December 14, 2011

The Forrester Wave™: Demand-Side Platforms, Q4 2011

by Joanna O'Connell
for Interactive Marketing Professionals

December 14, 2011

The Forrester Wave™: Demand-Side Platforms, Q4 2011

MediaMath, Turn, and DataXu Vie For Top Honors

by Joanna O'Connell
with Emily Riley, Shar VanBoskirk, Jennifer Wise, and Sarah Takvorian

EXECUTIVE SUMMARY

In Forrester's 48-criteria evaluation of demand-side platform (DSP) vendors, we found that MediaMath, Turn, and DataXu led the pack because of the breadth of their media access, the depth and acumen of their audience management capabilities, and their expertise in algorithmic optimization. Invite Media by Google features an intuitive and easy-to-use self-serve offering but lacks some of the bells and whistles of our top three. AppNexus, a well-scaled provider of real-time bidding (RTB) infrastructure and tools for the sell-side, lags behind in its buy-side focus, while X Plus One, strong in audience management and algorithmic optimization, is less focused on providing a self-serve platform solution. LucidMedia Networks, which trails the pack, brings a strong technology focus to its DSP but lacks the resources and marketer-friendly orientation of several of its competitors.

TABLE OF CONTENTS

NOTES & RESOURCES

Forrester conducted product demo evaluations in August 2011 and interviewed six vendor and user companies: AppNexus, DataXu, LucidMedia Networks, MediaMath, Turn, and X Plus One.

Related Research Documents

"The Future Of Digital Media Buying"
September 21, 2011

"The DMP Is The Audience Intelligence Engine For Interactive Marketers"
July 25, 2011

"The State of the Digital Media Buyer"
July 19, 2011

DEMAND-SIDE PLATFORMS ARE THE GATEWAY TO CENTRALIZED PROGRAMMATIC BUYING

Today's digital media buyers — whether working in an agency environment or inside a company's marketing department — face an unprecedented level of complexity in developing, managing, optimizing, and reporting on their media programs.[1] It's no wonder, then, that more than 50% of buyers say a better system for managing multichannel buying and execution would do the most to improve their current workflow.[2] This need, along with an increase in RTB, is driving the rising interest in the demand-side platform model. DSPs offer buyers the promise of:

- **Centralized management across programmatic media sources.** Centralized management means a one-stop-shop tool to access and manage supply across channels such as display, mobile, and video in an operationally efficient manner. Although the reality is more of a work in progress (today, the bulk of media under management is RTB-enabled display, with channels such as video and mobile representing a very small fraction of total DSP-managed inventory), several leading DSPs are aggressively working to deliver on the vision.

- **Automated, real-time algorithmic optimization.** DSPs offer buyers an alternative to manual, placement-level optimization, featuring algorithms and bidding engines that make campaignwide data-driven buying and optimization decisions in real time, reducing waste and improving campaign performance for buyers.

- **Unified campaign tracking and reporting.** The earliest iterations of DSPs were focused almost exclusively on sourcing and optimizing biddable inventory, but the leading DSPs are increasingly offering clients a more end-to-end solution where both buying and reporting are accessible via a single tool. The benefit to buyers is clear — a single view into campaign performance across all programs running (or even simply being tracked) through the DSP as well as a single tool by which to access a wide range of reports, both canned and custom.

- **Audience targeting and insights.** Nearly 45% of buyers plan to focus their future spend on audience targeting.[3] Today's leading DSPs now offer access to a long list of third-party providers to meet that need. In fact, some have a whole host of tools and features that feel a lot like those you'd find in a data management platform (DMP), such as custom segment-building tools and plenty of audience insight reports.[4] This means that clients can increasingly look to their DSPs to truly understand who is being affected by their programs — who's seeing their ads, who's responding (and who isn't), and why.

DEMAND-SIDE PLATFORM EVALUATION OVERVIEW

To assess the state of the demand-side platform market and see how the vendors stack up against each other, Forrester evaluated the strengths and weaknesses of top DSP vendors. After examining past research, user need assessments, and vendor and expert interviews, we developed

a comprehensive set of evaluation criteria. We evaluated vendors against 48 criteria, which we grouped into three high-level buckets:

- **Current offering.** We assessed our participating vendors on a number of factors valuable in an end-to-end DSP: the breadth and scope of media and data access provided; the depth and sophistication of vendors' algorithmic optimization; the richness and degree of flexibility in their reporting systems; their approach to managing brand safety and inventory quality; overall usability of the platforms; and, importantly with such a new tool set, their overall client support.

- **Strategy.** The DSP space is nascent and rapidly evolving, so while we did assess vendors' long-term visions, the strength and experience of their management teams, and their product road maps, we also paid particular attention to the size and makeup of their employee bases (both product development and client service) to understand the level of support in place to effectively deliver on each company's vision.

- **Market presence.** Finally, to understand vendors' market presence, we looked at their revenues; the size of spend and impression volume flowing through their platforms; the size and distribution of their client bases; and the general satisfaction levels of their clients.

We Looked For Biddable Display Experts Offering Self-Serve Tools

Of the three dozen vendors screened, Forrester ultimately included seven vendors in this assessment: AppNexus; DataXu; Invite Media by Google (which declined to participate fully but is still included in this analysis); LucidMedia Networks; MediaMath; Turn; and X Plus One. Each of these vendors has the following characteristics (see Figure 1):

- **Fifty percent or more of monthly impression volume is display media.** We chose vendors that have a demonstrated focus on display advertising. We considered a number of search vendors that are now offering display services but didn't yet meet this minimum threshold.

- **Fifty percent of impression volume is RTB-enabled.** RTB is a core underpinning of programmatic buying, so we were looking for vendors with demonstrated RTB capabilities.

- **The vendor is big enough to support large media buyers.** The relative newness of DSPs translates to platforms that are works in progress and to limited client experience. Therefore, we looked for vendors that met a minimum threshold of employees devoted to product/platform development and client service and support (20 or more) and that had at least 2 billion impressions per month flowing through their platforms.

- **The vendor makes self-serve tools available to clients.** DSPs can look an awful lot like next-gen ad networks if they aren't transparent and directly accessible by clients. We looked for vendors that had, at minimum, some level of self-serve capabilities that could satisfy a range of clients' needs.

Figure 1 Evaluated Vendors: Vendor Information And Selection Criteria

Vendor	Monthly platform volume (imps)	Employee base: product development plus client service	Date evaluated
AppNexus	26bn	80	August 2011
DataXu	3bn	76	August 2011
Invite Media by Google*	10bn+	85	August 2011
LucidMedia Networks	2.5bn	20	August 2011
MediaMath	10bn+	93	August 2011
Turn	10bn+	108	August 2011
X Plus One	2bn	67	August 2011

Vendor qualification criteria
Display media represented at least 50% of monthly impression volume running through the platform.
Real-time bidded (RTB) inventory represented at least 50% of impression volume.
The vendor is big enough to support large media buyers (20 or more platform/service personnel; 2bn+ monthly impression volume).
The vendor makes self-serve tools available to clients.

*Note: Invite Media by Google is a nonparticipating vendor and did not provide data. These are Forrester's estimates.

Source: Forrester Research, Inc.

EVALUATION ANALYSIS

We focused our attention on what potential DSP customers care about: finding a platform partner that is smart, transparent, and that offers best-of-breed tools and services. The evaluation uncovered a market in which (see Figure 2):

- **MediaMath, Turn, and DataXu lead the pack, with Invite Media following.** The first three emerged as clear Leaders, each for different reasons. MediaMath boasts excellent algorithmic optimization capabilities (including a multifaceted view of the decisioning engine's output), and its multichannel media and data access is both broad and deep. Turn outpaces MediaMath from a data management and reporting standpoint, offering very robust, scaled data management capabilities and an intuitive, easy-to-use reporting system. DataXu's current offering is actually the strongest by a small margin. The company is differentiated by its approach to advanced attribution, with multiple attribution settings available right within the platform; its depth of experience in multichannel buying and optimization; and its uniformly strong algorithmic

optimization capabilities. It does, however, trail the others in size, with a slightly smaller employee base devoted to platform and client service. Invite Media features a scaled buy-side user base and a very well-regarded self-serve tool as well as the future promise of deep integration into Google's technology stack; however, it lacks the breadth of channel access seen in others and is generally considered to have less robust algorithmic capabilities.

· **AppNexus and X Plus One offer very different competitive options.** AppNexus and X Plus One trail our top vendors by a fairly sizable margin. AppNexus is both a pioneer and industry leader in RTB technology, built on its own cloud-based infrastructure and featuring the highest queries per second (QPS) of the group, but boasts only a very small handful of sophisticated buy-side clients that are almost exclusively self-serve.[5] In addition to lacking the buy-side focus of its competitors, its user interface (UI) is neither intuitive nor user-friendly. In X Plus One's case, the company lacks a truly complete self-service offering, offers less breadth and flexibility of support across channels and supply sources, and has lower RTB impression volume (as a percentage of total) flowing through its system. It is, however, the only vendor we assessed that offers coordinated targeting and optimization across display media and clients' sites, and it has a long legacy of managing proprietary client data sets (e.g., Delta Air Lines' SkyMiles customer file) for targeting purposes.

· **LucidMedia Networks needs to grow and focus its self-serve offering on buyers' needs.** LucidMedia Networks rounds out the pack as the smallest and least well-rounded of the vendors assessed. Its clients praise LucidMedia for its technology chops but note that its small size puts a damper on its ability to deliver new tools and features as quickly as they'd like. Its current self-serve tool set also feels more suited to ad network clients' needs than those of media buyers. A key bright spot within LucidMedia's technology offering is its proprietary contextualization technology, which is deeply woven into its brand safety and inventory quality assurance (QA) processes, optimization, and reporting.

This evaluation of the demand-side platform market is intended to be a starting point only. We encourage readers to view detailed product evaluations and adapt the criteria weightings to fit their individual needs through the Forrester Wave™ Excel-based vendor comparison tool.

Figure 2 Forrester Wave™: Demand-Side Platforms, Q4 '11
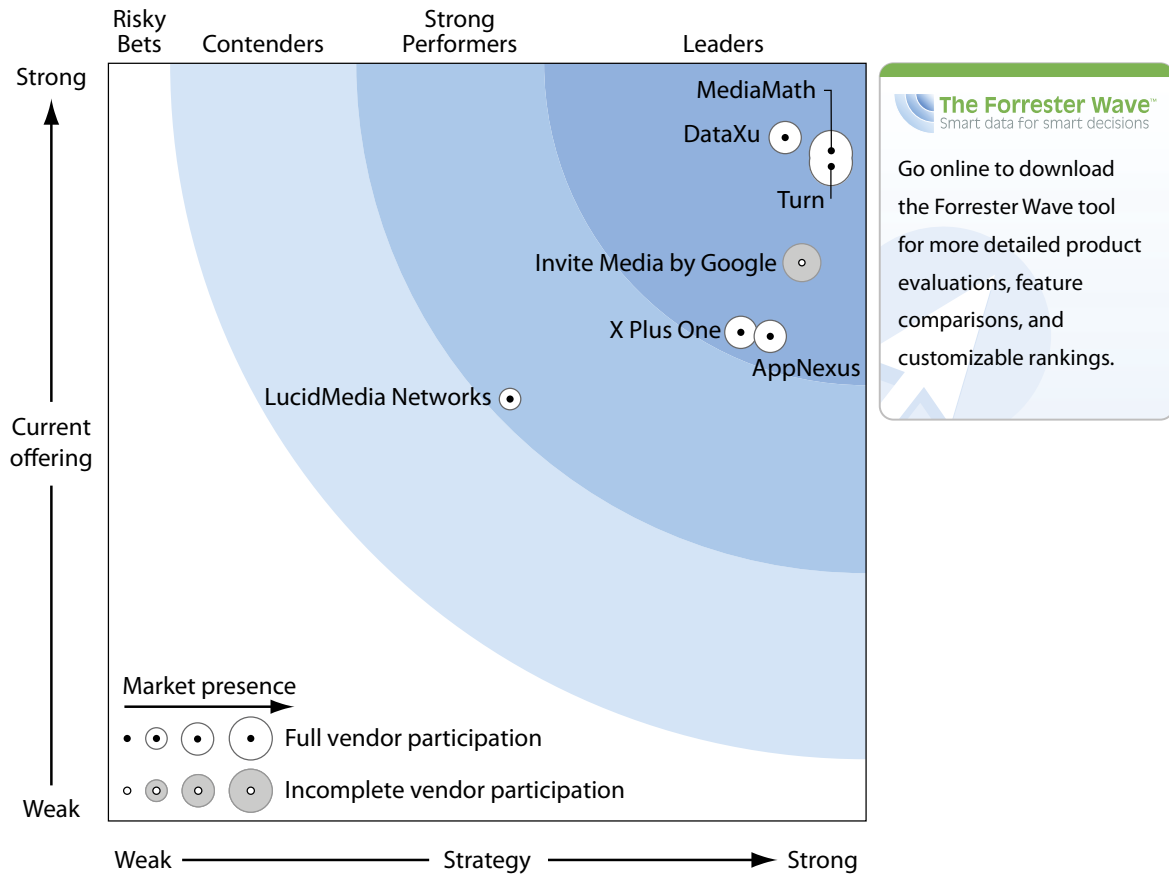
Source: Forrester Research, Inc.

Figure 2 Forrester Wave™: Demand-Side Platforms, Q4 '11 (Cont.)

	Forrester's Weighting	AppNexus	DataXu	LucidMedia Networks	MediaMath	Turn	X Plus One
CURRENT OFFERING	50%	3.10	4.39	2.67	4.30	4.22	3.11
Media access and support	35%	2.65	4.35	2.10	4.15	4.10	2.15
Data access and support	15%	4.20	4.70	1.80	4.70	4.20	4.00
Algorithmic optimization	20%	3.30	5.00	3.15	4.40	4.35	4.00
Reporting	10%	3.00	3.60	3.20	3.60	4.80	3.00
Brand safety and inventory quality	5%	5.00	5.00	5.00	5.00	4.00	3.00
Ancillary tools and technologies	5%	2.70	4.10	3.20	5.00	4.10	3.20
Usability	5%	1.00	3.00	3.00	3.00	3.00	3.00
Client support	5%	3.00	4.00	3.00	5.00	5.00	4.00
Pricing	0%	0.00	0.00	0.00	0.00	0.00	0.00
STRATEGY	50%	4.30	4.40	2.58	4.70	4.70	4.10
Leadership	40%	4.00	5.00	4.20	5.00	5.00	5.00
Internal resources	60%	4.50	4.00	1.50	4.50	4.50	3.50
MARKET PRESENCE	0%	3.40	3.22	2.65	4.68	4.76	3.31
Financial viability	20%	2.00	4.00	3.00	5.00	5.00	5.00
Clients	40%	2.50	2.80	2.50	4.20	4.40	3.15
Volume	15%	5.00	2.00	2.00	5.00	5.00	2.00
Footprint	25%	5.00	4.00	3.00	5.00	5.00	3.00

All scores are based on a scale of 0 (weak) to 5 (strong).

Source: Forrester Research, Inc.

VENDOR PROFILES

Leaders

- **MediaMath.** MediaMath is a great all-around choice for buyers in the market for a DSP. It has both a well-rounded self-serve offering and a capable and well-staffed managed service team for clients needing some (or total) support. It offers access to a variety of digital channels, biddable and RTB-enabled supply sources, and the most third-party providers, and clients consider its algorithmic optimization to be very effective. Marketers looking to expand their programmatic buying beyond the US will also be well served with MediaMath, which has both a UK presence and aggressive expansion plans for Asia Pacific and Latin America. Its large employee base and diverse, well-tenured management team also provide the necessary foundation for it to execute effectively on its strategic vision: to empower marketing professionals with a flexible, easy-to-use, multichannel platform.

- **Turn.** Turn, once thought of as simply an ad network, has become a formidable player as both a DSP and a DMP, flexibly offering clients the option to use these tools separately or in conjunction. With an intuitive, easy-to-use self-serve tool, a deep and flexible reporting system, and several large, sophisticated clients, including Experian, Turn is a great solution for big, analytically minded buyers looking for a scaled solution to integrated audience data management and media buying and optimization. Turn, with more than 100 platform and service employees, is also well positioned to deliver on its vision — to give clients an end-to-end multichannel buying, optimization, and analytics platform.

- **DataXu.** DataXu has proven itself an up-and-comer to watch. Over the past several quarters, DataXu has made major advancements in the robustness of its offering, with a focus on consolidating advanced analytics (e.g., advanced attribution), audience management, and programmatic buying into a single technology stack as well as building out and enhancing its front-end UI. Every client we spoke with also gave it extremely high marks for the strength of its algorithmic capabilities. DataXu is a good choice for buyers looking for best-in-class algorithmic optimization against brand or direct response goals and/or integrated advanced attribution settings built into its DSP's platform. DataXu's smaller resource base hurt it slightly when we evaluated its strategy, but its vision and road map are well in line with those of top competitors.

- **Invite Media by Google.** Invite Media was one of the earliest providers of a complete self-service platform for the demand side, making it a very attractive choice for early DSP adopters such as networks (which the company no longer accepts as clients) and trading desks. Clients praise Invite's management team for having the right vision from the start — to be a unified platform for the demand side to access and manage 100% biddable inventory. It also receives high marks for its user interface, which is considered more intuitive and easier to use than those of competitive DSPs. However, its algorithmic optimization capabilities are generally considered less robust (one client noted that it's a good choice for remarketing but less so for prospecting, for this reason). Invite's acquisition by Google in 2010 will likely prove to be a game changer for the company as it becomes a fully integrated component of the Google tech stack, alongside AdMob, AdWords, DoubleClick Ad Exchange (ADX), DoubleClick for Advertisers (DFA), and Teracent, making it an appealing choice for many DFA customers.

- **AppNexus.** AppNexus, conversely from X Plus One and in a departure from all other vendors assessed, is almost exclusively self-serve. It is laser focused on creating — and driving adoption of — best-of-breed RTB infrastructure across the buy and sell sides of the display ecosystem. Its current sweet spot is with sellers, boasting more than 200 sell-side customers and just a very small handful of large, sophisticated buy-side customers, such as eBay. AppNexus can be a good fit for a well-staffed, buy-side organization with expertise in bid-based buying and optimization, particularly for those that can bring their own application program interfaces (APIs) to the

relationship. While AppNexus has a stated goal of beefing up its buy-side offering, it has quite a long way to go in building out the buyer-friendly tools and features seen in other DSPs we evaluated.

- **X Plus One.** The only vendor we reviewed that does not have a complete self-serve offering, X Plus One can be a good choice for clients in market for a largely managed service solution, particularly for those interested in coordinating their site-side and media optimization and looking to leverage their large offline or other proprietary data sets for targeting purposes. Clients generally rate it well, with particularly high marks going to its audience targeting capabilities, the strategic guidance it provides, overall responsiveness, and the strength of its management team. While X Plus One's stated strategic vision is well in line with those of our Leaders, its history tells us that clear focus has not traditionally been its strong suit.

Strong Performers

- **LucidMedia Networks.** LucidMedia gets praise from its self-serve clients (which comprise 5% of its customer base) for its distinctly technology-oriented slant — one client noted with a smile, "These aren't guys you put in front of a client." Its self-serve tool will appeal to ad networks (network Traffic Marketplace is a client) and other network-like entities (such as small-to-midsize trading desks) looking for a tool to help them simultaneously manage to their clients' goals and their own internal business goals (e.g., margin). The remaining 95% of its clients (primarily agencies) use LucidMedia's Network Channel, where the engagement model is more reminiscent of traditional network programs — an agency-based insertion order (IO) outlines the terms of the deal, and Lucid runs the program, soup to nuts.

SUPPLEMENTAL MATERIAL

Online Resource

The online version of Figure 2 is an Excel-based vendor comparison tool that provides detailed product evaluations and customizable rankings.

Data Sources Used In This Forrester Wave

Forrester used a combination of four data sources to assess the strengths and weaknesses of each solution (note: Non-participant information was estimated by Forrester and/or derived from publicly available materials):

- **Vendor surveys.** Forrester surveyed vendors on their capabilities as they relate to the evaluation criteria. Once we analyzed the completed vendor surveys, we conducted interviews with each vendor to gather details of qualifications and product features.

- **Platform demos.** Each vendor participated in a three-hour proof-of-concept meeting during which it discussed the company's perspective on the DSP marketplace, shared its vision and product road map, and provided Forrester with a demo of its platform.

- **Customer reference calls.** To validate product and vendor qualifications, we conducted reference calls with three of each vendor's current customers.

- **Customer survey.** Additionally, we surveyed all client references with whom we'd had reference calls to gather supplemental quantitative data.

The Forrester Wave Methodology

We conduct primary research to develop a list of vendors that meet our criteria to be evaluated in this market. From that initial pool of vendors, we then narrow our final list. We choose these vendors based on: 1) product fit; 2) customer success; and 3) Forrester client demand. We eliminate vendors that have limited customer references and products that don't fit the scope of our evaluation.

After examining past research, user need assessments, and vendor and expert interviews, we develop the initial evaluation criteria. To evaluate the vendors and their products against our set of criteria, we gather details of product qualifications through a combination of lab evaluations, questionnaires, demos, and/or discussions with client references. We send evaluations to the vendors for their review, and we adjust the evaluations to provide the most accurate view of vendor offerings and strategies.

We set default weightings to reflect our analysis of the needs of large user companies — and/or other scenarios as outlined in the Forrester Wave document — and then score the vendors based on a clearly defined scale. These default weightings are intended only as a starting point, and we encourage readers to adapt the weightings to fit their individual needs through the Excel-based

tool. The final scores generate the graphical depiction of the market based on current offering, strategy, and market presence. Forrester intends to update vendor evaluations regularly as product capabilities and vendor strategies evolve.

ENDNOTES

[1] For more information on the dramatic changes happening in the media buying ecosystem, largely as a result of the dramatically increasing complexity of digital media management and the rise of new tools and systems to manage media, see the September 21, 2011, "The Future Of Digital Media Buying" report.

[2] In Forrester's 2011 survey of 46 digital media buyers, we found that 52% of buyers note that a better system for executing and managing buying programs encompassing multiple channels (e.g., display, search, video, and mobile) would do the most to improve their current workflow processes. For more information, see the December 7, 2011, "Making Sense of the Digital Media Buying Platform Landscape" report.

[3] For more details on today's digital media buyers, see Forrester's July 19, 2011, "The State of the Digital Media Buyer" report.

[4] A DMP is a unified technology platform that intakes disparate first-, second-, and third-party data sets, provides normalization and segmentation on that data, and allows a user to push the resulting segmentation into live interactive channel environments. For more information of the role and value of a DSP and its digital audience and data management, see the July 25, 2011, "The DMP Is The Audience Intelligence Engine For Interactive Marketers" report.

[5] Since August 2011, when we conducted our vendor evaluation, nearly all vendors assessed have increased their QPS capacity, among other tools and features, signaling the rapidly evolving state of the DSP marketplace.

FORRESTER®

Making Leaders Successful Every Day

Research and Sales Offices

Forrester has research centers and sales offices in more than 27 cities internationally, including Amsterdam, Netherlands; Beijing, China; Cambridge, Mass.; Dallas, Texas; Dubai, United Arab Emirates; Frankfurt, Germany; London, UK; New Delhi, India; San Francisco, Calif.; Sydney, Australia; Tel Aviv, Israel; and Toronto, Canada.

For the location of the Forrester office nearest you, please visit: www.forrester.com/locations.

For information on hard-copy or electronic reprints, please contact Client Support at +1 866.367.7378, +1 617.613.5730, or clientsupport@forrester.com. We offer quantity discounts and special pricing for academic and nonprofit institutions.

Forrester Research, Inc. (Nasdaq: FORR) is an independent research company that provides pragmatic and forward-thinking advice to global leaders in business and technology. Forrester works with professionals in 19 key roles at major companies providing proprietary research, customer insight, consulting, events, and peer-to-peer executive programs. For more than 28 years, Forrester has been making IT, marketing, and technology industry leaders successful every day. For more information, visit www.forrester.com.

FORRESTER®

59169