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# **Measuring Digital Audio in Media Mix Models**

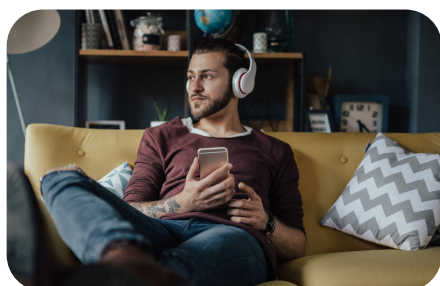
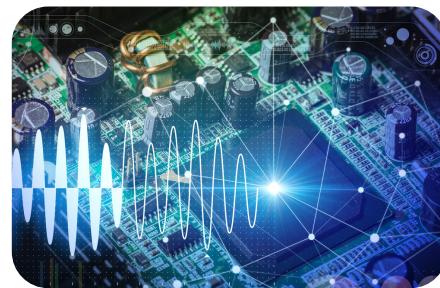
A Beginner's Guide



JUNE 2025

Ever since its founding, the IAB Media Center has dedicated itself to helping ad supported media companies and their marketing partners in the brand and agency communities **navigate the transition** from traditional analog media to the dynamic but often complicated digital channels of today.

This dynamism - and the sophistication of creative and technical capabilities of digital media - has created **opportunities** to engage consumers with impactful advertising campaigns that serve their needs at the highest level.



The complexity of parsing and analyzing the gigantic data sets that quantify all this engagement, however, also creates significant **challenges** when it comes to measuring impact and optimizing media plans.

To address these challenges, IAB has always worked to facilitate collaboration between buyers and sellers regarding their shared **measurement** and **data** practices to inform omnichannel media planning.

As part of this process, the Media Center seeks to help publishers and advertisers unlock the power of **emerging digital channels** where the complexity of measurement can cause investment to lag the amount of time and attention consumers spend with these channels.

It is a desire to help unlock the full power of **Digital Audio** – a channel that sports some of the most engaged and attentive audiences in all of media – that is the focus of this paper

## Getting Audio & Podcasting on the Media Plan

As **Rich Tunkel**, Nielsen's GM, Audio, said during an [October 2024 webinar](#) about the benefits of advertising in Audio, companies like Nielsen are ramping up their ability to account for audio in the context of omnichannel campaign planning.

Tunkel's point was part of a broader discussion about **how to address underinvestment in audio** relative to the amount of time that people spend consuming audio content, and he continued his thoughts about the importance of addressing existing underrepresentation of the channel in planning tools this way:



*"I think when audio isn't producing strong results in Mix Models, it's probably because it hadn't been planned for with enough media weight. It's like exercising for only 5 minutes a day and expecting to see big results on your bathroom scale. There's a couple of pieces of advice I would give to people about the way that they use audio. And the first of those is to plan for it at the appropriate levels so that it can be measurable."*

– **Rich Tunkel**, GM, Audio, Nielsen

This desire to boost the visibility of audio in omnichannel marketing efforts was the genesis of a “**Getting Audio & Podcasting on the Media Plan**” working group that was launched in the Media Center in March of 2024.

The group was formed to facilitate the development of a [Business Guide](#) and the aforementioned [Webinar](#) to support increased investment in and better integration of digital audio advertising into brand and agency media plans by putting a spotlight on the highly attractive audiences and powerful marketing outcomes to be found in Audio.

Among other things, the Guide highlighted how:

- Digital Audio accounts for **20% of all 18+ time spent** with digital media at more than two hours a day.<sup>1</sup>
- Nearly **80% of Americans listen to Digital Audio** each month, with **over 70% tuning in each week**.<sup>2</sup>
- Audio **generates 56% greater attentive seconds per thousand impressions** than other forms of media.<sup>3</sup>
- A Neustar analysis of the media mix performance of 40+ national advertisers showed that a **1.8% shift** of media investment into audio produced a **23% increase** in overall ROAS for Auto advertisers.<sup>4</sup>
- A study involving 30+ advertisers found that Podcast advertising generated the **highest long-term and short-term ROAS** in comparison to nine other media channels, including Search, Social, TV, and Display.<sup>5</sup>



## Getting Audio & Podcasting on the Media Plan:

A Guide for Mutual Success

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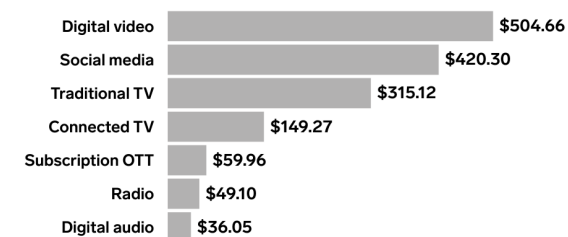
A desire to aggregate and share powerful data like this about the benefits of audio was and remains a core Media Center priority, and bringing such information together in a single document was therefore **an important first step** in helping buyers better understand the incremental contributions of audio to their total marketing efforts.

The effort to spotlight audio's ability to deliver superior marketing outcomes continues, however, **and the next step** the working group is taking to continue this effort is focused on a key learning that came out of the guide's development and eventual publication.

## Standardization of Audio Measurement Data for use in MMM is a vital part of getting on a Media Plan

### Digital Audio Has the Lowest Ad Spend per User of Any Major Medium

US ad spending per user, 2024



Note: among adult users at least once per month; analyst calculations based on annual ad spend divided by adult users of that medium  
Source: EMARKETER Analysis, March 2024

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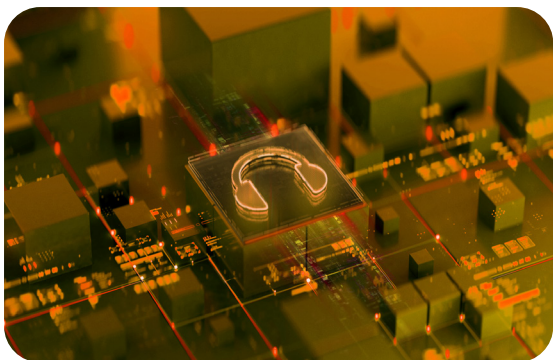
As the [Getting Audio & Podcasting on the Media Plan Guide](#) is careful to explain, all of the audience growth, case study data, and attention to audio that it describes **has yet to close a tremendous, long standing gap** between the amount of time that people spend consuming digital audio content and the amount of investment that marketers are making in the space.

Indeed, as of the Guide's publication near the end of last year, only 3.1% of digital advertising revenue was targeted to the 20% of time that consumers spent listening to Digital Audio<sup>6</sup>, and as of April of this year, the proportion of audio investment has actually dropped slightly to just 2.9% (\$7.6 Billion) of total revenue (\$258.6 Billion).<sup>7</sup>

time spent with Digital Audio **well exceeds time spent with Social Media**, which claimed 34% of 2024 digital ad revenue (\$88.8 Billion), and **is more than half the amount of time spent with Digital Video**, which claimed 24% of the overall digital revenue pie (\$62.1 Billion).<sup>7,8,9</sup>

This persistent imbalance of time spent vs. investment was a principal reason for starting the working group and creating the guide, and the realization that the imbalance has, if anything, become even larger since the guide's publication begs an obvious question: Why does this gap continue to exist, and how should the digital marketing ecosystem address advertisers' underinvestment in audio despite impressive evidence about its efficacy?

Considering this question from many different angles, the members of the GAPOTMP working group have come to an inescapable conclusion that a large factor holding investment in Audio back is a **historical lack of representation in Media Mix Models**.



This inability of modelers to account for Audio's contributions as easily as they do for other forms of media is tied to a **relative lack of measurement standardization** in comparison to other channels, and it has especially important implications when it comes to the use of MMMs and the future of digital advertising moving forward.

Digital Audio accounts for **20%** of time spent with digital media but only attracts **2.9%** of overall digital advertising revenue.



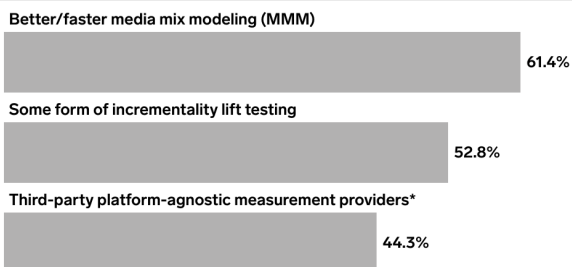
## MMMs are vital to Audio because they are vital to Marketers

To be clear, the question of why advertisers have yet to fully embrace Digital Audio isn't a question of measurement per se. As alluded to above, there are many powerful ways to measure Return on Ad Spend in audio against every conceivable KPI.

### Improving MMM Tops Marketers' List of Priorities for Upgrading Measurement Strategies

% of US marketers, July 2024

Q: How are you trying to augment your measurement strategy into the future? Select all that apply.



Note: n=282; \*e.g., Measured, Fospha, LiftLab  
Source: Snap and EMARKETER Survey, "Media Measurement," Sep 2024

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As far back as 2022, for instance, IAB published a [Digital Audio Measurement Guide](#) detailing the existence of digital audio metrics and measurement solutions, ranging from audio attribution pixels that track conversions across multiple devices to sophisticated brand suitability controls that enable contextual alignment, that are hard to find in other channels.

The challenge that remains is how to ensure that audio's measurement capabilities – and the impressive evidence of audio's value that flows from that measurement – move from a current state in which those capabilities and success stories are defined by **their ad hoc, one-off nature** to one in which they are also included in the **integrated, holistic measurement rubric of MMM**.

**Media Mix Models are as important as they have ever been**

The stakes surrounding the measurement of advertising effectiveness for both buyers and sellers have never been higher.

As noted in the [2024 Internet Advertising Revenue Report](#), advertisers are under ever-increasing pressure to not only meet audiences where they are but also to **demonstrate business outcomes**.<sup>10</sup>

This comes on the heels of [IAB's 2025 Outlook Study](#), in which the **top concerns** that advertisers cited for developing their investment strategies included **cross-channel media measurement** and a desire to **improve MMM results**.<sup>11</sup>

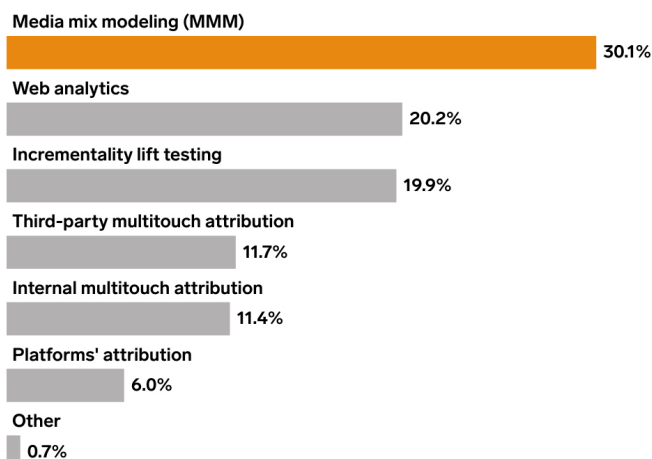
These concerns aligned with the priorities expressed in a 2024 eMarketer survey that listed **MMM as the #1 method** that advertisers trust the most to measure outcomes.<sup>12</sup>

As the Outlook Study explained, two important drivers of these goals are a long-term structural trend towards an **increasingly fragmented** advertising

### Determine Key Business Drivers

% of US marketers, July 2024

Q: Which type of measurement do you believe is best at identifying drivers of business value or outcomes?



Note: n=282  
Source: Snap and EMARKETER Survey, "Media Measurement," Sep 2024

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marketplace and a drop in deterministic audience targeting due to a **loss of identity signals** caused by state and federal privacy regulations.

All of this points to a future in which structuring and delivering measurement data in ways that are well suited to ingestion and analysis by MMM companies will be paramount, which means that the time to meet advertiser expectations regarding MMM has come for Audio.

As former P&G Senior Media Analyst, John Fix, puts it, brand awareness and brand lift metrics provide useful directional insights, but large brand advertisers ultimately want to use their MMMs to “tell me explicitly what levers I can pull” to make a media plan more effective.

*“Being told that higher engagement or higher purchase intent can be worth a million dollars in sales is nice, but not truly actionable. MMM is used to say what direct action can be taken with the media plan through reallocation or changing investment levels. Secondary measures aren't actionable. Using granular data in MMM can help to show that the higher engagement campaigns performed better, but the actionable correlation needs to be between investment (spend or impressions) and sales. Granular data will also allow for optimization within a media channel at the levels at which decisions are made.”*

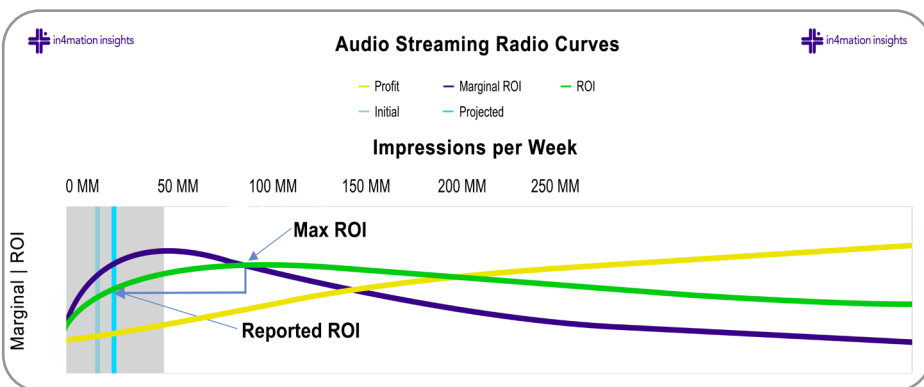
– John Fix, Measurement Consultant and Former Procter & Gamble Most Senior Media Analyst

## The granularity is there, but the delivery lags

With Fix’s POV in mind, the answer to the question of how to address underinvestment in Audio begins to emerge.

As mentioned, Digital Audio is a channel packed full of actionable measurement capabilities including the ability to measure incremental lift, sales attribution, foot traffic, and more, and brands and agencies who have invested in the space have been able to measure and act upon outcomes that have driven repeat investment against upper and lower funnel goals.<sup>12</sup>

As also mentioned, however, analysis of audio measurement data has historically been a largely fragmented and piecemeal process in which the many signals that exist aren’t delivered to MMM companies in as comprehensive, standardized, or uniform a fashion as they are in other forms of media.



The answer to the question of how to address chronic underinvestment in audio is therefore as much about addressing this traditional underdelivery of audio measurement data to modelers for big picture analysis as it is about educating audio stakeholders about individual measurement capabilities themselves.

## Better Collection and Structuring of Data Will Improve Stakeholder Outcomes

One of the keys to unlocking the value of audio for media suppliers and advertisers is understanding the current audio measurement landscape in relation to the mechanics of MMM and the data input expectations of modelers.

At present, audio representation in MMM lags other channels due to **low levels of exposure data, a lack of granular spend reporting**, and a **paucity of weekly or daily breakdowns** that MMM companies are used to ingesting from other channels.<sup>14,15</sup>

One reason for this is that audio data for MMM has historically been collected and delivered by third-party platforms and advertising partners, but this is not an insurmountable obstacle to improving data delivery and granularity.

The key moving forward is to recognize that the data points needed by modelers to better account for audio's contributions **are available today** – and that everyone across the entire ecosystem will benefit from ensuring their delivery due to the complementary effects of incremental reach and frequency across channels when new channels are added to existing strategies.

The question then becomes, what are those audio signals not currently being captured by MMM companies that can and should be delivered to them?

The Getting Audio & Podcasting on the Media Plan working group has been dedicated to answering this foundational question, and early answers include a wide array of inputs that the industry can standardize.

As we come to the ones listed below, it is important to emphasize that these recommendations should be viewed as a basis for further discussion to set the stage for industry-wide implementation.

The process of refining this list and operationalizing its use will continue throughout the rest of this year and into the next, and we invite all interested parties from the measurement, media, and publishing communities to [click here to join our working group](#) and push these efforts forward.

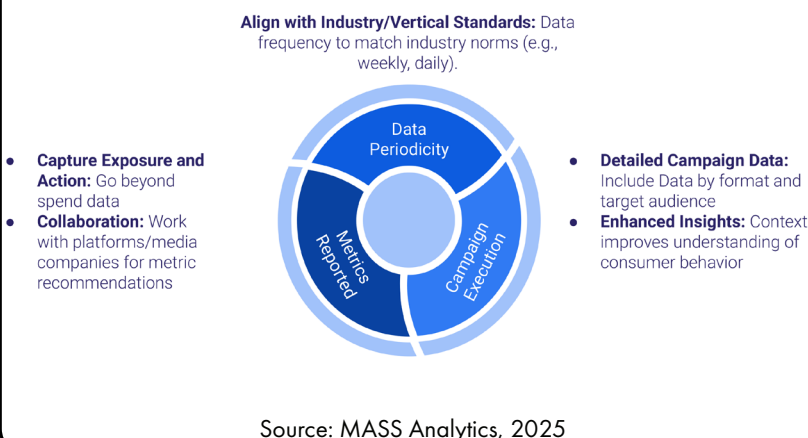
### **Granularity + Variance is the key to Audio's Inclusion in MMM**

One of the cardinal rules of MMM is that variability of data inputs over time optimizes a model's ability to generate accurate results.

With this in mind, the more data the better, and the more specificity the better.

To help establish a minimum set of requirements to register audio's contributions within MMMs, various members of the working group have contributed their thoughts, which roughly fall into the following top-tier categories.<sup>15</sup>

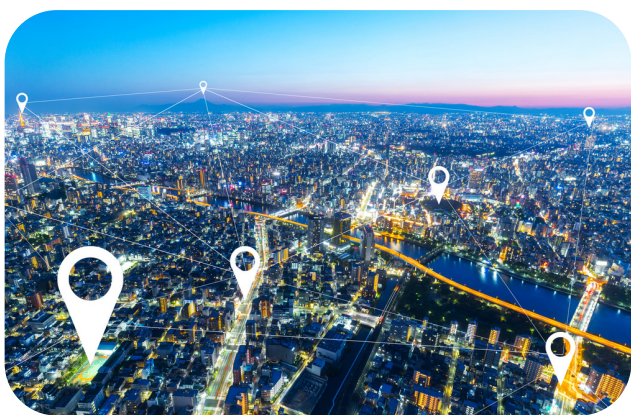
### **Recommended Data Standards for Audio**



By applying these descriptors, MMMs will move beyond a single ROI for Digital Audio to allow for optimization within the channel (streaming vs podcasting, direct vs indirect, etc).

- Creative or campaign name
- Product name and details (Brand, Sub-brand, and/or Product line)
- Marketing Objectives & KPIs (e.g., Awareness, Conversion, etc.)
- Buy type (Direct, Indirect, Programmatic)
- Media Type: Streaming Audio, Podcasting, or Satellite
- Geography by targeted or relevant geography description (National vs DMA)

By sharing this list, the intent isn't to say that these data slices are not already, at least in some cases, being delivered, but rather to establish a baseline for what every audio campaign should account for when it comes to the delivery of data to modeling companies.



As will be discussed below, some of these signals are already being passed to modelers to good effect, but the intention here is to propose a standard set of recommendations for everyone to follow and to make clear the need to deliver certain types of data on an accurate and consistent basis.

Regarding the last of the above bullet points, for instance, it is important to recognize that **high-quality location data is often scarce** when it comes to the delivery of data for audio campaigns because of the previously discussed tendency of audio data to be sent to modelers by platform or agency partners. While it is only pertinent for models that

accommodate DMA-level analysis, this fact means that location data in audio is sometimes not delivered or that the location data that is delivered is inaccurate, which creates an obvious roadblock to accurate modeling of sales by market and region.

By being aware of these minimum requirements for MMM, audio stakeholders can and should take care to ensure that each of these data slices is present and accurately communicated to modelers. It may take some time until enough of this signal has built up on a large enough scale to fully account for audio's impacts on omnichannel campaigns, but anything less will perpetuate existing levels of underinvestment.





## Placement level details and accurate labeling are also essential

Other important data points to keep in mind include those that further quantify the contours of incrementality, audience, and creative, including placement-level details that can make all the difference to a model's effectiveness.

With that in mind, additional measurement inputs like these should be considered for delivery alongside the core recommendations above.<sup>16</sup>

- Vendor
- Unit Size and Length (e.g., Companion banner dimensions or length of audio ad)
- Ad Position (e.g., Pre, Mid, or Post roll)
- Platform / Media Supplier
- Show Title
- Placement
- Demo
- Audience Target
- Creative Type



When thinking about how to deliver data slices like this to MMM companies, media owners and their agency partners should be careful to not only ensure that such data is gathered and made available but also carefully formatted for delivery.

Consider, for example, the following text string used to communicate information about an ad campaign executed by Horizon Media on behalf of one of their clients:

### **DAX-SM\_300x250\_RT\_MI\_Mobile\_STRM\_Banner\_M3564\_Tech Influencers\_Male Creative**

In this case, the information being passed doesn't simply specify important attributes such as audience target and creative type. It also does so in a format that makes it easy for the data described to be delivered to and ingested by measurement companies so that the granularity it encompasses can inform a media mix model.

Similarly, another example shows a clear and easily ingested format for communicating a specific podcast show title and ad insertion type (dynamic insertion) ...

### **PPOD-SM\_60\_MID\_POD\_SHOW\_Crime Junkie\_DAI\_A1849\_No\_Gen**

... while this one demonstrates a method for declaring a run of network as part of the data to be analyzed and modeled:

### **ACST-SM\_30\_PMRT\_POD\_ROM\_Acast Business Influencers\_DAI\_A21+\_No\_Gen**

In each case, it is the granularity of the data being described that audio stakeholders must aspire to deliver to modelers, and precision and uniformity of descriptions are essential.

*"Agencies and brands should implement a uniform, standardized naming convention that aligns with the data feed to ingest into their Analytics model. Otherwise, it will break the data, and you'll need to troubleshoot to deliver customized reporting in the required format."*

— **Lauren Russo**, EVP Managing Partner, Innovation & Performance Audio, Horizon Media

## The time to uplevel audio's representation in MMM is now

To quote a couple of the working group's most knowledgeable members, the challenge that exists in accurately accounting for audio's contributions to omnichannel marketing plans via MMM can be summarized as a problem of two areas, both of which can be solved via collaboration and new ways of operating.

As **Joe Macarak**, SiriusXM's Director of Measurement Partnerships, points out, "audio data for MMM has been historically collected and delivered by legacy Google streams on media suppliers' behalf, misrepresenting channel and platform effectiveness."

And as **Ashley Fitzgerald**, Ad Results Media's Director of Analytics, explains, "in most Marketing Mix Models (MMMs), audio is represented by a single input: spend. But because audio budgets are typically just a small fraction of what other channels receive, **the model often doesn't detect enough signal to assign meaningful impact**. The result? Audio shows up as statistically insignificant — and the model recommends reducing or eliminating spend altogether."

Audio data for MMM has been historically collected and delivered by legacy Google streams on media suppliers' behalf, misrepresenting channel and platform effectiveness



These twin challenges have come up over and over again during work group meetings, focusing our attention on the need to work towards a new standard of data delivery to modelers and inspiring the publication of this paper.

The answer to each of these challenges lies in delivering audio measurement data in the comprehensive and granular fashion described above, and the early returns on modelers' ability to account for audio when this happens are extremely encouraging.

As noted in the GAPOTMP guide, for instance, standardizing the collection and delivery of the previously siloed and piecemeal streaming and podcast data slices represented in the campaign data listed above has allowed Horizon Media and their measurement partners to, for the first time, prove the value of audio alongside other traditional and digital channels in their models.

Similarly, following a year of work to standardize delivery and integrate a wealth of pixel-tracked user-level engagement, audience characteristics, and time-stamped conversion behavior into their models, Ad Results Media has seen a consistent and significant lift in audio's modeled ROI, even when spending is low.

*"We're no longer guessing when audio works," says Fitzgerald. "Incorporating this data into MMMs is essential to moving beyond the limitations of traditional spend and impression-based proxies, allowing us to reveal audio's true contribution and its role in driving performance across the full marketing mix. We're seeing it, clearly, at the individual level."*

### A note about spend and as run data

As mentioned above, this paper is intended to serve as a beginner's guide to addressing chronic underinvestment in digital audio by providing for accurate measurement in MMM.

That said, there are a couple of additional items that are important to mention and that marketers should keep in mind when thinking about their audio-based investments before we close.

The first item is the historically low level of spend in audio when compared to other media. As Fitzgerald mentioned, "this creates a modeling trap in which low spend leads to low signal, which leads to even lower spend."

As she also said, delivery of granular, time stamped measurement can solve for this trap by plugging enough detail and variance into a model so that lower levels of spend don't become as self-reinforcing as they might otherwise be, but, as Nielsen's Tunkel also mentioned, sufficiency of spend is still something that should still be considered when thinking about ways to optimize a model's ability to account for audio's contributions.

The other item to keep in mind is the critical importance of ensuring that any measurement data shared with modelers, whether directly by media suppliers or by brand or agency partners on their behalf, must be as run data. Often in audio, the data delivered to modelers reflects what was planned rather than what actually ran, which can skew models and distort audio's contributions, especially when as run impressions wind up exceeding what was planned.



**Audio measurement data that is shared with modelers must be as run data!**

### Help Shape a Prosperous Future

In the current state of measurement, when audio data shared with MMM companies tends to be limited to gross impressions and spend data and is often delivered on a planned rather than on an as run basis, chronic underperformance relative to other channels is all but certain to continue. This paper aims to build awareness of that problem and seed efforts to solve it.

As alluded to throughout, the most important thing to be aware of is how crucial it is for the high-quality, accessible



delivery of granular measurement data that brands and agencies rely upon for continuous reporting and analysis to become the norm in Digital Audio.

Once this becomes common practice, audio will be on par with other media channels’s representation in MMM, and strategic questions about which campaigns perform the best and how to optimize across podcasting, streaming, platforms, and more will replace the question of whether Digital Audio works.

The Getting Audio & Podcasting on the Media Plan working group is dedicated to making this happen, and it will continue to meet with a laser focus on refining the list of measurement inputs that should be built into audio for use in MMM and on supporting delivery of these data slices to MMM companies in a consistent and actionable manner.

The end goal is a future state of digital marketing in which Digital Audio is no longer expressed as an unidentifiable bucket of insufficient, piecemeal measurement data so that publishers and advertisers can increase their mutual sales and revenue by unlocking the intrinsic value of audio’s passionate and highly engaged audiences.

Please join this effort today by [clicking here](#).

Appendix

Below is a 1st draft of an MMM dictionary that SiriusXM Media is in the process of enabling to be passed/ingested into MMMs along with corresponding definitions.

It is included here as a possible taxonomical template that media suppliers can use to help MMMs better understand and represent audio media supplier inventory.

Field Name	Definition	Notes
Brand Name	Determined by MMM requester.	There is a field in OMS called brand name, but we've been told that's unreliable as it's a manual entry and there's not a standard naming convention for all brands. The compromise is for a brand name to be added during MMM requests.
First day of week	Week breakdown as the first day of the week.	Also referred to as the week start date.
Start Date	First day of scheduled delivery.	
End Date	Last day of scheduled delivery.	
Campaign ID	Unique identifier for a campaign.	



Field Name	Definition	Notes
Cost Type	The determining factor of how an advertiser is paying for an ad product. Aligns with an ad products delivery	
Ad Comments	Ad name listed on the insertion order.	Comments on the ad that often given additional insights into the targeting that is being run. This should be previewed before sharing externally as shorthand can be manually used in this field that is not necessarily for external consumption.
Medium	Medium of the ad delivered.	
Delivered DMA	The DMA breakdown column as its own value.	
Week or day		
Impressions - delivered	1P, number of impressions delivered.	
Clicks - billable based	An event used to track when a click action is taken. This is the total number of clicks tracked.	
Platform	the platform on which the metrics occurred, also known as drv_site	
Reach	The number of unique listeners to whom an impression was served.	Not always available, ex. podcast products will not have reach and that will populate as 0 or -
Frequency	The average number of times a listener is served an ad, computed as the ratio of impressions over reach.	
Ad Size	The size/dimension of the ad delivered.	

Field Name	Definition	Notes
Medium	The medium of the ad delivered.	
Component ID	The unique identifier for the ad component.	This adds in banners and non money lines. Very relevant on click through. ID = child line and product id = parent line in OMS. Strongly recommend understanding this distinction before adding in to creatives.
Component Name	The name of the ad component.	

Below is a list of new audio variables that Ad Results Media is using to enhance signal in MMM from a buyer's POV.

Feature	How It Enhances MMM
Show Name, Host Name, Genre, Publisher, Media Type	The name of the ad component.
Spot Type, Spot Placement, Read Type	Reflects ad quality and placement. For example, host-read midrolls may outperform pre-recorded prerolls — and now that's measurable.
Daypart, Show Frequency, Seasonality	Captures temporal patterns, like time-of-day and seasonal effects on listener behavior and response.
Show Name, Host Name, Genre, Publisher, Media Type	The name of the ad component.
Spot Type, Spot Placement, Read Type	Reflects ad quality and placement. For example, host-read midrolls may outperform pre-recorded prerolls — and now that's measurable.
Daypart, Show Frequency, Seasonality	Captures temporal patterns, like time-of-day and seasonal effects on listener behavior and response.
Gender %, Age Range, HHI Bin	Audience composition data enables demographic segmentation. Critical for understanding who responds to audio.

Feature	How It Enhances MMM
Downloads Bin, Impressions, CPM, Net Cost	Controls for scale and efficiency. Supports normalization across campaigns and allows for apples-to-apples performance comparisons.
Category Exclusivity, Simulcast, Podcast Video Ratio	Reflects the attention environment and potential clutter — context that can impact performance.
Market	Enables geo-level analysis, especially useful for regionally distributed campaigns.
CPM (Cost), CPM (Impressions), CPA, CPV	Cost-efficiency metrics that serve as signals or controls in the model.
Podscribe Enrollments, Site Visits	Actual conversion events, often used as the dependent variable in MMM. Ties spend to tangible business outcomes.
Frequency, Reach	Essential for modeling diminishing returns and identifying waste versus optimal frequency.
Ad Exposure Lag Time	Allows the model to attribute conversions to the right touchpoint — even days after the ad airs. Captures delayed impact that would otherwise be missed.

## **Acknowledgements**

### **Contributors:**

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dentsu  
FastGrowingTrees  
Harmelin Media  
Hearts & Science  
Horizon Media  
iHeartMedia  
Ipsos  
Libsyn  
MagellanAI  
National Public Radio  
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OMD USA  
SiriusXM Media  
Soundrise  
SoundStack  
Spotify  
The New York Times  
The Trade Desk  
Triton Digital  
Veritonic  
Westwood One  
WPP Media



## **End Notes**

1. [US Digital Audio Forecast Overview 2023, eMarketer, 2023](#)
2. The Infinite Dial, Edison Research, [2024](#) & [2025](#)
3. Audio Attention, dentsu + Lumen Research Attention Economy Study – 2023
4. [Audio Amplification: The Return on Ad Spend Study, Neustar, May 2021](#)
5. Does Podcast Advertising Give Bang for the Buck?, Acast Intelligence / OMG / annalect, 2024
6. [Internet Advertising Revenue Report, IAB/PwC, 2024](#)
7. [Internet Advertising Revenue Report, IAB/PwC, 2025](#)
8. [US Time Spent With Media H2 2024 Update](#)
9. [US Digital Audio Forecast Overview 2024](#)
10. [Internet Advertising Revenue Report, Full-year 2024 results, IAB, 2025](#)
11. [2025 Outlook Study, IAB](#)
12. [Snap and eMarketer Survey, "Media Measurement, 2024](#)
13. [Getting Audio and Podcasting on the Media Plan, IAB, 2024](#)
14. Models Plus Experiments for Audio Ad Measurement, Mass Analytics/Central Control/Incrementality Insider, 2025
15. Want to Get Mixed Media Modeling Right? Start with Your Data!, John Fix/ANA, 2025
16. Horizon Media Naming Convention Taxonomy

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