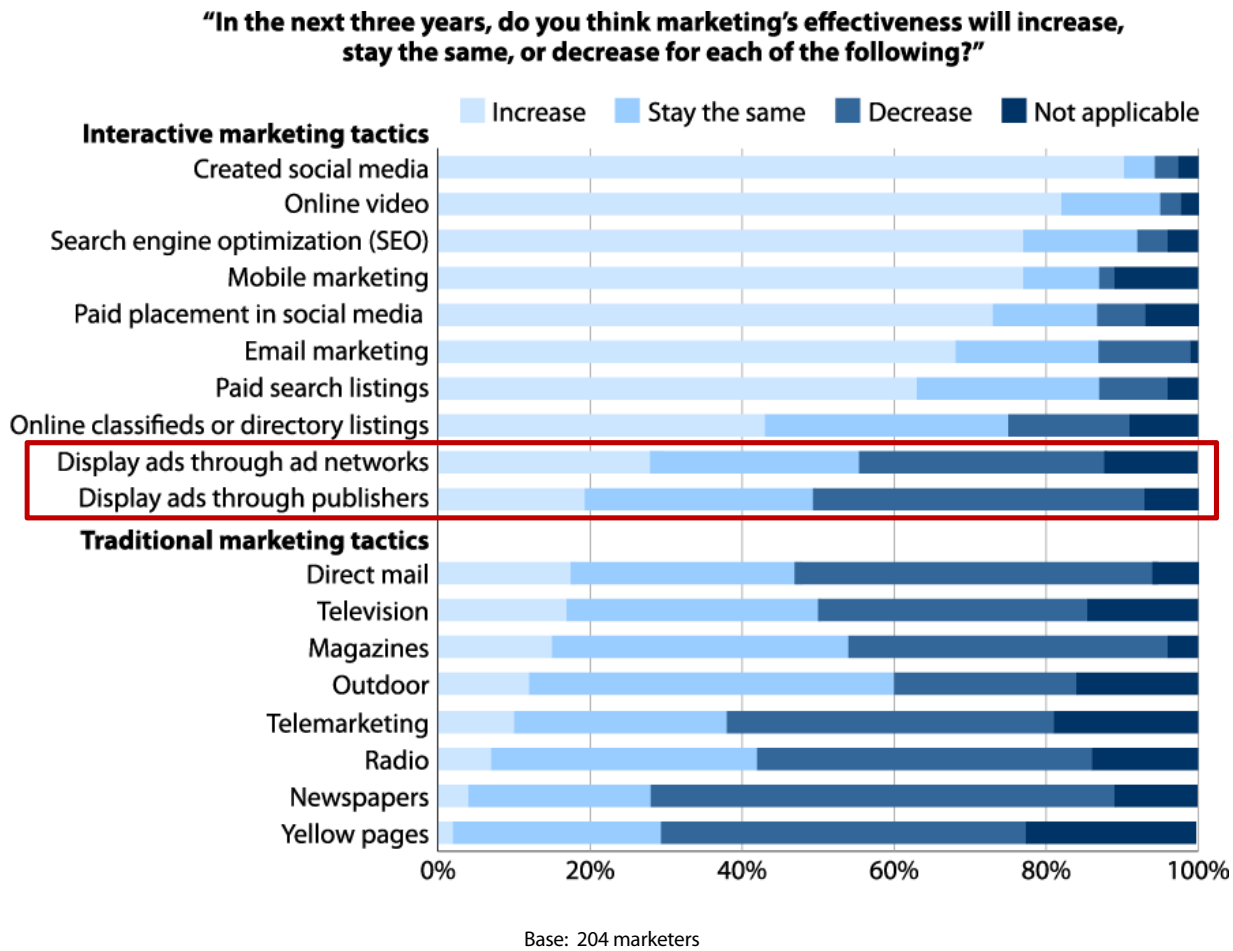
Figure 1

Forecast: US Display Advertising Spend, 2009 To 2013



Source: "US Interactive Marketing Forecast, 2009 to 2014", Forrester Research, Inc., July 2009

Figure 2
Marketers Expect Display Media Will Decrease In Effectiveness



Source: “US Interactive Marketing Forecast, 2009 to 2014”, Forrester Research, Inc., July 2009

The Time Is Right For Dynamic Media Optimization

We see advertisers and publishers gravitating toward a new approach to media buying which will allow for better targeting — the largest driver of more online display spend (see Figure 3). New labels for this new approach are stealing their way into the online advertising lexicon. You may have heard of “real-time bidding,” or “real-time optimization” taking place on “demand-side platforms” or “publisher-side platforms” and ad exchanges. We find that none of these commonly used terms perfectly describes the strategy needed for better media buying and selling. So Forrester recommends a new and specific approach called dynamic media buying optimization (DMBO) which we define as:

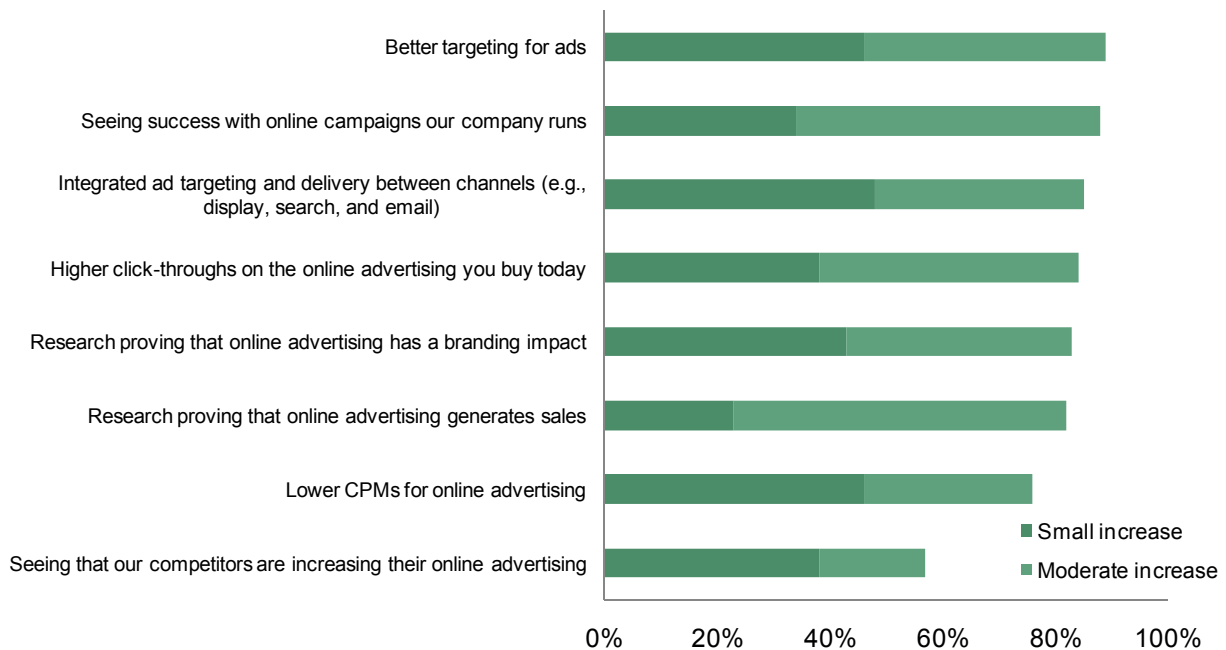
Dynamically adjusting the price of an ad impression based on its specific audience data and performance history.

To be fair, dynamic media buying optimization is just one piece of a more complex operation involving multiple pieces of the advertising supply chain — from target audience identification through buying to creative development and ad serving — which can also be optimized. In this report, however, we examine just media buying optimization, a process that requires a few essentials:

- **Data.** DBO only works when media buyers have accurate profile information about their desired audience as well as insight into how given inventory delivers target audiences and against performance goals. The more data provided by ad buyers and sellers, the more refined media buying decisions can be.
- **Automation.** New technologies are emerging to automate the millions of individual buying decisions of what to pay for which impression. These tools are the demand-side platforms that you may already know. They manage the “dynamic” part of DBO. That is, they match a buyer’s bid to an optimal impression in the milliseconds after a visitor arrives at a site, but before the site (and ad) content completely loads. One agency we interviewed indicated that following data access the key to success with DBO is “the ability to make decisions on user and inventory data really, really quickly.”
- **Bid-based buying.** Similar to bid management processes with paid search media buys, DBO relies on advertisers to bid for media placements rather than to negotiate media contracts as they have done historically. Bids are typically based on a cost per thousand (CPM) impressions to reach a specific audience with a certain size ad and placement. Like with the stock market, bid amounts depend on market demand (competition for like inventory will drive the price up), availability of supply, and the willingness of a seller to accept a given price.
- **Access to inventory at scale.** Of course, no media buying process is helpful if it connects media buyers to only a few properties. Media-buying optimization hinges on comparing the audience, performance, and ask price of millions of impressions in order to inform algorithms that determine optimal future buys. Today buyers achieve this kind of reach by working through portals, exchanges and publisher-side platforms.

Figure 3**Advertisers Would Spend More If They Had Better Targeting**

“How would each of the following influence the level of your company’s spending on online advertising?”
(Percent who indicated any level of increase)



Base: 204 marketers

Source: “US Interactive Marketing Forecast, 2009 to 2014”, Forrester Research, Inc., July 2009 (unpublished data)

Advertisers And Publishers Must Adjust

The move to DBO is still in the early phase; many participants and capabilities still need to mature. But media buyer adoption is happening rapidly. In the words of one agency we spoke with, “We are completely bought in that this is not just today’s hot thing but representative of a big shift in the way online media is handled. And it has been easier than I imagined it would be to persuade clients to shift dollars into [DBO].” Forrester believes that 2010 is the year for both advertisers and publishers to experiment with DBO in order to be prepared when the process goes mainstream in early 2011.

Advertisers Experiment

DBO by advertisers today is still primarily experimental. Our research found early media buyer adopters:

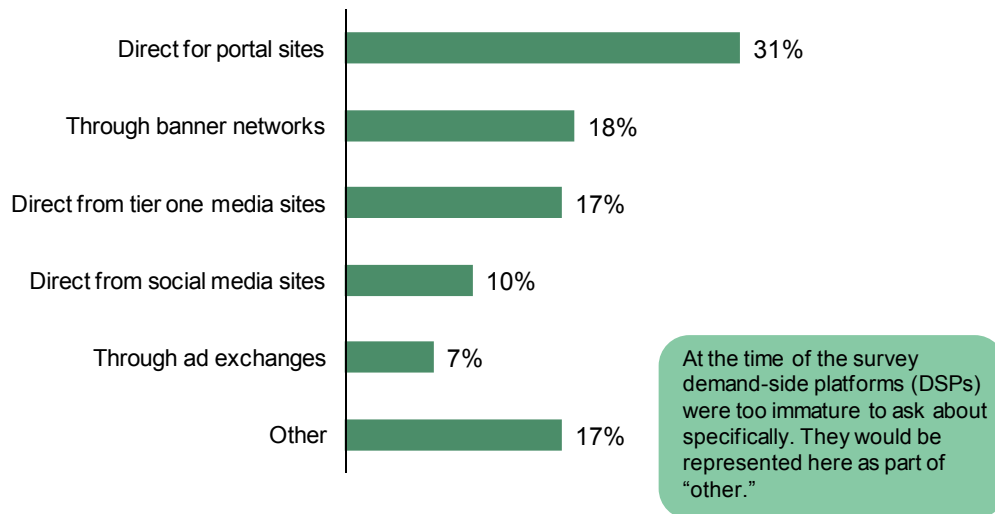
- **Trialing directly and through agency partners.** We found that large, innovative online advertisers work directly with one or a few demand-side platforms for maximum control over their buys. Other advertisers who can’t

support the technology requirements needed to work directly with a DSP rely on agencies. One interviewee explains that advertisers need agency support because “[DBO] is 10 times harder than paid search because you have so many more variables that you have to deal with.” But agencies today aren’t complete DBO solutions either. They lack technology heritage and create a potentially awkward intermediary between buyers and sellers. In the words of one advertiser we talked to, “If you don’t have your own seat on an exchange you may not have [visibility] into what you are being charged. Your [partner] may be adding on a mark up.”

- **Buying for performance-marketing goals.** Although brand advertisers are dabbling as well, performance marketers are the easiest to win over to bid-based display media buying because of their familiarity with ad networks and exchanges and clear response-based objectives. One agency we interviewed initiated DBO with a client focused on low-cost lead acquisition. Immediate success convinced this client to optimize across other direct and branding campaigns. And early adopters tend to be big buyers. One demand-side platform told us that Fortune 100 companies account for 70% to 80% of its clients.
- **Mapping cookie data.** Marketers will need to map their existing customer data against the audience attributes available through the demand-side platform that will automate bid optimization and match of buyer bids with publisher inventory and asking price. For most marketers, this means a cookie data mapping exercise that can take several months and require a new set of skills. As one early adopter explained, “You have to put a lot of technology in place. Now I’m staffing with people with mathematics and technology backgrounds who are versed in databases and SQL queries. I can train them on how to write a creative brief.”
- **Reallocating spend.** Display media spend today is still dominated by portal buys (see Figure 4). But within six months we expect to see significant adjustments in the distribution of media dollars. One advertiser we interviewed has already shifted 25% of her budget to demand-side platforms, after six months of experimentation. In her words, “We still rely on a few established workhorse buys, but it would be ok if my budget moved more and more toward [dynamic media buying optimization].”
- **Improving efficiency.** Interviewees talked over and over about two benefits of DBO: 1) creating efficiency — cutting waste out of existing buys by eliminating poorly targeted buys and 2) lifting effectiveness — gaining better results per campaign by improving ad relevance. Today, most applications of DBO increase efficiency by automating currently manual processes, eliminating wasted impressions, and improving data management. One demand-side platform estimates that it reduces data management requirements by 92% for advertisers.³ DBO also promises to improve effectiveness as inventory and data volume grows, data quality improves, and bid algorithms gain sophistication. In an early example of effectiveness gain, one insurance company decreased its online cost per lead from \$200 to \$100 using DBO.

Figure 4
Marketers Still Spend The Most With Portals

“What percent of your 2009 online display advertising budget will be bought in the following ways?”



Base: 175 marketers

Source: “US Interactive Marketing Forecast, 2009 to 2014”, Forrester Research, Inc., July 2009 (unpublished data)

Publishers Must Buy In

Publishers have been slow to join this new ecosystem, despite the increasing buzz about it. But publishers must recognize that advertisers are actively adopting DBO; we estimate that 30% of advertising dollars will trade through DBO and demand-side platforms by year end 2010. Participating in DBO is critical for continued publisher ad sales. We recommend that publishers get involved with DBO now while advertiser adoption is still early in order to be prepared for when DBO becomes a mainstream online buying strategy in early 2011. Do this by:

- **Following buyer dollars.** It seems elementary, but publishers who don’t place inventory on bid-based buying platforms will be ceding ad sales to other publishers who do. As more marketers (and their dollars) flock to demand-side instead of ad networks or buying directly, any publisher not participating with biddable media platforms will lose access to potential buyers.
- **Selling audience, not ad space.** Marketers and publishers have long used content as a proxy for target audience (i.e., “Young men typically like sports. We want to reach young men, so we will buy inventory on sports sites.”). But better data, improved targeting technology, and real-time bidding allow marketers to buy based upon actual

audience identification (i.e., “We want these particular young men, at this time, regardless of the site they are on.”). Counter to most publishers’ fears, this does not necessarily mean lower CPMs across the board. One marketer we interviewed told us that they actually pay more for inventory through bid-based platforms when it connects them to high-performing audiences. “In the past, I wouldn’t pay more than a \$1 CPM,” our interviewee explains. “But now I will pay \$10 for the same inventory because I can justify the value.”

- **Selling smarter, higher margin deals.** Conventional relationship-centric sales negotiations can be lengthy and require tedious manual bookkeeping, resulting in errors and high cost. Selling inventory through automated bid-based platforms frees up publisher sales organizations *without sacrificing margin and data to ad networks*. The outcome? Sales forces will be able to dedicate their time to selling high-value, high-touch sponsorships and content integrations instead of minor but time-intensive on-off deals.
- **Building user-centric sites.** Audience-based buying means that inventory that delivers valuable audiences becomes desirable whether it is on the home page of a branded site or three pages in on noname.com. But audience is not the only variable that will determine price. Media buyers will also pay for placements on sites with engaging content, well-designed customer experiences, and the ability to support flexible ad units.⁴

Optimization Will Redefine Media Buying And Selling

Optimization will eventually redefine on and offline media buying and selling.⁵ This means short term upheaval for publishers, data providers, and ad networks. Specifically:

- **Publishers will boost data capabilities.** To accommodate marketers’ growing demand for audience-based buying, publishers will shift priorities away from “how to drive page view volume” and toward “how to demonstrate the value of our audiences.” We expect publishers to invest in data experts and analytics tools to 1) help them identify profitable audiences in order to attract more like them; 2) provide reporting that shows advertisers value beyond the click-through; 3) determine needed site design or content improvements; and 4) merchandise audience profiles to media buyers.⁶
- **Offline data providers will improve data quality and management.** Data — both proprietary and third party — continues to become ever more critical to keeping marketers competitive. In the words of one agency we interviewed for this research, “The more data points the better” when it comes to optimization. Firms that can anonymously combine proprietary and third-party data will have an advantage with DBO. Advantage: traditional database marketing service providers are already experienced in managing terabytes of data within Federal Trade Commission (FTC) regulations and marketer privacy policies. We anticipate their creating relationships with demand and publisher-side platforms to help unify data standards and improve data usability.
- **Ad networks consolidate.** Ad networks face the biggest threat from the rise of DBO. One agency we interviewed said client dollars for media buys optimized through demand-side platforms comes “straight out of networks’ [budgets].” Big portals will likely integrate their various networks and exchanges in order to support more dynamic optimization. But standalone networks will have to reinvent or die. We expect consolidation as ad networks either fold, turn exclusively into publisher rep firms or turn themselves into a demand-side platform or a firm that aggregates and/or resells data to other players along the online ad supply chain.

- **Dynamic media buying optimization will extend into other channels.** It took the Web-based display market more than a decade to arrive at DBO, but success with it online will encourage buyers and sellers to apply the same approach, data and technology across channels. Forrester certainly thinks mobile ads will be traded dynamically as mobile marketing adoption grows and the line between mobile and the desktop continues to blur. We also expect DBO to graduate into traditional media as television and print buyers and sellers learn from their online brethren how to target, optimize, and automate bid-based buys.⁷

Appendix A: Methodology

In this study, Forrester interviewed 10 organizations in the United States to evaluate the future of interactive display media buying and emerging technologies, such as “real-time bidding.” Interview participants included decision-makers in roles of CEO, CTO, chief digital officer, director/manager of advertising, head of digital media, interactive operations GM/director, and managing director across a variety of industries. Respondents were offered an executive summary of the findings as a thank you for time spent on the survey. The study began in December 2009 and was completed in January 2010.

Appendix B: Supplemental Material

Related Forrester Research

“2010 North American Interactive Marketing Predictions”, Forrester Research, Inc., January, 2010

“US Interactive Marketing Forecast 2009 to 2014”, Forrester Research, Inc., November, 2009

“Interactive Marketing Channels To Watch In 2009”, Forrester Research, Inc., June, 2009

“Six Ways Online Publishers Can Boost CPMs”, Forrester Research, Inc., March, 2009

“Ad Networks For Brand Advertisers”, Forrester Research, Inc., February, 2009

“Behavioral Targeting”, Forrester Research, Inc., November, 2008

Appendix D: Endnotes

¹ When asked, 32% of marketers indicated they expected display ads bought directly through publishers to decrease in effectiveness within three years. Forty-three percent said the same for ad network buys. See the July 7, 2009 “US Interactive Marketing Forecast: 2009 to 2014,” report [47730].

² Performance based online media buys represent 58% of display dollars spent in 2009, growing to 66% of display spend by 2014. See the July 6, 2009, “US Interactive Marketing Forecast: 2009 to 2014,” report [47730].

³ AppNexus found efficiency gains by offloading data management, processing power and human resources. See the October, 2009 study, “Uniting Online Advertisers and Publisher Inventory Aggregators with a Real-Time Ad Buying Platform,” found here <http://www.appnexus.com/about/press.php>

⁴ Online users see more than 1,800 online ads per day, which is an increase of more than 250% since 2004. How can online brand marketers make a big impact when they are competing with so many other advertising messages? The key is to develop a Go Big or Go Home media buying strategy, which embraces larger ad sizes and rich media technology and takes advantage of several TV media buying standards, including pumped-up frequency, share of voice, and creative execution. See the June 19, 2009, “Go Big Or Go Home Advertising,” report [54722]

⁵ Most TV buys will still be managed manually in 2010. But television buyers and sellers should spend 2010 learning from their online brethren how to target, optimize, and automate bid-based buys in order to be ready when the television upfront takes a backseat to the “online-like” rules of order. See the January 12, 2010, “2010 North American Interactive Marketing Predictions,” report [56029]

⁶ Publishers may not be able to directly counter the larger market forces that keep online advertising rates low, but there are tactics they can employ to justify charging higher rates for their inventory. See the March 19, 2009, “Six Ways Online Publishers Can Boost CPMs,” report [53816].

⁷ Online technologies and processes are already seeping into television mediaGoogle partners with DISH Network to enable targeted spot buying. Quantcast applies TiVo data into the audience profiles it sells for online targeting. Media planning platform Spot Runner launched the Malibu Media Platform to automate television ad targeting, buying, and trafficking. See the January 12, 2010, “2010 North American Interactive Marketing Predictions,” report [56029].