

Out of Home Advertising:

Measurement and Analytics Guide for Agencies and Advertisers

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Background

Out-of-home (OOH) is a vibrant, growing, and essential medium for advertising. As Marketers are increasing ad spend to out-of-home, OAAA and member companies seek to establish consistent standards and communications so marketers can plan, transact, and analyze effectively.

These OOH guidelines were produced to help educate the reader, with an eye towards:

- Simplifying the various measurement and analytics solutions available in the marketplace today
- Enabling smarting planning of OOH media and increased performance management
- · Facilitating the use of data and measurement within OOH

OOH Enables Location and Audience Data

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, helping the OOH industry evolve its location-centered attention to an intense focus on the power of *audiences at locations*.

Mobile Society

Consumers' embracing 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. However, 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.

OOH is committed to understanding the consumer <u>journey</u> along with consumer <u>behavior</u> in both the physical and digital worlds. As advertisers think about consumer journeys and locations, they quickly realize OOH is a fundamental, proven medium that delivers contextually relevant messages at scale; 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.

Evolving 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 is typically illustrated with the concept of a "marketing funnel," where the top of the funnel is filled 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." In a mobile-led society, however, the notion of the traditional marketing funnel and the idea of driving people to physical places has been altered.

Rather than simply driving people to locations, in a mobile-led society, marketers drive consumers to "points of decision." More than what to purchase, "points of decision" include what to research, what to share, what to post on social sites, what to recommend, and how to proceed with the continually evolving relationship between the consumer and the brand. Understanding consumer behaviors along these journeys is crucial for identifying the ideally-situated OOH ads that will deliver the contextually relevant messages that influence decisions and subsequent actions.

Therefore, it's critical to consider how audiences are reached at OOH locations, not just what and where OOH displays are located.

Marketing Funnel	OOH Advertising Applications
Awareness	Broad Reach
Visitation	Proximity to locations
Purchase	Incentivized promotions

Data and Analytics

The OOH industry has embraced the application of mobile data to illustrate consumer behavior and mobility in the physical world. In doing so, OOH media companies can help advertisers better achieve and measure campaign impact against specific audience segments.

The introduction of new measurement sources brings new considerations for buyers and sellers as data consumers in the OOH industry.

Misunderstood data types, if applied to an inappropriate campaign goal or compared to different data sources, risk negatively influencing ad campaigns and causing confusion in the marketplace.

Increasing (Sub)Urban facility

"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 through either the conversion of existing printed display structures into digital displays or via the development of entirely new digital inventory. Digital OOH has reached a critical mass of scale, reach and impact, driving significant growth in OOH spend overall, while simultaneously helping marketers think of OOH as a digital location medium not "just a location medium." This trend toward digital infrastructure has the added benefit of being "addressable" by using data to 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 by passing data back-and-forth. The programmatic transactional platforms are not built around the purchase of OOH inventory, structures or locations; rather, they're built around reaching audiences. Platforms now offer 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.

Audience-Driven Data Approach

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

- 1. Buying processes have been simplified to make it easy to transact via each marketer's preferred mix of direct buys and programmatic platforms
- 2. Marketers continue to leverage brand-building impact and creative capabilities inherent to the medium

Contemporary OOH campaigns can be as targeted, responsive and insights-driven to 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 pass and engage with 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.

Core Differences in OOH

The medium itself operates differently from other media due to a few primary differences:

Audience

- Ads, generally, are reaching a broader audience (more than 1 person and often significantly larger volumes)
- Consumers 18-64 spend more time with OOH than any other ad media except for television

Formats

- Ad experiences can be static to video, print to digital, and may or may not offer sound
- More creative experience options than any other advertising medium
- 100% of OOH viewership is human and fraud-free
- OOH Units are always-on, can't be delayed, skipped, or deactivated

Locations

- Ads are presented out in the physical world. Locations can be indoors or outdoors, fixed position or moving, above ground or below ground, and on land, sea, or air.
- Most consumers spend 70% of their waking hours away from home

Marketer's Needs

While the OOH environments are unique and compelling, there are considerations in capturing value, effectiveness, and attribution either in a platform-specific or cross-platform perspective.

Typically, there are four applications to the available data:

- 1. Measurement: Using data for planning and marketing strategy
- 2. Audience Targeting: Identification of unique audience attributes & behaviors around each display
- 3. Creative: Tailoring creative messaging to content/location & audience
- 4. Ad Effectiveness: post-campaign analytics to determine effectiveness to KPIs

Data for Planning

- Measurement provides standardized metric(s) 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
- Enhance the efficiency and accuracy of measurement,
- Incorporating new sources of information including mobile and movement data

Data for Targeting

- 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.

Data for 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.
- Studies have shown that contextualizing advertising content stimulates higher ad recall and positive brand association markers.

Data for Measurement

- 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 content running on screens can also be evaluated to understand if a campaign met a marketer's key performance indicators (KPI's)
- Ongoing measurement should be performed during the campaign flight to gauge success and optimize (where creative formats allow for optimization)

Enabling the Advertising Life-Cycle

It is a best practice to use consistent data set from Planning through Attribution. If not, be aware of the potential mismatch in data sets and how that could impact understanding about results.

Prove

 The same data set should be used between publisher and 3rd party validation tools



Plan

- Identify Targets and Objectives
- Data must be usepermissioned to be dynamically joined with clients' audiences



Publish

 Must be able to provide interim impression reporting for revenue recognition, client reporting and regulartory compliance



Purchase

 Publisher and buyer need transparent impression data to value inventory and negotiate

Data Source Considerations

OOH can be planned and measured utilizing numerous technologies. While there is no one standard that applies to every format, marketers should first identify what are the desired campaign and measurement goals.

Additional dependencies may be needed depending on whether buys are platform-specific vs cross-platform.

Note: Given the various platform and format considerations, one or multiple technologies may be required.

Platform(s)

 Is there a need to measure a unique medium or align data in a cross-platform methodology?

Ad Formats

 Are the ad formats similar (digital vs analog, static vs animated vs video)?

Methodology

 What is the method to fit the other pieces, such as GeoFenced Based Mobile or Intercept Survey Online?

KPIs

What are the target KPIs?

Success Criteria

- How is effectiveness counted and determined?
- Is the effectiveness shared with the publisher or agency?

Fidelity

- What Precision is required for Success?
- What Frequency of data change is required for effective trracking?
- What Scale is required for appropriate coverage?

OOH Execution "Types"

OOH is a diverse medium with a wide variety of types of executions. While the formats may vary, they can be broadly categorized into 4 categories for analytics considerations.

	Billboards	Street Furniture	Transit	Place-Based
Type	Large format advertising displays intended for viewing from extended distances, generally more than 50 feet	Advertising displays, many that provide a public amenity, positioned at close proximity to pedestrians for eye-level viewing or at a curbside to impact vehicular traffic	Displays affixed to moving public transportation vehicles or in the common areas of transit terminals and stations	OOH media used to create customized advertising programs generally targeting specific consumer audiences
Industry Terminology Examples	Bulletins, junior posters, posters, and spectaculars	Transit shelters, newsstands/news racks, and kiosks	Bus panels, train/rail panels, airport panels, taxi panels and mobile advertising signage	Arenas and stadiums, malls and in-store signage, gas stations and other business locations, and movie theaters
Considerations	Field of view, signal accuracy, time in view, smaller typeface impacts distance from ad	Highly directional, fixed location, potential for obstruction from vehicular traffic	Short-term duration from moving vehicle, generally not fixed in location	Restricted to the people in the immediate vicinity, need to filter people not immediately adjacent to the screen

Measurement and Attribution

The dramatic expansion of data capabilities and available measurement solutions has significantly enhanced marketers' capabilities. With access to better and varied data that can be measured, the ability to develop attribution models improves.

While measurement and attribution are connected, they are separate disciplines:

- **Measurement**: summarizes metrics such as ad plays and impressions, audience attributes, reach, frequency, and user behaviors.
- Attribution: utilizes in-flight and post-campaign analytics to demonstrate causality or correlation between ad performance and consumer behavior relative to the advertiser's stated goals

Selecting the appropriate analytical solutions requires understanding overall goals, the methodology of each, and the technical considerations.

Measurement Fundamentals

There are a few key fundamentals for measuring OOH. There is far more granularity following these core concepts. Additionally, OOH has slightly different terminology and lexicon from other advertising forms which can cause confusion if not careful.

Measurement Type	Out of Home	Digital	Broadcast
Exposure	Users in proximity and presence of the media screen/board and expected to be able to view of the screen/board. This is not verified to actually have seen the screen/board or that the user actually saw the ad. Also called "Opportunity to See"	Any ad displayed on a screen of a device as measured by an ad server. Not necessarily verified as having actually seen by a user	An average of the number of people estimated to have viewed a given timeframe of a given television station
Plays	Ad plays as generated by media owners, if screens have rotational (vs 100% fixed) images	For interactive media, the total number of times a videois played either with or without user engagement	Identical to Exposure
Impressions	Impressions viewed by users (also known as Likelihood to See and may also be called Opportunity to See in Exposure)	Identical to Exposure	Identical to Exposure
Accuracy (Confidence)	The measurement partner's ability to have a high confidence level of measurement based on methodology used for type of assets and outcome being measured	Identified to an IP address and/or device ID	Identified to an IP address and/or device ID
Sample Size	The collected data point volume vs the overall population in the "area." Ultimately need to determine if sample size translates to a proxy in the local market's overall audience	The number of people in a survey used for analytical assessment	The number of people included in the rating of a market

Planning and Buying

Measurement data gets utilized for planning solutions. In order to determine (select) the appropriate advertising inventory displays, the data solutions need to be tested for fidelity to the desired goals. Effective planning (which will then influence attribution) requires knowing the right data sources. Common questions that should be considered include:

- Is the data source audited / industry accepted? Has it been tested against known ground truth data sets for accuracy?
- How is audience data collected; how is potential survey bias accounted for?
- How often is data refreshed? (This affects planning and attribution)
- Are the necessary data elements provided to align with other internally utilized data sources? Example metrics include Impressions, TRP's Index, Reach, Frequency, etc as well as data such as Mobile Advertising Identifier (MAID) or cross-device ID matching.
- Does the methodology align with or are they properly set up to report on advertiser goals (ex. Different considerations for auto vs retail vs direct to consumer). Auto as an example may require tracking for footfall, as well as online visitation: whereas service- based businesses may not care for footfall and look to online visitation only. Do the elements align with the desired platform specific or omni-channel approach?

Attribution Oriented

For effective post campaign analytics, the typical approach is to compare results from a control group vs the exposed group to measure lift.

Control

Group (or no incremental ad spend) which is not served advertising to be compared to test group (or different time period) where users are exposed to determine lift.

Lift

Represents the incremental traffic/visit/conversion from exposed users versus the control group or be fore the ad buy occurred. The data is typically measured as a percentage vs whole numbers. May also be known as "Incremental Lift". Lift as a measure

Attributions Solutions Matrix

This matrix will provide guidance on which technologies are effective based on the marketer's data goals and KPIs. As campaigns can incorporate multiple OOH executions and potentially other media channels, a combination of solutions may be needed to increase the accuracy of results.

Category	Data Collection Methodology	Accuracy	Precision	Scale
Carrier	Every time a consumer's phone is connected to the network (any text, call, or internet use)	Fair	Good	Excellent
GPS	From apps where consumers opt in to allow access to their location information	Good	Good to Excellent (Signal Dependent)	Dependent on SDK Installs
Bid Stream	When a consumer is using a mobile app with location services turned on while seeing an ad in-app	Poor	None	Good
Beacon	Uses bluetooth technology to scan devices within 10-100 feet; users need to have BT turned on and visible	Excellent	Excellent	Dependent on SDK Installs
Survey	User-based self disclosures against desired outcomes	Good	Good	Poor
Point-of- Sale	Retailer specific dtaa logs to identify conversions	Excellent	Excellent	Fair
Camera Sensor	Uses anonymous vision algorithms to analyze users passing an OOH asset	Good to Excellent	Good	Dependent on sensor installs

Attributions and The Marketing Funnel

The ideal solution can also vary based on the various stages of the marketing funnel. One data source will not capture all the data points that are needed. Instead, a combination of measurement solutions should be utilized to understand all of the touch points and formats.

Marketing Funnel	Preferred Measurement Methodologies
Awareness	Panel, survey, geolocation
Visitation	Geolocation, beacons, visual detection
Purchase	Survey, point of sale

Collection Methodology

For the common technologies, there are tradeoffs in the overall capabilities based on the scope and data capture that each technology provides. To ensure best results, marketers need to determine:

- Campaign goals and KPIs
- · Level of accuracy needed

As examples, there are various goals of campaigns:

- Driving people to a place/location (e.g. footfall)
- Driving sales (in-location or via online channels)
- Brand perception (ex. Recall, intent, perception, association)
- Tune-in or visit (TV, radio, website)

Benefits and Tradeoffs of Solutions:

Туре	Advantages	Considerations
Panel Based (Survey)	Accuracy (precision) Depth of information	Sample size of panel limits amount of cuts of data Delay in analysis from panel response
WiFi (Footfall)	Accuracy (broad range)ScaleBroadly availableOngoing (real-time)	Accuracy is not precise for a subset of locations due to range being 300'
GPS (Footfall)	Accuracy (precision in geo) Ongoing (real-time)	 Scale may be limited due to user opt-in requirement Frequency of location updates may be limited by device settings
Beacons (Footfall)	Accuracy (precision in geo) Directional configuration and data capture	Beacon cost Requires a physical Installation at/around screen/board or retail location Requires app to read beacon signal
Device Tracking	Asociate the actions of a specific user to media viewed	Deletion of browser cookie reduces visibility Industry actions decreasing access to device identifiers
Point of Sale (Purchase)	High precision	Limited range Lacking access to 100% of retail footprint
Camera Sensor	Accuracy Ongoing (real-time) No opt-in required	Requires physical installation of sensor in vicinity of screen

Example(s) Based on Business Type to Use in Tracking:

	Footfall	Online/Web site	Phone Tracking	Survey	Tune-in
Storefront Only					
Online Only					
Service Only					
Television					

Data Health

Every measurement technology has tradeoffs versus other solutions. Within a given technology there are multiple providers each with differing capabilities. Determining the ideal solution and partner requires asking the right questions to understand the data sources and methodology. While the industry hasn't formally adopted the "nutritional label" solution, the concepts are valid. Ideally, every data and measurement provider would provide explanations of how the methodology works.

	OOH Data Label		
Data Set	Ex. descriptions of quality, size, location		
Application/ Purpose	Ex. Predictive Campaign Planning, Footfall Atribution studies		
Location data sample size	% of all mobile devices, 150 M devices etc		
Location Data source	How device ID's are managed, duration/ persistence of trip observation		
Location accuracy (Level of deviation)	Trip location accuracy, indicated as variance or deviation		
Geographic coverage	All US by DMA, CBSA, County, Zip Code		
Audience source(s)	Population data, US Census, survey		
Audience sample size	Number or percentage of audience sample size		
Release/ Update	Ex. Monthly Data Release, avg trip data		
schedule	updated annually		
Collection Methodology	Ex. Sample Survey, Opt in Panel, Observed Location Data		
Validation Methodology	Ex. Bias, model scaling		
Reporting/ Lookback	historic lookback time range limits,		
period	observation period limits or requirements		
Baseline data set	Observertion, panel, historic football		
Link to documentation	www.GetMore Info.com		
Exposure determination	How exposure time is determined and defined		
Dwell time determination	How is audience dwell time measuree		
Control measures	Group size or % of total test group. Definition of control group applicable to test		

A concept developed by the ANA and IAB Tech Lab is the inspiration for the OAAA version. These data concepts should be asked of each provider to ensure the methodology and applicability of the data aligns to marketer's goals.Note: At present, providers will not provide results in this format but instead provide a visual interpretation of the considerations that should be approached to simulate a similar result.

Summary

OOH provides a compelling medium for marketers. The enhancements in measurement solutions ultimately lead to improved campaign planning and attribution capabilities. Understanding the various solutions is critical to ensure data inputs align to the desired KPIs. There has never been greater measurement capabilities available to marketers as there is currently. Having numerous options is beneficial but knowing what the best solutions are for a marketer's unique goals is critical.

Measurement Checklist

By asking the correct questions upfront, a campaign will have the best chances for success.

Approach Considerations		
	Approach Considerations	
General Considerations	How important is moving data across platforms?How important is real-time access to the data?Is data sampling acceptable for accuracy of my analysis?	
Methodology Considerations	 What is the provider's data collection methodology? Are probabilistic and/or deterministic data sets utilized? What is the data source(s)? How does the collection methodology account for the display's location and direction? What are the seasonality considerations (If needed based on frequency)? How is time of day and day of week factored in? How can/are baseline & lift results be determined? Is a control group utilized? How are consumer journeys constructed and/or evaluated? 	
Technical Considerations	 What is the given technology's accuracy (or confidence level against known ground truth examples)? What type of data attributes are provided? What is the data collection frequency? How is altitude & multi-story buildings results addressed? What is location accuracy based on? How is location bias determined? Is location based on Point of Interest (POI) radius vs custom polygons? Is data a point-in-time sample or real-time? Is there panel bias or is data normalized to census (or some other known quantity)? How is dwell time and ad exposure calculated? 	

Acknowledgments

OAAA Data Use and Analytics Committee

This document was produced guidance from members of the OAAA Data Use & Analytics Committee. The Out of Home Advertising Association of America (OAAA) is the convening trade body for the out of home advertising (OOH) industry, which includes digital out of home (DOOH), and is comprised of billboards, street furniture, transit advertising, and place-based media including cinema. OAAA is a unified voice, an authoritative thought leader, and a passionate advocate that protects, unites, and advances OOH advertising.

Document Prepared by Prohaska Consulting

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Appendix: Data Use Questions

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.

How does OOH compare to other media forms?

First, OOH's value proposition needs to highlight the value 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 exposure/impression counts. While it can evolve from impressions into a number of other actions (store visits, phone calls received, etc.) impression counts is where validated measurement starts.

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 datasets 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.

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.

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. Many 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.

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. 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 displays which can be bought based on an audience passing an individual site and measured as easily as a digital location. Think about a static display as a digital display only with a 4 week "flip".

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.

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 well established online benchmarks.

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

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.

OOH has historically been under-utilized across all brand verticals. Because of many similarities between OOH and digital (location accuracy, premium video capabilities, audience 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.

Appendix: Definitions

Term	Definition
Ad Server	The application that manages scheduling, delivery, and tracking of a digital screen.
Attribution	The ability to tie performance of advertising exposure to the desired outcome
Audience	Broadly it represents the number of people exposed to a display with an opportunity to see the typical advertising. Specifically, it can also include the specific audience demographics.
Audience Composition	The demographic, socioeconomic, or behavioral profile of the network's audience that is inclusive of the percentage of the total audience falling in each segment.
Audience Demographics	The characteristics that define who the target audience is. Such items as age, gender, ethnicity, cultural background, religious or political affiliations, economic status, family background and group memberships may help define the demographic.
Brand Awareness	Effectiveness of advertising campaigns to align to the Brand's desired message or performance activity.
Brand Lift	A measurement of an advertising campaign's effectiveness in driving a positive shift in customer awareness and perception of a brand.
СРМ	The cost (price) to deliver 1,000 ad impressions on displays. Cost Per Thousand derived from Cost Per Mille.
Demo Targeting	Targeting audiences that are defined by demographic attributes i.e. age, gender, household income, presence of children.
Dwell Time	The length of time an individual is in a Screen Exposure Zone (also referred to as a viewshed) which is a location from which the screen is visible and, if appropriate, audible.
Exposure	Presence in the defined Screen Exposure Zone (also referred to as a viewshed) while content is deemed to be viewable, though this does not require that the content be viewed or listened to. Exposure is also often referred to as Opportunity-to-See.
Frequency	The number of times the target audience is typically exposed to content, advertising, or a specific ad, in the defined time frame.

Term	Definition
Geographic Targeting	Targeting audiences defined by their location in the real-world. Location attributes can vary from granular attributes such as mobile/GPS-enabled latitude/longitude data to broader attributes such as DMA or state/province
GPS	Global Positioning System (GPS) based location tracking identifies a location based on a receiver (ex. Mobile phone) from a satellite.
Gross Rating Point	A term used to measure the size of an audience reached by a specific media vehicle or schedule. In the DOOH landscape, GRP means the total number of impressions delivered, expressed as a percentage of a market population. One rating point represents impressions equal to 1% of the market population.
Impression	The count (impression singular = 1) of presumed exposed individuals when an ad plays or within the . viewshed of a published advertisement. This could be referred to as an Opportunity to See or Likelihood to See which may use different calculations based on methodology.
Lift	Percent difference in visitation rates between exposed audience and unexposed audience. A variant of lift, "Incremental Lift", is when a known visiting quantity is removed from the calculated set to show only the "incremental" lift, versus the general lift of control and exposed.
Location Bias	Choosing location based on a pre-existing proximity and what skew that could give based to attribution and effectiveness reporting (ie. the OOH asset is outside of a measured location, this will of course skew exposure and visitation results).
Look-alike Targeting	Targeting additional audiences that have some number of attributes in common with an audience of interest.
POI	Point Of Interest (POI) is the mapping of specific latitude & longitude coordinates to venue classifications (Ex. Store name, location type)
Psychographic Targeting	Targeting audiences defined by personality, interests, attitudes or mindsets, e.g. Financial Optimists, Environmentally-Conscious Consumers. Often driven from offline surveys and stated preferences.
Reach	The net (unduplicated) count or percent of the defined universe of the target audience exposed to content, advertising, or a specific ad, in a Screen within a defined time frame.
Retargeting	Targeting audiences that are defined by having recently shown interest in said advertiser, interest most often being defined as visiting the advertiser's web site.