

The State of Programmatic in OOH Advertising

April 12, 2016

Nurlan Urazbaev, DigitalSignagePulse.com

I asked five well-known industry professionals who use the latest tech innovations in out of home (OOH) ad campaigns about the state of programmatic in OOH.

My questions were answered by:

Helma Larkin, CEO, Posterscope US
Michael Provenzano, CEO & Co-Founder, Vistar Media
Dan Dawson, Chief Creative Technology Officer, Grand Visual
Jody Smith, Product Manager at BroadSign International
Matt Prohaska, CEO & Principal at Prohaska Consulting.

1. Programmatic is a hot topic today. There is also a widespread confusion about what it means. What is your definition of programmatic buying?

Helma Larkin: The term “programmatic” generally refers to online display advertising that is aggregated, booked, flighted, analyzed, and optimized via demand side software interfaces and algorithms.

Michael Provenzano: Programmatic has become quite the buzzword in online digital marketing over the past seven years. Unfortunately, it is a word that can have multiple meanings and a variety of interpretations based on where you sit in the marketing value chain. Let’s take some time to simplify “programmatic” into two core concepts that apply to the buying and selling of media.



1. Automation - Technology exists to make media buying and selling more efficient. Software for the advertising industry allows media buyers and sellers to minimize the manual work that goes into transactions, similar to how you would use a calculator to compute basic arithmetic.
2. Data - Marketers have benefitted from an explosion of data sources that describe consumer behavior. Certain data sources can be analyzed to increase efficiency in media transactions while other data sources provide a means of measuring returns on a media investment. However, it’s neither practical, nor efficient for a human to ingest multiple data sources to make transactional decisions at scale, so data inherently ties back to automated decision making.

Dan Dawson: The programmatic ad world can be a confusing place for newcomers, especially in the OOH market where it is still being defined and tested.

True, various interpretations, acronyms, and buzzwords may be misleading. For me, programmatic advertising simply means the use of data and technology to deliver relevant messages that are context specific.

The term programmatic covers a wide range of technologies that are used to automate the creation, transaction, placement, and optimization of advertising. Looking specifically at the programmatic buying side, this means that, first, the buying mechanics use automated workflows, and second, these automated

workflows are used to buy media based on criteria and insight gleaned from data. We have a keen interest in both as they can ultimately inform, define or help optimize the content and copy too - making the whole process more efficient.

Jody Smith: We view programmatic as two things:

Sales automation: a means of attaining sales workflow efficiency and accuracy by eliminating spreadsheets and multi-system disparities.

Programmatic RTB and direct: publishers make their inventory available publically or privately to demand-side platforms (DSPs) while agencies gain quick access to global inventory within a single view.

Matt Prohaska: We use the definition formulated by IAB US, which we helped a bit in creating years ago. But the quick explanation is simply using computer programs, or algorithms, to buy and sell media more automatically. The confusion often comes when people understandably think all programmatic buying equals real-time bidding, which is now only one of its flavors.

2. What problem does programmatic buying solve?

Helma Larkin: The current programmatic offering facilitates spot buying and provides insights into OOH audiences of increments that are less than the standard one week.

Michael Provenzano: OOH as an industry faces a rapidly evolving threat: mobile. Mobile is the fastest growing channel in media today, and it is the one channel that directly competes with OOH, in that both channels reach the on-the-go consumer.

Programmatic buying enables OOH to compete with mobile on two key value propositions:

- Ease and efficiency of transacting media at scale
- Use of data to better inform and measure the returns on media investment

Mobile can be purchased with the same ease as any other online channel – a single buyer, with the help of technology, can in one fell swoop purchase the best inventory to reach a specific audience across a variety of publishers, networks, marketplaces, etc.

Mobile benefits from one-on-one tracking that allows marketers to link a variety of descriptive data sources to a single device or cookie to better inform audience strategy (selecting the best inventory to reach a group of consumers who exhibit similar behavior) and measure the impact of media exposure on driving consumers to take a desired action.

For OOH to compete with today's data-driven media market, the industry must find ways to leverage these same technologies and data sets that give mobile a competitive edge.

Dan Dawson: Programmatic buying ultimately streamlines the campaign planning and buying processes. From a creative perspective, this is exciting. It means that campaigns can be more targeted and more tactical. Use of data sources can help to define and refine the campaign in early stages, but also inform the content, bringing a new intelligence to the medium. Empowered with programmatic, campaigns can be responsive and evolve over the course of a day with fresh and targeted content relevant to location, time of day, and mind-set.

Jody Smith: Our discussions with publishers and agencies have resulted in a consensus that the DOOH ad sales process is currently manual, complex, and time-consuming. Programmatic shortens the time between viewing the available inventory and booking it. It reduces personnel costs, enables the layering of data and analytics, and allows publishers, advertisers, and agencies to make more informed decisions about how inventory is bought and sold.

Matt Prohaska: Programmatic makes buying and selling media more efficient, not necessarily always

making it cheaper in terms of CPMs for buyers; but it helps make the transactions faster and less labor-consuming. It also allows the combination of audience targeting with contextual relevance, where appropriate.

3. Is real time bidding (RTB) a compulsory or optional component of programmatic?

Helma Larkin: Compulsory.

Michael Provenzano: RTB is another term that gets thrown around quite a bit when talking about programmatic buying. The importance of RTB comes into play with datasets that change in real-time on systems that can react to that data instantaneously to make better decisions for the buyer or seller.

For example, in the online display ecosystem, retargeting is an extremely common strategy. Suppose you go to a website (jcrew.com), view a few items, and then navigate elsewhere on the internet. While browsing elsewhere, you may notice J. Crew ads. This is because J. Crew dropped a cookie on your browser when you visited their site so it could retarget you with ads across the web. However, like any medium, there are diminishing returns to each additional impression after a certain frequency. Programmatic platforms in the online space allow buyers to set rules like “retarget this user only four times per day.” Retargeting with frequency caps is just one example that illustrates the importance of having systems that can react to data that changes in real-time to ensure marketers are spending budget efficiently.

RTB will become very important to OOH as media owners are beginning to collect their own first-party data from Wi-Fi, beacons, sensors, and other technology at screen-level, and can use this data to make better ad delivery decisions. However, without both of the pieces in place (real-time data + real-time systems), RTB is simply an optimization to automated buying.

Dan Dawson: Again, from a creative perspective, real time bidding is not essential. What is essential is the ability to serve up fresh, live, informative, and relevant content that reaches the right audience at the right time in the right place. Whether that’s through Programmatic Guaranteed [PG] - fixed pricing, impressions, campaign dates (perhaps the more likely model for OOH) or through Real Time Bidding (RTB), the main point is that by automating the workflow we create new efficiencies that essentially make the medium more agile and more intelligent.

Jody Smith: RTB is a completely optional component of programmatic. It also remains misunderstood. This type of programmatic should be controlled, and premium inventory should be serviced first before going to private marketplaces and then, if desired, public marketplaces. DOOH has learned from the Internet’s mistakes and instead of referring to RTB as “race to the bottom,” we think it should be dubbed “raise the bar.” It makes markets available, eliminates friction, and maximizes value recognized in a given moment.

Matt Prohaska: For the first six years of programmatic buying, it’s all there was. Now it’s optional.

4. Can programmatic be used in DOOH advertising? If so, what benefits would it bring to this medium?

Helma Larkin: While the targeting and buying components of programmatic can definitely be used in DOOH, RTB cannot be applied at this moment, because we do not yet have real-time audience data or the appropriate process around creative content acceptance.

DOOH media would benefit from programmatic as it:

- Brings greater efficiencies in media spend for brands because we can target micro-audiences;
- Makes the workflow more efficient;
- Gives OOH industry stakeholders the right to play in digital programmatic and potentially tap into digital budgets
- Michael Provenzano: Automation for an OOH buyer might mean escaping the redundancies of setting up campaigns manually, or pulling and reconciling delivery numbers from one system for billing in

another.

- For an OOH seller, automation might mean leveraging an ad server to ingest business rules from a contract instead of building out complex charting, scheduling, and playlists to deliver a client's campaign requirements.

In both cases, automation drives efficiency so buyers and sellers can spend their time focusing on strategy instead of manual tasks.

The industry is ready to evolve. The systems to enable all aspects of automated and data-driven media transactions in OOH exist, they just need to be leveraged appropriately.

Dan Dawson: Programmatic advertising will have a profound effect on the OOH ad market, just like it has on online advertising. With programmatic, more time can be dedicated to sophisticated planning, customized campaigns, and Dynamic Creative Optimization.

Jody Smith: Programmatic can and should be used in OOH/DOOH advertising. Automating the sales process removes manual, time-consuming and error-prone work, which speeds up the buying process and brings more accurate information to the forefront. Ease and efficiency is attractive to buyers and will make our medium more appealing to use by itself and in omni-channel campaigns.

Matt Prohaska: Yes, programmatic can be used in DOOH; as a matter of fact, the "pipes" are being connected aggressively between buyers and sellers and middle tech companies as we speak. It will bring the same benefits to DOOH as it does to display, mobile, video today (as described earlier).

5. What are the current challenges of introducing programmatic to DOOH media buying?

Helma Larkin:

Lack of digital inventory to make this a truly scaled proposition is a major challenge

- Disparate data sources
- Lack of standards and technology protocols

Michael Provenzano: Our first two years at Vistar were spent overcoming the lack of technology standards around digital signage software. There are countless CMS/digital signage software solutions in the market, and many media owners have built their own disparate standards for communicating with screens.

From the buy side, there are challenges around education and politics within agencies. OOH traditionally has been its own business unit within an agency, so when you start talking about programmatic OOH, all of the trading desks and digital buyers are extremely interested in expanding their data-driven strategies into new channels, but the challenge actually comes from educating OOH buyers on the value of programmatic.

Educating OOH buyers on the value of data-driven programmatic buying and educating digital buyers on the OOH industry at large has been a huge initiative for us these past years.

Dan Dawson: Many of the tools and requirements for programmatic campaigns are in place. But the campaign took months of planning and a seismic shift in the way the campaign was bought, booked, displayed, and reported on. Many processes from the various stakeholders had to be reworked in order to get the campaign off the ground.

As an industry, there is still much work to do. True collaboration and industry standardization is needed across the market and throughout the entire stakeholder chain.

Jody Smith:

The challenges are:

- Lack of standardization
- Audience measurement for a one to many medium (as opposed to the online world of one to one)
- Lack of education of media buyers about the benefits of DOOH
- Qualified salespeople need to be hired and trained for successful adaptation to new technology
- Matt Prohaska:

Moving past perceptions that this can only help unsold inventory for sellers

Getting standardization as we incorporate more DOOH

Addressability: someone changing an OOH creative with paper and paste once a month is not as dynamic as ideal

The complexity of integrating beacons and other targeting capabilities to achieve higher reach in combination with individual segmenting, where appropriate/available

6. What stakeholders (agencies, networks, software makers, advertisers, etc.) are most motivated to bring about programmatic in DOOH?

Helma Larkin: Advertisers have the most to gain because they can be more effective with OOH, which is typically seen as a traditional mass awareness channel.

Michael Provenzano: Different stakeholders will see different value in bringing programmatic buying to DOOH but the incentives all tie back to two core value propositions – efficiency and intelligence.

For both OOH buyers and sellers, automation drives efficiency so they can spend their time focusing on strategy instead of manual tasks.

Similarly, data-driven decision making for a buyer might mean using a first-party data asset within an agency holding company to make better decisions during the media planning process to achieve a brand's objective.

Data-driven selling might mean using sensors that are collecting consumer location data in order to change the price of ad space at different hours of the day based on traffic. This enables sellers to further optimize yield on their inventory.

In both cases, the incentive boils down to the ability to leverage data to make more intelligent decisions and drive value.

Dan Dawson: All OOH stakeholders need to have a vested interest in embracing programmatic; it's where the medium is heading. There are obvious gains to the industry in terms of revenue. Tapping into the budgets and systems being employed on programmatic campaigns running across other media is a huge opportunity.

Jody Smith: Any player operating in the ad-based DOOH industry should feel a real need to introduce programmatic processes in our space, as automation is key when competing with other media for revenue. That said, advertisers and general agencies are able to buy other media for their campaigns and as such, are not as incentivized to bring programmatic in DOOH.

It is the technology providers, network operators and specialist agencies that are currently faced with a huge opportunity to put the "pipes" in place to encourage the transfer of attention and ad dollars from other buckets to DOOH.

Matt Prohaska: Agencies, advertisers, software providers, publishers (networks if referring to individual supply sources, not black box arbitragers.) Transparency around supply discovery and fees tend to hurt traditional black box ad networks in the long run where they historically created value of convenience

around providing simpler reach with their own targeting.

7. Do you think the current obstacles to mass use of programmatic in DOOH can be overcome soon? When do you think it will happen?

Helma Larkin: Yes, if digital inventory can be introduced at a faster rate... this will depend on local governments' appetite for approving significant digital initiatives.

Michael Provenzano: I don't think there are any large obstacles today. Changing behavior simply doesn't happen overnight, but we are happy about the speed in which the buyers and sellers are adopting automation and data.

Dan Dawson: If you take the five pillars of a programmatic campaign:

- Technology
- Planning
- Creative
- Buying Efficiency
- Measurement

... then the OOH industry undoubtedly ticks every single box. Media owners have invested millions in the technology, and OOH has some of the best planning tools around.

Jody Smith: Even just a year ago, there was still so much confusion about who the key players in the programmatic DOOH landscape were that it was hard to wrap one's head around how the processes might be established. Thanks to the topic being featured in just about every conference agenda and trade body committee, this has been greatly ironed out. We now know who needs to do what to make this a reality and movement should start to occur by the end of this year.

Matt Prohaska: If soon means 9-18 months, then yes.

8. Can programmatic be applied to static (non-digital) OOH advertising? How would it work?

Helma Larkin: Elements of programmatic can be – automation of buying, integration of data to find locations where specific audiences frequent.

Michael Provenzano: Taking a slightly broader definition of programmatic, yes. There is a ton of inefficiency in the traditional buyer/seller transaction. Mapping software, workflow tools, and billing software integrations have been a big part of improving this so far. I think the next step will be adding data layers on top of not only digital buys, but also traditional/static buys. We have already seen this beginning in late 2015 with some of our buyers.

Dan Dawson: Absolutely. Static inventory can certainly be traded and booked programmatically with relevant deadlines for allowing creative distribution.

Jody Smith: A wise man (Tim Harvey, JCDecaux UK) once said "static is slow digital." In terms of yield optimization and the automated targeting of locations based on audience profile, static can be managed alongside DOOH for direct buys. The real time component is not applicable to static, but knowing the audience profile of campaigns still presents great value for making informed decisions in the next media buy.

Matt Prohaska: The impact of programmatic in static OOH would not be as powerful as in digital, but yes, it can be applied. As long as programmatic can improve transaction speed and audience targeting to some degree, then the juice will be worth the squeeze in static OOH as well, just not as much as in DOOH.

9. What should the currency be for programmatic DOOH buying: impressions, cost per interaction, cost per sale, other? Who should be providing the ROI metrics for programmatically bought DOOH campaigns?

Helma Larkin: The currency for programmatic DOOH should be impressions, but real impressions – actually knowing who saw the ad, similar to the unique visitors in on-line. There are many companies in this space who are getting closer to measuring this but we are not there yet.

A 3rd party ad verification company should be used for proving the ad ran – this service is not yet part of the programmatic DOOH ecosystem.

ROI for OOH is harder to measure than that of on-line ads because of the one-to-many nature of the medium. However, campaigns that drive consumers to retail are becoming easier to measure and cross-device attribution mythologies are evolving fast. In all cases, ROI should be measured by a 3rd party specialist measurement provider.

Michael Provenzano: I don't see the currency changing immediately, but it will definitely improve over time. Buyers and sellers have been transacting over TAB- and Nielsen-audited numbers for impressions for years, and this should, and will, continue. We saw something similar in the online space with companies like DoubleVerify and Integral Ad Science who came to validate viewability and fraudulent impressions. We are starting to see media owners installing sensors at their locations to get more accurate counts of consumers. I imagine this will become the standard for counting impressions in the long term.

Transacting OOH media will always be, in some sense, based on impressions (the absence of one-on-one tracking such as “post-click conversions” would make a CPA (cost-per-acquisition) model very challenging for OOH). ROI metrics are obviously not unique to programmatically bought DOOH campaigns – as an industry, we need to do a better job at measurement and attribution for OOH in general. That said, what programmatic buying does enable as it relates to performance measurement, is the ability to optimize a campaign based on performance while it is running – which, again, goes back to automation and data driving efficiency and value.

“Who” should provide ROI metrics for programmatically bought DOOH campaigns is a bit of a loaded question. Performance measurement and attribution as we know it today was born with online advertising and the proliferation of user-level data made possible by the desktop cookie and to a lesser extent mobile device id. Measurement companies have built solutions based on linking various data sets to cookies or device IDs because to date the demand for measurement has almost exclusively come from digital buyers.

As digital buyers come to see the value of OOH, they will demand the same rigorous measurement and attribution for OOH as they have in other digital channels. (And, of course, concrete measurement will further prove OOH's value in the eyes of digital buyers). We have already seen this from our clients – digital buyers drive the demand for measurement and have the budgets to influence measurement companies to build out new solutions for OOH.

Dan Dawson: This is best left to the planners, buyers, specialists, and media owners, I think.

Jody Smith: We need to take the unique audience information and ad formats from publishers and standardize them. The closer the currency is to existing standards in other media, the easier it will be for media buyers to standardize straight away. Impressions seem to be the most logical common currency and, unlike online, the barrier to interaction is greater for a large format billboard than for a web browser.

Matt Prohaska: That's a big TBD (“to be determined”) by buyers and sellers, along with traditional and new firms that provide those currencies today or will provide soon. ROI metrics for all campaigns, no matter how they are bought, will likely continue to come from the clients who have their internal ways of determining campaign success, as they need to decide where to allocate budgets.

About the experts featured in this article:

Helma Larkin, CEO, Posterscope US

With 15+ years of experience in the media and technology sectors, Helma leads the Posterscope USA team as CEO. Her focus is on enhancing the Posterscope offering through new technologies, relationships, and partnerships that are evolving the OOH marketplace and driving innovation for clients.

Michael Provenzano, CEO & Co-Founder, Vistar Media

Michael leads Vistar Media, a location-based ad technology company that is revolutionizing how the world buys and sells mobile and OOH media.

He previously co-founded Invite Media, Inc., the first universal demand side platform for online display advertising. Invite Media was acquired by Google in 2010 for \$81 million.

Dan Dawson, Chief Creative Technology Officer, Grand Visual

Dan Dawson has designed, developed, and directed many innovative and award-winning projects that have entertained and engaged millions of people since Grand Visual began.

Jody Smith, Product Manager, BroadSign International

A key member of BroadSign team since its early days, Jody Smith holds a broad technical background which he uses to design and implement solutions that help to achieve the goals of BroadSign customers.

Matt Prohaska, CEO & Principal, Prohaska Consulting

In less than two years, more than 100 clients across the globe have chosen Prohaska Consulting for a variety of digitally-focused services, including strategic guidance, project leadership, training, and supplying operating street teams.

Over the course of his career, Matt has contributed to the growth of online advertising since its commercial inception in the early 1990s with executive roles at ad agencies and publishers, most recently as the Programmatic Advertising Director for The New York Times.