



Out of Home Advertising Association of America

Understanding Out of Home Data and its Uses

The Shift in OOH from Location to Audience: Why, and Why Now?

The ability for advertisers to deliver messages to consumers in specific geographic locations has always been one of the unique strengths associated with out of home (OOH) media. From directional signage that helps consumers navigate to specific destinations to proximity targeting, OOH messages have an ability to tell compelling stories that are contextually relevant based on where ads are placed. A focus on location and contextual relevance is why OOH provides value to advertisers and consumers alike, and what has powered its growth and will continue to do so.

Consumer needs and desires change over time and the advertising industry adapts. As the advertising business has changed so has the OOH medium. One of the most transformative catalysts for change has been the proliferation of data sets which provide opportunities to leverage new tools, insights, and planning approaches that has helped the OOH industry evolve from a focus on locations to a more intense focus on the power of *audiences at locations*. What are the dynamics that are driving this imperative to change? Why is this happening now? And why does the OOH industry need to embrace these changes in order to continue to grow and deliver value to customers? There are many instructive answers to these questions.

Important trends and developments have enabled the evolution of greater audience knowledge, leading to new opportunity for OOH media companies and advertisers:

- **Our Mobile-led Society:** Consumers' embrace of mobile technology and smartphones as their "screen of choice," along with the resulting prioritization of mobile advertising, has put renewed focus on the importance of location. But in a mobile-led society, "location" is not just about understanding where people are; it's also about understanding why they're in these locations, where they were before, where they go afterwards and why. In other words, in OOH we're focused on understanding the consumer journey along with consumer behaviors in both the physical and digital worlds. It's no wonder, an advertiser thinking about consumer journeys and locations quickly realize OOH is a fundamental and proven medium that delivers contextually relevant messages at scale and with the opportunity for unparalleled creative impact. This understanding has led many advertisers to a renewed focus on the role OOH plays in a broader, mobile-led media mix.
- **The Evolution of the Marketing Funnel:** The traditional objective of media planning has always been to effectively deliver a message to a broad group of people with sufficient reach and frequency of exposure. The purpose is to eventually drive a portion of the audience to exhibit the desired behavior (e.g., buying the product advertised). This notion has oftentimes been illustrated with the concept of a "marketing funnel," where the top of the funnel is filled by using broad-reach media like OOH and TV. Subsequently, more targeted messages are intended to move consumers "down the funnel" toward conversion activities like visiting brick & mortar retail locations or the "point of sale." But, in a mobile-led society, the notion of the traditional marketing funnel and the idea of driving people to physical places has been altered.

Nearly every consumer carries a smart device at all times, and throughout consumers' many daily journeys, they are confronted with advertising messaging that provide an opportunity to use the devices to take a range of actions. Rather than simply driving people to locations, in a mobile-led society, marketers drive consumers to "points of decision." The decision not only address what to purchase but, what to research, what to share, what to post on social sites, what to recommend, and how to proceed with the continually evolving relationships between consumers and brands? It is necessary to understand consumer behaviors along these journeys, so OOH ads can be ideally situated to deliver contextually relevant messages that influence decisions and actions taken. To do so, it is necessary to not simply think about the locations where OOH displays are located but, instead think about how audiences are reached at OOH locations.

- **Innovations in Data & Measurement:** The OOH industry has embraced the application of mobile data to best illustrate consumer behavior and mobility in the physical world. In doing so, OOH media companies can help advertisers best achieve and measure campaign impact against specific audience segments. This is accomplished at the industry level with Geopath, the independent non-profit organization that provides audience measurement metrics and insights to the OOH industry. More and more, innovations in data and measurement are brought to market by independent companies focusing on customized solutions that provide additional insights into audience planning, attribution and retargeting.
- **An Increasingly (Sub)Urban Society:** According to the [World Resources Institute \(www.wri.org\)](http://www.wri.org), by 2020 nearly 85 percent of Americans will live in urban environments. In addition, "urban sprawl" has become "[suburban sprawl](#)," with cities growing larger and more spread out, which in turn means that people are traveling farther to get to their destinations. People spend more time in cars and in traffic, than ever before, providing ongoing opportunities for exposure to OOH advertising. Because of this, advertisers can no longer rely solely on proximity targeting as a way for delivering their messages to consumers. Said differently, people travel longer distances than a 3-mile radius to get to a store, so why would advertisers limit their OOH messaging to locations that reach people when they're already near the advertised store? By understanding consumer behavior – what people do and where and when they do it – advertisers have the opportunity to not only reach consumers when they're near a venue but, pull them closer and build top of mind awareness for when those "points of decision" take place.
- **Digitization:** The growth of digital OOH has been steady for many years, either conversions of existing printed billboard structures into digital displays or the build of entirely new digital inventory. Digital OOH has reached a critical mass of scale, reach and impact, driving significant growth in OOH spend while also illustrating ways that OOH can be thought of not just as a location medium, but also as a digital location medium. This trend toward digital infrastructure has the added benefit of being able to use data to more dynamically deliver the right advertising messages to the right audiences at the right times. By leveraging mobile data to understand the audiences in front of OOH displays, the same data can be used to optimize the messaging and creative on digital OOH screens against desired audience segments. This in turn, drives higher levels of consumer engagement.
- **Interconnectivity:** While in the past, digital OOH displays were run by companies using a vast range of unique and "walled-off" platforms, most software companies and media owners today have embraced an Application Program Interface (API) approach that facilitates systems communicating with each other, passing data back-and-forth. This has allowed for

development of Supply Side Platforms (SSP) that aggregate large OOH audiences across publishers. In turn, this has allowed the development of numerous Demand Side Platforms (DSP) that integrate and make digital OOH audiences available to buyers in unified transactional platforms. The programmatic transactional platforms are not built around the purchase of OOH inventory or structures or locations; they're built around reaching audiences. These dynamic platforms allow OOH media companies the ability to measure, plan and report on impact against these audiences, and to participate in digitally-led buys, programmatic or otherwise.

- **Evolving Media Agency Models:** After years of treating each media channel as a separate "silo," agencies have broken down internal barriers and are embracing a more collaborative approach across media types and teams. Agencies continue to make progress cross-training teams beyond their core media channels of expertise; sharing data about audiences and efficacy; and thinking not just in terms of media channels but about audience behaviors, journeys and the role that OOH plays in the broader media mix.

Consistent with media trends and developments, the OOH industry is leveraging data to illustrate for marketers, the value of audiences reached by OOH, in ways that better integrate OOH within broader digitally-led media plans while emphasizing the unmatched impact, scale and creative storytelling canvas OOH provides.

The OOH industry has a compelling story to tell about a shared embrace of data and an audience-led approach:

- Buying processes have been simplified to make it easy to transact via each marketer's preferred mix of direct buys and programmatic platforms
- Marketers continue to leverage brand-building impact and creative capabilities using the medium
- Contemporary OOH campaigns can be as nimble, responsive and insights-driven as other digital media channels.

The challenge and the opportunity for OOH media sellers and buyers is to recognize OOH products not as boards, screens and displays; but, as people passing boards, screens and displays. The embrace of data and audience insights is one of the best ways to integrate OOH's unparalleled reach, scale and creative canvas into today's digital and mobile-led media ecosystem.

Use Cases: Measurement, Targeting, Dynamic Creative and Attribution

The rise of smart devices has enabled a massive transformation in the use of data for personalization in areas like digital marketing, allowing marketers to speak to individuals on a one-to-one basis, yielding greater performance and increased campaign effectiveness.

OOH is fundamentally a one-to-many medium and by leveraging data, can facilitate "mass personalization" by increasing the likelihood that the right advertiser messages are delivered to the right audience segments. The OOH industry's "digital transformation" relies on the use of a data-driven approaches that make OOH a more targeted and contextualized experience.

There are 4 key use-cases for OOH data:

1. Measurement

- At a very basic level, measurement provides a common currency for evaluation of the medium by marketers who use impressions, reach & frequency to make media decisions.
- Measurement provides marketers a view into the number and types of people reached by an OOH location or campaign, leveraging standards that define metrics, calculations, attributes, environments, and more.
- Recent technology advancements have helped enhance the efficiency and accuracy of measurement, allowing the OOH industry to move away from manual counting approaches to an automated approach that leverages mobile location data and movement data to better understand the impact of vehicular and pedestrian traffic.
- Using new sources of information, including mobile location and movement data, a more automated approach to data capture is possible.

2. Targeting

- OOH has been traditionally bought using “location” as a primary strategy. With recent advancements in technology and access to new data sets (primarily mobile location influenced), marketers can consider OOH options by bringing a level of parity to audience buying strategies that thrive in the online digital world.
- Data is helping marketers identify where their target audiences live or work, and how they move through various environments which allows brands to effectively reach audiences at a larger scale with greater accuracy, all done in a privacy-friendly manner.
- OOH media companies use data from a variety of data sources to help marketers better understand the value of specific OOH inventory for reaching target audiences.
- Identifying audiences can be achieved through a range of media planning tools with many open to the marketplace while other are proprietary to OOH media companies. All these tools leverage data to help marketers identify which displays or screens have the highest propensity to reach a specific target audience.

3. Dynamic Creative

- Data can be used to enhance the creative content displayed on a screen helping to contextualize the experience and provide more dynamic and engaging advertising copy.
- Using easily accessible data sources, like weather reports or language translators, marketers can customize advertising content.
- Studies have shown that contextualizing advertising content stimulates higher ad recall and positive brand association markers.

4. Attribution or Campaign Effectiveness

- Technology advancements and mobile based solutions are key drivers for how data is leveraged when measuring the efficacy of OOH. Solutions may be panel based (using specific apps to drive panel interaction) or based on broader-reaching mobile data sets.

- Response to dynamic content running on screens can also be evaluated to understand if a campaign met a marketer's key performance indicators (KPI's) including:
 - i. Driving people to a store (footfall)
 - ii. Driving sales (in-store or online)
 - iii. Measuring brand metrics (recall, association, intent, perception, etc.)
 - iv. Social behavior (like, share, comment)
 - v. Tune-in or click (TV, radio, website)

The importance of data in measurement, targeting, creative, and attribution for advertising isn't all that new. What is new is how technology advancements and capabilities from the digital data world are helping drive efficiency, improved accuracy, and scale in OOH, helping bring "mass personalization" to a traditional medium that continues to innovate and thrive in our mobile-first era.

The Right Questions to Ask

When considering location-based media within the broader media landscape, and directly against other advertising channels available to marketers, it is critical to think, act and propose OOH options that solve problems for customers. It is equally important to think about "how a CMO weighs a media proposition" and then respond accordingly. "Where does OOH add value to media-mix model discussions?" and "what is required of OOH media companies for consideration within the original planning stages of media buying?" In fact, there are several important question OOH professionals must ask when defining the value of the medium within complex communication strategies.

Question ONE: How does OOH compare to other media forms?


First, OOH's value proposition needs to highlight the **cost effectiveness** of the medium when added into larger media plans. It requires solid measurement that is based on metrics common to the contemporary media ecosystem. The most common currency is impression counts. While can evolve from impressions into number of other actions (store visits, phone calls received, etc.) impression counts is where validated measurement starts.

Question TWO: What are the right data sets used to measure OOH?

Historically, the counting tools available to OOH were neither sophisticated nor reliable, and they came at a high cost. With the explosion of personal devices, mobile and cellular data-sets are now poised to underpin an audience metric that compares very well to those used by Google, Facebook and other online media channels. It is necessary to appreciate an audience journey and then apply an "opportunity to see" metric. This approach is distinct from evaluating audiences at locations based simply on where people live or work, which is how OOH was historically evaluated and is no longer a valid approach to measurement.

Question THREE: How does OOH compare value with other media channels?

A cost-per-thousand ("CPM") impression has been the metric in main stream media for many years. A discussion around effective CPM (eCPM) is the right conversation to have with buyers. Fortunately, OOH does not have viewability issues, nor does it have fraud, click-bots or ambiguous measurement standards. Location-based media is brand safe, provides "in-real-life" exposures and the ability to "tag" campaigns to certain conditions if displayed digitally. Moreover, in many places, consumer



exposure to OOH ads is for longer durations and with a less distracted dwell time compared with web and mobile ads. OOH is not considered intrusive to a user's experience, which is certainly not the case with web and mobile ads.

Question FOUR: How can OOH target audiences more accurately?

With granular audience data, OOH is able to apply audience counts against the same targeting segments as digital channels. Acxiom and other data providers supply the media industry with researched audience segmentations against which OOH audience counts can be applied in the same way as TV, Radio and online.

Question FIVE: How can OOH be made easier to buy?

Both hardware and software exist that will allow the OOH industry to establish a dynamic digital buying and content publishing environment similar to Google and Facebook. It is simply not hard to do but, it requires commitment and investment. Using a trading platform for planning and buying digital OOH is straightforward. However, these platforms can also include static billboards which can be bought based on an audience passing an individual site and measured as easily as a digital location. Think about a static billboard as a digital billboard only with a 4 week "flip".

Question SIX: Is OOH in compliance with the best practices for privacy?

OOH is a one-to-many medium. That is a unique positive attribute compared with one-to-one digital alternatives. It also makes OOH less intrusive with personal data. The OOH industry has an opportunity to set the bar. Anonymous and aggregated audiences are fine for planning and evaluating OOH campaigns.


Question SEVEN: How can attribution metrics best be incorporated into OOH models?

The OOH industry continues to experiment with attribution providers and data sets. Several providers are able to use established OOH audience counts and cross-reference them with client data to account for increased visitations, basket size, phone traffic, etc. This is a linear evolution.

The OOH industry smartly and accurately divides those dependable audiences counts into established and custom groupings (targeting) and once a level of accuracy is achieved that validates credibility, it is possible to engage in sophisticated data matching with client-side information sets (web traffic, store visitations, sales, phone call volumes, etc.) At this point, some attribution modelers are evaluating how best to incorporate OOH data. To do so requires accurate underlying OOH audience counts. The goal is to establish credibility relative to Facebook, Google, and now Amazon benchmarks.

Question EIGHT: What does the OOH industry need to do in order to move forward?

Any liquid and traded marketplace requires a set of agreed upon standards, definitions and protocols in order for a fair and trusted economy to evolve. OOH is no different. The industry works with the Media Ratings Council (MRC) to publish a set of rules for just this purpose. While many data providers will offer services to agencies, clients, and media companies, they all should adhere to a same rule-set that creates parity and establishes benchmarks for the OOH industry. How do we measure an impression? What is expected dwell time for specific types of OOH assets? This list goes on.



The OOH industry supports a dynamic and lucrative environment that encourages companies to invest in the medium by continuing the development of new data sets, tools and platforms that benefits all stakeholders. Development and breakthrough innovation will only occur when investors understand the field is level and that business is built based on an adherence to a set of industry accepted norms.

Linking OOH with Other Media Channels

When contemplating the many factors that could advance OOH and enable it to grow and enjoy greater ad share, data seems the most tantalizing and exciting consideration. The new data available to OOH sellers can fuel measurement, targeting, dynamic creative and attribution or campaign effectiveness. But, simply having the data isn't enough. It's necessary to understand what information is being collected and what it will be used for.

Research shows how OOH has historically been under-utilized across all brand verticals and, based on performance, media investment in OOH should increase up to 30 percent for some KPIs (such as driving online activity). Because of many similarities between OOH and digital (location accuracy, premium video capabilities, huge reach to name just three), an OOH and digital media mix makes sense.

The good news is that many brands, agencies are embracing omnichannel marketing more than ever before. Individual ad channels have become less important to brands compared with reaching the right people, at the right moment, in the right context. Marketers want to merge channels to create seamless experiences, in much the same way consumers live their lives. However, ad buyers are also keenly aware of issues that have plagued traditional digital channels such as viewability, brand safety, and fraud which are all non-issues for the OOH medium. So, the chances are good OOH can be integrated into an omnichannel world, gaining share from digital but, only if it can fit into omnichannel planning in the first place.

A Respect for Privacy

To bridge with other media and take advantage of the omnichannel revolution, OOH media companies must and do respect the privacy of individuals. *AAA's Privacy and Consumer Data Usage Guiding Principles for the OOH industry* are recommendations intended to provide baseline markers that respect consumer privacy and the use of consumer data. Recognizing that the operational characteristics of companies often differ from one another and technology itself changes rapidly, the following principles anticipate that individual companies may need to adopt modifications that are consistent with their particular business model.

1. **Privacy by Design:** OOH media companies take privacy into account in the entire engineering process to develop products that anticipate and mitigate any privacy concerns.
2. **Transparency is Critical:** Consumer data collection practices should be transparent and accurately disclosed.
3. **Legitimate Purpose:** OOH media companies only collect consumer data for specific, explicit and legitimate purposes.
4. **Compliance with Laws:** The collection and use of consumer data must comply with all applicable laws.
5. **Individual Control:** Consumers should have control over whether to disclose personally identifiable information.
6. **Protection of Personally Identifiable Information:** OOH media companies should take reasonable precautions to protect personally identifiable information in their possession from loss, unauthorized access or theft.

A Final Thought

As the OOH industry continues to evolve as an omnichannel option, its true value as a medium will continue to grow, possibly in exponential ways. What omnichannel buyers want from the OOH industry may expand to include markers like computer vision and foot traffic but, only if data points can be collected, normalized and ingested into buy side platforms