

Counted, Not Heard

An audit of the public proof behind US audio advertising, not a test of whether it works. Audio is sold on attention and proven on counts. The certified podcast metrics count downloads, listeners and ad deliveries; most attribution products that name a method match IP addresses, households or pixels, which says how a match is made, not whether an ad caused a sale; and none of the attention, intrusiveness or in-game retention claims this review coded has independent support. In the two buyer surveys it could code, one Australian and one of unclear geography, measurement was the leading constraint on spend.

Evgeny Popov · No Fluff Advisory

RESEARCH CUTOFF 30 SEPTEMBER 2026 · ONLY INFORMATION AVAILABLE BY THAT DATE IS USED

993 sources opened and registered	641 claims in the research ledger	34 vendors scored
74 corrections logged		

ABSTRACT

Abstract

What US audio advertising is in 2026, who sells it, and how much weight the public evidence behind its pitch will bear. It audits published proof; it does not test whether audio advertising works. Research current to 30 September 2026, with the United States as the main market.

IN SHORT

Audio is sold on attention and proven on counts. Podcast measurement is certified on downloads, listeners and ad deliveries; none of its units measures listening time, attention or an outcome ♦. Most attribution products that document a method match IP addresses, households or pixels, a narrow result that says how a match is made, not whether the estimate is causal; no product in the sample documents uncertainty in its results, in the pages opened ♦ ♦. None of the public claims this review coded, that audio earns more attention, is less intrusive or leaves game players' retention unharmed, has independent support; the bar needs an independent funder, so a sound seller-run test still codes as insufficient ♦ ♦. In the two buyer surveys that could be coded, one Australian and one of unclear geography, measurement is the leading class of constraint on spend and narrative leads neither; two surveys cannot speak for all US buyers ♦. The largest publishers own the best-known programmatic rails, but on the registered count their rails are about a third of the audio supply integrations five DSPs name; that counts named relationships, not spend, so how much buying runs through owned rails is unresolved ♦. On the Listen Quotient, which scores documented capability rather than performance, three sellers reach the top band, Most documented, and no ad-technology service does. 19 of the 24 seller bands are provisional, because filling their missing cells moves them, and 3 bands are provisional because a blind second scorer would move them.

What a buyer can do with this

What a buyer can establish today is delivery. IAB Tech Lab's public record shows whether a seller's podcast counts are certified, for which units and when; a listing is current only within its 12-month term (chapter 4) ♦. Before spending more, ask the seller four things: the attribution method's matching unit and match rate, how much of the reported result is modelled, and its error range; who paid for any attention study and whether its score is modelled; for in-game audio, day-7 retention with the control group's rate and a confidence interval; and where the certified count covers the impressions being sold. What would justify more spend is a holdout test with a randomised control group, run on the buyer's own campaign with the design and results shared. Podscribe sells randomised holdouts as a priced option, and the AMP summary recommends holding out 5-10% of each platform's audience ^[1, 2] ♦.

The question

Audio sellers pitch attention, intent and a format listeners do not skip. This paper asks what the public record shows behind that pitch. How big is US audio advertising, and by whose count? Who sells it, and who owns the pipes it runs through? What do the measurement

standards certify? How is audio attributed to sales, and has anyone shown that it causes them? What stands behind the attention and in-game retention claims? What have AI voices and agentic buying changed? The paper covers broadcast and satellite radio, streaming audio, podcasts and audio inside games. Each channel keeps its own tables.

How it was done

AI research agents worked from one brief in ten topic workstreams, a vendor-universe sweep, eight capability sweeps and eight vendor profiles. A second AI agent checked each file with orders to refute it. In all, 993 sources were opened and logged, and the research ledger holds 641 claims. The paper registered 6 starting claims and questions, with rules for what would count as support, before any research ran. The scoring rules and the product register were fixed before any cell was scored. An outside AI model, run by the author, spot-checked the evidence before scoring and reviewed the draft twice; every fact it raised was checked against its primary source first. A separate AI scorer then re-scored the 17 rows nearest a band line without seeing the first scores; it matched 72% of their cells exactly. An adjudication of the largest disagreements then corrected 10 first-pass cells against their sources (chapter 12). The paper scores 34 sellers and ad-technology services on 12 dimensions. The corrections ledger records each change made after the checks.

What it found

- 1. The market has several sizes, each counting something different.** IAB/PwC counts \$8.4 billion of US internet audio advertising revenue in 2025, of which podcasts were \$2,862.2 million, both reported by sellers ♦. BIA forecasts, as reported by Radio Ink, \$9.79 billion of local over-the-air radio for 2026 ♦. This review found no current public level estimate of total US radio advertising that includes national spot and network radio, in the sources screened ♦.
- 2. Broadcast shrank while podcasts grew.** iHeartMedia's podcast revenue rose 25.6% in 2025 to \$563.7 million while its broadcast radio revenue fell 5.4% ♦. No filing screened allows a market-wide concentration ratio ♦.
- 3. The standards define counting units only.** Guidelines v2.2 define four units: download, listener, ad delivered and client-confirmed ad play ♦. Only four of the 34 companies on IAB Tech Lab's public record are certified for client-confirmed ad play ♦. Eleven were last certified more than 12 months before the review, the recertification interval the Compliance Guide sets, and the public list shows no status ♦. In the Media Rating Council's lists read on 28 September 2026, this review found no podcast or streaming-audio measurement service accredited by it ♦.
- 4. Attribution matches households, and no sampled product publishes the error.** IP, household or pixel matching is the documented primary method in 11 of the 12 attribution products that document one, and in 11 of 19 once products that name no method are added: above half, but narrowly ♦. The codes say how an exposure is linked to a sale, not whether the estimate is causal or reliable, and one product can document several designs: Podscribe also sells randomised holdouts ^[1]. Spotify Ad Analytics says its device graph generally matches 40% to 80% of the time ♦. This review found no independent causal test of commercial audio advertising on advertiser outcomes with

published design and results, in the sources screened, which did not include a systematic academic database search ♦.

5. **The attention and retention claims rest on insufficient evidence.** The most-cited audio attention study reports a modelled score equated to visual attention, from a study the sellers took part in ♦. The strongest design found is Pandora's own randomised test, in which one extra ad per hour cut mean listening time by 2.082% ♦. Every in-game retention claim found states no control, window or confidence interval, so none can show that players were not harmed ♦. Insufficient evidence is not refutation, and the class is wide: it holds Pandora's randomised test, which fails only the independent-funder test, beside claims with no study behind them.
6. **The rails are owned, but not closed on the record.** Filings show SiriusXM owns AdsWizz, iHeartMedia owns Triton Digital and Spotify owns Megaphone ♦ ♦ ♦. This review found no public term that gives an owner's inventory priority, and no published fee or take rate, in the sources screened ♦ ♦. On the registered count, the three owners' rails are 15 of the 43 audio supply integrations five DSPs name (35%), which contradicts the ownership part of H5 as registered. That counts named relationships, not spend, so whether most buying runs through owned rails is unresolved ♦.
7. **Agentic audio is protocol-ready, and the deal flow has barely started.** AdCP represents audio in its published schema ♦. The one documented agentic audio buy found, a Butler/Till pilot with iHeartMedia worth just under \$10,000, names no protocol in its release ♦. Of the AI voice tools found, only SiriusXM Media's documents voice-actor opt-in and approval of each ad ♦.
8. **Buyers say the gap is proof.** In the two buyer surveys with a stated base and period, one Australian and one of unclear geography, measurement is the leading class of constraint, and the narrative ranks third and fourth ♦. Two surveys describe their own respondents, not US audio buyers as a whole. The author's playbook named the buyer narrative as the bottleneck.
9. **On the Listen Quotient, the leaders document more; that is not the same as performing better.** Among sellers the field score is 44; Acast, Spotify and SiriusXM Media reach the top band, Most documented. Among ad-technology services the field score is 58, and none does. Acast is the only seller with a current certification at the top counting-assurance anchor ♦. Most radio groups have little public record on measurement, workflow or brand safety, and missing evidence is recorded as missing, never scored zero. 19 of the 24 seller bands are provisional. Scores are capped by the type of evidence, so a capability documented only by its vendor scores at most 4: a score reads as documented capability, discounted for its evidence.

What would change these findings

Independent measurement of listening, rather than delivery, at scale. An accredited podcast audience measurement service. A published incrementality study of commercial audio with its design, control and results. A randomised in-game study reporting day-7 retention with its control rate and confidence interval. Chapter 13 sets out each registered claim, its verdict and the evidence that would move it.

Limits

The paper scores what companies document in public; a private company can score low for saying little. Two buyer surveys could be coded; one was run with an audio seller and the other by a trade body that represents sellers. Several market figures were read through trade reporting. The vendor scores come from one AI-assisted scoring pass and a calibration pass; a blind AI second pass re-scored only the rows nearest a band line, and no human scored any cell. Status-sensitive facts were rechecked on 30 September 2026, the cutoff; the recheck found v2.3 of the podcast guidelines final and a few earlier items the record had missed, each logged in the corrections ledger. Every absence is bounded to the sources screened; no systematic academic database search was run. The research was AI-assisted. It is not peer reviewed or externally audited.

How to read it

Chapters 1 to 11 cover the channels, market, sellers, counting, rails, attribution, attention, brand safety, in-game audio, AI and the rules. Chapter 12 scores the vendors, chapter 13 gives the verdicts and chapter 14 holds the method and ledgers. Each chapter opens with a short summary. In the web edition, the Skim control cuts the paper down to those summaries, the figures and the instruments.

INTERESTS

The author has worked at Samba since May 2025. Samba is a TV measurement and ad data company. Before that he worked at Verve Group, Hearts & Science and Lotame. He co-leads the Signals & Measurement working group of AgenticAdvertising.org, which publishes AdCP, a protocol discussed in chapter 10, and he co-filed its radio measurement-parity work. No Fluff Advisory, the author's own practice, is a member of AgenticAdvertising.org, and two agents in its public registry, one for signals and one for sales, are registered under that membership; neither is an audio agent ^[3]. Triton Digital, scored in chapter 12, is one of the companies that launched AdCP ^[4]. Spotify, scored and profiled, lists Samba among the measurement companies it integrates with directly ^[5]. None of the author's current or former employers is scored. Membership of a standards body earns no score. No vendor funded, reviewed or saw the paper before publication. Every vendor is scored under the same published rules.

What counts as audio advertising

Audio advertising here means paid ads heard on five channels, counted in each channel's own units. The paper scores two kinds of product and lists the rest.

IN SHORT

This paper covers paid ads delivered in audio on broadcast radio and its streams, satellite radio, streaming music and digital radio, podcasts and in-game audio. Each channel keeps its own market and measurement tables. IAB Tech Lab's podcast counting standard, guidelines v2.2, final since 2 May 2024, was still listed as current on 28 September 2026 [♦]. Its section 6 defines four units: download, listener, ad delivered and client-confirmed ad play [♦]. None of them measures listening time, attention or an advertising outcome [♦]. Two cohorts are scored: audio inventory sellers and audio ad technology. Measurement vendors, demand-side platforms, creative tools and agencies are recorded without scores. Represented supply is counted once: SoundCloud's US inventory sits in the SiriusXM Media row, and YouTube audio will join it when live ^{♦ ♦}. Video podcast figures are context, because the main US podcast revenue series uses an audio-based definition [♦].

A buyer who says "audio" can mean a radio spot, a Pandora break, a host read or a sound ad inside a mobile game. Each is sold and counted its own way. This chapter fixes what the paper includes, and how each item is recorded, before any number appears.

Five channels, kept apart

The paper covers five channels. Broadcast radio includes the station's own online stream. Satellite radio means SiriusXM's subscription service. Streaming music and digital radio cover services such as Spotify, Pandora and online-only stations. Podcasts are episodes delivered as files or streams from a feed. In-game audio means audio ads placed inside games.

Each channel has its own counting system, so each keeps its own tables. Radio is sold on audience estimates. Nielsen Audio's people meter service is accredited by the Media Rating Council (MRC), the US body that accredits audience measurement, for monthly and average quarter-hour estimates in 24 markets ^[6, 7]. Streaming audio has its own MRC standard of January 2018, built on an audible ad impression of at least two continuous seconds of unmuted play ^[8]. Podcasts are counted from server logs under guidelines from IAB Tech Lab, the standards arm of the Interactive Advertising Bureau (IAB). So an audience estimate, an impression and a download are different series. This paper never adds them together.

In-game audio is in scope by format. A package that also sells visual placements inside games is split, and a companion paper on gaming scores the visual part. This review found no published estimate of US in-game audio advertising spend in the sources screened by the cutoff: one web search whose results were screened by title and snippet and not opened, and the IAB/PwC report, which has no audio split for gaming ^[9] ♦.

Four fields recorded apart

Every product is described in four separate fields. Device is where the ad is heard: smart speaker, phone, car or console. Content format is what surrounds it: music, talk, a podcast episode or a game. Delivery method is how it arrives: broadcast, satellite, stream or download. Commercial product is the thing the buyer signs for.

Vendors often merge these fields. A "smart speaker audience" names a device and says nothing about the content or the delivery. Devices are recorded but not scored; the channel breadth dimension scores channels only.

Four fields for a podcast ad

A podcast ad is recorded in four further fields. Speaker role is host, announcer or other. Voice production is human, synthetic or mixed. Insertion is baked-in, meaning recorded into the episode file, or dynamic, meaning stitched in when the file is requested. Buying method is direct, programmatic guaranteed, private marketplace or open auction.

Prices and measurement are compared only within a matched combination of the four. A host read recorded into the file and bought direct is a different product from a synthetic voice ad inserted at request time and bought at auction. The fields also change what can be counted. Under guidelines v2.2, a dynamic ad counts as delivered only when 100% of its bytes are downloaded. A baked-in ad counts when the part of the file that holds it was downloaded ^[10] ♦. Buying method limits where an ad can run. Megaphone's private marketplace deals, non-guaranteed auctions sold to demand-side platforms, can deliver only in shows enabled for the Spotify Audience Network (SPAN) ^[11] ♦. Chapter 10 covers synthetic voices, and chapter 11 the endorsement rules for host reads.

The four counting units

IAB Tech Lab released guidelines v2.2 for public comment on 22 February 2024 and as final on 2 May 2024. On 28 September 2026 its guidelines page still listed v2.2 as current ^[12, 13, 14] ♦. Section 6 defines four metrics ^[10] ♦.

A valid download delivers at least the file header plus one minute of content. A listener is a count of unique pairs of IP address and user agent in a stated time frame. The guideline itself says this proxy can double count when a device changes address and undercount when addresses are recycled ^[10] ♦. An ad delivered follows the byte and position rules above, and only inside a valid parent download. A client-confirmed ad play needs a tracking beacon sent by the listening app. It should report ad start and quartile markers where possible. The guideline notes that aggregator apps such as Apple Podcasts and Spotify

typically send no playback data to publishers, so podcast measurement rests on server logs [10] ♦.

Certification follows the same four units. On 28 September 2026 IAB Tech Lab's public record listed 34 companies certified against v2.2. Of those, 17 were certified for ad delivery and 4 for client-confirmed ad play [15] ♦. On the registered test, H2 is supported. Guidelines v2.2 define four counting units; none measures listening time, attention or outcomes; certified scope on IAB Tech Lab's record covers counting only. Chapter 4 sets out that test.

Two version traps follow from this. Version 2.3 was open for comment from 21 July to 19 August 2026 and was released as final on 29 September 2026, the day after this review first read the guidelines pages. It keeps the same four metrics with reworded definitions [16, 17, 18, 19] ♦ ♦. The Podcast Measurement Compliance Guide carries its own numbering. Its Version 2.3, of April 2024, implements guidelines v2.2 [20] ♦. A reference to "version 2.3" can mean either document.

Who is scored, and who is listed

The paper classifies each named service by what the buyer purchases. It reads the service description and the selling agreement, and ignores the company name and the word "exchange". Every decision sits in a product register of 83 products: 34 scored, 47 listed and 2 historical.

Cohort A is audio inventory sellers. A seller sells audio inventory it owns or represents under contract. Radio groups belong here whatever their digital share, and so do in-game audio sellers. Cohort B is audio ad technology: separately supplied hosting, insertion, ad-serving, exchange or supply-side platform services. Cohort A is scored on all 12 dimensions. Cohort B is scored on every dimension except creative, because these services do not make ad creative. The Listen Quotient, the paper's summary score of documented capability, places rows in bands within a cohort. It never ranks a seller against an ad-tech service. Chapter 12 gives the results.

Several calls follow from that rule. Spotify's 20-F, its annual report as a foreign issuer, defines SPAN as a podcast-only marketplace. Spotify sells music, podcast, video and display ads across its whole ad-supported service. So the seller row is named Spotify Advertising [21] ♦. The filing describes the Spotify Ad Exchange as a marketplace for real-time bidding, announced on 1 April 2025, and Spotify's pages describe it as access to Spotify inventory through more than 40 demand-side platforms (DSPs). This paper infers from that record that the exchange is a buying route into the Spotify row [21, 22] ♦. Megaphone, its hosting and insertion service for publishers, stays in cohort B [23]. AdsWizz and Triton Digital each document a publisher platform and a marketplace. The paper scores each as two cohort B rows. That split is an inference from their documentation, and it may count some of one company's capability twice [24, 25, 26] ♦. A parent group's profile can describe its subsidiaries. It never pools their capabilities into one score.

A service whose role the record cannot settle is listed. TuneIn is one case: on the pages read, who sells its US inventory is unsettled [27, 28]. Announced and retired products are listed too.

Four kinds of company are recorded without scores. Measurement and attribution vendors go into a measurement table that records method, match level, match rate, certification, invalid-traffic filtering and validation. They include Edison Research at SSRS, Nielsen Audio, Podtrac, Podscribe, Spotify Ad Analytics, Claritas and Magellan AI. DSPs that buy audio are listed, among them The Trade Desk, Display & Video 360, Amazon DSP, StackAdapt and Viant. So are creative and voice tools such as AMA, Instreamatic and Veritone's AI products, and Oxford Road, an agency. None of them sells audio inventory or supplies insertion to publishers, so the seller and ad-tech anchors do not fit them. Two records are historical: Chartable, whose features Spotify said would be removed on 12 December 2024, and Veritone One, sold to Oxford Buyer, LLC on 17 October 2024 [29, 30, 31, 32]. A retirement and a sale show nothing about whether a method worked.

Represented supply, counted once

Some inventory is sold by a company that does not own it. The paper counts it once, at the seller that represents it. SiriusXM Media is a trade name of Pandora Media, LLC. SiriusXM is SoundCloud's exclusive ad sales representative in the US and some European countries, and holds only an equity-method stake in SoundCloud [33, 34] ♦. SoundCloud's US inventory therefore sits inside the SiriusXM Media row and has no row of its own.

YouTube's audio-first inventory is scheduled to follow. SiriusXM Media announced on 22 April 2026 that it would become YouTube's exclusive US audio advertising representative. On 28 September 2026 its FAQ still said buying would start in "Fall 2026". Google blocked new US-targeted audio campaigns in Display & Video 360 from 1 September 2026 and stops US auction-based audio serving on 5 November 2026 [35, 36, 37] ♦. The inventory is listed as announced. If it goes live, it will be counted once, in the SiriusXM Media row, and never also as a Google row.

The same rule applies elsewhere. Westwood One stays inside the Cumulus row, because Cumulus reports one segment and its internal team sells the network inventory of 7,800+ affiliated stations [38] ♦. LiveOne and Live365 inventory sits inside DAX US, Global's US digital audio business [39, 40, 41].

Why video podcasts are context only

A video view and an audio download are different delivery units. This paper uses a video podcast figure only as context, unless the measured inventory is sold as audio. The main US revenue series supports that line. IAB/PwC put US podcast advertising revenue at \$2,862.2 million in 2025, up 17.6%, on what the report calls "the traditional, audio-based definition" of a podcast [9] ♦.

Other counts mix in video. Owl & Co, in its own estimate as reported by Podcast News Daily, puts US podcast revenue at \$6 billion in 2025, about 2.1 times the IAB/PwC figure. Its count adds consumer revenue, branded work and video, and it says video drives 41% of US net podcast advertising revenue. The wider scope is the likely reason for the gap, which is not broken down in public [42, 43] ♦. Edison Research at SSRS's Infinite Dial 2026, released with support from SiriusXM Media, found that 58% of Americans aged 12 and over had

consumed a podcast in the last month. Its podcast measure counts watching as well as listening ^[44] ♦.

The standards are moving toward video. Version 2.3 applies the four metrics to audio and video podcasts delivered through open feeds, and IAB Tech Lab plans a v3.0 for public comment in the middle of 2027 ^[18, 17, 45, 19]. Until a final standard counts video delivery, video figures appear in this paper as context next to the audio tables.

How big it is, and by whose count

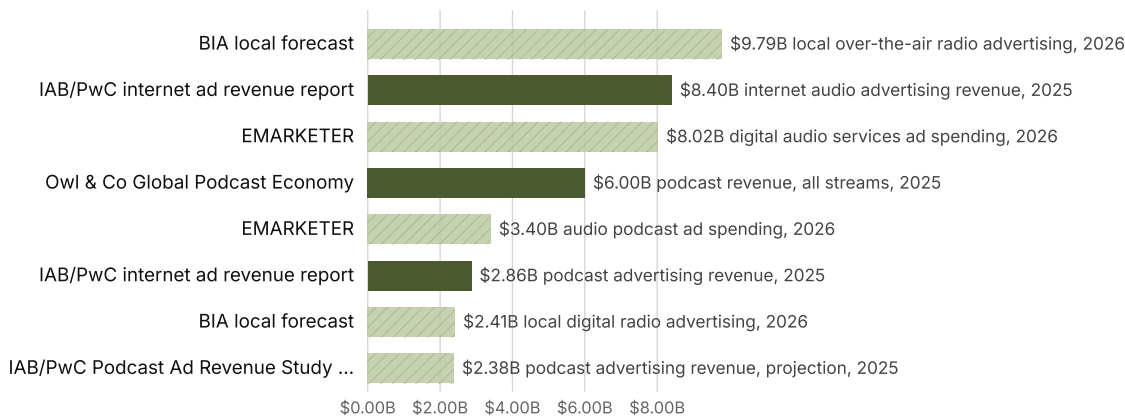
Five public series put a dollar figure on parts of US audio advertising. They count different things for different parts of the market, so none of them is the size of the whole, and they cannot be added together.

IN SHORT

IAB/PwC counts \$8.4 billion of US internet audio advertising revenue in 2025. Podcasts were \$2,862.2 million of it. Both are revenue reported by sellers ♦ ♦. EMARKETER's 2026 forecast for US digital audio, read only third-hand, is \$8.02 billion. That is below IAB/PwC's 2025 actual, although EMARKETER's definition is wider ♦. For radio, the only current public level is BIA's local forecast: \$9.79 billion over the air and \$2.41 billion digital in 2026 ♦. This review found no current public level estimate of total US radio advertising that includes national spot and network radio, in the sources screened ♦. It found no in-game audio estimate from an original market-research publisher in the sources screened ♦. SiriusXM's filing gives \$157 million for a segment that mixes satellite radio with its app ♦. Podcast projections published by IAB missed in both directions ♦.

Audio advertising in this paper covers broadcast radio and its streams, satellite radio, streaming music and digital radio, podcasts and in-game audio. Chapter 1 sets out those channels. This chapter asks how much money moves through them in the US, and whose figure says so.

US AUDIO ADVERTISING, BY WHOSE COUNT (US\$ BILLIONS)



Hatched bars are forecasts. Figures differ in what they count (seller revenue or advertiser spend, local or national, audio or all podcast revenue) and are not additive.

The published estimates measure different things, so none of them is the size of US audio advertising. Each bar is one published figure for US audio advertising or a part of it, labelled with its publisher, metric and year. IAB/PwC counts seller revenue for internet audio; EMARKETER models advertiser spend for digital audio; BIA forecasts local radio only; Owl & Co counts all podcast revenue, not only advertising.

Units: US\$ billions · Scope: US; 2025 actuals and 2025 to 2026 forecasts as published by the cutoff · Sources [50] [9] [47] [42] [55]

Not additive: the series overlap (podcasts sit inside internet audio; local digital radio overlaps streaming). Some values were read through trade reporting, as the estimates table records.

The published series and what each counts

The longest-running series is the Internet Advertising Revenue Report. IAB, the Interactive Advertising Bureau, commissions it, and PwC conducts it. IAB is a trade body whose members include audio sellers. The report puts US internet audio advertising revenue at \$8.4 billion in 2025, up 10.2% from \$7.6 billion in 2024. That is 2.8% of \$294.6 billion in total US internet advertising revenue. Its audio format covers podcasts, streaming music and streaming radio [9, 46] ♦. The unit is what the report calls GAAP commissionable earned revenue, GAAP being US generally accepted accounting principles. It counts US-based revenue only. It is gross of traffic acquisition cost, or TAC, the share paid on to publishers, for companies that report on a gross basis. The report is built from a survey of companies plus an estimate for those that did not take part. PwC does not audit the figures [9, 46].

Inside that line, IAB/PwC puts US podcast advertising revenue at \$2,862.2 million in 2025, up 17.6% from \$2,433.1 million. It uses what the report calls "the traditional, audio-based definition" of a podcast [9] ♦. Podcasts were therefore about 34% of internet audio revenue in 2025, against 32% in 2024. That leaves about \$5.5 billion for streaming music, streaming radio and other online audio. The report publishes no line for that residual. This paper derives it, and it cannot be split further from public data [9] ♦. Audio here is a format. A display or video ad sold by an audio company falls in another format line.

EMARKETER, a subscription research publisher, models advertiser spend. Its figures reached this review third-hand, because its own pages refused this project's tools: PPC Land reported them from a members-only deck by VAB, a video advertising trade body,

circulated on 15 September 2026. On that route, EMARKETER's June 2026 forecasts put US digital audio services ad spending at \$8.02 billion in 2026, rising to \$9.79 billion in 2030. US audio podcast ad spending is \$3.40 billion in 2026, 42% of digital audio, rising to \$4.69 billion, or 48%, in 2030. The VAB slide's own callout says about 50% for 2030 ^[47, 48] ♦. By 30 September EMARKETER's forecast pages carried a newer vintage, labelled August to September 2026, whose values are paywalled, so the June figures used here are superseded ^[49]. EMARKETER's digital audio definition includes broadcast stations' digital revenue, satellite radio services, pure-play and streaming music services and podcasts, in audio and non-audio ad formats. Whether it is gross or net could not be read.

BIA Advisory Services forecasts local advertising and sells the forecast by subscription. Its clients include local media. BIA's September 2026 release gives no radio lines; Radio Ink reported them. On that report, BIA puts US local over-the-air radio advertising at \$9.79 billion in 2026, up 1.6% on 2025, and local digital radio at \$2.41 billion, up 0.8%. Without political spending, over-the-air falls 1.3% to \$9.49 billion and digital radio 2.1% to \$2.34 billion. Radio is 6.5% of BIA's \$186.1 billion local total for 2026 ^[50, 51] ♦. National spot, network radio and national satellite sit outside a local forecast. BIA does not define "digital radio" in the release, and it calls the figures both revenue and spend.

Satellite radio has one public figure, and it belongs to one company. SiriusXM's 10-K for 2025 reports \$157 million of advertising revenue in its SiriusXM segment, down 6% from \$167 million. That segment covers satellite radio and the SiriusXM app together. Its Pandora and Off-platform segment reported \$1,615 million, up 1%. That line covers audio, display and video ads on and off SiriusXM's own platforms, including podcasts, programmatic sales and technology fees. SiriusXM records advertising revenue net of agency fees and gross of revenue share ^[34] ♦. So no pure satellite-radio advertising figure is published. The Pandora line is not an audio-inventory figure either. Chapter 3 takes up the sellers' own filings.

Owl & Co, an advisory and research firm, counts podcast revenue of every kind. As reported by Podcast News Daily, it puts US podcast revenue at \$6 billion in 2025, up 27%. Its report tracks five revenue streams: direct advertising, programmatic advertising, consumer revenue, branded or work-for-hire revenue and other revenue. It counts video podcasts. It puts US video podcast revenue at \$2.3 billion and says video drove 41% of US net podcast advertising revenue ^[42, 43] ♦. Who paid for the report is not known. Only the trade report of it was read. Its \$6 billion is about 2.1 times IAB/PwC's podcast line. The wider fence, with non-advertising revenue and video inside it, is the likely reason. That is an inference. The gap is not broken down in public.

Why the figures do not reconcile

The series differ on six points. IAB/PwC and SiriusXM report seller revenue, while EMARKETER models advertiser spend. IAB/PwC counts gross of TAC where a company reports gross, SiriusXM counts net of agency fees, and EMARKETER's basis could not be read. IAB/PwC counts internet audio only, while BIA covers over-the-air radio. BIA counts local markets only. IAB/PwC counts audio-based podcasts, while Owl & Co adds video. And a format fence drops display and video sold by audio companies from IAB/PwC's audio line.

The largest gap on the record runs against those fences. EMARKETER's 2026 digital audio forecast, \$8.02 billion, sits below IAB/PwC's 2025 actual of \$8.4 billion, although EMARKETER's stated definition is wider. EMARKETER's 2026 podcast forecast, \$3.40 billion, is 18.8% above IAB/PwC's 2025 podcast actual. That is more than twice the growth buyers told IAB to expect ^[9, 47, 52] ♦. Possible reasons include the seller-revenue basis, EMARKETER's own gross or net convention, and podcast ads sold outside the companies PwC surveys. None is confirmed by the sources. The EMARKETER values are third-hand, so this comparison is an inference on unconfirmed inputs. PPC Land itself says the two series cannot be joined into one growth line ^[47].

The buyer growth figure is a third kind of number. In IAB's survey of more than 200 brand and agency decision-makers, released on 10 September 2026, US podcast ad spend is projected to grow 8.7% in 2026. That was 8.6% in January. It trails social media at 16.5%, connected TV at 15.6%, commerce media at 13.6% and digital video excluding connected TV at 9.4% ^[52, 53] ♦. It is a buyer's intention, stated as a growth rate. It has no level and should not be applied to a seller-revenue level without saying so. Trade reporting adds +3.6% for digital audio excluding podcasts. IAB's release does not carry that figure ^[53].

Audience figures are a separate series again. Edison Research at SSRS released *The Infinite Dial 2026* with support from SiriusXM Media, an audio seller. In a January 2026 survey of 2,050 people aged 12 and over, 58% of Americans aged 12+ had consumed a podcast in the last month, an estimated 167 million people. And 81%, or 233 million, had listened to online audio. Its podcast measure counts watching as well as listening^[44] ♦. That is reach, drawn from a survey. It measures neither revenue nor ad delivery. Chapter 4 keeps downloads, listeners and ad deliveries apart for the same reason.

Sellers also frame the market by time. IAB's October 2024 audio guide cites a 2021 WARC figure: 31% of media time spent with audio against 9% of media budgets. It also puts digital audio at 20% of US adult digital media time but 3.1% of 2023 digital ad revenue ^[54] ♦. That is an advocacy frame from a trade body. A share of time is not a revenue denominator. On IAB/PwC's own chart, audio was 2.8% of internet revenue in 2025. Chapter 13 codes the constraints buyers report in the two surveys that could be coded.

Market-size reconciliation

Which estimates include which formats, surfaces and markets, and which cannot be combined. Values are as published; no estimate here is the paper's own.

Machine-readable copy: [data/estimates.csv](#).

ESTIMATE	PUBLISHED	METRIC	VALUE	YEAR	GEOGRAPHY	INCLUDES	EXCLUDES	COMBINABLE WITH	SRC
IAB/PwC Internet Advertising Revenue Report	2026-04	US internet audio advertising revenue	\$8.4B	2025	US; seller revenue (GAAP commissionable earned, gross of TAC where reported gross)	podcasts; streaming music; streaming radio (online audio environments)	over-the-air broadcast radio; satellite broadcast; display or video ads sold by audio companies (other formats)	Podcast line is inside it. Not additive with EMARKETER digital audio or BIA digital radio (overlapping fences).	[9]
IAB/PwC Internet Advertising Revenue Report	2026-04	US podcast advertising revenue	\$2.862B	2025	US; seller revenue	podcast advertising, audio-based definition	video-podcast advertising sold as video (per 'audio-based definition')	Subset of IAB/PwC audio. Not comparable in level with EMARKETER spend or Owl & Co total revenue.	[9]
IAB/PwC Podcast Ad Revenue Study FY2023	2024-05	US podcast advertising revenue, projection	\$2.379B	2025	US; net commissionable revenue, PwC Outlook growth	podcast publishers and ad networks	non-US revenue	Superseded by the FY2025 actual (\$2.862B).	[55]
IAB 2026 Outlook Study (September update)	2026-09-10	US podcast ad spend growth, buyers' plans	+8.7%	2026	US; buyer survey, 200+ decision-makers	podcast ad spend as buyers plan it	seller revenue	A growth rate from buyers; never apply it to a seller-revenue level without saying so.	[52]
EMARKETER (via VAB via PPC Land)	2026-06	US digital audio services ad spending	\$8.02B	2026	US; modelled advertiser spend	digital revenue of local and national broadcast radio stations; satellite radio services; pure-play online radio; streaming music; podcast advertising and sponsorship; audio and non-audio formats	over-the-air radio	Overlaps IAB/PwC audio and BIA digital radio; not additive.	[47]
EMARKETER (via VAB via PPC Land)	2026-06	US audio podcast ad spending	\$3.40B	2026	US; modelled advertiser spend	audio advertising within a podcast		Subset of EMARKETER digital audio (42%).	[47]
BIA U.S. Local Advertising Forecast (via Radio Ink)	2026-09-14	US local over-the-air radio advertising	\$9.79B	2026	US local markets	local over-the-air radio incl. political	national spot; network radio; satellite	Only over-the-air line found; add national/network from another source only if its fence is disclosed.	[50]
BIA U.S. Local Advertising Forecast (via Radio Ink)	2026-09-14	US local digital radio advertising	\$2.41B	2026	US local markets	local digital radio incl. political	national	Overlaps IAB/PwC streaming radio and EMARKETER digital audio; not additive.	[50]

ESTIMATE	PUBLISHED	METRIC	VALUE	YEAR	GEOGRAPHY	INCLUDES	EXCLUDES	COMBINABLE WITH	SRC
SiriusXM Form 10-K	2026-02-05	SiriusXM segment advertising revenue (satellite radio and SiriusXM app)	\$157M	2025	US; company revenue, net of agency fees	ads aired on satellite radio and SiriusXM streaming	Pandora and Off-platform	One company; not a market estimate.	[34]
Owl & Co Global Podcast Economy (via Podcast News Daily)	2026-05-20	US podcast revenue, all streams	\$6.0B	2025	US; revenue	direct and programmatic advertising; consumer revenue; branded/work-for-hire; other; video podcasts		Not comparable with IAB/PwC podcast advertising; different fence.	[42]
Gadsme (reported by GamesBeat)	2022-09-08	'audio ads market' value (definition not given)	about \$200 million	2022	worldwide	not stated	not stated	no	[62]
Gadsme (reported by GamesBeat)	2022-09-08	additional in-game audio ads value	\$50 million	2026	worldwide	not stated	not stated	no	[62]
eMarketer (quoted in IAB release)	2024-03-26	ad spend in games, all formats (context; not audio)	\$8.53 billion	2024	not stated in release (IAB US context)	all ad formats in games	not stated	no	[63]
eMarketer (quoted in IAB release)	2024-03-26	ad spend in games, all formats (context; not audio)	\$11.49 billion	2027	not stated in release (IAB US context)	all ad formats in games	not stated	no	[63]

Actuals against forecasts

IAB's standalone podcast revenue study was last found as its FY2023 edition, published in May 2024. That study compiled "net commissionable advertising revenue" from podcast publishers and networks. The Internet Advertising Revenue Report's survey definitions apply to the report as a whole and are not restated for its podcast line. Both documents show 2023 at \$1,925.2 million ^[55, 9, 56] ♦. This review found no FY2024 or FY2025 standalone edition in IAB's own catalogue, as searched on 28 September 2026. IAB's September 2026 Podcast Upfront recap gave no revenue figure ^[57].

The projections in that May 2024 study missed. They were not IAB's or respondents' forecasts. They applied PwC Global Entertainment & Media Outlook growth rates to the 2023 base. They put 2024 at \$2,164.7 million and 2025 at \$2,379.0 million. Actuals came in 12.4% and 20.3% above them. The study's 2026 projection, \$2,562.1 million, is already below the 2025 actual. The next miss ran the other way. In October 2025 an IAB staff member said 2025 would top \$3 billion. That was at least 4.8% above the \$2,862.2 million actual ^[55, 9, 58] ♦. The October figure was a staff statement reported in trade press.

BIA's radio lines moved between vintages in ways the public record does not explain. As Radio Ink reported, BIA's April 2026 vintage had 2026 local over-the-air radio at \$10.08 billion. It stated that as +1.8% from \$9.91 billion in 2025, though the two levels give +1.7%. Digital radio was \$2.38 billion, up 5.0%. The September vintage has over-the-air at \$9.79 billion, up 1.6%. That implies a 2025 base near \$9.64 billion. Radio Ink headlined the September vintage as a lift to radio's outlook, although its over-the-air level is lower ^[59, 50] ♦. Radio Ink's April report said BIA had changed its method that cycle to break out digital out-of-home. Neither article nor BIA's releases tie that change to the radio lines. A BIA restatement of its 2025 base would explain the gap, but none is documented in public.

What no public source sizes

This review found no current public level estimate of total US radio advertising that includes national spot and network radio, in the sources screened by 28 September 2026. BIA's forecast is local only. EMARKETER's radio forecast could not be opened. PwC's Global Entertainment & Media Outlook sits behind a subscription and was not opened. An Omnicom Media spokesperson confirmed in January 2026 that Magna's December 2025 posting was the last of Interpublic's public ad forecasts ^[60, 51, 48, 9] ♦. WPP Media's June 2026 global midyear release describes audio as plateauing within global content-driven advertising. It gives no audio figure. In the pages read, neither agency group supplies a public 2026 US audio figure. WPP Media's US-specific edition was not screened ^[61, 60] ♦.

One growth rate reaches beyond local radio. The IAB/PwC report quotes PwC's Outlook as showing advertising revenue in its "Music, radio and podcast" segment up 1.3% in 2025. By PwC's segment definition, that advertising covers radio stations and networks, podcast advertising and live-music sponsorship. The page gives no level and does not state the geography ^[9]. A first reading took it for a mix of consumer and advertising spending; the verifier showed it sits on a chart of advertising revenues. If the figure is for the US and its podcast part grew near IAB/PwC's 17.6%, the rest of the segment, radio and live-music sponsorship, grew by less than 1.3%. That is this paper's inference. The source does not state it.

Satellite radio has no market estimate in the sources screened. The SiriusXM segment line above is one company's revenue, and it mixes satellite broadcast with the company's streaming app ^[34].

In-game audio has no estimate from an original market-research publisher. This review searched for one from IAB/PwC, EMARKETER, Magna, WPP Media, Newzoo and Circana, and found none in the sources screened by the cutoff. The only figure found is a vendor's belief. In September 2022 Gadsme, which sells in-game ads, told GamesBeat that audio ads are worth about \$200 million worldwide and that in-game audio "can be an additional \$50m in 2026". It gave no definition or method ^[62] ♦. An EMARKETER projection quoted by IAB in March 2024 has ad spend in games rising from \$8.53 billion in 2024 to \$11.49 billion by 2027, with no audio breakout ^[63]. The IAB/PwC report defines a gaming format and reports gaming advertising growth, also with no audio split. The market-size stream's own search was one web search, whose results were screened by title and snippet and not opened ^[9] ♦. Chapter 9 covers in-game audio as a format.

Using the figures

Each series answers one question. IAB/PwC gives what US companies reported as internet audio and podcast ad revenue in a finished year. EMARKETER gives modelled advertiser spend on digital audio, read [here](#) only third-hand. BIA gives the local radio forecast. SiriusXM's filing gives one company's advertising revenue. Owl & Co gives podcasting's revenue from every source, video included.

The overlaps block any total. Podcasts sit inside IAB/PwC's internet audio. BIA's local digital radio overlaps IAB/PwC's streaming radio and EMARKETER's digital audio. EMARKETER's digital audio includes satellite radio services that SiriusXM's segment also covers. Adding BIA's over-the-air line to IAB/PwC's internet line would mix a local forecast with a national actual counted as seller revenue. It would still leave out national spot, network radio and satellite. A single US audio advertising figure would need all of those fences on one basis. This review did not find one in the sources screened by the cutoff.

Who sells it

Audio advertising is sold by radio groups, streaming services, podcast networks and a few in-app sellers, and each reports it on its own basis. The filings show which lines grew and which shrank in 2025. They cannot show how concentrated the market is.

IN SHORT

In 2025, broadcast revenue fell at each of the five radio groups filing with the Securities and Exchange Commission (SEC) that report a broadcast line, while iHeartMedia's podcast line and the three listed podcast sellers grew. iHeartMedia's podcast revenue rose 25.6% to USD 563.7 million and its broadcast radio revenue fell 5.4% ♦. Spotify's global Ad-Supported revenue fell 1% to EUR 1,836 million, a figure that includes display and video ♦. Only iHeartMedia and Audioboom disclose a podcast figure that can be set against the IAB/PwC US total, at about 19.7% and 2.6%, on different definitions ♦. No market-wide concentration ratio can be built from the filings screened ♦. Audacy emerged from Chapter 11 on 30 September 2024. Cumulus's plan was confirmed on 15 April 2026, and this review found no emergence by 29 September 2026 ♦. No source screened ties a restructuring or exit to the failure of an audio format.

This chapter names the sellers from their own filings and annual reports. A seller's revenue is not advertiser spend. Some sellers book gross, some net, and some lines include display, video or barter. Each figure below carries the issuer's own definition, and none is added to another.

What the filings report

Spotify reports annually on Form 20-F and files interim results on Form 6-K. In 2025 its Ad-Supported segment took EUR 1,836 million, down 1% from EUR 1,854 million, or 11% of total revenue. Direct music channels and podcast ad sales fell EUR 116 million, on lower fixed CPMs (prices per thousand impressions) and fewer music impressions sold. Automated channels rose EUR 103 million ^[21] ♦. The figure is global and covers display and video as well as audio. From 2026 Spotify moved some activities from Ad-Supported to Premium and restated prior periods. On that basis Ad-Supported revenue was EUR 831 million in the first half of 2026, down 2%, which Spotify attributes mainly to foreign exchange ^[64].

Sirius XM Holdings reported 2025 advertising revenue of USD 1,772 million. The SiriusXM segment took USD 157 million, down 6%. Pandora and Off-platform took USD 1,615 million, up 1%, on podcasts, programmatic and higher technology fees, partly offset by weaker

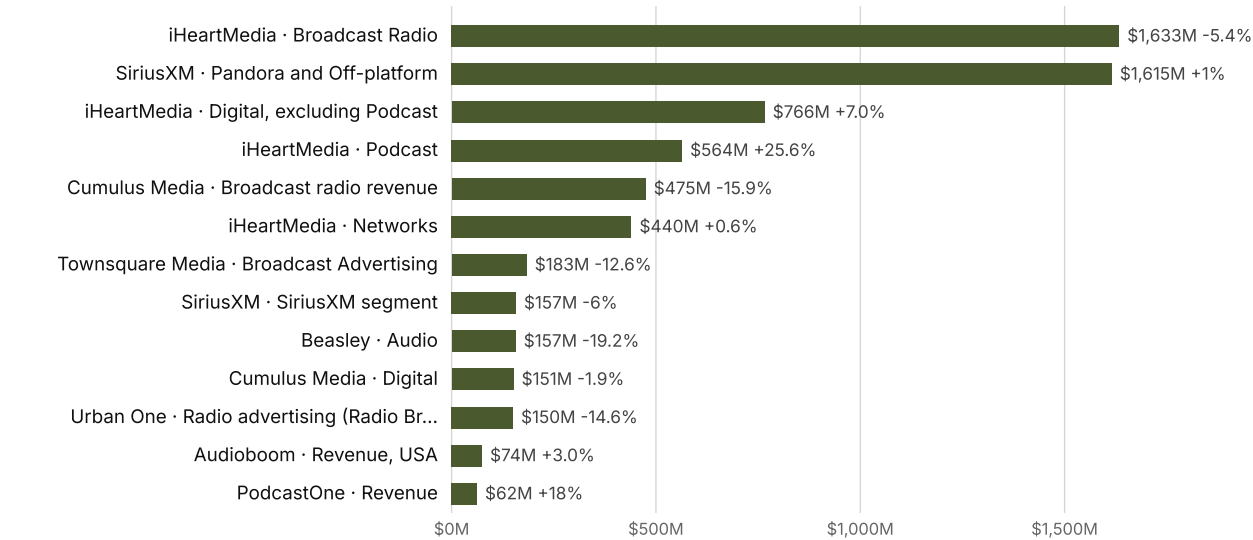
demand in streaming music ^[34]. That line includes display, video and the technology fees of AdsWizz. SiriusXM books advertising gross of revenue-share payments to third parties and net of agency fees, so the line includes money later paid to represented publishers and creators ^[34] ♦. Pandora's ad-supported listener hours, counted from bytes served whether or not anyone hears the whole track, fell 2% to 9.75 billion. Pandora's advertising revenue per thousand listener hours, which excludes off-platform revenue, fell 9% to USD 91.78 ^[34, 65] ♦.

In 2025 iHeartMedia's Broadcast Radio revenue fell 5.4% to USD 1,633.4 million. Podcast revenue rose 25.6% to USD 563.7 million, from USD 448.8 million ^[66] ♦. Non-cash trade and barter revenue rose to USD 381.3 million from USD 261.8 million. The 10-K ties that increase to Digital excluding Podcast and to the Multiplatform group, and attributes podcast growth mainly to advertiser demand. It does not say how much trade sits inside podcast revenue ^[66] ♦. In the first half of 2026, podcast revenue rose 23.5% to USD 309.3 million. Broadcast Radio rose 3.1%, and the issuer attributes that rise to non-cash trade, partly offset by lower spot revenue ^[67].

The other radio groups that file with the SEC reported falls. Cumulus Media's 2025 net revenue fell 10.3% to USD 741.7 million, with broadcast radio at USD 474.5 million, down 15.9% by this review's arithmetic. Cumulus says its digital decline came largely from "the loss of certain podcast relationships" ^[38]. Urban One's radio advertising revenue fell 14.6% to USD 150.0 million. Radio and Reach Media made up 45% of its net revenue, against 42% for cable television ^[68]. Beasley's audio revenue, which counts aired spots including trade, fell 19.2% to USD 156.5 million ^[69]. Townsquare's broadcast advertising net revenue fell 12.6% to USD 183.4 million ^[70]. The issuers note that 2024 was a political year, so part of each fall is cyclical.

Three listed podcast sellers report on other bases. Audioboom Group plc reported 2025 revenue of USD 80.4 million, up 10%, of which USD 74.2 million, or 92%, came from US customers. It books revenue gross, as principal ^[71] ♦. Acast's net sales were SEK 2,516.9 million (Swedish kronor), up 29%. Its North America segment took SEK 964.2 million, up 60%. Customers located in the US accounted for 34.8% of net sales ^[72, 73]. PodcastOne, majority-owned by LiveOne, reported USD 61.7 million for the year to 31 March 2026, up 18%, with USD 3.0 million of the growth from barter ^[74].

AUDIO REVENUE LINES AS SELLERS REPORT THEM, FY2025 (US\$ MILLIONS)



Lines are defined by each company and are not comparable: some include trade, subscriptions or display, and PodcastOne's year ends 31 March 2026. Spotify (EUR, global) and Acast (SEK, North America) are left out.

Broadcast lines shrank in 2025 while podcast lines grew; no filing gives a market total to share them against. Fiscal 2025 audio revenue lines in US dollars, as each company reports them, with the change on the prior year. iHeartMedia's podcast line grew 25.6% while its broadcast line fell 5.4%; Cumulus's broadcast line fell 15.9%.

Units: US\$ millions · Scope: US-reporting companies with a separable audio line; fiscal 2025 · Sources [66] [34] [38] [70] [69] [68] [71] [74]

Company definitions differ (net or gross, trade included or not). Lines are shown side by side, never summed or shared against a market total.

Concentration, and the missing denominator

The IAB/PwC Internet Advertising Revenue Report put 2025 US podcast advertising revenue at USD 2,862.2 million, up 17.6%, on what it calls the traditional, audio-based definition of a podcast [9]. The Interactive Advertising Bureau (IAB) is a trade body whose members include audio sellers, and it commissions PwC to compile the figure. Against it, iHeartMedia's 2025 podcast revenue equals about 19.7%, and Audioboom's revenue from US customers about 2.6% [66, 71, 75] ♦. Neither ratio is a market share. iHeartMedia does not state that its podcast figure is US-only or audio-only. Audioboom's is by customer location, which may differ from where the ads were heard.

The other large sellers give no figure that fits. Spotify reports Ad-Supported revenue globally, with display and video included. SiriusXM does not split podcast revenue out of Pandora and Off-platform. Cumulus folds podcasts into digital. Acast reports a North America segment and the share of net sales from US-located customers (34.8% in 2025), but not US audio advertising revenue, so neither figure matches a US podcast advertising denominator. PodcastOne's year ends in March. Audacy and Salem no longer file periodic reports [21, 34, 38, 76, 77] ♦. This review found no public basis, in the filings screened by the cutoff (which did not include Amazon's segment disclosure), for a market-wide concentration ratio in US audio or podcast advertising. Adding sellers' revenues would also count some dollars twice, because SiriusXM, Audioboom and PodcastOne book gross, including amounts passed to creators and publishers.

Restructurings and exits, by type of event

An insolvency, a debt exchange, a product retirement, a divestiture and an acquisition are different events. None of them shows that a format failed unless a source establishes the cause.

Audacy is a completed insolvency. Its prepackaged plan, agreed with creditors before filing, took effect and the company emerged from Chapter 11 on 30 September 2024. Pre-petition debt holders received the new common equity and existing shares were cancelled. It filed a Form 15 the next day to stop SEC reporting, and continues as a private company ^[76, 78] ♦.

Cumulus is an insolvency still in progress. Nasdaq suspended its Class A stock on 2 May 2025 ^[38]. On 4 March 2026 Cumulus and substantially all its subsidiaries filed prepackaged Chapter 11 petitions in the Southern District of Texas, and the court confirmed the plan on 15 April 2026. The plan gives secured 2029 creditors 95% of the new equity, before dilution from a management incentive plan, and cancels existing shares. The reorganised company does not intend to list or keep reporting to the SEC ^[79, 80, 81] ♦. Confirmation is not emergence. The plan takes effect only after approval by the Federal Communications Commission (FCC) and other conditions. The FCC granted the licence transfers to the post-reorganisation shareholders on 17 August 2026, according to its own public notice ^[82]. The debtors have extended the emergence deadline to 27 October 2026, the latest date their restructuring agreement allows ^[81, 83] ♦. This review found no filing, release or notice of the plan's effective date in the sources screened by 30 September 2026 ^[84, 85, 86]. Emergence was pending at the time of writing.

Two groups restructured debt out of court. Urban One refinanced substantially all its debt on 18 December 2025 through an exchange offer and new notes ^[68]. On 1 May 2026 Beasley's holders exchanged about USD 184.1 million of 2028 second-lien notes for USD 98.5 million of 2027 payment-in-kind notes. Beasley says their conversion into equity may result in a change of control ^[87, 88] ♦. At the end of September it sold shares and warrants to one institutional investor and, with the sale of two radio stations, set the proceeds to pay down its revolving loan and redeem about \$11.4 million of first-lien notes ^[89]. PodcastOne and MediaCo each report substantial doubt about continuing as a going concern ^[74, 90]. Salem Media Group left SEC reporting in February 2024 and on 20 August 2026 announced completion of its acquisition by The Christian Community Foundation, Inc., d/b/a WaterStone ^[91, 77].

Chartable is a product retirement. Spotify, which bought it in 2022 ^[92], announced its closure on 27 September 2024 and stopped onboarding at once. It said features would be removed on 12 December 2024, and that SmartLinks and SmartPromos would move into Megaphone. Both sources predate 12 December and describe a plan ^[29, 30] ♦. The stated reason was a re-focus. No source screened establishes that podcast attribution failed.

Veritone One is a divestiture. Veritone sold the agency to Oxford Buyer, LLC, an affiliate of Insignia Capital Group, on 17 October 2024, for up to USD 104.0 million. Veritone One and Oxford Road then said they would combine ^[31, 32]. Veritone One was an agency on the buying side, so the sale did not change seller supply (inference).

TuneIn and Edison changed owners by acquisition. Stingray Group completed its purchase of TuneIn on 19 December 2025, for up to USD 175 million. It valued TuneIn on TuneIn's

own forecast of USD 110 million revenue for 2025, a figure not split between advertising and subscriptions ^[93, 94] ♦. SSRS announced on 15 October 2025 that it had acquired Edison Research, which now publishes as Edison Research at SSRS. The release gives no terms or closing date ^[95].

Where listening happens

Edison's Podcast Consumer 2026 found that 37% of US weekly podcast consumers use YouTube most often for podcasts, up from 31% in 2024. YouTube already led Spotify in Edison's October 2024 data, 31% to 27%, so the 2026 figure shows a wider lead ^[96] ♦. The 2026 figure reached this review through Inside Radio, a trade outlet owned by Cumulus Media. Spotify's and Apple Podcasts' 2026 shares were not confirmed in a source this review opened. The measure records the service a listener uses most and carries no ad revenue.

Edison's network ranking comes closer to the seller question. In the first quarter of 2026 it ranked Spotify first among US podcast networks by average weekly reach, then the SiriusXM Podcast Network, iHeartPodcasts and Red Seat Ventures. It credits each show to the network that represents its advertising, from 5,163 weekly podcast consumers aged 13 and over recalling the shows they listened to or watched ^[97] ♦. It measures reach by ad-sales representation and includes no revenue. Edison sells its podcast metrics to the networks it ranks, so its independence is unknown. A download count gives a different leader: iHeartMedia calls itself the number one podcast publisher according to Podtrac, with 167 million global monthly downloads and streams in 2025 ^[66].

For radio, a buyer survey published by Cumulus set perception against Edison's Share of Ear. In Edison's first-quarter 2025 US data for people aged 18 and over, AM/FM radio took 68% of ad-supported audio listening, and ad-supported Pandora and Spotify about 5% each. The 303 agencies and marketers surveyed in August 2024 put AM/FM at 27% ^[98]. The company that published the comparison sells AM/FM radio.

Represented supply, and who is scored

This paper records represented supply once, at the seller that holds the mandate to sell it.

SiriusXM is SoundCloud's exclusive ad sales representative in the US, while holding only an equity-method stake in SoundCloud, so SoundCloud's US inventory sits in the SiriusXM Media row ^[34, 33] ♦. On 22 April 2026 SiriusXM Media announced that it would become YouTube's exclusive audio advertising representative in the US ^[36]. On 28 September 2026 its FAQ still said buying would start in "Fall 2026". Google's help page says US YouTube audio campaigns must be set up through SiriusXM from 1 September 2026, and that US auction-based audio serving stops from 5 November 2026 ^[35, 37] ♦. This is a transfer of US sales to an exclusive representative, not a retirement of the inventory. Delivery through SiriusXM was not confirmed by the freeze, so the inventory is listed as announced and is not scored.

Other mandates sit with radio groups and representatives. Audacy has been the exclusive US sales representative for Sonos Radio's streaming inventory since 10 February 2026 ^[99].

iHeartMedia's Katz Media represents more than 3,400 radio stations that iHeartMedia does not own, in a separate segment outside the scored iHeartMedia row ^[66]. Cumulus's internal sales team sells Westwood One, so its more than 7,800 affiliated stations stay in the Cumulus row ^[38]. DAX US, a business created by Global, represents LiveOne and Live365 among other publishers ^[27, 41]. Its sellers.json file marks an "Odeeo US" record as DAX US, from which this review infers that Odeeo's US in-game audio could be counted twice ^[100] ♦. DAX US calls Cox Media Group an exclusive publisher, yet Cox sells digital audio in its own name through AdsWizz and SoundStack ^[101, 102, 103]. The Global pages that name TuneIn as DAX-represented face the UK, and no source establishes a current US mandate, so TuneIn is listed and not scored ^[104, 105] ♦.

Spotify's filing defines the Spotify Audience Network (SPAN) as a podcast-only marketplace of its own and exclusive shows, publishers hosted on Megaphone and creators on Spotify for Creators ^[21]. The paper's seller row is therefore Spotify Advertising, and the Spotify Ad Exchange (SAX) is treated as a buying route into it. Megaphone's help pages say private marketplace deals booked through SAX deliver only in SPAN-enabled shows. That classification is an inference, and it would change if Spotify offered SAX to other publishers ^[11].

Three sellers also own programmatic rails: SiriusXM owns AdsWizz and Simplecast, iHeartMedia owns Triton Digital, and Spotify owns Megaphone ^[34, 66, 21]. Chapter 5 tests whether that ownership affects access or price.

The product register holds 83 products. Chapter 12 scores 24 as audio inventory sellers (cohort A) and 10 as audio ad technology (cohort B). Another 47 are listed without a score, and 2 are historical: Chartable and Veritone One. A parent group never pools its subsidiaries into one score. AdsWizz and Triton each appear as two cohort B rows, a publisher platform and a marketplace, an analytical split inferred from their documentation. The vendor universe below gives 73 entries, with owner, formats, routes and status.

Vendor universe

A reasoned sample, not a census: how it was assembled and what was left out is stated in the method chapter.

Machine-readable copy: data/vendor-universe.csv.

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Spotify Advertising (SPAN, Spotify Ad Exchange, Spotify Ads Manager)	Spotify Technology S.A.	Luxembourg (registered); Stockholm (operations)	digital	streaming music; podcasts (owned, exclusive, Megaphone and Spotify for Creators supply via SPAN); video and display	direct IO; self-serve; programmatic via Spotify Ad Exchange (40+ DSPs; PMP, PG, open auction video)	global; US via Spotify USA Inc.	live	[21] [22] [158]
Megaphone	Spotify Technology S.A.		adtech	podcast hosting; dynamic ad insertion	publisher licence; optional SPAN monetisation	US (data controller Spotify USA Inc.) and other markets	live	[21] [23]
Spotify Ad Analytics	Spotify Technology S.A.		measurement	attribution and brand-lift reporting; Spotify Pixel	free to advertisers	global	live	[470]
SiriusXM Media (Pandora, SiriusXM, SiriusXM Podcast Network; represents SoundCloud in the US)	Sirius XM Holdings Inc.	US	radio	satellite radio; streaming music (Pandora); podcasts; represented SoundCloud	direct; AudioGO self-serve; programmatic	US	live	[34] [33]
AdsWizz publisher platform (AudioServe, Ad Insertion Suite, AudioMax SSP)	Sirius XM Holdings Inc.	US	adtech	ad serving; dynamic insertion; SSP	publisher licence	global	live	[34] [24]
AdsWizz Audio Marketplace (AdWave Marketplace, incl. PodWave)	Sirius XM Holdings Inc.	US	adtech	exchange for streaming and podcast inventory	advertiser and DSP buying; publishers join by Sales Order	North America, EMEA, APAC	live	[24] [25]
AdsWizz AudioMatic	Sirius XM Holdings Inc.	US	listed	audio DSP	direct, PMP, PG, open auction	global	live	[469]
AudioGO (AdsWizz)	Sirius XM Holdings Inc.	US	listed	self-serve audio buying for small advertisers (Pandora, Audiomack, Univision and other networks)	self-serve	US	live	[471]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Simplecast	Sirius XM Holdings Inc. (through AdsWizz)	US	adtech	podcast hosting and analytics; resold AdsWizz monetisation tools	publisher licence	US	live	[34] [25]
SoundCloud (US inventory)	SoundCloud Holdings, LLC (SiriusXM holds an equity-method stake)		listed	streaming music	sold in the US by SiriusXM Media (exclusive representative)	US	live	[34]
YouTube audio-first inventory through SiriusXM Media	Google LLC (Alphabet Inc.)	US	listed	YouTube and YouTube Music audio-first placements	SiriusXM Media buys (exclusive US representative)	US	announced (scheduled Fall 2026; not observably live at 28 Sep 2026)	[35] [36]
YouTube audio ads through Google Ads and Display & Video 360 (US targeting)	Google LLC (Alphabet Inc.)	US	listed	YouTube audio ads	Google Ads; DV360	US	retiring: no new US campaigns from 1 Sep 2026; existing ones serve through 4 Nov 2026; US auction-based serving ends 5 Nov 2026	[37]
iHeartMedia (broadcast, iHeartRadio, iHeartPodcasts)	iHeartMedia, Inc.	US	radio	broadcast radio (860+ stations, ~160 markets); streaming; podcasts	direct IO; programmatic	US	live	[66] [378] [28]
Triton Ad Platform (TAP)	iHeartMedia, Inc.		adtech	ad server; server-side insertion for live, on-demand and podcast audio	publisher licence	global	live	[66] [26]
Triton Audio Marketplace (formerly a2x)	iHeartMedia, Inc.		adtech	open audio exchange (broadcast, podcast, streaming)	buyer agreement with Ando Media, LLC d.b.a. Triton Digital; DSP integrations	global	live	[66] [153] [140]
Spreaker	iHeartMedia, Inc. (Spreaker Inc.; part of Triton Digital)		adtech	podcast hosting; dynamic insertion; monetisation (Prime / Premium Podcast Marketplace)	creator and publisher sign-up	global	live	[66] [472] [473]
Omny Studio	iHeartMedia, Inc.		adtech	enterprise podcast hosting (audio and video); insertion through TAP	publisher licence	global	live	[66] [474]
Jelli	iHeartMedia, Inc. (Triton Digital)		listed	programmatic buying and ad serving for over-the-air radio	broadcaster and advertiser platform	US	unconfirmed: Triton says the RCS Zetta connection replaces it	[475]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Sounder (Triton Digital)	iHeartMedia, Inc.		listed	transcript-based brand safety, suitability and topic targeting for podcasts	licence	global	live	[476]
Amazon Ads audio (Amazon Music, Alexa, Wondery and Art19-hosted shows)	Amazon.com, Inc.	US	digital	streaming music; smart-speaker audio; podcasts; third-party publishers	direct IO; Amazon DSP	US	live	[477] [194] [478] [479]
Art19	Amazon.com, Inc.		adtech	podcast hosting; dynamic insertion	publisher licence		live	[478]
Audacy	Audacy, Inc. (private)	US	radio	broadcast radio; streaming; podcasts	direct IO	US	live	[480] [153]
Cumulus Media (incl. Westwood One, Cumulus Podcast Network)	Cumulus Media Inc. (in Chapter 11; emergence not filed at 28 Sep 2026)	US	radio	broadcast radio (393 O&O stations, 84 markets); network radio (7,800+ affiliates); podcasts; streaming ad network	internal sales team; direct IO	US	live	[38] [84]
Urban One radio (Radio One, Reach Media)	Urban One, Inc.	US	radio	broadcast radio (76 stations, 13 markets); syndication	direct	US	live	[68]
Acast podcast advertising network (Acast marketplace; Acast Ad Platform)	Acast AB (publ)	Stockholm, Sweden	digital	podcasts (140,000+ shows); host reads; dynamic ads; video podcasts	direct; self-serve Ad Platform; programmatic PG and private auction	global; US via Acast Stories Inc	live	[73] [481]
Audioboom advertising (Showcase and marketplace)	Audioboom Group plc		digital	podcasts; host reads; dynamic insertion	direct; self-serve portal	global; mostly US	live	[196]
Libsyn Ads	Liberated Syndication Inc. (private)	US	digital	podcasts (host reads)	marketplace and full-service	US	live	[482] [483] [484]
Libsyn hosting	Liberated Syndication Inc. (private)	US	listed	podcast hosting; monetisation	creator subscription	US	live	[483]
PodcastOne	PodcastOne, Inc. (Nasdaq: PODC), majority-owned by LiveOne, Inc.	US	digital	podcasts (host reads, DAI, programmatic); LaunchpadOne hosting	direct; programmatic	US	live	[74]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
LiveOne / Slacker streaming (US inventory)	LiveOne, Inc.	US	listed	streaming radio	sold through DAX US	US	live	[27] [41]
National Public Media sponsorship	NPR	US	radio	public radio sponsorship; NPR podcasts; NPR digital	direct	US	live	[485]
Tuneln	Stingray Group Inc.		listed	streaming radio aggregator; podcasts	US inventory represented by DAX US (national) and iHeartMedia (local, since 2021)	US	live	[27] [28]
DAX US	Global (Global Media & Entertainment)	New York, US	digital	streaming audio; podcasts; live sports streams; mobile games	direct; programmatic (incl. Basis for political)	US	live	[27] [39] [40] [41]
Captivate	Global (acquired 20 Dec 2021)	Sheffield, UK	listed	podcast hosting; dynamic ads	creator subscription	global	live	[486]
Audiomob	AUDIOMOB LTD (owner not established)	London, UK	ingame	audio ads in mobile apps, including games	SDK; OpenRTB; direct	global; US unconfirmed	live	[487]
Odeeo	Sonic Odeeo Ltd. (independent, venture-backed; Global an investor)	Herzliya, Israel	ingame	audio ads in mobile games, with banner or icon companion	SDK; programmatic partners (Walmart DSP named)	global; US via partners (vendor assertion)	live	[310] [488]
Gadsme audio	Gadsme (owner not established)		listed	in-game audio as one of four formats	SDK; PMP; curated deals	global	unconfirmed as a separately sold service	[318] [317]
Targetspot	Azerion		listed	digital audio sales across podcasts, streaming, radio, mobile gaming	own ad tech; SSP and DSP partners	global; US unconfirmed	live	[317] [321]
SoundStack	SoundStack, Inc. (independent)	US	adtech	streaming infrastructure; podcast/streaming analytics; links to SSPs and ad servers	publisher licence	US	live	[489]
Townsquare Media (incl. Townsquare Ignite)	Townsquare Media, Inc.	US	radio	broadcast radio (340 stations, 74 markets); programmatic digital advertising	direct; own programmatic platform	US	live	[70]
Saga Communications	Saga Communications, Inc.	US	radio	broadcast radio (82 FM, 30 AM; 28 markets)	direct	US	live	[490]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Beasley Broadcast Group	Beasley Broadcast Group, Inc.	US	radio	broadcast radio; digital; events	direct	US	live	[69]
Mediaco (WQHT, WBLS, Estrella radio)	Mediaco Holding Inc.	US	radio	broadcast radio (New York; Estrella's 11 stations in LA, Houston, Dallas); TV	direct	US	live	[491]
Salem Media Group (incl. Salem Podcast Network)	Salem Media Group, Inc. (OTC; SEC-deregistered Feb 2024)	US	radio	broadcast radio; podcasts; digital	direct	US	live	[492] [493] [77]
Hubbard Radio (incl. Gamut Podcast Network)	Hubbard Radio, LLC (ultimate owner not established)	US	radio	broadcast radio; streaming; podcasts	direct	US	live	[494]
Bonneville International	Bonneville International (ultimate owner not established)	US	radio	broadcast radio; podcasts; TV	direct	US (five western markets)	live	[495]
TelevisaUnivision audio (Uforia; ViX Música)	TelevisaUnivision	US	radio	Spanish-language broadcast radio (40 stations); streaming; podcasts	direct; also offered through AudioGO	US	live	[496] [497] [471]
Podbean Ads Marketplace	Podbean (entity not established)		listed	podcasts	self-serve marketplace (from \$200)	global; US unconfirmed	live	[498]
Podbean PodAds	Podbean (entity not established)		listed	podcast dynamic insertion (own ads, VAST tags)	creator subscription	global	live	[498]
RedCircle	RedCircle Technologies, Inc.	US	listed	podcast host endorsements; hosting	fully managed	US	live	[499]
Audiomack	not established		listed	streaming music and podcasts	offered through AudioGO	US	live	[471]
AdTonos	AdTonos (entity not established)		listed	audio exchange and self-serve platform (radio streams, podcasts, apps)	self-serve; programmatic	global; US unconfirmed	live	[500]
The Trade Desk	The Trade Desk, Inc.	US	listed	DSP (audio)	programmatic	US	live	[22]
Display & Video 360	Alphabet Inc.	US	listed	DSP (audio)	programmatic	US	live	[22] [37]
Amazon DSP	Amazon.com, Inc.	US	listed	DSP (audio, incl. podcasts)	programmatic	US and other markets	live	[158] [194]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Yahoo DSP	Yahoo	US	listed	DSP	programmatic	US	live	[22]
Adform	Adform		listed	DSP	programmatic	global	live	[22]
Basis	Basis	US	listed	DSP	programmatic	US	live	[41]
Walmart DSP	Walmart	US	listed	DSP	programmatic	US	live	[310]
Magnite	Magnite, Inc.	US	listed	SSP	programmatic	global	live	[22]
Podscribe	not established	US	measurement	podcast and audio attribution and verification	licence	US	live	[216]
Magellan AI	Twenty Nine Enterprises, Inc.	US	measurement	ad intelligence; pixel, broadcast-radio and pod-to-pod attribution; incremental lift	licence	US and other markets	live	[501]
Podtrac	Podtrac, Inc.	US	measurement	podcast audience measurement and rankings	licence	US	live	[502]
Claritas podcast attribution	Claritas, LLC	US	measurement	identity-graph podcast attribution	licence	US	live	[503]
Barometer	not established		listed	podcast brand safety	integration		unconfirmed (site not reachable by this review)	[481]
AMA (A Million Ads)	A Million Ads Inc. (owner not established)		listed	dynamic audio creative	managed service and platform	global	live	[504]
Oxford Road	Insignia Capital affiliate (per round-1 check)	US	listed	podcast advertising agency	agency	US	live	[505]
Cox Media Group radio	Cox Media Group, LLC (majority Apollo-managed funds)	Atlanta, US	radio	broadcast radio, streams, podcasts	direct; programmatic via SoundStack and AdsWizz	US (9 markets)	live	[506] [507] [508]
AmperWave	Audacy (to be confirmed)	US	listed	audio ad serving and streaming	publisher platform	US	live	[509] [510]
Katz Media Group	iHeartMedia	New York, US	listed	national spot radio representation	direct	US	live	[66]
Sigma Audio Networks	eMedia (to be confirmed)	US	listed	national radio sales	direct	US	live	[450] [511]
Deseret Digital Media (KSL audio)	Deseret Management Corporation	Salt Lake City, US	listed	streaming audio, podcasts	direct	US	live	[512]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Spreaker Premium Podcast Marketplace	iHeartMedia	US	listed	host-read podcast sponsorships	direct	unconfirmed	live	[472]

Counting, not listening

The podcast guidelines that buyers rely on count files and ads delivered to devices. This chapter tests what they certify and sets them beside what the US accreditor of audience measurement has accredited for audio.

IN SHORT

IAB Tech Lab's podcast guidelines v2.2, final since 2 May 2024, define four counting units: download, listener, ad delivered and client-confirmed ad play [♦]. None measures listening time, attention or outcomes, and the certified scope on IAB Tech Lab's record covers counting only, so H2 is supported [♦]. Version 2.3 became final on 29 September 2026 and keeps the same four units, so H2 holds on the final text too [♦]. On 28 September 2026 the public record listed 34 companies under v2.2, and only four were certified for client-confirmed ad play [♦]. Eleven of the 34 were last certified more than 12 months earlier, the recertification term in IAB Tech Lab's Compliance Guide, and the public list shows no status [♦]. In the Media Rating Council's lists, this review found no accredited podcast or streaming-audio measurement service [♦]. Reporting attributed declines in reported downloads to Apple's iOS 17 change, and none of it measures listening [♦].

H2 tests a line on the author's standards page: a download is not a listen. It asks whether any metric in the final guideline text, or in any certified company's certified scope, measures listening time, attention or an outcome. The records were read on 28 and 29 September 2026.

What the guidelines count

IAB Tech Lab is the technical standards body of the Interactive Advertising Bureau (IAB), the digital advertising trade association. Its Podcast Measurement Technical Guidelines v2.2 went to public comment on 22 February 2024 and were released as final on 2 May 2024 ^[12, 13, 14]. Section 6 defines four metrics. A download counts content delivery. A listener counts audience. Ad delivered and client-confirmed ad play count ads. Section 6.4 defines no new metric; it rolls them up by publisher, show and episode and covers audience building from listener IDs ^[10] [♦].

A dynamically inserted ad counts as delivered only when all of its bytes are downloaded. A baked-in ad, recorded into the episode file, counts when the part of the file that holds it was downloaded. Either way the parent download must be valid: the file header plus at least one minute of content ^[10]. A listener is a unique pair of IP address and user agent, the string that names the app and device, within a stated time frame. The text says this can double count a device whose IP address changes and undercount when IP addresses are recycled ^[10].

Client-confirmed ad play needs a tracking beacon sent by the player, and should report the ad's start and quartile markers "whenever possible". The guideline says aggregator apps such as Apple Podcasts and Spotify typically do not send playback data, so podcast measurement rests on server logs ^[10] ♦. Providers may report further metrics if they label them apart from the four core ones ^[10].

The only attention language in v2.2 is a sentence in its executive summary saying podcast audiences "remain attentive even during ads". No metric stands behind it ^[10] ♦. Chapter 7 audits claims of this kind. This review codes quartile markers as counting of ad playback. Read as a listening-time measure, they would still be optional, and aggregator apps such as Apple Podcasts and Spotify typically do not send them.

Three documents numbered 2.x

Guidelines v2.3 went to public comment on 21 July 2026, with comment open until 19 August 2026. On 28 September 2026 neither the v2.3 page nor the guidelines page showed a final text. On 29 September IAB Tech Lab released v2.3 as final, and it now plans a v3.0 for public comment in the middle of 2027 ^[16, 17, 14, 106, 45] ♦. The final text keeps the four metrics with reworded definitions and applies them to audio and video podcasts delivered through open RSS feeds. It also sets a tolerance of $\pm 5\%$ for discrepancies between certified measurers ^[18, 19]. H2 was re-tested on the final text at the freeze recheck and holds. On 30 September every listing on the public record was still certified against v2.2 ^[15].

The Podcast Measurement Compliance Guide has its own numbering. Its Version 2.3, dated April 2024, implements guidelines v2.2 ^[20, 14]. Certification is voluntary and global, run by IAB-approved third-party auditors in an iterative process of about 60 days that the guide calls "generally not a pass or fail". A certified company must recertify at least every 12 months or its status changes to expired ^[20].

Who is certified, and for which counts

On 28 September 2026 IAB Tech Lab's public compliance record listed 34 companies, all certified against guidelines v2.2. Of those, 33 were certified for download and 33 for listener. Seventeen held ad delivery. Four held client-confirmed ad play: ART19, Audiomeans, Audion and SoundStack ^[15] ♦. The record states scope as a guideline version and a list of metrics per company, and names no product, inventory, environment or geography. One report, issued to Sirius XM Holdings and dated 30 April 2025, serves both the AdsWizz listing for ad delivery and the Simplecast listing for download and listener ^[15, 107] ♦.

Certification does not mean every control is met. The reports for Triton Digital (28 February 2025) and SiriusXM (30 April 2025) mark domain threat filtering "Not Supported". Podtrac's report (10 July 2026) marks ad delivered and client-confirmed ad play "Not Applicable" ^[108, 107, 109] ♦.

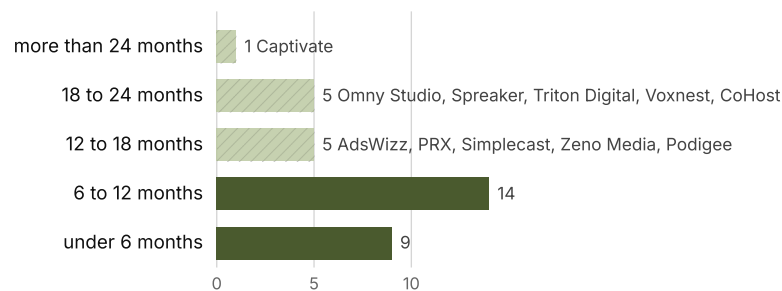
A certified vendor can also sell counts outside its certification. Podscribe's certification covers its prefix-based download counting. Its own documentation says its pixel impressions for dynamically inserted ads are a separate count that "can include more than

one count per download" ^[110, 111] ♦. Its home page calls it "the only 3rd-party, IAB-Certified attribution provider", while the certifier's record covers download and listener counting and the guideline defines no attribution metric ^[112, 15] ♦. A buyer has to check which count a report uses and whose certification stands behind it.

How current the certifications are

The Compliance Guide sets the 12-month term and allows "some flexibility" case by case. It defines three statuses, Active, Expired and Suspended, and keeps suspended versions listed with their certified date ^[20]. The public page has no status column. Eleven of its 34 listings show a last-certified date more than 12 months before 28 September 2026: AdsWizz, Captivate, CoHost, Omny Studio, PRX, Podigee, Simplecast, Spreaker, Triton Digital, Voxnest Audience Network and Zeno Media ^[15, 20] ♦. Whether any of the eleven is active cannot be settled from the page, and this paper describes none of them as lapsed. Since suspended listings stay on the page, appearing there does not establish active status for any of the 34.

PODCAST MEASUREMENT LISTINGS BY MONTHS SINCE LAST CERTIFICATION



Hatched: last certified more than 12 months before the cutoff, the Compliance Guide's recertification term. The public list shows no status, so none is marked expired.

Eleven of the 34 listings were last certified more than a year before the cutoff, and the public list does not say which are current. Each bar is one company on IAB Tech Lab's public podcast measurement compliance list, all under guidelines v2.2, with its last-certified date. The Compliance Guide asks for recertification every 12 months; the public page has no status column.

Units: months (days / 30.44) · Scope: IAB Tech Lab podcast compliance list as read on 28 and 29 September 2026 · Sources ^[15] ^[20]

A date older than 12 months does not prove a lapse: the Guide allows case-by-case flexibility, and status may be held outside the public page.

Review round 2 clarified the scoring rule for these listings (R2-02). On the counting-assurance dimension, a listing counts as current only within the 12-month term. A listing past the term with no status shown is read as "no longer current, status not shown" and scored at anchor 3. It scores 0 only if the record itself shows Expired or Suspended. The SiriusXM group's two listings, last certified on 15 May 2025, fall under that rule ^[15, 20] ♦. Chapter 12 applies it.

Server delivery and client playback

The Media Rating Council (MRC) is the US industry body that accredits audience measurement services. Its Digital Audio Measurement Standards v1.0 of January 2018, written with the IAB and radio industry bodies, set a different bar. They cover streaming and progressive-download audio. They define a client-side Audible Ad Impression: player not muted, volume above zero, at least two continuous seconds. They call server log files generally not acceptable, and not acceptable for measuring activity in progressive-download environments. Log-based counts such as downloads are allowed where client-side measurement is precluded, as in offline podcast listening. Over-the-air AM/FM and subscription satellite radio are excluded ^[8] ♦.

This review's reading is that the two texts agree on counting a download from a server log when playback cannot be observed. They part on streamed or progressively downloaded episodes, which the IAB guideline counts from server logs and the MRC text treats as unacceptable for measuring activity.

v2.2 treats URL-prefix measurement, used by Podtrac, Podscribe and similar services, as distinct from full server-log measurement. A prefix records the request but cannot see how many bytes were served, so the method must be separately proven to meet the guidelines ^[10]. Podtrac, which does not report plays, says in its 2024 methodology, a vendor document, that players supporting ad-play pingbacks carry under 10% of podcast traffic, with no base or period stated ^[113].

Invalid traffic

v2.2 splits invalid traffic (IVT) into general invalid traffic (GIVT), such as crawlers, known data centres and pre-fetching, and sophisticated invalid traffic (SIVT). It publishes no SIVT filtering rules and says its filtering "will catch most general IVT and some of the more obvious sophisticated IVT" ^[10]. The text does not require the IAB/ABC Spiders and Bots List, a paid subscription at \$5,000 a year for IAB members and \$15,000 for others ^[10, 114]. For Podscribe's pixel impressions, this review found no filtering description in the sources screened ^[110, 111].

What the MRC has accredited for audio

In the MRC's lists for radio, digital, multimedia, services outside the US and services under review, read on 28 September 2026, this review found no accredited or in-process podcast or streaming-audio measurement service. The one audio-related entry under review is Adelaide's AU attention metric, listed as "Pre-audit reviewed 5/2026, Audit not begun", which gives no assurance ^[115, 116, 117] ♦.

Broadcast radio has accreditation, within limits. MRC accreditation of the Nielsen Audio PPM (Portable People Meter) service covers monthly and AQH (average quarter-hour) estimates in 24 named markets, under a letter of 20 November 2024 updated on 18 September 2026. The MRC lists 22 other PPM markets as under review, including New York, Philadelphia, Boston and Washington DC ^[6, 7] ♦. The accreditation does not extend to streaming, podcasts or minute-level data. Nielsen's Audio Diary service, previously

accredited, entered a six-month accreditation hiatus effective 23 June 2026. During the hiatus the MRC treats it as unaudited and unaccredited, and Nielsen has committed to resume audit by its end ^[118, 7] ♦.

Triton Digital, owned by iHeartMedia, left the process for streaming. In a blog post dated 20 April 2022, read through a Wayback Machine capture of 4 June 2023, it said it was moving its Webcast Metrics away from MRC accreditation. It said that accreditation "is not provided outside of the U.S. and does not include podcast measurement", and that it was undergoing a SOC 2 controls audit instead ^[119, 117] ♦. The podcast reason is Triton's framing: the MRC's 2018 standard covers podcasting, and what the record lacks is an accredited podcast service. This review did not check whether a SOC 2 report exists.

iOS 17 changed downloads

Apple changed automatic downloads in iOS 17, released on 18 September 2023 according to Podnews; Apple's notice is dated 11 October 2023. Automatic downloads pause when a device runs out of storage or when a followed show has not been played for more than 15 days. On resuming, Apple Podcasts no longer downloads the unplayed back catalogue ^[120, 121]. The notice is the platform's own documentation.

Reporting first published in February 2024 tied download declines to the change. In a Podnews table of ten publishers from Triton Digital's US Podcast Ranker, combined average weekly downloads in January 2024 were 32.4% below January 2023, or 34.7% leaving out one publisher with no January 2023 figure. Podtrac data suggested an average 15% drop for most large shows. National Public Media reported about 10% for daily shows and about 30% for other cadences ^[121, 122] ♦. These are publisher totals, which also move when portfolios change. They measure downloads. By inference, fewer automatic downloads of unplayed episodes would lower the count with no change in listening; the sources do not measure listening before and after.

v2.2 had already urged players not to download back catalogues by default. This review found no guideline addendum on iOS 17 in the IAB Tech Lab sources screened by 28 September 2026, and the final v2.3 text does not mention it ^[10, 19].

Cross-publisher reach

The guidelines count per measurer, so cross-publisher reach comes from other methods. Edison Podcast Metrics, from Edison Research at SSRS, estimates the weekly reach of US podcast shows and networks from surveys of weekly podcast consumers aged 13 and over: 5,163 interviews in Q1 2026 and 5,006 in Q2 2026. Reach is a share of weekly podcast consumers and includes shows watched as video. The same company separately sells download counts run on SoundStack's certified system ^[123, 124, 125, 126] ♦.

Nielsen announced Nielsen Podcast Fusion, powered by Edison Research, in its Nielsen Media Impact planning tool on 6 August 2025. On 27 April 2026 it announced that Triton Digital's Podcast Metrics Demos+ would join the same tool. Neither release describes a validation or an accreditation ^[127, 128]. This review infers that cross-publisher podcast planning is consolidating in one tool fed by a survey and one company's download data. It

found no accredited single-source measure of cross-publisher podcast reach and frequency in the sources screened by the cutoff.

AMP and the 30-second play

The Alliance for Measurement in Podcasting (AMP) was convened by Oxford Road, a podcast advertising agency, in July 2025. It was announced publicly on 29 May 2026 as a task force of "12 voting member parties", and the release named two Spotify staff among "Select AMP members" ^[129]. On 28 September 2026 AMP's website said the Accords were "Ratified by twelve operators" but showed nine voting-member logos and fifteen endorsement logos, and Spotify appeared in neither group. The Accords sit behind a form asking for personal data, which this review did not fill in. The site claims no accreditation ^[130] ♦. This paper does not call Spotify a signatory and makes no membership claim beyond what the dated pages show.

Oxford Road's own summary of 23 July 2026 says the Accords define a podcast play as at least 30 consecutive seconds of consumption and an ad impression as any portion of an ad airing. They recommend a randomised hold-out of 5% to 10% of each platform's audience to measure incrementality ^[2] ♦. The Accords are voluntary, and this review found no platform's implementation or audit of them. A play measured by consumption needs playback data that, by the IAB guideline's own account, most aggregator apps do not send.

What the H2 verdict rests on

H2: supported. Guidelines v2.2 define four counting units; none measures listening time, attention or outcomes; certified scope on IAB Tech Lab's record covers counting only. Version 2.3, final from 29 September 2026, keeps the same four units ^[10, 15, 19]. The certification reports this review opened cover a minority of the listings; the rest are read from the table. A verdict on what certification covers says nothing about whether the counts are accurate. A final guideline that defined a listening or outcome metric would change it, and so would an accredited, listen-level measure of podcast or streaming audio. Chapter 6 takes up outcome measurement.

Rails, supply paths and prices

Three audio groups own programmatic audio rails that buyers' platforms name as supply sources. This chapter tests what that ownership amounts to in the buyers' own documentation, in published access terms and in published prices, and keeps the three tests apart.

IN SHORT

Filings establish that SiriusXM owns AdsWizz and Simplecast, iHeartMedia owns Triton Digital, and Spotify owns Megaphone and runs the Spotify Ad Exchange ♦ ♦ ♦ ♦. On the registered pooled count, those groups' rails are 15 of 43 named audio supply integrations in the documentation of five demand-side platforms (DSPs), or 35%, so H5's ownership part is contradicted. Leaving out The Trade Desk's directory gives 9 of 17 (53%), a sensitivity test only ♦. Access is unresolved. No public term gives an owner's inventory priority, and Megaphone's private marketplace (PMP) deals deliver only in shows enabled for Spotify's own podcast ad network (SPAN) ♦. The owned rails' sellers.json files list rival sellers, including iHeartMedia on AdsWizz and AdsWizz itself on Triton ♦. Pricing is unresolved: this review found no published fee or take rate for AdsWizz, Triton Digital, Spotify Ad Exchange or Megaphone ♦. The VAST 4.1 ad-serving template absorbed its audio variant, DAAST, in 2018, yet Triton's 2026 bid-request page lists only VAST 2.0, VAST 3.0 and DAAST 1.0 as the protocols it always sends, though its example request adds VAST 4.0 ♦.

A rail is the technology a programmatic bid passes through on its way to audio inventory: an ad server, a supply-side platform (SSP, which offers a publisher's inventory to automated buyers), an exchange, or a podcast hosting and insertion service. Buyers reach rails through DSPs, the software agencies and advertisers use to bid. H5 says programmatic audio runs on rails owned by the largest audio publishers. The test registered before extraction splits it into ownership, access and pricing, each with its own rule. Ownership alone never settles price or access.

Who owns which rail

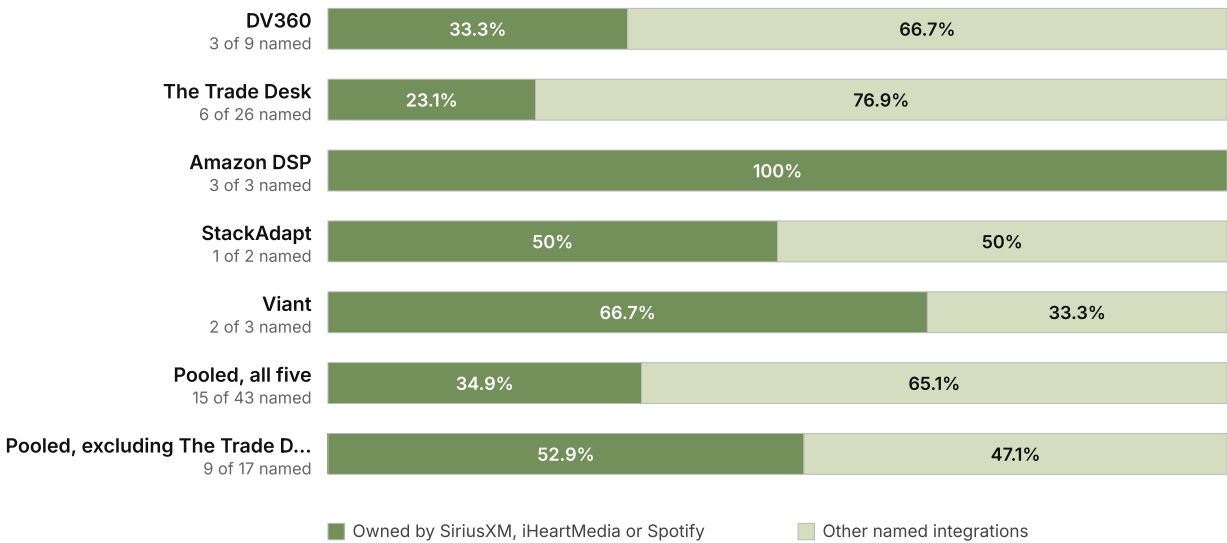
Every named rail's owner can be read from a filing. Sirius XM Holdings' fiscal 2025 Form 10-K, filed 5 February 2026, says AdsWizz is its subsidiary, that Pandora and third-party customers use AdsWizz technology, and that AdsWizz offers podcast hosting, analytics and advertising sales through Simplecast ^[34]. iHeartMedia's fiscal 2025 10-K, filed 2 March 2026, lists Triton Digital among the ad technology companies it acquired and calls Triton's marketplace "an innovative global open audio exchange" ^[66]. "Open" there is the issuer's own word, not a published access term. Spotify's fiscal 2025 Form 20-F, filed 10 February

2026, says Spotify announced the Spotify Ad Exchange (SAX) on 1 April 2025 for real-time auction buying. It says SPAN sells enterprise publishers' podcasts "via Megaphone", under agreements that mostly share revenue and can include minimum guarantees ^[21] ♦. Spotify's fiscal 2020 20-F records that it bought 100% of Megaphone LLC on 8 December 2020 for EUR 195 million ^[131] ♦. The first condition of H5's ownership part is met.

The registered count

The second condition asks whether those rails make up more than half of the audio supply integrations named in the public documentation of five DSPs: The Trade Desk, Google's Display & Video 360 (DV360), Amazon DSP, StackAdapt and Viant. The count is of named integrations. It says nothing about spend or volume.

NAMED AUDIO SUPPLY INTEGRATIONS IN FIVE DSPS' DOCUMENTATION



On the registered pooled count, the three owners' rails are about a third of the named integrations, not the majority. Named audio supply integrations in the public documentation of five DSPs, split by whether SiriusXM (AdsWizz), iHeartMedia (Triton Digital) or Spotify owns them. The pooled row is the registered test of H5's ownership part; the row without The Trade Desk's directory is a sensitivity test only.

Units: count of named integrations · Scope: The Trade Desk, DV360, Amazon DSP, StackAdapt and Viant documentation, 2021 to 2026, observed 28 September 2026 · Sources ^[132] ^[134] ^[135] ^[136] ^[137] ^[138] ^[139]

Counts of named integrations, not of spend. The Trade Desk's directory mixes publishers and rails.

DV360's help page names nine supported audio exchanges, three of them owned rails ^[132]. The Trade Desk's partner directory, filtered to inventory and audio, lists 26 entries worldwide. Six belong to the three groups: three publishers (Pandora, iHeart Media, Spreaker) and three rails (AdsWizz, Triton Digital, Spotify). Of the 26, 18 carry an Americas tag, including all six; there is no separate US tag ^[133, 134]. Amazon's 6 July 2026 release names three SSPs, one from each group, in a list introduced by "including" ^[135]. StackAdapt's announcements name Magnite and iHeartMedia ^[136, 137]. Viant names Magnite, AdsWizz and Triton Digital ^[138, 139].

Pooled across the five, the owned rails are 15 of 43 named integrations, or 35%. Under the registered rule, half or fewer contradicts the ownership part ♦. Leaving out The Trade Desk's directory, which mixes publishers and rails, gives 9 of 17, or 53%. That is a sensitivity test, because the registered rule does not provide for dropping one DSP's documentation. The stream verifier tried two treatments that keep all five DSPs. Limiting the directory to Americas-tagged entries gives 15 of 35 (43%). Counting only its entries that are clearly exchanges or SSPs, the verifier's own classification, gives about 48% ^[134]. Only removing a whole DSP lifts the share above half. Confidence is still low. The five documents differ in kind, Amazon's list is explicitly partial, and Amazon's own group also sells audio (chapter 3).

Access in the published terms

H5's access part is supported only by documented terms that give an owner an advantage, and contradicted only by documented open-access terms that show none. The public record holds some terms, but not the ones that would settle the question.

Triton's public buyer terms for its programmatic marketplace (formerly "a2x") let each publisher exclude any buyer "at any time for any reason or no reason". They warn that the highest bid may not always win, because sellers can set bidding terms. They contain no fee, no take rate and no clause giving iHeartMedia's inventory priority ^[140] ♦. These seller controls apply to every participating publisher. The buying agreement behind the terms and the publisher-side terms are not public.

Megaphone's help page, updated 15 July 2026, describes its PMP deals, auctions open only to invited buyers. They are non-guaranteed and clear at first price. At launch they reach The Trade Desk, DV360, Yahoo, Amazon and more than 40 DSPs under Magnite's SSP. They run after guaranteed campaigns, then "compete alongside the Spotify Audience Network (SPAN) in an auction" on highest gross bid above a publisher's floor. They "can only deliver in shows that are Spotify Audience Network (SPAN) enabled" ^[11, 141] ♦. That condition ties a Megaphone publisher's PMP access to enrolment in the owner's network. The page states no priority rule for SPAN demand, and the service terms a publisher must accept were not public in the sources screened.

Access in practice

A sellers.json file is a rail's public list of the sellers it is authorised to sell for. An ads.txt file is a publisher's public list of the rails authorised to sell its inventory. On 28 September 2026, AdsWizz's sellers.json held 641 entries, Triton Digital's 485 and Spotify's 634, and no file marked any seller confidential ^[101, 142, 143]. AdsWizz lists iHeartMedia, Audacy, Cumulus, Acast, Audioboom, Libsyn, PodcastOne, NPR and TuneIn. Triton lists AdsWizz Inc, Audacy, Cumulus, Urban One, Salem, Audioboom, Libsyn, PodcastOne, TuneIn and DAX. Spotify's lists Westwood One, Audioboom and Libsyn ♦.

The two largest owned rails also sit in each other's files. AdsWizz's sellers.json lists Triton Digital as an intermediary, and the iheart.com ads.txt file authorises 16 AdsWizz lines among about 580 records ^[101, 144]. The web ads.txt files of six sellers outside the three groups (Audacy, PodcastOne, Acast, Audioboom, Libsyn, TuneIn) each authorise both

AdsWizz and Triton Digital ^[145, 146, 147, 148, 149, 150]. Pandora's own sellers.json carries a malformed key on its Pandora entry, so a strict parser would read no seller type for it ^[151].

These files record authorisation. They do not record volume, priority or price, and entries can be stale. They cover web domains, while DV360's help says most audio inventory sits in mobile apps, where its ads.txt setting cannot be used ^[132]. The files show the owned rails carrying rival inventory. They say nothing about the terms. Access stays unresolved.

Deal types by route

The documents name three programmatic transaction types: open auction, PMP, and programmatic guaranteed (PG, a fixed-price deal with reserved delivery). Each route offers a different mix. DV360 sends open-auction audio through Google Ad Manager and reaches the other exchanges through deals ^[132].

Triton's DSP-integrations page names 41 partners for its Triton Audio Marketplace. Not all are DSPs: Magnite is an SSP and Tara Media Strategies an agency. The count is kept apart from the "60+ DSP Integrations" heading on Triton's marketing page ^[152, 153] ♦. The page labels The Trade Desk and Amazon DSP for open auction and PMP, and DV360, StackAdapt and Viant for PMP only. Triton's 2023 specification calls marketplace inventory not guaranteed, while its 2026 bid-request page carries a deal flag for guaranteed inventory ^[154, 155]. Triton Digital told AdExchanger in December 2025 that PG deals on iHeartMedia's broadcast radio inventory carry the same priority as direct-sold deals ^[156].

Amazon DSP's February 2024 US podcast launch covered only Amazon-owned and Amazon-related supply on non-guaranteed delivery ^[157]. The 6 July 2026 release opened self-service buying across publishers and SSPs "including" Spotify Ad Exchange, SiriusXM Media/AdsWizz and iHeart Media/Triton, with PMP and PG deals for podcasts and streaming audio. The page calls the launch global and lists 34 countries, the United States among them ^[135]. Spotify's own article on the direct Amazon DSP link is narrower. Podcasts are sold through PMP deals; the newly added PG and open auction apply to music inventory ^[158] ♦.

Spotify Ad Exchange as a buying route

SAX has an exchange's name, but its record describes a way into Spotify-owned and SPAN-enabled inventory. Spotify's SAX page offers "Spotify inventory" through the buyer's DSP, "across over 40 DSPs" ^[22] ♦. Spotify's October 2025 release says Megaphone-hosted publishers would book PMP deals via SAX from 2026 ^[141], and Megaphone limits those deals to SPAN-enabled shows ^[11]. This review found no Spotify or Megaphone page, in the sources screened by the cutoff, that offers or licenses SAX to publishers outside Megaphone and SPAN ^[159].

After review round 2 (R2-11), the paper treats SAX as a buying route into the Spotify Advertising row, where the inventory it clears is counted once. The publisher-side PMP function is scored on the Megaphone row, where it is documented. That classification is an inference, and it would change if Spotify offered SAX to other publishers. Spotify's sellers.json lists Westwood One, Audioboom and Libsyn ^[143], and no source opened says

which route carries that inventory. In the H5 count SAX stays a Spotify-owned rail, because DSPs name it as a supply source.

Standards the rails declare

VAST, the Video Ad Serving Template, tells a player which ad file to fetch and what to report. IAB Tech Lab's VAST 4.1, released in November 2018, merged the Digital Audio Ad Serving Template (DAAST), a 2014 spin-off of VAST 3.0, back into VAST ^[160] ♦. OpenRTB, the protocol DSPs and SSPs use to exchange bids, defines an Audio object in version 2.6 that "generally assumes compliance with the VAST standard". The AdCOM 1.0 list of creative subtypes still carries DAAST 1.0 codes beside VAST 4.1 to 4.3 ^[161, 162].

Triton is the one owned rail whose documentation states a protocol version. Its 2023 DSP specification says OpenRTB 2.5. Its bid-request page, updated 26 March 2026, says some attributes also follow 2.6. It lists the audio protocols sent as always VAST 2.0, VAST 3.0 and DAAST 1.0 with their wrappers, with no VAST 4.x, yet its own example request adds VAST 4.0 ^[154, 155] ♦. The same page gives the auction type as second price plus, while Triton's publisher help describes first-price open-marketplace auctions ^[163]. No AdsWizz or Spotify page opened states an OpenRTB audio version ^[164, 22].

What is published about price

H5's pricing part needs documented fees, take rates or price differences by rail. This review found none for AdsWizz, Triton Digital, Spotify Ad Exchange or Megaphone in the sources screened by the cutoff ^[21, 165] ♦. The nearest disclosures for those four carry no rate. Spotify's 20-F says most publisher agreements share revenue. AdsWizz says publishers can "apply different prices for each sales channel or deal". Triton publishes a default open-marketplace floor of \$1.00 and mentions per-segment data fees without rates ^[163, 166]. Simplecast's monetisation page gives a 70/30 revenue share, 70% to podcasters, through the AdsWizz Podcast Marketplace ^[167]. One payout split on one owned service, with no independent rail's split beside it, cannot show an owner advantage.

Buyer-facing prices are thinner. This paper compares podcast prices only within matched combinations of four fields: speaker role, voice production, insertion and buying method. Libsyn Ads' table of 23 September 2026 gives CPM (price per thousand) ranges of \$24–26 for 60-second and \$18–22 for 30-second baked-in host reads, \$18–22 for dynamically inserted new-episode ads, \$14–16 for dynamic back-catalogue ads and \$12–15 for programmatic pre-produced ads ^[168, 169] ♦. These are list ranges set by the seller. Voice production is not stated, and Libsyn's pages define the unit two ways: downloads in the first 30 days, or downloads or impressions. Libsyn's reported average of \$21.37 for a 60-second ad in September 2024, from its own sales data, states no speaker role, insertion or buying method, so it fits no matched combination ^[170].

This review found no second seller publishing prices for the same matched combination in the sources screened. Spotify's Ads Manager page says ads are sold by auction at "no fixed cost" and states no minimum or CPM ^[171]. DV360 says audio CPMs are "significantly higher" than display rates, without a number ^[132]. Pricing stays unresolved.

Where H5 stands

The ownership part is contradicted on the registered pooled count: the three owners' rails are 15 of 43 named audio supply integrations in five DSPs' documentation (35%); leaving out The Trade Desk's directory gives 9 of 17 (53%), a sensitivity test only. Access is unresolved: no public term gives an owner's inventory priority, and Megaphone PMP deals deliver only in SPAN-enabled shows. Pricing is unresolved: no published fee or take rate for AdsWizz, Triton Digital, Spotify Ad Exchange or Megaphone. Ownership alone never settles price or access. Chapter 13 sets these results beside the other verdicts, and chapter 14 explains why AdsWizz and Triton each appear as two rows in the ad technology cohort.

Attribution and proof

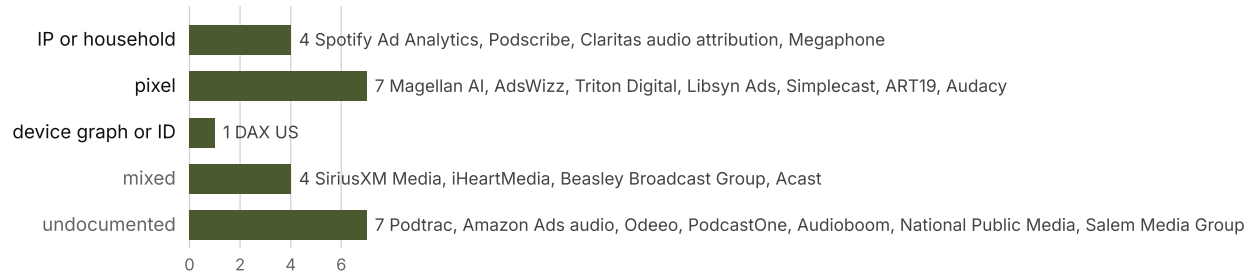
Most attribution products in this paper's named sample link an ad to a later website visit through an IP address, a household match or a pixel. This review found no independent causal test of commercial audio advertising on advertiser outcomes with published design and results, in the sources screened by the cutoff.

IN SHORT

In a named sample of 23 attribution products, IP-address, household or pixel matching is the documented primary method in 11 of the 12 products that document one (91.7%), and in 11 of 19 when products without a documented method are added (57.9%), so H3 is supported, narrowly ♦. The match is to a household IP address, and Spotify Ad Analytics and Podscribe model part of the unmatched remainder ♦. Spotify Ad Analytics says its device graph generally matches 40-80% of the time; Podscribe says residential IPs carry about 50-60% of impressions ♦ ♦. No product in the sample documents confidence intervals or any other uncertainty measure in the pages opened ♦. Lift products mostly compare exposed listeners with a matched or synthetic control, and Podscribe sells randomised holdouts as a priced option through SmartServe, its ad-serving layer ♦. This review found three academic randomised experiments with non-commercial radio messages and no independent causal test of commercial audio on advertiser outcomes, in the sources screened by the cutoff ♦. The largest randomised audio experiment found was run by Pandora and measures what ads cost in listening time ♦.

The author's standards page says that most podcast attribution is modelled. This chapter tests that claim and the registered hypothesis H3 behind it. Attribution here means crediting an ad with a later action, such as a site visit or a purchase. Proof means evidence that the ad caused the action.

PRIMARY ATTRIBUTION METHOD DOCUMENTED, AUDIO ATTRIBUTION SAMPLE



IP, household or pixel is primary in 11 of 12 products with a documented method (91.7%) and in 11 of 19 with undocumented products added (57.9%). Adding the 4 mixed products as a sensitivity gives 47.8%.

IP, household or pixel matching is the documented primary method in 11 of the 12 products that document one, but the result is narrow once undocumented and mixed products are counted. Each product in the registered H3 sample, coded by the primary attribution method its own documentation names. The sample, rebuilt in review round 3, is every measurement-table product with an attribution function plus every scored row whose documentation describes one, each counted once; a partner's method is never imported into a row. Under the registered rule H3 is supported, narrowly: treating the two oldest supporting pages as undocumented and recoding Claritas as an identity graph would together make it unresolved.

Units: products · Scope: named, dated sample as documented at 28 to 29 September 2026 · Sources [176] [177] [207] [178] [174] [179] [180] [175] [181] [182] [513] [183] [184] [185] [186] [514] [187] [190] [188] [454] [515] [189] [193] [194] [195] [74] [196] [197] [198]

A count of products, not of campaigns or spend. It says nothing about accuracy; none of the coded products documents uncertainty reporting.

The sample and the count

H3 was registered on 28 September 2026, before extraction. It says that in a named, dated sample, more than half of the products with a documented primary method name IP-address matching, household matching or a pixel. The verdict must hold again when products with no documented method are added to the denominator. The sample is every product in the paper's measurement table plus every scored seller or ad-technology row whose documentation describes an attribution function. Coding follows what vendors document as of 28 and 29 September 2026. It does not show which method buyers use most.

The first coding had two errors. It counted ArtsAI apart from Claritas, but ArtsAI's attribution page now redirects to Claritas's audio attribution page, so the two are one product line [172]. It also coded Megaphone as undocumented. Megaphone's Help Center documents up to five third-party tracking pixels per order and its own pixels for promotion attribution [173, 174] ♦. A second review round changed one more code (R2-22). Triton Digital's Podcast Attribution 101 never uses the word household. Triton passes the listener's IP address, user agent and episode identifier to the advertiser's attribution partner, and the partner does the matching [175] ♦. Triton is coded as passing the IP address to that partner's pixel. A third review round then found the sample incomplete: several scored sellers whose own pages describe attribution were missing. The sample was rebuilt under the registered rule, and a separate verifier opened the pages and tightened three codes (R3-01, R3-02).

The rebuilt sample has 23 products: the five measurement-table products with an attribution function (Edison Research and Nielsen Audio have none) and every scored row whose own documentation describes one, each counted once. A partner's method is never imported into a row. Spotify Ad Analytics, Podscribe and Claritas match on household IP addresses or a household identity graph, and Megaphone matches on IP address plus device information ^[176, 177, 178, 174]. Magellan AI, AdsWizz's AudioPixel, Triton Digital, Libsyn Ads, Simplecast, ART19 and Audacy name a pixel, a tag on the advertiser's site that records a visit ^[179, 180, 175, 181, 182, 183, 184]. DAX US names its own listener IDs ^[185]. SiriusXM Media, iHeartMedia, Beasley and Acast list several methods with no default, and are reported apart ^[186, 187, 188, 189] ♦. iHeartMedia's AudioGraph, announced on 18 June 2026 and described on 23 September as available as a managed service on its owned broadcast inventory, uses ID-based segments for targeting and routes attribution through partners (Magellan AI, PlaceIQ and GroundTruth), so it does not count as an ID-based attribution method ^[190, 191, 192] ♦. Podtrac, Amazon Ads audio, Odeco, PodcastOne, Audioboom, National Public Media and Salem describe an attribution function without naming a method ^[193, 194, 195, 74, 196, 197, 198]. Veritonic, which the first coding included, sits outside the registered population.

That gives 11 of 12 (91.7%) with a documented method, and 11 of 19 (57.9%) with the undocumented products added. Both are above half, so H3 is supported under its registered rule. The margin is thin. Adding the four mixed products to the denominator, which the rule does not do, gives 11 of 23 (47.8%). Treating the two oldest supporting pages, Audacy's and DAX US's, as undocumented and recoding Claritas as an identity graph would together give 9 of 10 and 9 of 19 (47.4%), and the verdict would then be unresolved. This is a count of products. It says nothing about campaigns, spend or accuracy.

The codes also mix three different things: an identifier (the IP address), a matching level (the household) and a collection mechanism (the pixel). None says whether the resulting estimate is causal, modelled or reliable, and a product can document more than one design. Podscribe documents pixel-based attribution beside randomised listener holdouts ^[1]. A coding that splits collection method, matching unit, extrapolation and causal design would test the standards page's claim better than H3's single code. It was not registered, and this edition does not run it (review round 4, R4-03). With the four mixed products counted, the share is 11 of 23, so the result is a fragile basis for any general statement about audio attribution.

Households, match rates and lookback windows

Triton says podcast listeners send the ad server no third-party cookies or mobile device IDs, only an IP address, a user agent and an episode ID ^[175]. At best, an IP address identifies a household. Attribution therefore matches households. It does not identify the person who heard the ad ^[199, 177, 178].

Spotify Ad Analytics uses the IP address as its primary identifier and filters for household IPs. Its device graph, powered by Tapad, covers Australia, Canada, Mexico and the US. Spotify says it generally sees a 40-80% match rate, varying by campaign. The page gives no base, period or definition of what is matched ^[176, 199] ♦. Its default lookback windows depend on the IP type: 30 days for household and cable or DSL addresses, 1 day for corporate ones and 2 hours for cell towers. For impressions on non-household IPs it models results with a multiplier, total unique IPs divided by unique household IPs. The advertiser

can switch it off ^[200] ♦. The multiplier assumes those listeners convert at the household rate (an inference from the formula). This review found no validation of that assumption in the pages opened.

Podscribe matches on household IPs with a 30-day default window, adjustable from 0 to 60 days. Its device graph returns the household IP about 40% of the time for conversions on another IP. Where 10 or more user agents download podcasts on one IP, Podscribe calls the address noisy and models it. It says residential IPs usually carry about 50-60% of impressions; one of its pages says about half, and an FAQ example uses 47% ^[177, 201] ♦. A Podscribe marketing page claims match rates of 85% or higher across channels, with no base or period. The same page also states a 40%+ cross-device match rate ^[202]. Claritas's 2022 methodology note advises using matches not verified to a household IP only as directional insight ^[178]. SiriusXM Media says a 14-day window is typical for listeners who heard an ad without clicking, and 30 days for clicks ^[203].

None of the sample products documents confidence intervals or any other uncertainty measure for attribution results in the pages opened. Only Magellan AI and Megaphone mention de-duplication, for reach and for duplicate tracking URLs ^[200, 204, 177, 179, 173] ♦. A buyer receives a point estimate built on household matching, often with a modelled share added, and no error band.

What the lift products test

An attributed conversion is an action that followed an ad. It does not show the ad caused it. AdsWizz's June 2021 report covered 600 campaigns from 12 US and UK agencies. It counted 238,022,875 audio impressions and 9,521,850 conversion actions, 4.0% of impressions. Actions counted within 7 days of an audio ad or 1 day of a retargeted display ad. There was no unexposed control group ^[205] ♦.

Lift products add a comparison group. Spotify's Conversion Lift compares exposed impressions with a control sample of impressions selected by time and geography. The page describes no randomisation and reports no significance test. It needs at least 250,000 impressions and four weeks live, and is offered in Australia, Canada, Japan, Mexico and the US ^[204] ♦. Magellan AI builds simulated control groups from lookalike audiences and says no holdout group is required ^[206]. Claritas offers a "proprietary control group methodology" and reports an average 34% lift across more than 150 podcast campaigns, as compared with non-podcast channels, without method statistics ^[207]. In each design a model or a match picks the comparison group, so exposed and control listeners may differ in ways the match does not capture (an inference from the designs as described).

Seller and vendor outcome figures share that gap. Podscribe's benchmark report gives a median purchase lift of 26% for podcast-only campaigns against 10% for streaming-audio-only campaigns. The report page gives a base of 98K+ campaigns from May 2025 to April 2026. The report is gated, and neither the report page nor the trade article states the incrementality design or how many campaigns had an incrementality read ^[208, 209] ♦.

Westwood One, part of Cumulus Media, reported an NCSolutions study of a men's personal care brand from March to September 2017. It matched radio listening measured by Nielsen's Portable People Meter to household purchases, and found an 8% sales lift for the parent brand where men were exposed, and \$11.96 return on ad spend across all

households. It published no uncertainty or sample counts, and who paid for it is not stated [210]. Nielsen's October 2024 review of 2,857 campaigns in its marketing-mix models, selected where radio was a notable share of budget, says radio "consistently ranks as a top-tier medium for ROI" when impressions are large enough to measure. It publishes no ROI values. Nielsen also sells audio ratings and marketing-mix models [211].

Podscribe, the measurement vendor profile

Podscribe is profiled as a measurement vendor. Measurement vendors are described, not scored. Its terms name the contracting company as Podible, Inc. The US trademark record for the PODSCRIBE mark names Podible, Inc., organised in Delaware per that record, and the Texas Comptroller lists it as active in Texas [212, 213, 214]. This review found no parent company or funding filing. Podscribe sells prefix-based download counting and impression verification, transcript-based airchecks, household-level pixel attribution, incrementality testing and SmartServe. List prices, read on 29 September 2026, start with a \$250 monthly platform fee plus usage CPMs (cost per thousand impressions) from \$1.50 for podcast and \$0.50 for streaming impressions [112, 215].

Its certification is narrower than its marketing. IAB Tech Lab, the industry standards body, lists Podscribe under podcast guidelines v2.2 for the Download and Listener metrics, last certified on 8 December 2025. The certificate marks Ad Delivered and Client-Confirmed Ad Play as "Not Applicable" [111, 15] ♦. Podscribe's home page calls it "the only 3rd-party, IAB-Certified attribution provider". The guidelines define no attribution or incrementality metric [216, 15] ♦. Its pixel impressions for dynamically inserted ads can exceed one per download, so they sit outside the certified scope; its reports flag which count is used [110, 10].

Podscribe offers three incrementality designs. A synthetic control built from similar listeners is the default. Randomised ghost or PSA holdouts run through SmartServe for dynamically inserted ads; a ghost holdout serves nothing, and a PSA holdout serves a public service announcement. The randomised option is an add-on at \$0.50 CPM on the price list. Publishers can also build their own holdouts. Podscribe estimates that about two-thirds of publishers accept SmartServe for all buys. A holdout marks listeners' IP addresses as control, so for podcast buys the unit of randomisation is in practice an IP address [1, 217, 218] ♦. SmartServe also makes Podscribe the ad server and optimiser for campaigns it measures; it added AI optimisation and lookalike targeting on 6 August 2026 [219]. Podscribe says it checks its attribution against promo codes, vanity URLs and post-purchase surveys. This review found no published validation study of its attribution or incrementality with design and results, in the sources screened by the cutoff [177, 201].

Independent causal tests found

The registered count needs a randomised, holdout or geographic experiment, published with design and results, and paid for by a party with no financial interest in the result. This review found no such test of commercial audio advertising on advertiser outcomes, for podcast, streaming or broadcast audio, in the sources screened by the cutoff. The screen did not include a systematic search of academic databases [220, 221, 222] ♦.

It found three academic randomised field experiments with non-commercial radio messages. In the first, nonpartisan radio ads ran in a matched-pair design across 49 US cities holding mayoral elections in November 2005 and 2006. They cut the incumbent's vote share by 0.078 percentage points per gross rating point, a unit of audience reach times frequency. The authors call the result of borderline significance. Its funder is not stated in the pages opened ^[223, 220]. The second randomised the airdates of public service announcements on three US stations and was read at abstract level ^[221]. The third was a cluster-randomised trial in Burkina Faso, with 7 intervention and 7 control clusters from March 2012 to January 2015. It found no effect on under-5 mortality (risk ratio 1.00, 95% CI 0.82-1.22). The Wellcome Trust and the Planet Wheeler Foundation funded it; four authors were the chief executive and staff of the organisation that ran the campaign ^[222] ♦.

The largest randomised audio experiment found tested ad load on almost 35 million Pandora listeners from June 2014 to April 2016. One extra audio ad per hour cut mean listening time by $2.082\% \pm 0.227\%$ (95% CI) and active listening days by $1.911\% \pm 0.130\%$. Pandora ran it, and one author is affiliated with Sirius XM Pandora ^[224] ♦. It measures a cost to listeners and says nothing about advertiser outcomes; chapter 7 takes it up. It does show that an audio seller can randomise exposure at scale. With Podscribe also selling randomised holdouts, the missing public tests are a disclosure gap in the sources screened. They do not show that no tests are run.

Study evidence table

Outcome measures are deliberately not pooled: different outcomes are different quantities. Sort by any column; sponsorship is shown so a vendor-funded result is never read as independent.

Full records with limitations and source passages are in data/study-evidence.csv.

STUDY	YEAR	DESIGN	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Panagopoulos and Green, radio ads and electoral competition (AJPS 52(1))	2008	Randomised field experiment; unit = city; treatment = nonpartisan radio ads at varying GRPs; comparator = no-ad cities; no holdout beyond control cities	49 cities	US municipal elections, Nov 2005 and Nov 2006	broadcast radio ads (political, nonpartisan)	incumbent vote share	-0.078 pp incumbent vote share per GRP	borderline significance; falls short of conventional levels	Academic (Yale ISPS); funder not stated on pages opened: independence likely, unconfirmed	low for commercial brand outcomes	[223] [220]
Calfano and Green, radio PSAs, three field experiments (Electronic News 13(3))	2019	Randomised airdates of PSAs on three broadcast stations; comparator = non-air dates	3 stations (listener counts not read)	US broadcast radio	radio public service announcements	audience behaviour (per abstract)	significant but short-lived effects (abstract)	not read (abstract only)	Academic; funder not read: independence unknown	low to medium (non-commercial spots)	[221]
Sarrassat et al., mass radio campaign, Burkina Faso (Lancet Global Health)	2018	Repeated cross-sectional cluster-randomised trial; 7 intervention v 7 control clusters; 1-min spots ~10/day plus 2-h programmes	14 clusters	Burkina Faso, community radio	radio spots and long-format programmes (public health)	under-5 mortality (primary); facility use (secondary)	RR 1.00 for under-5 mortality; year-1 under-5 consultations +35% (routine data)	95% CI 0.82-1.22; p>0.999	Wellcome Trust and Planet Wheeler Foundation (no financial interest in result)	low for US commercial audio	[222]

STUDY	YEAR	DESIGN	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Goli, Huang, Reiley, Riabov, Pandora ad-load experiment (QME 23(3))	2025	Listener-level randomisation into nine ad-load arms (1% each) plus 10% control; 21 months	~35 million listeners	Pandora music streaming, US	streaming audio ads (ad load)	listening hours, days, ad-free subscriptions	+1 ad/hour: -2.082% listening time; -1.911% active days	± 0.227% and ± 0.130% (95% CI)	Pandora ran the experiment; author affiliated with Sirius XM Pandora: vendor	medium for streaming ad-load cost; not an advertiser outcome	[224]
NCSolutions for Westwood One, men's personal care brand radio sales effect	2018	Observational exposed v unexposed households (PPM panel matched to shopper cards); no randomised holdout	not stated on page	US AM/FM radio	broadcast radio ads	sales lift; ROAS	8% sales lift (exposed male households); \$11.96 ROAS all households	not reported	Westwood One (seller): commissioned	low (single brand, 2017)	[210]
Nielsen, radio in marketing mix models	2024	Meta-analysis of Nielsen MMMs	2,857 campaigns	national, local, international	radio, streaming audio, podcast	ROI ranking	radio 'top-tier' ROI; podcast 'not yet indicative'; no values	not reported	Nielsen (own; sells audio ratings and MMM): vendor	unknown (selection: radio a notable share of budget)	[211]
Nielsen, host-read podcast ads brand-lift summary	2020	Exposed v control brand-lift surveys (exposure method as summarised by Nielsen)	260+ surveys, 240 brands	US podcasts	podcast ads (host-read v non-host-read)	purchase and recommendation intent	+50% average (host-read v non-host-read, relative)	not reported	Nielsen (own): vendor	low (stated intent; exposure method unclear)	[516]
Podscribe Performance Benchmark Report (via Inside Radio)	2026	Incrementality method not stated in article; report gated	~98,000 campaigns (rolling 12 months); incrementality base unknown	US podcast and streaming audio	podcast and streaming audio ads	purchase incrementality lift	median 26% (podcast-only) v 10% (streaming-only)	not reported	Podscribe (vendor)	unknown	[208] [466]
AdsWizz Audio Attribution Technology Report	2021	Exposed-only attributed conversions; no control group	600 campaigns; 238,022,875 impressions	US and UK agencies' audio campaigns	streaming radio and podcast ads	conversion actions within 7 days	4.0% conversions per impression	not reported	AdsWizz (vendor)	low (not causal)	[205]

STUDY	YEAR	DESIGN	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
iHeartMedia/Triton AudioGraph proof of concept	2026	Not described (ID-based plan v demo-based plan)	not stated	US broadcast radio	broadcast radio ads	unnamed KPI	+75% v demo-based plans	not reported	iHeartMedia/Triton (vendor)	unknown	[190]
dentsu Audio Attention Economy study, with Lumen Research (podcasts, radio; Amazon Music run separately)	2023	Forced-exposure listening (about one hour) + survey vs similarly recruited control; attention modelled by Lumen; comparator = dentsu cross-media norms	not stated	US; podcasts via Audacy, Cumulus, iHeartMedia, Spotify, SXM Media; radio via Audacy, Cumulus, iHeartMedia	podcast, broadcast radio, music streaming	modelled attentive seconds per 1,000 impressions (APM); brand recall; brand choice uplift	APM 10,126 vs 6,501 norms; recall 41% vs 38%; brand choice +10% vs +6% (podcast-only: recall 33%, +7%)	none reported	not stated; agency study with participating sellers who supplied ads and programming	low: model estimate equated to visual attention, lab exposure, no published method	[233] [234] [235] [236] [237]
dentsu Attention Economy phase two, with Amplified Intelligence (Spotify as audio partner)	2021	Survey of exposed users with questionnaires and brand choice; attention from a model of dwell and exposure factors; comparator = platform average	1,000	US and UK Spotify users listening to music	streaming music audio and video ads	attentive seconds	Spotify audio ads +14% attentive seconds vs platform average	none reported	not stated (seller summary)	low: seller summary of an unpublished agency report	[517]
Spotify Sonic Science (Neuro-Insight), volume 1 and 2023 WPP wave	2021; 2023	Lab listening to pre-recorded playlists and podcasts with ads; Steady State Topography headsets; comparator = Neuro-Insight all-media norms	316 podcast + 273 music (2021); 135 US + 132 UK (2023)	US (2021); US and UK (2023)	streaming music, podcast	neural engagement, memory encoding, emotional intensity	29% more engaging, 20% more memorable, 19% higher brand breakthrough than all other US media (2021)	none reported	Spotify (paid and commissioned Neuro-Insight)	low: proprietary benchmark, no error margins published	[240] [239]

STUDY	YEAR	DESIGN	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Spotify Sonic Science (Neuro-Insight) visual attention wave	2022	Neuro measurement of occipital activity during audio ads; comparator = Neuro-Insight all-media benchmark	250+	US and Australia; 24 ads, 4 industries	streaming music, podcast	'visual attention' (occipital-lobe activity read as mental imagery)	Spotify ads +27% visual attention vs benchmark	none reported	Spotify (paid and commissioned Neuro-Insight)	very low for auditory attention: construct is visual	[239]
Adelaide AU channel indices published by Westwood One	2024	AU model scores by channel; comparator = linear TV and social platforms	not stated	US (not stated on page)	broadcast radio, streaming audio, podcast	AU attention index; attention per dollar	AM/FM 85%, streaming audio 86%, podcasts 94% of linear TV; \$1,000 AM/FM = \$2,635 Facebook	none reported	not stated; published by a seller that is an Adelaide publisher partner	low: model outputs, CPM source unstated	[231] [242]
Adelaide and NPR podcast AU analysis	2023-2024	Observational comparison of higher- vs lower-AU shows; outcome data also used as AU model inputs	60+ shows; 75M impressions; 75,000+ attributed conversions	US, NPR podcasts	podcast	site visitation; brand lift	higher-AU shows +30% site visitation; up to +19% brand lift	none reported	not stated; NPR (seller) with Adelaide	low: not an out-of-sample validation	[242] [232]
Sounds Profitable, The Ad Bargain (Signal Hill Insights)	2024	Online self-report survey; each medium's users asked about their medium	2,020	US adults 18+, weighted to Census	podcast vs radio, streaming TV, TikTok, YouTube	stated attention to ads ('watch or listen to all of the ads'); stated annoyance	all of the ads: podcasts 28%, radio 23%, streaming TV 18%, TikTok 14%, YouTube 10%; 63% say favourite podcasts' sponsor messages less annoying than other ads	none reported	Wondery, Spreaker, BetterHelp, ESPN Podcasts, Libsyn Ads, SiriusXM Podcast Network, NPR, Paramount	low: self-report, different bases per medium	[245] [246]

STUDY	YEAR	DESIGN	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Sounds Profitable, Ad Nauseam (Signal Hill Insights)	2024	Online self-report survey of weekly podcast listeners	1,011	US weekly podcast listeners 18+	podcast	stated annoyance, skipping, abandonment	52% at least slightly annoyed (derived); 46% always or often skip; 30% have stopped a podcast over too many ads	none reported	Wondery, BetterHelp, ESPN Podcasts, Libsyn Ads, SiriusXM Podcast Network, NPR, Paramount	medium for podcast listeners' stated attitudes; no comparator medium	[246] [247]
Kantar Media Reactions 2021 and US 2025	2021; 2025	Syndicated consumer receptivity surveys ranking channels and media brands	14,500+ (2021, 23 markets); 21,300 (2025, 30 markets, at least 500 each)	global; US within 2025 study	all channels incl. podcast ads	stated ad receptivity (ad equity)	podcast ads 11th overall in 2021, top digital ad medium, 'more repetitive'; 2025 US consumer preference led by OOH, sponsorships, online publications	none reported	Kantar (own syndicated study)	medium for stated receptivity; not attention	[248] [249]
Johnson et al., Memory for short audio ads (Psychology & Marketing 38(11))	2021	Lab experiment: incidental memory for 2-, 4- and 8-second ads heard during a driving game with music	not read (abstract only)	US lab (UCSF Neuroscape with Pandora)	streaming music audio ads	recall and recognition	each duration left recall and recognition traces; first or last in pod remembered best	not read	not read; five of eight authors at Pandora	low for cross-format claims; no comparator format	[518]
Veritonic with Audiomob, in-game audio brand lift	2025	Post-exposure survey of users who heard in-game audio ads; comparator recall figures of unstated origin	not stated (37M ad impressions)	mobile games; geography not stated	in-game audio	recall; stated format preference	recall 30% vs podcasts 6% and music streaming 5%; 54% prefer audio ads over interruptive video	none reported	not stated; partnership with Audiomob (seller)	low: unmatched comparators, sample not stated	[519]

STUDY	YEAR	DESIGN	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Edison Research and Consumable, audio-led ad forced-exposure test	not visible	Forced exposure to one home-security ad in three randomised versions (audio only, audio + image, audio + video); results reported by audience segment	2,158	US adults	audio-led ad creative	stated liking and 'held my attention'; brand awareness and favourability	held attention: 71% of monthly podcast consumers vs 62% overall	none reported	not stated	low: per-version results not reported in the article read	[253]
Veritonic brand-lift survey published by Audiomob	2025	Online survey of respondents who had heard or interacted with Audiomob ads; no control	333	Mobile games (Audiomob inventory); geography not stated	In-game audio (rewarded and standard)	Stated preference, self-reported recall and behaviour	54% prefer audio vs 9% video (37% no preference); 42% continue playing, 2% close game, 56% would skip if possible; 30% recall ads from mobile games vs TV 32%	None reported	Audiomob (conducted 'in partnership with Audiomob'); payer not stated	Low: self-selected vendor audience, 67% women, no dates	[361]
Audiomob case study: Lockwood Publishing (Avakin Life)	undated	Vendor case study; no method	not stated	One title, Avakin Life	Rewarded and standard audio	Revenue, retention, conversion	+10% revenue; '0%' retention damage; +5% conversion and spend	None reported	Audiomob (vendor)	Very low	[348]
Audiomob case study: TapNation (Ice Cream Inc)	undated	Vendor case study; no method	not stated	One hyper-casual title	Standard audio	ARPPDAU, retention	+5% ARPPDAU; 'without negatively impacting player retention'	None reported	Audiomob (vendor)	Very low	[349]
Audiomob case study: Magic Lab (Dream Wedding)	undated	Vendor case study; no method	not stated	One casual title	Rewarded and standard audio	Revenue, retention	+7% revenue; 'no retention damage'	None reported	Audiomob (vendor)	Very low	[350]

STUDY	YEAR	DESIGN	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Odeeo case study: Rocket Studio (landing page; full study gated)	undated	Vendor case study; method not visible	not stated	Multiple titles, Rocket Studio (Vietnam)	In-game audio	Revenue, retention, playtime	+10% revenue; 'no impact on retention, playtime, or other monetization channels'	None reported	Odeeo (vendor)	Very low	[351]
Odeeo case study: Lihuhu (landing page; full study gated)	undated	Vendor case study; method not visible	not stated	Puzzle titles, Lihuhu (Vietnam), 'key markets'	In-game audio	Ad revenue, retention	Up to +8% ad revenue; 'without impacting player retention or satisfaction'	None reported	Odeeo (vendor)	Very low	[352]
Odeeo integration guide claim	2022	Vendor statement; recommends A/B tests but publishes none	not stated	Hyper-casual studios, US ARPDau	Standard audio with icon	ARPDau, retention, playtime	+4% to +7% ARPDau (US); 'minimal adverse impact on retention and playtime'	None reported	Odeeo (vendor)	Very low	[354]
Gamejam anecdote in AdExchanger	2021	Anecdote from a partner developer; early test in 30 games	30 games (players not stated)	Gamejam titles	Rewarded audio (Odeeo)	Engagement, retention	'more engagement and stronger retention' (qualitative)	None reported	n/a (trade press quoting partner)	Very low	[333]
Burns, Roseboom and Ross: sensitivity of retention to in-game ads	2016	Observational panel; with-ads vs without-ads users; not randomised	99,620 users (1/16 sample) in 21 games	21 F2P mobile games using DeltaDNA analytics	In-game ads in general (not audio)	Individual-level retention measures	'weak, insignificant effect' of ads on retention; game identity dominates	Significance tests reported; no CI for a retention difference in the passages read	Not stated; University of San Francisco authors plus one DeltaDNA author	Low for audio: different format, confounded exposure, 2016	[355]
Odeeo x McDonald's/Admerasia (blog summary; full study gated)	2025	Outcome measurement by Claritas, 30-day lookback; design not published	not stated	Mobile apps, Asian American audiences, US	In-app audio	Installs, registrations, orders; LTR, CTR	+50% installs; +50% registrations; LTR 90.37%; CTR 3.13%	None reported	Odeeo (vendor); Claritas measurement, payer not stated	Low	[359]

STUDY	YEAR	DESIGN	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Audiomob x HMRC 'Help for Hustles' (blog summary)	2026	Delivery metric plus post-campaign research; method not published	not stated	Mobile apps, UK	Standard and Moments audio	LTR, recall, stated action	LTR 95.2%; recall 27% (33% among side hustlers); 9 in 10 took or intended action	None reported	Audiomob (vendor)	Low	[364]
Audiomob x SMRS x UWE Bristol	undated	Vendor case study; delivery metrics only	not stated	Mobile games, UK	Rewarded and standard audio	LTR, CTR	LTR 73%; CTR 2.69%	None reported	Audiomob (vendor)	Low	[520]

The table holds all 34 study records in this paper, with design, sponsor and uncertainty.

Whether most podcast attribution is modelled

The standards page says most podcast attribution is modelled. The documented methods are consistent with that. Spotify applies a multiplier to non-household impressions, Podscribe extrapolates for noisy IPs and Claritas treats unverified matches as directional [200, 177, 178]. If residential IPs carry roughly half of impressions, as Podscribe says, roughly half sit outside direct household matching. Spotify lets the advertiser switch its modelling off. No source opened publishes the share of reported conversions that is modelled. The claim is consistent with the record, but "most" is not established.

Privacy limits on IP matching

IP matching carries legal weight. California's privacy law, the CCPA, covers information that can be linked to a consumer or a household. It lists IP addresses, pixel tags and probabilistic identifiers as identifiers [225]. This paper infers that household matching for audio attribution handles personal information under that law. Whether a disclosure counts as sharing, a sale or a service-provider transfer depends on contracts that are not public. The opt-out signals regulators name have no documented path to podcast downloads made through third-party apps [225, 226, 227, 228] ♦. Acast does not pass IP addresses to third parties in the European Economic Area without consent [229]. Podscribe's privacy policy offers an email opt-out from IP and user-agent collection [230]. Chapter 11 sets out the rules.

Attention and the listener

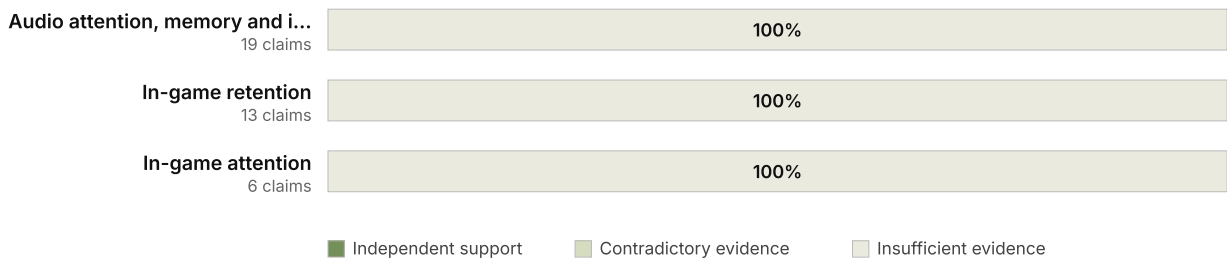
Audio sellers say their ads earn more attention and irritate listeners less than other formats. This chapter codes the public evidence behind those claims with the attention paper's definitions and finds none of it strong enough to settle them in either direction.

IN SHORT

Every public audio attention, memory and intrusiveness claim this review coded is insufficient evidence under Q4's registered rule; none has independent support and none is contradicted ♦. The most-cited study, dentsu's 2023 work with Lumen Research, reports a modelled attention score that Lumen equates to visual attention, and the sellers that took part supplied the ads and programming ♦. Spotify says it paid for its 2021 and 2022 Neuro-Insight studies, and its "visual attention" figure rests on occipital-lobe activity read as mental imagery ♦. Adelaide's attention unit for audio is a prediction, and its NPR analysis cannot be treated as an out-of-sample validation, an inference from the pages ♦. The Media Rating Council lists Adelaide's audio channels as pre-audit reviewed in May 2026, audit not begun ♦. Surveys sponsored by podcast sellers point both ways: 63% of respondents in one call favourite podcasts' sponsor messages less annoying, while 52% of weekly podcast listeners in another call the ads at least slightly annoying ♦. The strongest design found is Pandora's randomised test, in which one extra ad per hour cut listening time by $2.082\% \pm 0.227\%$ ♦. None of the claims coded cites the IAB and MRC Attention Measurement Guidelines v1.0 of November 2025 ♦.

The author's audio playbook says audio sells on attention and non-intrusiveness. Q4 asks what evidence stands behind claims of that kind. It is a research question with no direction, answered with a coding rule registered before extraction. Independent support needs a study whose design fits the claim (a randomised or holdout test, or an out-of-sample validation for an attention model), with published method and results and a funder with no financial interest in the result. Contradictory evidence needs a study that meets the same bar and finds the opposite. Everything else is insufficient evidence.

The definitions come from this project's companion paper on attention measurement. It keeps four layers apart: the opportunity to see or hear, attention, memory or brand response, and behaviour or sales. For every number it records the construct claimed and the measurement basis, either direct observation of people or a model estimate. A model output is never called observed attention.



None of the coded public claims has independent support; all are coded insufficient evidence. Every public claim coded by this review that audio earns attention, is less intrusive, or (for in-game audio) does not hurt player retention, under the registered Q4 rule. The coded set is not complete: a verifier found at least four more attention claims on pages already screened, which would code the same way on the evidence shown. Retention claims were judged against a non-inferiority margin of 1.0 percentage point in day-7 retention, fixed before any study was read.

Units: claims · Scope: claims coded by workstreams F and H by the cutoff · Sources [233] [308]

Insufficient evidence is not refutation: it means no study with a design that fits the claim, published method and an independent funder was found in the sources screened.

Every public claim this review coded is insufficient evidence: 19 audio attention, memory and intrusiveness claims, 13 in-game retention claims and 6 in-game attention claims. Insufficient is not refuted, and the class is wide. It holds a strong experiment run by a seller, which fails only the independent-funder test, beside modelled scores and assertions with no study behind them. The study table in chapter 6 records each study's design, sample, uncertainty and sponsor, so what a study shows stays visible when it cannot count as independent; replication was not coded (review round 4, R4-05). Chapter 9 discusses the in-game rows. The 19 is a count of coded rows. A separate verification agent found at least four more claims of the same kind on pages already screened, among them a Westwood One ad-skipping survey and National Public Media's benchmark comparisons, and each would code the same way on the evidence shown [231, 232] ♦.

The dentsu and Lumen study

Dentsu, the agency group, announced its audio Attention Economy study with Lumen Research on 1 August 2023. Podcasts were tested with Audacy, Cumulus Media, iHeartMedia, Spotify and SXM Media, and radio with Audacy, Cumulus and iHeartMedia. Amazon Ads ran a separate study on Amazon Music. The release reports 10,126 attentive seconds per 1,000 impressions (APM) for audio ads, against dentsu norms of 6,501. Correct brand recall was 41% against 38%, and brand choice uplift was 10% against 6% [233] ♦. The norms were dentsu's cross-media benchmarks for TV, online video, social and display.

Per SiriusXM Media's note, recruited listeners chose content across genres, heard standard ad loads and listened for about an hour. Lumen then "modeled an attention score which is equivalent to that based on visual attention" from passive listening data, survey results and the type of ad exposure. The releases screened publish no reference labels for auditory

attention, validation, sampling error, panel size, fieldwork dates or funder ^[233, 234, 235] ♦. Under the attention definitions, the figure is a model estimate scaled to a visual construct and does not record observed listening.

The sellers describe the headline aggregate two ways. The joint release says the 41% recall and 10% uplift cover podcasts, radio and music streaming. Audacy says they cover radio and podcasts only. The pooled 10% uplift is higher than both the podcast figure (7%) and the radio figure (9%), so it cannot be an average of those two alone. For podcasts alone, Audacy reports 33% average brand recall, which it calls "in line with visual ads" although the norm in the joint release is 38%. Podcast brand choice lift was 7% against a 6% norm ^[236, 237, 233] ♦. With no sample size or uncertainty by format, a one-point gap cannot be judged.

The sellers took part and still cite the result. Audacy called the study "third-party" while saying Audacy and other audio players supplied samples of their advertising and programming ^[237]. SiriusXM Media's page of 21 September 2026 says audio ads "outperform benchmarks across video, TV, display, and social by more than 50%", sourced to the 2023 study. Its own 2023 note said the benchmarks were those at the time of release; the 2026 page drops that caveat ^[238, 235] ♦.

Spotify's neuro studies

Spotify's Sonic Science pages report brain-measurement studies run by Neuro-Insight, and Spotify states that it "paid and commissioned" the 2021 and 2022 work ^[239]. The 2021 study reports that advertising on Spotify is 29% more engaging, 20% more memorable and delivers 19% higher brand breakthrough than all other US media, defined as TV, radio, digital audio, digital video and social. Spotify footnotes these figures to a 2021 "Post-SST Survey" with 316 podcast and 273 music participants. SST is Steady State Topography, Neuro-Insight's headset method of recording brain activity. It is not established that this is the brain-measurement sample. A 2023 wave with WPP, with 135 participants in the US and 132 in the UK, reports other figures, and its funding is not stated on the page ^[240, 239] ♦. The comparator is Neuro-Insight's own all-media database, with no matched test and no uncertainty shown.

Spotify also says its ads drive 27% more "visual attention" than Neuro-Insight's all-media benchmark, from 250+ participants in the US and Australia, 24 ads and two formats, music and podcasts, in the 2022 work. Neuro-Insight's explanation is activity in the occipital lobes, the visual cortex, which it reads as listeners creating mental imagery ^[239]. That makes the figure a neural proxy for a visual construct. This review's reading, an inference under the attention definitions, is that it does not measure attention to the audio ad ♦. The attention guidelines of the IAB (the digital advertising trade body) and the MRC, described below, ask neuro and biometric methods to disclose quantifiable error margins. Spotify's pages show none ^[241].

Adelaide's attention units

Adelaide sells a vendor-defined attention unit, the AU. It describes AU as a metric that "evaluates thousands of signals to predict attention and subsequent impact". For podcasts, the exposure inputs are genre, ad position, ad load and ad type, and full-funnel outcome

data also feed the model ^[242, 243] ♦. No page screened describes observed listening labels for audio, so the measurement basis is a model estimate. MediaSense audited AU from February to June 2025 at Adelaide's request. Adelaide's summary calls the method "outcome-driven" and names no audio scope ^[244].

Cumulus Media's Westwood One published Adelaide AU comparisons on 12 August 2024. They put AM/FM radio at 85% of linear TV's attentiveness, streaming audio at 86% and podcasts at 94%. They also say \$1,000 of AM/FM ads need \$2,635 of Facebook ads for the same attention. The raw page could not be retrieved; as read through a summarising fetch tool, it gives no sample, period, CPM (cost per thousand impressions) source or AU method. Westwood One was a launch partner of Adelaide's publisher product for audio, announced on 9 May 2024 ^[231, 242] ♦. By these indices every audio channel sits below linear TV, and the per-dollar comparison rests on unsourced prices.

National Public Media, NPR's sponsorship subsidiary, published an analysis with Adelaide on 29 April 2024. It covered more than 60 shows, 75 million impressions and over 75,000 attributed conversions, with an initial analysis in 2023. Shows with higher AU scores had 30% higher site visitation and up to 19% greater brand lift. National Public Media says the brand-lift and conversion data were "processed by the AU model", and no held-out test is described. The association therefore cannot be treated as an out-of-sample validation of attention. That is an inference, because the pages do not say whether the same outcome data were used to fit the scores ^[242, 232] ♦. The full report sits behind a personal-data form and was not read.

The Media Rating Council (MRC) is the US body that accredits audience measurement. In its lists read on 28 September 2026, this review found no accredited or in-process podcast or streaming-audio measurement service. The only audio-related entry under review is Adelaide's AU, whose channels include podcasts, streaming audio and terrestrial audio. It is listed as "Pre-audit reviewed 5/2026, Audit not begun" ^[115] ♦.

What listeners say in surveys

Sounds Profitable has published surveys that point in both directions. The Ad Bargain, released on 4 April 2024, is an online survey of 2,020 US adults run by Signal Hill Insights and sponsored by eight podcast sellers and advertisers, among them Wondery, SiriusXM Podcast Network and NPR. In it, 63% of respondents said their favourite podcasts' sponsorship messages are less annoying than other ads; the release does not state the base for that figure. Asked whether they "watch or listen to all of the ads", 28% answered yes for podcasts, 23% for radio, 18% for streaming TV, 14% for TikTok and 10% for YouTube ^[245, 246] ♦. Each medium was asked of its own users, and all of it is self-report.

Ad Nauseam came from the same body and a similar sponsor group on 12 June 2024. It surveyed 1,011 US adults who had listened to a podcast in the previous week. Of them, 52% described podcast ads as at least slightly annoying, against 48% who enjoy them or do not mind. Some 46% said they always or often skip ads, and 30% said they had stopped listening to a podcast because it carried too many ads ^[246, 247] ♦. That question had no comparison medium. Sponsor-funded self-report supports the less-annoying claim in one survey and qualifies it in the other.

Kantar's syndicated Media Reactions survey names no audio seller as funder. Its 2021 edition, covering more than 14,500 consumers in 23 markets, placed podcast ads 11th in the overall ad equity ranking. It called them the preferred digital ad medium, and more repetitive than in 2020 ^[248]. The 2025 US release, from 21,300 consumers in 30 markets, gives no podcast or radio rank. It says marketers' plans to raise podcast budgets, from a global survey of 974 senior marketers, are "at odds with the consumer preference for OOH [out-of-home], sponsorships, and online publications" ^[249] ♦. In September 2022 Acast wrote that podcast host reads ranked No.1 in Kantar's 2021 report. Kantar's own summary says podcast ads overtook influencer content as the preferred digital ad medium and does not mention host reads ^[250, 248] ♦. Kantar's survey has no audio-seller funder, but it measures stated preference, which cannot carry an attention claim in either direction.

The Radio Advertising Bureau (RAB), the radio sellers' trade body, says radio holds more than 93% of its lead-in audience during commercial breaks. Its source is the 2011 edition of a study by Nielsen Audio, Media Monitors and Coleman Insights. The same page shows retention falling from 100% for one-minute breaks to 85% for breaks of six minutes or more ^[251] ♦. Audience retention measures the opportunity to hear, the first layer, and says nothing about attention.

Other claims rest on no cited study or on self-report. iHeartMedia's page of 3 October 2025 says audio reaches people in "high-attention moments like traffic, sports, and weather updates" and cites nothing for that sentence. A forced-exposure test by Edison Research and Consumable of 2,158 US adults found that 71% of monthly podcast consumers said the ad held their attention, against 62% of the whole sample; the article read gives neither year nor funder ^[252, 253] ♦. That is a comparison of audiences, not formats.

Pandora's randomised ad-load test

Between June 2014 and April 2016, Pandora ran a randomised experiment on almost 35 million listeners of its mobile app. A hash of each user ID assigned listeners to one of nine ad-load groups or a control group. One additional ad per hour reduced mean listening time by $2.082\% \pm 0.227\%$ and active listening days by $1.911\% \pm 0.130\%$, both at 95% confidence. Higher ad load also increased paid ad-free subscriptions ^[254, 255] ♦. Pandora, the seller, ran the experiment, and its then staff published it; a journal version appeared in Quantitative Marketing and Economics in February 2025.

It is the strongest design this review found, and it shows a measurable cost in listening time. It varied ad load within one music service, with no other format as comparator, so it neither supports nor contradicts a claim that audio ads are less intrusive than other formats. Attention was not measured. Chapter 6 lists it among the randomised audio tests.

The standard no claim cites

The IAB and the MRC published final Attention Measurement Guidelines, Version 1.0, in November 2025. They bring "audio-based signals without corresponding visual media" into scope. They define attention as whether an ad was "seen or heard by a person and to what depth", and they require audibility for audio ads. Neuro and biometric devices must be validated and must disclose quantifiable error margins. The guidelines state that attention

is not a standalone measure of effectiveness ^[241] ♦. None of the audio claims coded here cites the guidelines or an audit against them. Most predate November 2025, but SiriusXM Media's page of 21 September 2026 came ten months later and still rests on the 2023 dentsu figures ^[238].

A claim would move to independent support with a randomised or holdout test against another format, or an out-of-sample validation of an audio attention model against observed listening, published in full by a funder with no stake in the answer. This review found no such study in the sources screened by the cutoff ^[233, 239, 245, 232] ♦. The playbook's claim that audio sells on attention and non-intrusiveness is therefore unresolved from public sources.

Brand safety and suitability

Podcast buyers can now ask for their ads to run only in episodes that software has transcribed and scored. This chapter asks who has checked that software and what a buyer can see once a campaign has run.

IN SHORT

In the Media Rating Council's records read on 28 September 2026, this review found no audio or podcast brand-safety or suitability service accredited or under review; the two accredited content-level services cover YouTube [♦]. The World Federation of Advertisers discontinued the Global Alliance for Responsible Media (GARM) on 9 August 2024. GARM's eleven categories now sit in IAB Tech Lab's Content Taxonomy 3.1, and its four risk levels in a vector that IAB Tech Lab still defines by reference to the GARM specifications [♦]. Three transcript-based classifiers recur in the sources: Barometer, Sounder and Proximic by Comscore. None has published accuracy figures in the sources screened [♦]. Sounder is owned by Triton Digital, an iHeartMedia subsidiary. Integral Ad Science and DoubleVerify announced suitability reporting for YouTube Audio Ads on 11 June 2026, and IAS announced episode-level pre-bid segments for Spotify podcasts bought through The Trade Desk from July 2026 [♦]. Among reports for advertisers in the sources screened, only Acast documents a show-by-show list of where an ad ran, counted in ad deliveries [♦].

Brand safety keeps an ad away from content that almost no advertiser would accept; GARM called that line the Floor. Suitability lets each advertiser set its own tolerance by content category and risk level. In podcasts the tools transcribe each episode and classify the text. Most of the record on them is the vendors' own documentation, and this chapter labels it that way.

No accredited audio brand-safety service

The Media Rating Council (MRC) is the US body that audits and accredits media measurement. Its lists, as displayed on 28 September 2026, carry two accredited services for content-level brand safety and suitability: Google's own YouTube brand safety, and Zefr's third-party reporting on it. Both run in desktop, mobile web and in-app environments, plus connected TV for Zefr. The environment key has no audio entry ^[116, 115] [♦]. MRC also accredits property-level ad verification, which rates whole sites and apps, for DoubleVerify, Integral Ad Science (IAS) and Protected Media. None of those covers an audio environment ^[116]. MRC's multimedia, television, outside-US and radio pages carry no audio brand-safety entry either ^[256, 117]. The one entry under review that names podcasts or

streaming audio is Adelaide's attention measurement, at pre-audit stage; chapter 7 covers attention.

A standard exists that such an audit could apply. MRC's September 2018 supplement on content-level brand safety is not written for audio. It does require content-level measurement to go beyond keywords and to consider images, video, text and audio ^[257, 258].

What replaced GARM

GARM was an initiative of the World Federation of Advertisers (WFA). Its toolset included the Brand Safety Floor and the Adjacency Standards Framework. The WFA's statement of 9 August 2024 discontinued it ^[259] ♦. When the WFA and X Corp. announced on 29 July 2026 that they had settled X's litigation over GARM, the WFA's statement said it "will not form or restart GARM or a similar initiative" ^[260, 261].

The categories outlived the body. IAB Tech Lab, the technical standards arm of the Interactive Advertising Bureau (IAB), carries all eleven as the "Sensitive Topics" branch of its Content Taxonomy 3.1. That version is dated December 2024, with public comment open until 24 January 2025 ^[262, 263, 264]. The risk levels survive as labels. IAB Tech Lab's Descriptive Vectors file for Content Taxonomy 3.0 has a vector named "Brand Suitability and Risk", with the values Floor, High Risk, Medium Risk and Low Risk. Its implementation notes, updated in August 2025, define each level only by reference to the GARM and 4A's APB specifications ^[265, 266] ♦. The 4A's APB is the Advertiser Protection Bureau of the American Association of Advertising Agencies ^[267]. So the level labels have a maintained home, but their definitions point to a closed framework. This review found no IAB Tech Lab document restating those definitions after GARM closed, in the sources screened by the cutoff.

Sellers describe the scheme in different words. Spotify's 2023 advertiser articles, still live in September 2026, cite GARM's Floor and framework. Triton Digital's Sounder documentation attributes its eleven categories and four levels to an "IAB Brand Suitability and Risk Framework", a name that echoes IAB Tech Lab's vector. SiriusXM Media's 2025 guide attributes its floor to "IAB guidelines", but the link leads to its page on the IAB podcast measurement guidelines, which count downloads and ads. A Basis and Barometer release of August 2026 cites an "industry agreed upon framework" ^[268, 269, 270, 271] ♦. This review infers from these few vendor pages that GARM still anchors audio suitability tiers two years after it closed.

Three classifiers and their owners

Barometer classifies podcast episodes for suitability. Its category document, current as of 11 June 2024, applies the GARM categories to podcasts. Where a category is present, it gives a high, medium or low risk level from topic classification plus tone ^[272]. Between November 2023 and September 2026, Barometer announced or documented integrations with at least eight audio sellers and buying platforms. Pre-bid episode targeting, applied before a buyer bids, went live across Acast's inventory on 22 January 2026. It became available across the AdsWizz product suite and the SiriusXM Podcast Network on 24 March 2026, and went live for Spotify Ad Exchange buys on The Trade Desk on 17 June 2026. Basis, a demand-side

platform (DSP), announced an integration in August 2026 and PRX a partnership in September 2026; neither release says the service is live, though a Barometer and Magellan AI release of 15 September 2026 lists Basis among the platforms where Barometer is live [273] [274, 275, 276, 271, 277] ♦.

Sounder sits inside a seller group. iHeartMedia launched Sounder-powered episode-level brand safety on 27 February 2023, while it was a strategic investor in Sounder, and described the launch as third-party verification. Triton Digital announced its acquisition of Sounder on 26 March 2024. On 20 May 2026 Triton announced expanded availability of Sounder.AI contextual and suitability segments in The Trade Desk [278, 279, 280, 269] ♦. The list of subsidiaries filed with iHeartMedia's 2025 Form 10-K includes Triton Digital, Inc. [281, 66]. Since 2024, then, iHeartMedia's own group has owned the classifier it launched as third-party.

Audioboom announced on 11 March 2025, in a non-regulatory press release, that Sounder's AI would be built into its Showcase marketplace. Its FY2025 results, published on 16 April 2026, list among key commercial developments that it “launched AI capabilities in Showcase through the integration of Sounder AI” for brand suitability guidance and contextual targeting [282, 71]. That is a one-line issuer statement with no mechanics, categories or independent confirmation (review round 3, R3-08). A classifier owned by a competing seller group’s subsidiary therefore rates Audioboom’s shows. That is this review's inference; no source describes an effect on buyers.

Comscore's release of 22 July 2026 announced integrations of Proximi by Comscore with Spotify, SiriusXM, Triton Digital, Acast and Libsyn. They let advertisers activate brand-safety tools and predicted audiences from episode transcripts. The headline says "Targeting and Measurement". The body describes targeting and suitability activation, not measurement. It names no measurement metric, category list, risk level or accreditation, and does not say which integration is live on which platform [283] ♦. The help pages of the Triton Advertising Platform (TAP) do not document the Proximi integration, which exists for Triton only as that announcement [284, 285].

None of the three classifiers appears in MRC's accredited or under-review lists, and the releases that describe them state no accuracy, error rate or independent validation [116, 274] ♦. The performance words that exist carry no method. Acast's January 2026 release with Barometer says initial campaigns reported "100% alignment" with the advertiser's brand standard at episode level, with no sample or verifier named [274]. SiriusXM Media calls Barometer's method "highly accurate" and gives no figure [286]. This review found no published validation study for any of the three, with precision, recall or agreement between human raters, in the sources screened by the cutoff.

What sellers let buyers set

In 2023 Spotify documented sensitive-topic filters in Ad Studio at four levels (Standard, Partial, Limited and Restricted), with a Custom setting per category. On the Spotify Audience Network (SPAN) it added a Sensitive Topics control on top of the GARM floor, and transcript-based Contextual Topics [268, 287] ♦. Its current US help-centre page, read on 29 September 2026 through a summarising fetch and re-read in a rendering browser for review round 3 (R3-09), documents the same four sensitive-topic levels under “Contextual

placement controls”, applied uniformly or per topic, and episode-level transcript classification; the Ads API v3 reference lists the same levels ^[288, 289]. The page is undated, and neither source documents a show-level allow or block list.

SiriusXM Media documents transcription targeting and Barometer pre-bid evaluation. Its published tier scheme changed from three levels in 2023 to a floor plus two tiers in 2025, and it publishes no category list ^[286, 290, 270]. At its ad-technology arm AdsWizz, episodes uploaded to the Simplecast hosting system are scored by Barometer before publication, and untagged episodes cannot run in suitability-targeted campaigns ^[275, 291]. TAP documents Sounder episode tags for flights and programmatic deals, plus include and exclude rules on stations and podcasts. Its help pages document no third-party verification integration ^[284, 285].

Some controls face the other way. Libsyn announced Barometer verification of suitability for every episode in August 2024. Its creator-side controls, documented in August 2026, are three exclusion groups over advertiser categories. They decide which advertisers may run on a show, which is a separate question from what content an advertiser's ad runs beside ^[292, 293]. At Amazon, Wondery said in May 2024 that its whole back catalogue carried Barometer scores. This review found no Amazon Ads documentation of episode-level suitability controls for audio or podcast buys, in the sources screened by the cutoff ^[294, 295].

The Listen Quotient scores these controls as dimension 12. Vendor documentation caps a cell at 4, no row in either cohort reaches 5, and most radio groups have no scoreable record. Chapter 12 reports the scores.

Verification from outside the seller

On 11 June 2026, IAS and DoubleVerify each announced brand safety or suitability measurement for YouTube Audio Ads campaigns, reported post-bid, after the ads run. YouTube Audio Ads run across YouTube Music, podcast content on YouTube and other audio-forward inventory that Google sells. Neither release covers podcast publishers' own inventory or claims MRC accreditation for audio. IAS's digital-audio product page documents audibility and invalid-traffic measurement on Pandora only ^[296, 297, 298] ♦. The first draft said this review had found no IAS or DoubleVerify classification of podcast inventory outside YouTube. The freeze recheck found one: on 16 June 2026 IAS announced episode-level contextual segments, applied before the bid, for Spotify podcasts bought through The Trade Desk, available from July. The release names protection of the brand among its aims. Whether the segments went live was not confirmed, and no cell was rescored for it ^[299].

Spotify reported in June 2023 that IAS, at Spotify's invitation, classified a sample of 800,000 monetised podcast episodes from a 12-month period across the eleven GARM categories and all risk levels, using machine learning with random human review. Less than 1% of the Spotify Originals and Exclusives and SPAN content in the sample fell below the GARM Floor ^[300] ♦. Only Spotify reports the result, without IAS's method document, sample dates or uncertainty, and who paid IAS is not stated. The unit is episodes, which says nothing about impressions or listening time.

SiriusXM Media announced Barometer verification reporting in September 2023, in beta, using ArtsAI pixels and reporting mid-campaign. It stated general availability for January 2024, which no later source confirmed ^[290]. Both vendors are engaged through the seller, so independence is not established, and a pixel sees only the impressions that fire it.

On 6 August 2026 Nielsen agreed to acquire DoubleVerify for \$13.60 per share in cash, an enterprise value of about \$2.15 billion. The deal was expected to close by the first quarter of 2027, subject to DoubleVerify shareholder approval and regulatory approvals ^[301] ♦.

DoubleVerify's definitive proxy of 29 September 2026 says the waiting period under the US merger-review law, the HSR Act, expired on 21 September and sets the stockholder vote for 29 October 2026, so the deal was pending at the cutoff ^[302, 303]. Nielsen Audio's portable people meter service is MRC-accredited for radio ^[117]. If the deal closes, radio audience measurement and a verifier with a YouTube audio product would share one owner. That is a status to recheck; the record shows no effect.

Where the ad ran

Acast documents a list of shows. Its campaign analytics dashboard for advertisers lists the podcasts where an ad was served most, with each show's impressions and share of delivered impressions, and the downloadable campaign report gives the full list. The unit is what Acast calls IAB-valid delivered impressions, which are ad deliveries in the guidelines' terms (chapter 4). Acast's Ad Manager also breaks reports down by show, but only eligible Creator Network partners can use it, so it serves the seller's side ^[304, 305] ♦.

SiriusXM Media's Barometer verification offers mid-campaign reporting, and PRX's release promises monitoring "from planning through reporting". Neither states whether the grain is show or episode. Amazon DSP's inventory-tier reporting of November 2025 does not name audio ^[290, 277, 295] ♦. This review found no public documentation of show-level placement reporting for Spotify, iHeartMedia, Libsyn Ads, Audioboom or Amazon audio, in the sources screened by the cutoff.

In-game audio

In-game audio is sold by a few specialists, and almost every figure about it comes from the sellers. No in-game measurement guideline found sets counting rules for an audio ad, and this review found no public study that tests what these ads do to player retention.

IN SHORT

Audiomob and Odeeo are the two in-game audio specialists scored in this paper. Both now sell beyond games, so neither discloses in-game audio scale on its own ♦ ♦. Their audience figures are global, carry no period and cannot be added together ♦. The 2022 in-game measurement guidelines define no audio ad unit, and the IAB's 2025 gaming framework lists audio metrics with no attention metric and no counting rules ♦ ♦. The assurance on record covers company processes: seals from the Trustworthy Accountability Group (TAG) and an IAB UK listing for Audiomob, TAG enrolment only for Odeeo, and no Media Rating Council (MRC) accreditation for either ♦ ♦. Both still show Moat, a verification service Oracle retired on 30 September 2024. Every retention claim found is coded insufficient evidence under the registered non-inferiority rule ♦. The attention evidence offered is listen-through rate, self-reported recall or assertion ♦.

Chapter 1 puts in-game audio in scope by format. A package that also sells visual placements inside games is split, and the companion gaming paper covers the visual part.

Who sells it

Audiomob is operated by AUDIOMOB LTD, a private UK company ^[306]. It sells rewarded, standard and Moments audio units inside mobile apps. A Moments ad is tied to an event the developer tags, such as a win. Rewarded and standard ads play only when the device is not muted ^[307, 308]. Its homepage now sells audio ads across streaming, social media, podcast and gaming apps ^[309] ♦.

Odeeo is the trading name of Sonic Odeeo Ltd., a private company in Herzliya, Israel, founded in 2021 ^[310, 311]. It sells Icon Audio and Banner Audio, which pair audio with a small visual, and an opt-in Rewarded Audio unit ^[312, 313]. Global, the UK media group, invested an undisclosed amount on 13 June 2022 and named its DAX business Odeeo's exclusive UK and US sales partner ^[311]. Since 2025 Odeeo has added display banners to its software development kit (SDK), announced Google Authorized Buyer status (17 April 2026) and announced access to Unity's exchange supply (22 June 2026). In 2026 it

describes itself as selling audio, display, video and native ^[314, 315, 316] ♦. Only its audio units are covered here.

Two other companies have their own in-game audio technology. Gadsme added audio ads to its in-game SDK in September 2022, with Targetspot's Targetplay division as representation partner ^[62, 317]. Its programmatic page now lists audio as one of four formats, and its audio-ads page returns a 404 error, so this paper lists Gadsme's audio and does not score it ^[318] ♦. Targetplay describes its own SDK and a server-to-server integration with game studios. Azerion owns Targetspot. Under a partnership Audiomob announced on 9 July 2026, Azerion also offers Audiomob's Moments format to its advertisers, so one group sells its own in-game audio and resells another seller's ^[319, 320] ♦. Targetspot is listed, because its role and US availability are not settled ^[321]. Other names found, such as Apex Gaming Network in Canada, resell or market in-game audio ^[322, 323].

Audiomob and Odeeo are scored in cohort A, the audio inventory sellers. Both sit in the Partly documented band, and both bands are provisional: they move when missing evidence is filled. Chapter 12 gives the results.

How it is bought

Audiomob's documented routes are direct sales and its own ad system. Bauer Media Audio added Audiomob to its audioXi exchange in eight European markets in December 2025. Audiomob announced in July 2026 that Azerion offers Moments, and a self-service platform, AllMediaDesk, lists Audiomob inventory for Germany. Audiomob announced its own advertiser demand-side platform (DSP) in March 2021; its current status is undocumented. This review found no named third-party DSP integration for Audiomob in the sources screened by the cutoff ^[324, 325, 326, 327, 328] ♦.

Odeeo's programmatic routes rest mostly on its own or partners' statements. On 29 September 2026 DAX's sellers.json still listed an "Odeeo US" account marked "DAX US" ^[100]. Chapter 3 notes that this could count Odeeo's US supply twice. Odeeo announced on 11 March 2026 that its inventory was available through Amazon DSP. A planning service for Amazon DSP, with a commercial interest in plans that include the deal, checked its own account on 17 July 2026 and found one Odeeo deal: a private auction on Magnite, US only and audio only. No Amazon Ads page naming Odeeo was found ^[329, 330] ♦. Odeeo says it has been on Walmart DSP since 13 August 2026; only its own statement was found ^[331].

In 2023 Odeeo said every ad it sold ran on its directly integrated SDK and never through an ad buy ^[332]. Its 2026 Google and Unity deals add exchange-bought supply, and neither says whether audio units run on it ^[315, 316]. This paper infers that a buyer cannot assume an Odeeo impression is in-game audio delivered through Odeeo's own SDK.

The only public price found is a 2021 anecdote. The head of a game developer working with Odeeo expected audio CPMs, the price per thousand impressions, of \$5 to \$10 within a year ^[333]. It is not a current rate.

Scale, by the sellers' own count

Every scale figure found comes from a seller, with no period, method or US breakout. Audiomob's About page claims 300m monthly active users, more than 15 billion monthly bid requests and 1,200 apps. In July 2026 it gave more than 500 million monthly users and over 15 billion monthly ad requests, across gaming and non-gaming content ^[334, 326] ♦. Odeeo's About page claims more than 300 million monthly active users, more than 12 billion monthly bid requests and more than 1,000 games. Other figures differ: 140 million monthly active users on an undated AdsWizz page, and company-supplied figures of 15 million daily active users and 100 billion ad requests in 2023 ^[335, 336, 337] ♦.

These are different series. Monthly active users count players of the apps that carry a seller's SDK. Neither seller reports how many of them heard an ad. Bid requests and ad requests count opportunities to sell. Both list TapNation as a developer partner, so their audiences can overlap and the figures must not be added ^[335, 334].

This review found no estimate of in-game audio spend from an original market-research publisher in the sources screened by the cutoff. Chapter 2 reports the one figure found, a vendor's 2022 belief with no definition or method ^[62] ♦.

Standards and counting rules

The Intrinsic In-Game (IIG) Measurement Guidelines 2.0, issued by the IAB, IAB Tech Lab and the MRC in August 2022, cover display and video placements. They define no audio ad unit. Audio appears only as an optional consideration for video impressions and duration ^[338] ♦.

The IAB Gaming Measurement Framework of June 2025 has an Audio Ad Metrics Matrix for intrinsic in-game, rewarded and interstitial placements. Its metrics include audible impressions, reach, frequency, listen-through rate, volume level, brand lift and skips. The display and video matrices list an attention metric. The audio matrix does not. It sets no counting rules, such as a volume threshold for an audible impression, and it is not a basis for accreditation ^[339] ♦.

So each seller writes its own audibility rule. In 2023 Audiomob described pausing an ad and prompting the player to unmute when device volume fell below 30% ^[340, 308]. Odeeo said in 2023 that it confirmed audibility at a 10% device-volume threshold ^[332]. Gadsme said in 2022 that it counted an impression only on unmuted phones with volume above 30% ^[62]. This review traced none of these thresholds to an MRC or IAB Tech Lab standard.

Assurance, and what it covers

TAG's registry shows Audiomob with two seals. Brand Safety Certified rests on validation by a third-party auditor and covers global operations. Certified Against Fraud rests on self-attestation and covers United States operations only. Audiomob's May 2026 post calls both renewed certifications and does not state that difference ^[341, 342] ♦. IAB UK's Gold Standard directory lists Audiomob as certified in its Buy Side Support category ^[343, 344]. Gold Standard is a UK programme of supply-chain practice and certifies no audio metric.

On 29 September 2026 TAG's registry showed Odeeo only as enrolled in the Verified by TAG programme, with no seal. Odeeo was not in IAB UK's Gold Standard directory, the MRC's digital accreditation page or any IAB Tech Lab compliance list ^[345, 343, 116, 15]. The MRC page showed no accreditation or audit in progress for Audiomob, Odeeo or Gadsme, and no accredited audio metric for any service ^[116].

Audiomob's SDK is on IAB Tech Lab's Open Measurement SDK (OM SDK) compliance list: status Active, last certified on 3 June 2026, for audio creatives in native ad sessions on Android and iOS ^[15] ♦. Odeeo says it uses the OM SDK but does not appear on that list ^[312, 15]. OM SDK compliance certifies the integration that carries measurement signals to verification vendors. It does not certify how ads are counted or whether anyone heard them. Neither row has a counting-assurance score.

Both sellers still point to Moat. Oracle ended all its advertising products and support on 30 September 2024 ^[346]. Audiomob's Ad Formats page, read on 29 September 2026, still names MOAT among its third-party trackers, beside Open Measurement tags from IAS, HUMAN or DoubleVerify ^[307] ♦. Odeeo's 2022 MOAT audibility integration lapsed when Moat ended, and its site-wide footer still shows an Oracle MOAT logo ^[347, 312].

Retention claims under the registered rule

Both specialists tell developers their ads do not hurt player retention. Audiomob offers "0% retention damage" ^[308]. Odeeo's developer page says "no impact over retention metrics" ^[313]. Their case studies repeat the point ^[348, 349, 350, 351, 352].

Q4's rule was fixed before any study was read. The primary endpoint is day-7 retention, the share of new players active on day 7. The estimand is the difference in day-7 retention between exposed and unexposed players, by assignment. The comparison must be randomised at player level, or use an equivalent randomised geo or cohort design. The confidence level is 95%, two-sided, and the acceptable loss is 1.0 percentage point. A no-harm claim is supported only when the lower 95% confidence bound of the difference is above -1.0 percentage point.

No retention claim found reaches that bar. None states an assignment method, a control condition, a retention window, a sample size, a confidence interval or a control-group retention rate, so each is coded insufficient evidence ^[308, 313] ♦. Odeeo's full case studies sit behind forms that ask for personal data and were not opened; they may hold method detail that could change a code ^[351, 352, 353].

Odeeo's own 2022 integration guide is less absolute. It says audio ads have "minimal adverse impact on retention and playtime" and tells developers to run A/B tests to set ad frequency. It publishes no results. The same post also says audio does not negatively affect retention ^[354] ♦. The guide concedes a possible retention cost that the current developer page does not mention.

The only non-vendor retention study found is a 2016 workshop report by Burns, Roseboom and Ross for the Association for the Advancement of Artificial Intelligence. Funding is not stated and one author worked for DeltaDNA, an analytics provider, so independence is not established. The study is observational and covers in-game ads of all kinds and does not

isolate audio. Across 99,620 sampled new users of 21 free-to-play games, installed between 29 June and 7 July 2016, it found a "weak, insignificant effect" of first-session ad density on three retention proxies, none of them day-N retention ^[355] ♦. Under the registered rule a non-significant observational difference is not evidence of no harm. The authors themselves warn that ad sellers' no-harm claims may reflect selective reporting.

Monetisation claims are vendor-reported too. Audiomob's case studies claim revenue uplifts of 5% to 14% for six developers and 100% for one. Odeeo claimed gains of 4% to 7% in US average revenue per daily active user in 2022, and its case studies give 7% to 10%. None states a baseline, a measurement period or a comparison ^[349, 356, 357, 358, 354]. A direct test would randomly assign players to ad exposure and report day-7 retention for both arms, the control rate and a confidence interval. This review found no such test in the sources screened by the cutoff.

Attention claims

The in-game attention evidence found is of three kinds. None is an attention measure in the attention paper's terms. The first is listen-through rate (LTR). Listen-through is completion, not attention; it sits at the opportunity-to-hear layer. Odeeo labels a 90.37% LTR in its McDonald's campaign "strong attention", and its advertisers page claims LTR above 80% ^[359, 312] ♦. Audiomob's advertiser case studies report LTRs from 73% to 95.2%, with no dates, bases or methods ^[360].

The second is self-report. Audiomob published a Veritonic survey in its H1 2025 white paper. Veritonic ran it "in partnership with Audiomob", and who paid is not stated. It covered 333 mobile game players, with undisclosed recruitment and no control group. The paper says respondents had heard or interacted with Audiomob's format, yet 20% said they had never heard an in-game audio ad. Of the respondents, 54% preferred audio ads to video ads. Asked how they respond to in-game audio ads, 56% said they skip the ad if possible ^[361] ♦. In the same survey 30% said they recall ads from mobile games, against 32% for television; the white paper's caption still calls the 30% higher than other media ^[361]. Self-reported recall sits at the memory layer.

The third is assertion. Odeeo's chief executive said in 2023 that mobile games hold "as close to 100% of the listener's attention as possible" ^[362]. No construct, reference label or validation is named. Audiomob's September 2026 post keeps the opportunity to hear apart from attention, but adds no measurement ^[363]. This review found no auditory attention study of in-game audio in the sources screened by the cutoff.

Outcome claims follow the same pattern. Odeeo reports a 50% lift in installs for McDonald's, "independently verified by Claritas". Audiomob reports 27% recall for a UK government campaign. Neither publishes the design, the control or the sample ^[359, 364]. A measurement vendor hired by an interested party does not make a result independent.

Every public claim this review coded is insufficient evidence: 19 audio attention, memory and intrusiveness claims, 13 in-game retention claims and 6 in-game attention claims. Insufficient is not refuted. Chapter 7 charts the three groups.

AI voices and agentic buying

Several large audio sellers offer tools that voice ads with AI, and one documents how the voice owner consents. Agentic buying protocols can describe audio, and one small audio campaign bought by software agents has been announced.

IN SHORT

Spotify, AdsWizz, Amazon and SiriusXM Media offer tools that write or voice audio ads with AI. Of these, only SiriusXM Media's Narrativ voice replicas document opt-in by the voice actor and approval of each ad ♦. iHeartMedia's Guaranteed Human policy, as reported, says every voice heard on its stations must be human, but its order terms accept AI-made ad materials under warranties ♦ ♦. One producer of AI-generated podcasts reports thousands of episodes a week with programmatic ads attached. This review found no seller, ad-tech or buyer policy that excludes or labels such shows as ad inventory, in the sources screened ♦ ♦. AdCP v3.1.24 represents audio in its published schema ♦. IAB Tech Lab's OpenProposal 3.0 draft lists audio as a channel but has no audio format entries ♦. The one documented agentic audio transaction found is a pilot by Butler/Till with iHeartMedia worth just under \$10,000, and its release names no protocol ♦. Under the registered rule H6 is supported, and protocol readiness and deal flow are separate tracks ♦.

This chapter covers two uses of AI. The first is voices: tools that write scripts and produce voiceovers, and shows made by AI that carry ads. The second is agentic buying, in which a buyer's software agent and a seller's agent negotiate and book a campaign. Synthetic voice with controls counts toward the creative dimension, and protocol states are recorded under programmatic access.

Synthetic voice tools and what they document

Spotify announced free AI-generated scripts and voiceovers in Spotify Ads Manager on 2 April 2025. Its US help page says the voiceovers use Spotify's own text-to-speech (TTS) service, with North American and British accents, and that the Ad Review team reviews each ad by hand. Read through a summarising fetch tool, the page states no listener-disclosure requirement and no voice-consent control ^[365, 366] ♦.

AdsWizz, owned by SiriusXM, launched Synthetic Voice Ads on 15 February 2024 in AudioGO, its self-serve platform for small and mid-sized businesses. Brands choose among artificial voices. The release describes no consent, disclosure or approval controls. This review did not recheck the product's status after that date ^[367] ♦.

Amazon Ads introduced Audio generator on 15 October 2024, in beta for US advertisers buying through Amazon DSP, its demand-side platform. It writes a script from an Amazon product page and returns a 30-second interactive audio ad for Alexa-enabled devices, at no added cost. The advertiser picks the voice and tone. The product page speaks of "voiceover talent" and does not say whether the voices are synthetic ^[368, 369] ♦.

SiriusXM Media announced on 17 June 2025 that advertisers would soon be able to use AI voice replicas from Narrativ in AdMaker, its self-service tool. Voice actors opt in and are paid to license their replicas. They can approve or reject every ad that uses their voice, and each ad needs approval from both the actor and the advertiser before it runs. A spokesperson told Radio World the technology was in beta testing ^[370, 371] ♦. This review found no general-availability notice in the sources opened.

Instreamatic and AMA, creative vendors listed but not scored, document AI variation at scale. Instreamatic's Contextual Audio Ads, launched 29 March 2023, synthesise the original voice actor's voice to produce "hundreds or thousands of ad variations" in one campaign. That is a voice clone, which makes missing consent terms more material. AMA's Studio.AI, launched 14 June 2023, matches voice elements to scripts and personalises ads by location, weather and device. Neither release, read through a summarising tool, documents voice-consent or listener-disclosure controls ^[372, 373] ♦.

Among the seller tools opened, SiriusXM Media's Narrativ offer alone documents opt-in and per-ad approval. The difference is in what vendors publish and may not hold in practice. Chapter 11 sets out the disclosure rules. New York's synthetic-performer advertising law, in force from 9 June 2026, exempts audio advertisements ^[374, 375]. This review found no US federal or state rule that requires a commercial, non-political audio ad to disclose a synthetic voice, in the sources screened by the cutoff.

iHeartMedia's Guaranteed Human policy

iHeartMedia is the only audio seller found with a written commitment to human voices. Radio Ink reported the policy on 1 December 2025 from an internal memo; the memo itself was not seen. As reported, it prohibits AI-generated on-air personalities, synthetic music and AI podcast content, and says every voice heard on iHeart stations must be human, including hosted segments, liners and imaging. Stations carry "Guaranteed Human" in their hourly legal IDs. Staff may use AI behind the scenes. Radio Ink added that it was unclear how the policy would affect iHeart's plans to use AI to translate podcasts ^[376, 377] ♦.

The reported rule does not name advertising. Read literally, "every voice heard" could reach ads, but no iHeart source applies it to them. iHeartMedia's fiscal 2025 10-K lists Guaranteed Human among its 2025 launches. Its order terms, dated 22 September 2026, accept advertiser materials made with generative AI, synthetic performers or digital replicas, subject to warranties on disclosure, likeness consent, union rules and truthful claims. This paper infers that the documented policy does not exclude AI-made ads ^[66, 378] ♦.

The policy covers what iHeart airs and publishes. Podnews reports that Inception Point AI's new shows are hosted on Spreaker, which iHeartMedia owns ^[379]. Hosting is a different service from ad sales, and no source opened shows iHeart selling ads on those shows.

AI-generated podcasts as inventory

Inception Point AI is the most documented producer of AI-generated podcasts. Its figures come from the company, relayed by trade press. The Hollywood Reporter wrote in September 2025 that it had more than 5,000 shows and more than 3,000 episodes a week, each costing \$1 or less and carrying programmatic advertising. At about 20 listens an episode made a profit before overhead ^[380]. TheWrap reported in November 2025 at least 175,000 episodes and 12 million lifetime downloads ^[381] ♦. Downloads are a delivery count and do not show listening (chapter 4). The sellers behind the programmatic ads are not named. Inception Point claimed iHeartRadio as a monetisation partner. iHeart representatives told TheWrap they did not recognise it.

Podnews reported on 15 April 2026, from the Podcast Index New Feeds Report, that 44.6% of new shows in the previous 24 hours were "likely legitimate" and 45.7% potentially made by AI. Inception Point released 325 new shows in one day, hosted by Spreaker and monitored by Podtrac. Podnews counted more than 8,000 of its shows still in the index ^[379] ♦. The classifier is itself AI and unvalidated in the sources opened. The shares describe new feeds on one day. They say nothing about listening, downloads or ad inventory.

This review found no ad seller, ad-tech company or buyer policy that excludes or labels AI-generated podcasts as ad inventory, in the sources screened by the cutoff. It found no source that measures their effect on inventory quality with data. TheWrap reported that Apple Podcasts, Spotify and YouTube do not require creators to disclose AI creation. Its statement that all Inception Point hosts say they are AI is contradicted by Podnews for at least one Spanish-language show ^[381, 379] ♦. The Podcast Index has an API that flags "low-effort AI" feeds. It is an index tool, and no seller or buyer in the sources opened uses it as an inventory policy.

What the protocols can describe

H6 tests the author's July 2026 claim that audio is "protocol-ready, deal-flow pending" ^[382]. Shared rule 12 records five states for each protocol and version: schema representation, an implemented connector, a demonstrated interoperability test, documented production use and a demonstrated transaction. Schema representation shows only that audio can be described.

The Ad Context Protocol (AdCP) is published by AgenticAdvertising.org. Version 3.1.24, released on 23 September 2026, was the latest non-prerelease version on 28 September. Its channel list and its property types both include radio, streaming_audio and podcast ^[383, 384, 385] ♦. Audio and podcast have been channels since v2.0.0 of 15 October 2025, the first tagged release; radio became a separate value later ^[386]. Version 3.2.0 was at release candidate 7 on 27 September 2026 and is on the recheck list for the freeze.

AdCP v3.1.24 defines two audio creative formats. One is a hosted file, or a script from which the seller produces a host read or synthesised audio. The other is a tag in DAAST, the Digital Audio Ad Serving Template. A field records whether audio was recorded by the publisher's host or synthesised by an agent, and another lets a creative declare AI involvement ^[387, 388] ♦. Nothing in the schema verifies what is declared, and this review found no seller documenting its use in the sources screened. AdCP's channel-neutral compliance scenarios

name audio sellers optimising for podcast or stream completion and for unique listeners [389]. Its example product "Triton Audio DAAST (30s)", on the domain triton.example, is example data and shows no Triton implementation [390].

IAB Tech Lab announced AAMP 3.0, the third release of its Agentic Advertising Management Protocols, on 22 September 2026. Its new OpenProposal specification (v3.0-draft-1, 24 September 2026) is in public comment until 22 October 2026 and is not a ratified standard. Its line-item channel list includes audio, with an audio example whose identifier, "iheart-audio", is example data. The draft records as an open question that its format registry has no audio entries [391, 392] ♦. A draft earns schema representation as a draft only.

IAB Tech Lab's Seller Agent and Buyer Agent reference code, v2.4.2 of 18 August 2026, both model audio. The Agentic Real Time Framework (ARTF) v1.0 is a final IAB Tech Lab specification released on 12 November 2025; its GitHub release tag is dated 20 July 2026. ARTF works on OpenRTB 2.6 bid requests, which include an audio object, but neither the specification nor its repository mentions audio. Its audio coverage is inherited, which is an inference [393, 394, 395, 396] ♦.

The one documented transaction

On 20 August 2026 the agency Butler/Till and iHeartMedia announced a completed campaign they called the industry's first agentic streaming audio campaign, for a US agricultural solutions company. The release names no protocol. Digiday reported the details the same day. The campaign ran four weeks in July and August 2026 and bought just under \$10,000 of iHeart streaming audio and podcast inventory as a direct buy. It used two agents, one built by each company, "designed as a matched pair using an MCP server" [397, 398] ♦.

The Model Context Protocol (MCP) is a general way to connect AI models to tools. AdCP itself runs over MCP; Triton Digital's vice president of architecture described AdCP as a layer that extends it [4]. So the MCP detail neither shows nor excludes AdCP use. The public record links the transaction to no advertising protocol and names no rail. A pilot counts as a demonstrated transaction. It is not documented production use.

The performance figures are the companies' own and unaudited. The release says the buy delivered streaming audio "42 percent more efficiently" than the advertiser's direct-buying benchmark. Digiday reports that as a 42% cut in campaign CPMs, the price per thousand impressions, against the client's own benchmark. In podcasts, 48% of impressions ran in mid-roll, against 33% estimated for the traditional plan [397, 398] ♦. A lower CPM is a price outcome, and the comparison is with a benchmark, not a controlled test. iHeartMedia said it plans to offer broadcast radio through agentic transactions "later this year". That is an announcement and earns no state [397]. On 16 September 2026 Magnite said its orchestration layer standardises buyer-agent requests across live audio streams and podcasts, with access to iHeartMedia inventory. The release names no protocol, date or completed transaction [399].

Registries, members and declared interests

On 28 September 2026 AgenticAdvertising.org's public agent registry listed 34 agents. None was run by a company in this paper's audio universe, and every entry listed its protocol as MCP ^[3] ♦. IAB Tech Lab runs its own agent registry, which this review did not screen.

Triton Digital, iHeartMedia's ad-technology subsidiary, is an AdCP founding member. In December 2025 its vice president of architecture said Triton had "a few demo systems in place" and had started building AdCP into its products. In January 2026 a Triton executive welcomed the move of the AdCP sales agent to Prebid. Neither source documents a connector, test, production use or transaction ^[4, 400] ♦.

Amazon Ads opened an MCP server to its Ads API in open beta on 2 February 2026. No source opened shows it creating audio buys ^[401]. On 29 September 2026 Amazon renamed its unified ad platform Amazon Ads Agent, "now powered by agentic AI", with display, video and audio campaigns in one place. The announcement names no advertising protocol, so it earns no protocol state ^[402]. Spotify's engineering blog of 1 May 2026 describes an open-source plugin that turns plain-language requests into Spotify Ads API calls, and Spotify's developer documentation lists an Ads API MCP server in closed beta ^[403, 404]. Both are tooling on proprietary interfaces and earn no protocol state.

For SiriusXM Media and AdsWizz, Spotify, Amazon, Acast, Audacy, Libsyn, Audioboom, Cumulus, Urban One and SoundStack, this review found no documented AdCP or AAMP connector, interoperability test, production use or transaction, in the registry and grouped web searches screened by 28 September 2026. LiveOne/PodcastOne, NPM, TuneIn, DAX US, Audiomob and Odeeo were screened only against the AgenticAdvertising.org registry. The table below gives each row's state and source ^[3] ♦.

Two declared interests bear on this section, and chapter 14 sets them out. The author co-leads the Signals & Measurement working group of AgenticAdvertising.org, which publishes AdCP. Triton Digital is an AdCP founding member. Neither earns any score. Under shared rule 12, membership, working-group roles and announcements earn no protocol state.

AI and agentic capability map						
Production functionality versus announcements. "Independently observable" means someone other than the vendor has documented the capability in use.						
Machine-readable copy: data/agentic-map.csv.						
PLATFORM / PRODUCT	CAPABILITY	STATUS	DATE	INDEPENDENTLY OBSERVABLE?	WHAT THE RECORD SUPPORTS	SRC
AdCP v3.1.24	Schema represents audio: channels radio, streaming_audio, podcast; audio property types; audio_hosted and audio_daast formats (state 1)	LIVE	2026-09-23	public JSON Schema	v3.2.0-rc.7 prerelease 2026-09-27; audio channels present since v2.0.0 (2025-10-15)	[383] [384] [385] [387] [386]

PLATFORM / PRODUCT	CAPABILITY	STATUS	DATE	INDEPENDENTLY OBSERVABLE?	WHAT THE RECORD SUPPORTS	SRC
IAB Tech Lab OpenProposal 3.0 (AAMP 3.0)	Draft schema: line-item channel enum includes audio; audio example; format registry has no audio entries (state 1, draft)	BETA	2026-09-24	public draft on GitHub	Not a ratified standard; example id 'iheart-audio' is illustrative	[391] [392]
IAB Tech Lab Seller Agent SDK v2.4.2	Reference implementation models audio as an OpenRTB ad format	LIVE	2026-08-18	open-source code	Reference implementation, not a specification	[393]
IAB Tech Lab ARTF v1.0	Agent services on OpenRTB 2.6 bid requests; audio inherited from OpenRTB 2.6 (inference)	LIVE	2025-11-12	open-source code	Operates on OpenRTB 2.6 bid requests, which include an audio object; neither the specification nor its repository mentions audio (inference). Corrected by the stream verifier.	[521] [395] [396]
AgenticAdvertising.org agent registry	Registered agents operated by audio-universe companies: none of 34	LIVE	2026-09-28	public API	Registration needs AAO membership; not a census	[3]
iHeartMedia (with Butler/Till)	Demonstrated transaction (state 5): paired buyer and seller agents over an MCP server; direct buy of streaming audio and podcast; just under \$10,000; four weeks	BETA	2026-08-20	press release and trade report	No AdCP or AAMP named; efficiency claims unaudited	[397] [398]
iHeartMedia broadcast radio via agentic transactions	Planned availability of broadcast radio to agentic buying	ANNOUNCED	2026-08-20	press release	Earns no state	[397]
Triton Digital	AdCP founding member; 'a few demo systems in place'; building AdCP into products	UNCONFIRMED	2025-12-10	interview	Membership and demos earn no state	[4] [400]
Amazon Ads MCP Server	Vendor MCP connector to the Amazon Ads API (not an advertising protocol); DSP audio coverage not shown	BETA	2026-02-02	vendor page	Available globally to partners with API credentials	[401]
Amazon DSP Campaign Management APIs	Audio ad-group inventory type, creatives, deals and reporting via API	LIVE	2026-06-11	API release notes (secondary report)	Programmatic API, not agentic protocol	[522]
Spotify Ads API Claude Code plugin	Open-source natural-language agent tooling for the Spotify Ads API v3; deliberately not MCP	LIVE	2026-05	vendor engineering blog; open source	Proprietary API; no protocol state	[403]
Spotify Ads Manager gen AI script and voiceover	AI script and TTS voiceover; manual ad review	LIVE	2025-04-02	vendor pages	No listener-disclosure requirement stated on help page	[365] [366]
AdsWizz Synthetic Voice Ads (AudioGO)	Artificial voices for SMB self-serve audio ads	LIVE	2024-02-15	press release	Current status not rechecked; no consent or disclosure controls described	[367]

PLATFORM / PRODUCT	CAPABILITY	STATUS	DATE	INDEPENDENTLY OBSERVABLE?	WHAT THE RECORD SUPPORTS	SRC
SiriusXM Media AdMaker with Narrativ voice replicas	Opt-in, paid voice-actor replicas; actor can approve or reject every ad; actor and advertiser approve each ad	BETA	2025-06-17	press release and trade report	Status after June 2025 not found	[370] [371]
Amazon Ads Audio generator	Script from product page; 30-second interactive audio ad; advertiser picks voice and tone	BETA	2024-10-15	press release and product page	Beta status at freeze not verified	[368] [369]
AMA Studio.AI	Matches voice elements to scripts; dynamic personalisation by triggers	LIVE	2023-06-14	vendor release	No consent or disclosure controls in release	[373]
Instreamatic Contextual Audio Ads	Generative AI and synthetic voice variations from one recording	LIVE	2023-03-29	vendor release	No consent or disclosure controls in release	[372]
iHeartMedia Guaranteed Human	Commitment: no AI-generated on-air personalities, synthetic music or AI podcast content	LIVE	2025-12-01	trade report of memo; vendor article	Coverage of ad creative not stated	[376] [377]

How H6 reads

The registered rule calls H6 supported when at least one protocol's published schema represents audio and no more than two rows have documented production use or a demonstrated transaction. AdCP v3.1.24 represents audio in its published schema. One row, iHeartMedia, has a documented transaction: the Butler/Till campaign announced as completed on 20 August 2026, whose release names no protocol. H6 is supported under the registered rule [♦].

Protocol readiness and deal flow are separate tracks on the public record. The schema work sits in AdCP and in IAB Tech Lab's specifications. The one transaction ran on a pair of agents whose protocol the sources do not name. The essay's July 2026 statement that no public agentic audio campaign existed was accurate at its date and was overtaken on 20 August 2026. "Pending" now rests on the rule's threshold rather than on absence. The reading holds only within the searches described above, and it would change if three or more rows documented production use or a transaction.

The rules

Few US rules were written for audio advertising. Host reads, IP-based measurement, children's audio and synthetic voices are governed mostly by general instruments, and this chapter sets out what each required at the cutoff.

IN SHORT

The Federal Trade Commission's Endorsement Guides carry a podcast example: an obvious host-read commercial needs no payment disclosure, but the host must hold any views presented as their own ♦. The only FTC enforcement on audio endorsements this review found is the Google and iHeartMedia case over nearly 29,000 radio reads for the Pixel 4, settled in February 2023 ♦ ♦. The Federal Communications Commission's sponsorship identification rule binds broadcast stations, and its text does not reach podcasts ♦. California law counts IP addresses and household-linked data as personal information ♦. The opt-out signals regulators name have no documented path to podcast downloads made through third-party apps ♦. The amended children's privacy rule took effect on 23 June 2025 with compliance due by 22 April 2026, and the FTC places ad attribution within support for internal operations ♦. California requires a spoken AI disclosure in committee political radio ads that contain AI-generated or substantially altered audio. For commercial audio ads, this review found no US rule requiring disclosure of a synthetic voice in the sources screened, and New York's synthetic-performer law exempts audio advertisements ♦.

This chapter reads the regulators' own texts where they could be opened. Law-firm summaries are used only where a primary text was not read, and are labelled. Nothing here is legal advice.

Rules and governance instruments

Official sources only for the rule text; industry guidance is marked as practice, not law. Nothing here is legal advice.

Machine-readable copy: data/rules.csv.

JURISDICTION	INSTRUMENT	WHAT IT REQUIRES	EFFECTIVE	SCOPE	LAW OR PRACTICE	SRC
Global (WFA)	GARM Brand Safety Floor and Suitability (Adjacency Standards) Framework	Voluntary floor and risk-level categories for brand safety; discontinued with GARM on 9 Aug 2024	2020-09 to 2024-08-09 (discontinued)	Advertisers, platforms and verification vendors; cited by audio sellers	industry framework (discontinued)	[269] [267]
Global (WFA)	WFA and X Corp. settlement	WFA will not form or restart GARM or a similar initiative (as reported)	2026-07 (reported 29 Jul 2026)	WFA	litigation settlement commitment	[261]
Global (IAB Tech Lab)	IAB Tech Lab Content Taxonomy 3.1, Sensitive Topics branch	Eleven category labels for sensitive content; no risk levels in the file	2024-12 (release)	Content classification in OpenRTB and VAST signals	technical standard	[263] [262]
US (MRC)	MRC Supplement: Enhanced Content Level Context and Brand Safety (Final)	Content-level measurement must go beyond keywords and consider images, video, text and audio; basis for MRC accreditation of verification services	2018-09	Ad verification organisations (third-party measurers, platforms, publishers)	accreditation standard	[257]
United States (federal)	FTC Endorsement Guides, 16 CFR Part 255 (revised 2023)	Endorsements must reflect honest views of bona fide users; unexpected material connections disclosed clearly and conspicuously, in the audible portion for audio; obvious host-read commercials need no payment disclosure but host must hold views expressed	Published 26 Jul 2023 (88 FR 48102)	All advertising media incl. radio and podcasts; advertisers and endorsers	Administrative interpretation of FTC Act s.5 (guides, not a rule)	[405]
United States (federal)	FCC sponsorship identification, 47 CFR 73.1212(a)-(f)	Broadcast station must announce at time of broadcast that paid matter is sponsored and by whom; naming sponsor or product suffices once per broadcast for commercial ads	Codified 1975, amended to 2026	Broadcast radio and TV stations (not podcasts by the text)	Regulation	[411]
United States (federal)	FCC foreign-government sponsorship disclosure, 47 CFR 73.1212(j)-(k)	Disclosure naming foreign governmental entity and country at start and end of leased-time programming and at least hourly; diligence inquiries and certification or screenshots; quarterly public-file uploads	Effective 19 Jul 2021; compliance 15 Mar 2022; (j)(8),(k) 15 Aug 2024; (j)(3) effective 10 Jun 2025, lease compliance 7 Jun 2026, technical requirements for covered ads and paid PSAs suspended two years (DA 26-526); (j)(8) foreign-adversary filing awaits OMB (freeze recheck)	Broadcast stations airing leased time; section 325(c) permit holders	Regulation	[411] [412] [413] [415] [416]

JURISDICTION	INSTRUMENT	WHAT IT REQUIRES	EFFECTIVE	SCOPE	LAW OR PRACTICE	SRC
United States (federal)	COPPA Rule, 16 CFR Part 312, as amended 2025	Verifiable parental consent before collecting children's personal information (incl. IP address, device ID, voice audio, voiceprints); separate consent for third-party disclosure; contextual ads and frequency capping allowed under internal-operations exception; audio-file exception	Published 22 Apr 2025; effective 23 Jun 2025; compliance 22 Apr 2026 (safe-harbor items separate)	Operators of child-directed services, or with actual knowledge of under-13 users	Regulation	[429] [428] [427]
United States (California)	CCPA definitions, Civ. Code 1798.140	Personal information includes IP addresses, device and probabilistic identifiers, and household-linked data; 'sharing' = disclosure for cross-context behavioral advertising	Current text effective 1 Jan 2026	Businesses meeting CCPA thresholds; California consumers and households	Statute	[225]
United States (California)	CCPA regulations, 11 CCR 7025 (opt-out preference signals)	Treat compliant opt-out preference signal as opt-out of sale/sharing for the browser or device and associated profiles, including pseudonymous profiles	Package effective 1 Jan 2026	Businesses that sell or share personal information and collect it online	Regulation	[419] [226]
United States (California)	California Opt Me Out Act, AB 566 (Civ. Code 1798.136)	Browsers must offer a consumer-configurable opt-out preference signal	Approved 8 Oct 2025; applies from 1 Jan 2027	Businesses that develop or maintain a browser (apps not named)	Statute	[227]
United States (Colorado)	Colorado Privacy Act universal opt-out (C.R.S. 6-1-1306(1)(a)(IV))	Honour Global Privacy Control as opt-out of sale and targeted advertising; GPC is the only recognised mechanism	1 Jul 2024	Controllers meeting CPA thresholds	Statute and AG guidance	[420]
United States (Virginia model)	Virginia Consumer Data Protection Act, Va. Code 59.1-575, -577, -581	Personal data = linked or reasonably linkable to an identified or identifiable natural person; opt-out of targeted advertising, sale, profiling; pseudonymous data exempt from access/correct/delete/portability only	Law effective 1 Jan 2023; amended to 2025	Controllers meeting thresholds; Virginia residents	Statute	[421] [523] [422] [423]
United States (19 states in effect; 4 more enacted 2026)	US state comprehensive privacy laws (count)	19 in effect at cutoff, 17 flagged with a targeted-advertising/profiling opt-out; Louisiana, Oklahoma, Alabama, Vermont enacted 2026	In effect by 1 Jan 2026; new laws 1 Jan 2027 to 1 Jan 2028	Controllers meeting each state's thresholds	Statutes (count from trackers)	[423] [424]
United States (state design codes)	State age-appropriate design codes (CA, MD, NE, SC, VT)	Duties on services likely accessed by minors (profiling, dark patterns, geolocation limits vary by state)	MD 1 Oct 2024; SC 5 Feb 2026; NE amended 17 Jul 2026; VT 1 Jan 2027; CA partly enjoined	Online services likely accessed by minors; no audio-specific provision reported	Statutes (secondary summary)	[524]
United States (Tennessee)	ELVIS Act, HB 2091, Public Chapter 588	Adds 'voice' as a protected personal right against unauthorised commercial use	Signed 21 Mar 2024; Public Chapter 588 dated 26 Mar 2024; effective 1 Jul 2024 (review round 3, R3-11)	Commercial use of an individual's voice or likeness in Tennessee	Statute	[431]

JURISDICTION	INSTRUMENT	WHAT IT REQUIRES	EFFECTIVE	SCOPE	LAW OR PRACTICE	SRC
United States (federal)	NO FAKES Act of 2025 (S. 1367 / H.R. 2794)	Would create a federal right in voice and visual likeness (proposal)	Introduced 9 Apr 2025, no later action; successor S. 4591 (NO FAKES Act of 2026) reported by Senate Judiciary 24 Jun 2026 and on the Senate calendar, no floor vote by 30 Sep 2026 (freeze recheck)	Proposed, not law	Bill (proposal)	[432] [433]
United States (federal)	FCC Declaratory Ruling FCC 24-17 (TCPA and AI voices)	AI-generated voices are 'artificial or prerecorded voice' under the TCPA; prior express consent needed	Adopted 2 Feb 2024; released 8 Feb 2024	Telephone calls, not broadcast or streaming ads	Agency ruling	[436]
United States (federal)	FCC NPRM FCC 24-84 (AI-generated call disclosure)	Proposes definition of AI-generated calls and caller disclosure (proposal)	Published 10 Sep 2024; no final rule found at cutoff	Telephone calls	Proposed rule	[525]
United States (federal)	FCC NPRM FCC 24-74, MB Docket 24-211 (AI in political ads)	Proposes on-air disclosure of AI-generated content in political ads by broadcast radio, TV, cable, DBS and SDARS (proposal)	Published 5 Aug 2024; comments closed 19 Sep 2024, replies 11 Oct 2024 (DA 24-849); no termination and no later FR document at 30 Sep 2026 (freeze recheck)	Political ads on broadcast and satellite radio, TV, cable, DBS	Proposed rule	[437]
United States (New York)	Synthetic performer ad disclosure, S8420-A (GBL 396-b), Chapter 617 of 2025	Conspicuous disclosure of synthetic performers in ads where advertiser has actual knowledge; audio-only ads exempt	Signed 11 Dec 2025; effective 9 Jun 2026	Commercial advertisements with audiovisual or visual synthetic performers	Statute	[374] [375]
European Union	AI Act transparency obligations (Regulation (EU) 2024/1689, Art. 50) as applied	Disclose AI interaction; label deepfakes incl. audio; machine-readable marks on AI-generated or altered content	Applies and enforced from 2 Aug 2026; Art. 50(2) marking for generative systems on the market before 2 Aug 2026 from 2 Dec 2026 under the AI Omnibus, per the Commission FAQ (freeze recheck)	Providers and deployers of certain AI systems (EU context)	Regulation	[440] [441]
United States (industry)	IAB Tech Lab Podcast Guidance: Platform Privacy Restrictions (2022)	Describes IP-address use for de-duplication, fraud filtering and geo-targeting; asks apps to pass privacy signals to podcasters	Released Jul 2022	Podcast publishers, hosts and apps (voluntary)	Industry guidance	[228]

Host reads and endorsements

The Federal Trade Commission (FTC) is the US consumer-protection regulator. Its Endorsement Guides, 16 CFR Part 255, were revised in a text published on 26 July 2023.

They interpret Section 5 of the FTC Act, which bars deceptive practices, and say they provide the basis for voluntary compliance ^[405].

The Guides address podcasts directly. In Example 12 to section 255.5, a host reads what is obviously a commercial near the start of a show. No disclosure of payment is needed. If the wording suggests the host is giving their own views, the host must actually hold them. A separate social-media mention by the same host is judged on its own ^[405] ♦. Where a claim is made through sound, any needed disclosure must be made at least in the audible portion, at a volume, speed and cadence ordinary listeners can follow. An unexpected material connection must be disclosed when "a significant minority of the audience" does not expect it. Advertisers are liable for their endorsers' misleading statements. The Guides do not name networks, sales houses or ad-insertion platforms, so this text does not settle their exposure ^[405] ♦.

The FTC also has a trade regulation rule on reviews and testimonials, 16 CFR Part 465, in effect since 21 October 2024. Section 465.2 bars disseminating a celebrity testimonial that materially misrepresents that the testimonialist used the product. Unlike the Guides, the rule carries civil penalties ^[406]. The research stream missed it and its verifier added it. On this review's reading, which is inference, the rule could reach a well-known personality's read for a product that person has not used. No case has tested that reading in the sources screened.

The one audio endorsement case

In November 2022 the FTC and several states sued Google and iHeartMedia. The case concerned nearly 29,000 first-person endorsements of the Pixel 4 phone, aired in 2019 and 2020 by radio personalities. The FTC alleged the personalities had not been given the phones before recording and airing the majority of the ads. The FTC approved final consent orders on 9 February 2023 by a 4-0 vote. Separate state judgments required \$9.4 million in penalties; the sum is the states', and the allegations were settled without adjudication ^[407, 408] ♦.

On 28 September 2026 a search of the FTC's Legal Library for "podcast", "podcaster" and "host-read" returned no case. A search for "radio endorsement" returned the Google matter. Warning letters and closing letters were not searched separately ^[409, 410] ♦. So this review found no FTC enforcement on podcast endorsements in the sources screened by the cutoff. Podcasts remain exposed all the same. The Guides apply to them by their own example.

Sponsorship identification on broadcast stations

The Federal Communications Commission (FCC) licenses US broadcast stations. Its sponsorship identification rule, 47 CFR 73.1212, binds them. A station that airs paid matter must announce at the time of broadcast that it is sponsored and by whom. For commercial products, naming the sponsor or product once per broadcast is enough. On this review's reading, the text does not reach podcasts or other audio outside broadcast. Whether satellite radio carries equivalent duties under other rules was not checked ^[411] ♦.

Separate rules cover foreign-government programming on leased airtime, and they came in stages. They reach advertisements only where a foreign government provides the material. The 2021 order took effect on 19 July 2021, with compliance from 15 March 2022. By the FCC's account, the US Court of Appeals for the D.C. Circuit vacated only the duty to check lessees against two federal sources on 12 July 2022. A second order made paragraph (k) effective on 15 August 2024, with the paragraph then numbered (j)(8), an exemption for candidates' "uses" of stations now numbered (j)(9). Its diligence procedure in (j)(3) took effect on 10 June 2025, with compliance for leases deferred to 7 June 2026. For covered advertisements and paid public service announcements, a Media Bureau notice of 26 May 2026 suspended the (j)(3) technical requirements for two years ^[412, 413, 414, 415, 416, 417] ♦. The disclosure must name the foreign government entity and country, at the start and end of the programme and at least every sixty minutes in longer ones. A new (j)(8), added by the FCC's foreign-adversary control rule, has been effective since 9 June 2026. It requires filings that identify a foreign-adversary lessee, but compliance waits until the FCC announces a date after review by the Office of Management and Budget ^[411, 418] ♦.

Privacy law and IP-based measurement

An IP address is the network address a device uses to fetch a file. In chapter 6, H3 is supported: IP, household or pixel matching is the documented primary method in 11 of the 12 products that document one (91.7%), and 11 of 19 with undocumented products added (57.9%) ♦; four products list several methods and are reported apart. The rules below do not move that verdict. They bear on what the matching may do with the data.

California's Consumer Privacy Act (CCPA) covers information reasonably capable of being linked to "a particular consumer or household". It lists IP addresses among identifiers. A household is consumers who share a residential address and use of common devices or services. Unique identifiers include IP addresses, pixel tags, mobile ad identifiers and probabilistic identifiers ^[225] ♦. "Sharing" is disclosure to a third party for cross-context behavioral advertising, paid or not ^[225]. Under California's regulations, a business that sells or shares must treat an opt-out preference signal as an opt-out for that browser or device. The opt-out extends to associated profiles, "including pseudonymous profiles" ^[226, 419] ♦.

The signals live in browsers and device settings. Colorado has required covered businesses since 1 July 2024 to honour the Global Privacy Control (GPC), which its Department of Law recognises as the only valid universal opt-out ^[420]. California's Opt Me Out Act, Assembly Bill (AB) 566, will from 1 January 2027 bar a business from maintaining a browser without an opt-out signal. It defines a browser as software used to navigate internet websites. On this review's reading, it does not reach a podcast app that does not navigate websites ^[227] ♦.

Many other state laws follow Virginia's model, which has no household category. There, pseudonymous data keeps the right to opt out of targeted advertising ^[421, 422]. By the definition of the International Association of Privacy Professionals (IAPP), 19 states had comprehensive privacy laws in effect at the cutoff, per its chart dated 24 November 2025. A Venable law-firm update of 30 July 2026 reports four more enacted in the first half of 2026, effective from 2027 or 2028. Later enactments were not checked ^[423, 424] ♦.

The one state enforcement case on streaming opt-outs found by this review that names a company concerns video. California's January 2024 sweep of "popular streaming apps and

devices" named no recipients and gave video examples. It led to a \$2.75 million settlement with Disney on 11 February 2026 over opt-outs not applied across devices and services. Whether audio services received sweep letters is not public ^[425, 426] ♦. This review found no regulator guidance or enforcement specific to podcast or audio measurement in the sources screened by the cutoff. Releases from other state attorneys general were not screened.

The industry's own account shows where the gap sits. IAB Tech Lab is the technical standards body of the Interactive Advertising Bureau. Its July 2022 podcast guidance says measurement mostly represents what the server delivered. IP addresses filter duplicate downloads, detect non-human traffic and set the location for inserted ads. Combined with other tracking data, an IP address "can identify a listener". Privacy-preference signals reach podcasters only in the limited cases where they have a relationship with the listening app. The guidance comes from the industry whose practice it describes, and it predates current guideline versions ^[228] ♦.

Put together, and labelled as inference: IP and household matching handles data California treats as personal information. Passed to a third party for cross-context behavioral advertising, it is sharing, subject to opt-out signals. Measurement not used for targeting may instead be a sale or a service-provider disclosure, depending on contracts that are not public. Podcast apps fetch episodes from RSS feeds, the open format that publishes a show. The signal channels regulators name have no documented path to those downloads ^[225, 226, 227, 228] ♦.

Children's audio

The Children's Online Privacy Protection Act (COPPA) Rule governs services directed to children under 13, and others with actual knowledge of such users. Its amendments were published on 22 April 2025, took effect on 23 June 2025 and required compliance by 22 April 2026, except for three safe-harbor provisions ^[427, 428] ♦. Personal information includes an IP address or device identifier and an audio file of a child's voice. Since 2025 it also includes voiceprints. "Music or other audio content" is among the factors for judging whether a service is directed to children ^[429, 428].

Operators need separate parental consent before disclosing a child's data to third parties, unless disclosure is integral to the service. Persistent identifiers may be used without consent for "support for the internal operations". That covers contextual ads and frequency capping, and excludes behavioural advertising and profiling ^[429, 428] ♦. The FTC states in the 2025 final rule that ad attribution also falls within that definition. Attribution therefore needs no consent if the identifier is not used to contact the child, for behavioural advertising or to build a profile, and the operator's notice names the purpose ^[428, 429]. The research stream had inferred the opposite. Its verifier found the FTC's statement, and the inference was rebuilt on it. Whether a third-party vendor's IP matching stays within the limits is untested. This review found no FTC statement or case applying COPPA to podcasts in the sources screened.

The amendments also codified an audio-file exception. An operator may collect a child's voice recording without consent only to answer the child's request, and must delete it straight afterwards ^[429, 428]. That matters more for smart speakers than for ad delivery. On

31 May 2023 the FTC and the Department of Justice charged Amazon under COPPA over its retention of children's Alexa voice recordings; the proposed order carried a \$25 million civil penalty ^[430].

Synthetic voices

Tennessee's ELVIS Act added voice as a protected personal right. The legislature's record shows the Governor signed it on 21 March 2024, and it took effect on 1 July 2024 ^[431]. The research stream first gave 26 March, the date the act became Public Chapter 588; its verifier corrected it. The federal NO FAKES Act would create a right in a person's voice and likeness. The 2025 bills, introduced on 9 April 2025, went no further than referral. Their successor, S. 4591, was reported by the Senate Judiciary Committee on 24 June 2026 and had no floor vote by the cutoff ^[432, 433, 434, 435] ♦.

The one adopted federal action on AI voices found by this review concerns telephone calls. In February 2024 the FCC confirmed that the Telephone Consumer Protection Act (TCPA) limits on "artificial or prerecorded voice" cover AI-generated voices, so such calls need prior express consent ^[436]. For political ads, an FCC proposal published on 5 August 2024 would require an on-air disclosure of AI-generated content. It would bind broadcasters, cable and satellite TV operators, and satellite radio licensees that originate programming. Comments closed on 19 September 2024 and replies on 11 October 2024. The docket shows no termination and no final rule ^[437, 438] ♦. California already has such a rule. AB 2355, approved on 17 September 2024, requires a committee's political ad containing AI-generated or altered image, audio or video to carry a disclosure, spoken clearly on radio. Its litigation status was not checked ^[439].

New York's synthetic-performer law (Chapter 617) has been in force since 9 June 2026. It requires a conspicuous disclosure when whoever produces an ad knows it contains a synthetic performer. It exempts "audio advertisements" and the media publishers that disseminate ads ^[374, 375] ♦. The exemption's statutory wording was seen only through summarising fetches.

The research stream first concluded that no US rule requires any audio ad to disclose a synthetic voice. AB 2355 contradicts that for political ads. The corrected finding is narrower: at the cutoff, this review found no US federal or state rule requiring a commercial audio ad to disclose that its voice is synthetic, in the sources screened. Other states' election-deepfake laws were not screened. The FTC's deception authority could still reach an undisclosed synthetic endorser case by case ^[374, 437, 436, 431, 439].

The EU is context. Its AI Act transparency obligations began to apply on 2 August 2026. Deepfakes, which the European Commission says include AI-generated or edited audio, must be labelled, and AI-generated content must carry machine-readable marks. Under the AI Omnibus, in force from 27 July 2026, providers of generative systems already on the market before 2 August 2026 must add the machine-readable marks only from 2 December 2026, according to the Commission's FAQ; deepfake labelling has no such delay ^[440, 441, 442] ♦. Chapter 10 describes how sellers use synthetic voices.

The Listen Quotient

The Listen Quotient (LQ) turns the capability matrix into bands inside each of the paper's two cohorts. It summarises what the public record documents about a product. It does not measure how well the product works.

IN SHORT

The matrix scores 24 audio inventory sellers and 10 audio ad-technology services against anchors fixed before scoring, and only verified or qualified cells count. The seller field score is 44 and the ad-technology field score is 58. Each cohort is banded against its own field, so no row is compared across cohorts. Acast, Spotify and SiriusXM Media clear the Most documented line among sellers. Acast is the only seller whose counting assurance reaches the top anchor, on an IAB Tech Lab certification dated 18 February 2026 [♦]. Spotify gets there on documented measurement and a public API [♦], and SiriusXM Media on national reach sold by a sales group its parent's 10-K names ^[34]. No ad-technology row reaches Most documented. 19 of the 24 seller bands are provisional, because they move when missing cells are filled, and 3 bands are provisional because a blind second scorer would move them. Sellers are weakest on buyer workflow, optimisation, measurement and transparency, and most radio groups have no scoreable brand-safety record [♦].

LQ summarises publicly documented capability within a cohort. It does not measure product performance.

What a cell means

The matrix has one row per named product and 12 dimensions in three groups. Depth covers targeting, creative, measurement, optimisation and buyer workflow. Reach covers inventory scale, channel breadth, programmatic access and US coverage. Standing covers counting assurance, transparency and brand safety.

Cohort A is audio inventory sellers: radio groups, streaming and podcast sellers, and in-game audio sellers, each selling inventory it owns or represents under contract. Cohort B is audio ad technology: separately supplied hosting, insertion, ad-serving, exchange or supply-side platform (SSP) services. Each cohort has a mask, the list of dimensions that apply to every row in it. Sellers use all 12. Ad technology uses every dimension except creative, because these services do not produce ad creative. A cell outside the mask reads n/a, and that label is never assigned row by row.

A cell is a score from 0 to 5 against the dimension's own anchors, written before any product was scored and stated with numeric thresholds. A seller earns 5 on inventory scale,

for example, with 500 or more US stations. A 0 needs a source that documents absence or failure. Where the opened record gives no basis to score, the cell reads n/e; missing evidence never scores 0. Evidence grades then cap the score: vendor documentation caps a cell at 4 and vendor marketing at 3. A grade can lower a cell and never raise it. So a cell reads as documented capability discounted for the type of its evidence, not capability alone. Spotify's workflow meets the anchor for 5 on its own API documentation and scores 4 for that reason ^[443]. The matrix gives each cell's grade, so the two can be read apart; this edition does not publish a separate confidence score (review round 4, R4-02). The scale anchors also treat different units as equal: 500 US stations, a monthly US audience of 100 million and one billion monthly deliveries all earn 5. Those equivalences are the author's assumptions, fixed before scoring, not measured comparisons.

Each cell records its grade, date, reason, sources and verification status, and only cells a verifier re-checked, as verified or qualified, count. An unverified cell is shown but treated as n/e. 1 cell is in that state, Hubbard Radio's workflow; Libsyn's inventory scale was verified in the round-5 adjudication. Of the matrix's 408 cells, 350 carry a score, 48 are n/e and 10 are n/a.

The capability matrix

Each cell is a 0 to 5 score against the dimension's published anchors, bounded by its evidence grade, or n/e where the opened record gives no basis to score, or n/a where the dimension is outside the cohort's mask. Open a cell to see its sources, date, grade and verification status. Rows are compared only within their cohort.

5 documented in operational detail

3 real but thin or narrow

1 adjacent or incidental

0 documented absence

n/e insufficient evidence

n/a outside the cohort's mask

unverified: shown, counted as n/e

β beta · ann announced · ? unconfirmed · ret retired · ± provisional band: it moves when missing evidence is filled

† provisional band: a blind second scorer's scores move it

Product	LQ	Targeting	Creative	Measure	Optimise	Workflow	Scale	Channels	Prog.	US	Assurance	Transp.	Safety	Counted
A. AUDIO INVENTORY SELLERS														
BANDED, BY LQ														
Spotify SPOTIFY ADVERTISING · STREAMING AND PODCAST SELLERS	62 Most documented	4	2	4	4	4	4	3	3	4	2	4	3	12/12
Acast ACAST PODCAST ADVERTISING NETWORK · STREAMING AND PODCAST SELLERS	59 Most documented	4	3	3	1	3	4	1	3	4	5	4	3	12/12

Product	LQ	Targeting	Creative	Measure	Optimise	Workflow	Scale	Channels	Prog.	US	Assurance	Transp.	Safety	Counted
SiriusXM Media RADIO GROUPS	59 Most documented 	3	4	3	2	1	4	4	3	5	3	4	3	12/12
iHeartMedia IHEARTMEDIA AUDIO ADVERTISING · RADIO GROUPS	56[±] Well documented 	4	3	2	2	2	5	4	3	5	3	2	n/e	11/12
National Public Media NATIONAL PUBLIC MEDIA SPONSORSHIP · RADIO GROUPS	54 Well documented 	3	3	3	2	1	3	3	3	5	3	3	3	12/12
Libsyn LIBSYN ADS · STREAMING AND PODCAST SELLERS	49[±] Well documented 	3	2	2	1	2	3	1	2	3	4	3	n/e	11/12
Cumulus Media CUMULUS MEDIA (INCLUDING WESTWOOD ONE) · RADIO GROUPS · IN CHAPTER 11	48[±] Well documented 	1	3	1	n/e	1	5	3	2	5	4	2	n/e	10/12
Audioboom AUDIOBOOM ADVERTISING · STREAMING AND PODCAST SELLERS	48[±] Well documented 	3	3	1	n/e	2	n/e	2	2	5	1	3	3	10/12
Amazon AMAZON ADS AUDIO ADS · STREAMING AND PODCAST SELLERS · ACTIVE; RESTRUCTURED	47[±] Well documented 	2	2	1	1	4	n/e	3	3	3	2	3	n/e	10/12
Beasley Broadcast Group RADIO GROUPS	45[±] Partly documented 	3	3	1	n/e	1	2	3	2	3	4	1	n/e	10/12
PodcastOne STREAMING AND PODCAST SELLERS · ACTIVE (GOING- CONCERN DOUBT)	44[±] Partly documented 	1	3	1	1	1	2	2	2	5	4	2	n/e	11/12
Odeeo IN-GAME AUDIO SELLERS	43[±] Partly documented 	2	2	3	2	1	3	1	3	3	n/e	2	n/e	10/12
Audiomob IN-GAME AUDIO SELLERS	42[±] Partly documented 	3	2	3	1	1	3	1	2	3	n/e	2	n/e	10/12
Salem Media SALEM MEDIA GROUP · RADIO GROUPS · ACTIVE (PRIVATE SINCE 20 AUG 2026)	42[±] Partly documented 	3	3	1	n/e	1	3	3	2	3	2	1	n/e	10/12
Hubbard Radio RADIO GROUPS	40[±] Partly documented 	n/e	n/e	1	n/e	1	3	3	2	3	4	1	n/e	7/12
DAX US (Global) DAX US · STREAMING AND PODCAST SELLERS	40[±] Partly documented 	n/e	2	n/e	2	1	3	4	3	3	n/e	1	n/e	8/12

Product	LQ	Targeting	Creative	Measure	Optimise	Workflow	Scale	Channels	Prog.	US	Assurance	Transp.	Safety	Counted
Urban One URBAN ONE RADIO · RADIO GROUPS	39 Partly documented 	1	2	1	1	1	4	2	2	3	3	1	n/e	11/12
Bonneville International RADIO GROUPS	38[±] Partly documented 	n/e	2	1	n/e	1	2	3	2	2	3	1	n/e	9/12
Cox Media Group COX MEDIA GROUP · RADIO · RADIO GROUPS	37[±] Partly documented 	1	2	1	n/e	1	2	3	2	2	3	1	n/e	10/12
Audacy RADIO GROUPS	37[±] Partly documented 	1	2	2	1	2	3	3	2	3	n/e	1	n/e	10/12
TelevisaUnivision TELEvisaUNIVISION · AUDIO · RADIO GROUPS	37[±] Partly documented 	1	1	1	n/e	1	2	3	2	3	3	1	n/e	10/12
MediaCo MEDIACO · RADIO GROUPS · ACTIVE (GOING-CONCERN DOUBT)	35[±] Least documented 	1	n/e	1	n/e	1	2	2	2	2	3	1	n/e	9/12
Saga Communications RADIO GROUPS	33[±] Least documented 	1	n/e	1	n/e	1	3	2	2	3	n/e	1	n/e	8/12
Townsquare Media RADIO GROUPS	32[±] Least documented 	1	n/e	1	n/e	1	4	2	2	4	0	1	n/e	9/12
B. AUDIO AD TECHNOLOGY														
BANDED, BY LQ														
Triton Digital (iHeartMedia) TRITON AD PLATFORM (TAP) · AUDIO AD TECHNOLOGY	69 Well documented 	4	n/a	3	4	4	3	4	3	4	3	4	4	11/11
AdsWizz (SiriusXM) ADSWIZZ PUBLISHER PLATFORM · AUDIO AD TECHNOLOGY	68 Well documented 	4	n/a	3	4	4	3	4	3	4	3	4	3	11/11
Spotify (Megaphone) MEGAPHONE · AUDIO AD TECHNOLOGY	64 Well documented 	4	n/a	3	3	4	4	2	3	3	4	4	2	11/11
Amazon (ART19) ART19 · AUDIO AD TECHNOLOGY	61 Well documented 	3	n/a	3	2	4	n/e	1	3	4	5	4	2	10/11
Spreaker (iHeartMedia) SPREAKER · AUDIO AD TECHNOLOGY	57⁺ Partly documented 	4	n/a	3	1	4	4	2	2	3	2	4	2	11/11
Simplecast (SiriusXM) SIMPLECAST · AUDIO AD TECHNOLOGY	57 Partly documented 	2	n/a	3	2	4	4	2	2	3	3	4	2	11/11
Triton Digital (iHeartMedia) TRITON AUDIO MARKETPLACE · AUDIO AD TECHNOLOGY	57 Partly documented 	4	n/a	2	2	2	3	4	4	4	n/e	3	2	10/11

Product	LQ	Targeting	Creative	Measure	Optimise	Workflow	Scale	Channels	Prog.	US	Assurance	Transp.	Safety	Counted
Omny Studio (iHeartMedia) OMNY STUDIO · AUDIO AD TECHNOLOGY	54 Partly documented 	2	n/a	1	2	4	4	2	2	3	3	4	2	11/11
SoundStack AUDIO AD TECHNOLOGY	50 Partly documented 	3	n/a	1	1	2	3	3	1	4	4	4	1	11/11
AdsWizz (SiriusXM) ADSWIZZ AUDIO MARKETPLACE · AUDIO AD TECHNOLOGY	43 Least documented 	3	n/a	1	2	1	3	3	1	3	2	1	n/e	10/11

How LQ is built. The Listen Quotient keeps the Contextual Quotient's groups, weights and band offsets but takes its field mean over the cohort's admitted rows' Raw scores, not pooled group scores; the resemblance does not validate it. Three groups: **Depth** (targeting and context, creative, measurement and attribution functionality, optimisation and outcome buying, buyer workflow), **Reach** (inventory scale, channel breadth, programmatic access, us availability and coverage) and **Standing** (counting assurance, transparency and inventory quality, brand safety and suitability). Only verified or qualified cells count; an unverified cell counts as n/e, and n/a comes only from the cohort's applicability mask. Each group is the mean of the counted cells inside it, so an unscored dimension is not counted as a zero. Raw combines the groups at 45/25/30, renormalised over the groups present, and is shrunk toward the cohort's field mean, the mean Raw score of the cohort's admitted rows, thin rows included, with a prior strength of 4 against the row's own count of counted cells. A cohort is a set of products doing a comparable job; each has its own field mean and band lines, and rows are never ranked across cohorts. The weights and the prior strength are author-defined heuristics. Bands come from the unrounded distance to the cohort's field score (Most documented at +12 or more, Well documented at +1 or more, Partly documented at -8 or more, Least documented below that); only the displayed score is rounded. A row gets a band only with at least six counted cells and at least one in every applicable group, and only in a cohort with at least 6 such rows; the others show a score without a band and are listed apart, A to Z, with any missing group named. The three bars under each score are Depth, Reach and Standing in that order. LQ summarises publicly documented capability within a cohort, not product performance, and is not calibrated to buyer outcomes.

Read the band, not the rank. A. Audio inventory sellers (24 rows, field LQ 44.1). Band lines: Most documented 56.1, Well documented 45.1, Partly documented 36.1, Least documented below. Under four reweightings (equal thirds, depth-led, reach-led, standing-led), with Raw and the field mean recomputed, the top band loses at most 1 of its 3 members (iHeartMedia joins it under reach-led weights), while positions move by up to 5 places and by 1 on average. Of the 24 banded products, 17 keep their band under every weighting (Amazon, Audioboom, Audiomob, Bonneville International, Cox Media Group, Cumulus Media, DAX US (Global), Hubbard Radio, Libsyn, National Public Media, Odeeo, Saga Communications, Salem Media, SiriusXM Media, Spotify, Townsquare Media, Urban One); Acast, Audacy, Beasley Broadcast Group, iHeartMedia, MediaCo, PodcastOne, TelevisaUnivision cross a band line under at least one. With a prior strength of 0 (Raw, no shrinkage), 2 and 8 instead of 4, positions move by up to 1, 0 and 0 places. Deleting one counted cell at a time moves a score by up to 9 points up (Hubbard Radio, measurement and attribution functionality) or 6 down (Beasley Broadcast Group, counting assurance); 0 deletions would drop a row below admission and 6 would cost a row its band eligibility. In the missing-evidence scenarios (every n/e cell of a banded row filled with 1, then with 4, with the field and every other row frozen), 19 of the 20 banded rows with n/e cells change band (Amazon, Audacy, Audioboom, Audiomob, Beasley Broadcast Group, Bonneville International, Cox Media Group, Cumulus Media, DAX US (Global), Hubbard Radio, iHeartMedia, Libsyn, MediaCo, Odeeo, PodcastOne, Saga Communications, Salem Media, TelevisaUnivision, Townsquare Media; marked ±). **B. Audio ad technology** (10 rows, field LQ 58.0). Band lines: Most documented 70.0, Well

documented 59.0, Partly documented 50.0, Least documented below. Under four reweightings (equal thirds, depth-led, reach-led, standing-led), with Raw and the field mean recomputed, no product sits in the top band (Most documented), while positions move by up to 3 places and by 0.3 on average. Of the 10 banded products, 8 keep their band under every weighting (AdsWizz (SiriusXM), AdsWizz (SiriusXM), Amazon (ART19), Omny Studio (iHeartMedia), Simplecast (SiriusXM), Spotify (Megaphone), Spreaker (iHeartMedia), Triton Digital (iHeartMedia)); SoundStack, Triton Digital (iHeartMedia) cross a band line under at least one. With a prior strength of 0 (Raw, no shrinkage), 2 and 8 instead of 4, positions move by up to 0, 0 and 0 places. Deleting one counted cell at a time moves a score by up to 5 points up (SoundStack, brand safety and suitability) or 4 down (Omny Studio (iHeartMedia), buyer workflow); 0 deletions would drop a row below admission and 0 would cost a row its band eligibility. In the missing-evidence scenarios (every n/e cell of a banded row filled with 1, then with 4, with the field and every other row frozen), none of the 3 banded rows with n/e cells changes band. **Missing evidence is not neutral:** every deletion case is in data/lq-missing-evidence.json, and every row's scenario scores, including a hypothetical 0-to-5 envelope reported separately and never used for the flag, are in data/lq.csv. These tests cover weights, prior strength and missing cells, not evidence grades, the scorer or the product sample. Every input is in the CSVs in the appendix, so the index can be recomputed on different weights.

Conventions that decided the hard cells

Counting assurance was the hardest dimension. IAB Tech Lab, the Interactive Advertising Bureau's standards body, requires podcast measurement companies to recertify at least every 12 months, or their status changes to expired ^[20] ♦. Its public list shows no status column. Review round 2 settled the reading (R2-02) on 29 September 2026, before any cell was scored. A listing counts as current only within the 12-month term. A listing past the term with no status shown reads at anchor 3, and 0 needs the record itself to show a lapse. SiriusXM Media's podcast counting runs on AdsWizz and Simplecast listings last certified on 15 May 2025, so it reads at 3 ^[15, 107] ♦. Beasley's podcasts are served from ART19, listed for all four counting metrics and last certified on 10 February 2026. That listing is current, and Beasley scores 4 because its broadcast channel is only partly covered ^[444, 445, 15] ♦.

Who owns the certified system does not change the score. Saga, Beasley, MediaCo and Salem hold no IAB Tech Lab or MRC (Media Rating Council) record of their own; where their counting is certified, the system belongs to a third party ^[117, 15] ♦. The rule that a lapse must appear in the record decided Townsquare. Its first-pass 0 rested on the Nielsen diary service, which entered a six-month accreditation hiatus on 23 June 2026; none of Townsquare's 74 markets is among the 24 where the MRC accredits Nielsen's Portable People Meter (PPM) service ^[70, 6, 118] ♦. The calibration pass made the cell n/e (SC-02), reading which of its markets are diary-rated as an inference. The adjudication in review round 5 found that the MRC's quarterly record names four of Townsquare's markets among the diary reports in hiatus, so the cell is 0 ^[118, 70].

National coverage needs national selling. Anchor 5 on US coverage requires national coverage and a US sales operation documented in a filing or official record. Where a radio group documents no national sale of its streams, its broadcast markets are scored. Spotify's 20-F names Spotify USA Inc. as its US operating company but documents no US advertising sales operation, so Spotify reads 4 (R2-09) ^[446, 21] ♦. Cumulus reads 5 because its filings say an internal US sales team sells network inventory across owned and affiliated stations ^[38, 81] ♦.

Represented supply is counted once, at the seller that represents it. SoundCloud's US inventory sits in the SiriusXM Media row, its exclusive US representative since 2019 ^[447, 151] ♦. Stations that iHeartMedia's Katz Media represents for commission stay outside iHeartMedia's row ^[66].

Evidence is never inherited from a parent, subsidiary or partner. SiriusXM Media calls AudioGO its self-serve platform, but AudioGO is an AdsWizz product with its own register entry, so SiriusXM Media's workflow cell reads 1 ^[448, 449] ♦. MediaCo's national seller, Sigma Audio Networks, is an equity-method affiliate managed by eMedia. Sigma presents itself as powered by MediaCo's stations, so leaving its offers out of MediaCo's row is an accounting-control decision and says nothing about whether Sigma sells other supply ^[90, 450] ♦. Partner names, announcements, agentic protocol states and capability sources older than 24 months earn nothing.

A calibration pass followed the first scoring. Separate agents compared every cell of each dimension within each cohort against the anchors and these conventions, so that the same evidence earns the same score; the changes are logged as SC-01 in the corrections ledger. iHeartMedia's counting assurance moved from 4 to 3, Amazon's from 3 to 2, and Cumulus's measurement from 3 to 1. Scoring was one pass by the author's AI-assisted research process, after separate AI agents had tried to refute the facts. After review round 4, separate AI scorers re-scored blind the 17 rows nearest a band line: those whose offset sits within 2 points of a line, or whose band moves under a K or reweighting variant. They had the rules, each row's sources and the verified claims, but not the first scores. They matched the first pass exactly on 144 of 200 cells (72%) and came within one point on 162 of the 168 cells both passes scored (96%), a quadratic-weighted kappa of 0.86. Fifteen cells were n/e in one pass and scored in the other, and the second pass scored 0.2 points higher on average. Agreement was weakest on transparency, counting assurance, optimisation and creative. On the second pass's scores four rows would change band: iHeartMedia would reach Most documented, Cumulus and Spreaker would rise to Well documented, and PodcastOne would fall to Partly documented. Both passes are AI scorers reading the same rules, so this tests reproducibility; it is not an independent human rating.

Review round 5 then adjudicated the 29 largest disagreements: every cell scored in one pass and n/e in the other, every cell two points or more apart, and the one-point differences on the four rows whose band had moved. Separate AI adjudicators read both rationales and reopened the sources; a first-pass score changed only for a factual, anchor-application or convention error, and only after the deciding passage was re-read. Ten cells changed and nineteen kept the first pass. The first pass had missed a certified invalid-traffic filter and a content taxonomy for Spotify's transparency, the terms that TelevisaUnivision and Urban One publish, show-level selling in PodcastOne's IO-K, and the MRC record that names Townsquare's diary markets; one TelevisaUnivision cell was set at the level every other radio row gets, not the adjudicator's higher reading. After the corrections, Cumulus rises to Well documented and PodcastOne falls to Partly documented, as the second pass had them, and Beasley slips just below the Well documented line as the field moves. Three bands stay sensitive to the scorer and are marked †: iHeartMedia and Beasley, which the second pass would each raise one band, and Spreaker. data/second-pass.json and data/second-pass.csv hold both passes and each adjudication cell by cell; entries AJ-01 to AJ-10 in the corrections ledger record the changes.

How the quotient is built

Each group score is the mean of the row's counted cells in that group, skipping n/e and n/a. Raw combines the groups at 45% Depth, 25% Reach and 30% Standing, renormalised over the groups present. The field mean is the average Raw of the cohort's admitted rows. Each row is pulled toward it with a prior strength of 4: the shrunk score is $(k \times \text{Raw} + 4 \times \text{field}) \div (k + 4)$, where k is the row's number of counted cells. LQ is $100 \times \text{shrunk} \div 5$. A row with more counted cells moves further from its field. With a 5 in every applicable cell, a seller would show 86 and an ad-technology service 89. The prior strength is the author's heuristic; no statistical model sets it.

Bands come from the unrounded offset, $20 \times (\text{shrunk} - \text{field})$: Most documented at +12 or more, Well documented at +1 or more, Partly documented at -8 or more, Least documented below. The names say what the bands measure, documented capability within the cohort; until review round 4 they were Front rank, Strong, Mid and Narrow, with the same thresholds. A row needs at least 6 counted cells, with one in every applicable group, to be banded. A cohort needs at least 6 such rows. All 34 rows qualify.

Rows are never compared across cohorts. The two fields differ, and each row is shrunk toward its own. An ad-technology service in Partly documented can show a higher number than a seller in Well documented.

LISTEN QUOTIENT (0–100) BY COHORT, WITH THE RANGE UNDER FOUR REWEIGHTINGS



Grey bar: range under the four reweightings. Provisional: ± the band moves when missing evidence is filled; † a blind second scorer's scores move it. Every scored vendor is banded.

Read the band, not the rank: three products clear the most documented line. The Listen Quotient for the products with enough evidence to band, one section per cohort. The Listen Quotient keeps the Contextual Quotient's groups, weights and band offsets but takes its field mean over the cohort's admitted rows' Raw scores, not pooled group scores; the resemblance does not validate it. Depth, Reach, Standing group means are combined 45/25/30 and shrunk toward the cohort's field mean (the mean Raw score of its admitted rows) with a prior strength of 4; bands come from the unrounded distance to that field score, and only verified or qualified cells count. A band needs at least 6 counted cells with one in every applicable group, in a cohort with at least 6 such rows. Across the reweightings, positions move by up to 5 places within a cohort, and 25 of the 34 banded products keep their band under every weighting. LQ measures publicly documented capability within a cohort, not product performance.

Units: LQ points on a 0–100 scale, pulled toward the cohort field mean; shown rounded, plotted unrounded · Scope: 34 banded products of 34 in the capability matrix, scores as of 30 September 2026

Single scorer. The index inherits every limit of the dimension scores and is sensitive to the weights; the bands, not the positions, are the finding.

Results for audio inventory sellers

The seller field score is 44. The Most documented line sits at an LQ of 56.1. Acast, Spotify and SiriusXM Media clear it, each with a complete record. The Well documented rows are iHeartMedia, National Public Media, Libsyn, Cumulus, Audioboom and Amazon. Beasley Broadcast Group sits just below the Well documented line, in Partly documented with PodcastOne, Odeeo, Audiomob, Salem, Hubbard, DAX US, Urban One, Bonneville, Cox Media Group, Audacy and TelevisaUnivision. MediaCo, Saga and Townsquare are Least documented.

A row flagged "band sensitive to missing evidence" is one whose band changes when its n/e cells are filled first with 1, then with 4, with the field and every other row held fixed. 19 of the 20 seller rows with n/e cells carry the flag. Among the Well documented rows, iHeartMedia would reach Most documented at the high fill, and Libsyn, Cumulus, Audioboom and Amazon would fall to Partly documented at the low fill. Those bands rest partly on what their public records leave out, so the matrix marks every flagged band ± provisional, with its scenario span in the row's note, and the figure labels it provisional. Only Acast, SiriusXM Media, Spotify, National Public Media and Urban One have a seller band that no fill moves.

Results for audio ad technology

The ad-technology field score is 58. No row reaches Most documented, whose line would sit at 70. Triton Ad Platform (TAP), the AdsWizz publisher platform, Megaphone and Art19 are Well documented. Spreaker, Simplecast, Triton Audio Marketplace, Omny Studio and SoundStack are Partly documented. The AdsWizz Audio Marketplace is Least documented. These records are nearly complete; 0 of the 3 rows with n/e cells are band sensitive. AdsWizz and Triton are each scored as a publisher-side row and a marketplace row. That split is inferred from their documentation and may count some of one company's capability twice; chapter 14 returns to it.

What separates the leaders

The Most documented sellers get there on different groups. Acast leads on Standing. Its counting certificate covers the ad deliveries it sells on, and it reports delivery show by show with file export ^[15, 451, 304, 452]. It scores 1 on optimisation and on channel breadth, since it sells podcasts only. Spotify has the highest Depth in the cohort. It has a public Ads API ^[443], and its Ad Analytics uses the IP address as the primary identifier and reports a 40% to 80% device-graph match rate that varies by campaign ^[176, 199]. Its Standing trails Acast's. IAB Tech Lab lists Megaphone, and no listing named Spotify, Spotify for Creators or Spotify Advertising, so the certified scope misses the in-app impressions Spotify mainly sells ^[15, 453] ♦. SiriusXM Media scores 5 on US coverage and 4 on channel breadth and inventory scale, and 1 on workflow.

What the leaders share is documented measurement beyond delivery reports, a buying route beyond the insertion order, and a counting chain in an issuing body's record. Most radio groups document none of them. In ad technology, TAP and the AdsWizz publisher platform lead on Depth, with optimisation and workflow at 4 each. The AdsWizz Audio

Marketplace is Least documented partly because its terms pay on the advertiser's own count, which no certified scope is shown to cover ^[25, 15].

Where the field is weak

Among sellers, Depth is the lowest group mean and Reach the highest. The weakest dimensions are buyer workflow, optimisation, measurement and transparency. Most radio groups sell by insertion order, with reports on request, and report delivery without attribution. On transparency, most show only entries in supply-path files. Brand safety is n/e for most of them: this review found no documented brand-safety or suitability control offered by Saga, Beasley, MediaCo or Salem in the sources screened by 29 September 2026 (inference) ^[454, 198] ♦. Among ad-technology services the lowest mean is brand safety, followed by measurement and optimisation.

How much the bands move

The build reruns LQ under 4 reweightings: equal thirds, Depth-led (60/20/20), Reach-led (30/45/25) and Standing-led (30/20/50), recomputing Raw and the field each time. Positions move by up to 5 places among sellers and 3 among ad-technology services. 17 of 24 sellers and 8 of 10 ad-technology rows keep their band under every weighting. iHeartMedia reaches Most documented under the Reach-led weights, and Acast drops to Well documented under them. Beasley reaches Well documented under the Depth-led and Standing-led weights.

Setting the prior strength K to 0, 2 and 8 moves seller positions by at most 1 place. Bands move more: 7 seller rows change band at K = 0, 5 at K = 2 and 2 at K = 8. For ad technology the counts are 3, 2 and 0.

The deletion test turns each counted cell into n/e in turn. Across 242 seller cells, 33 deletions change a band, 6 cost a row its band eligibility and 0 remove a row from the matrix. Deleting Hubbard Radio's measurement and attribution functionality cell, a 1, lifts its LQ from 40 to 49, while leaving it without a counted Depth cell. Leaving out a low score can raise a composite. The largest fall, 6 points, comes from deleting Beasley's counting assurance, which leaves it in Partly documented. Across 107 ad-technology cells, 13 deletions change a band.

The missing-evidence fills of 1 and 4 are scenarios, not bounds. Fills of 0 and 5 are reported separately as a hypothetical full-scale envelope and never set the flag. Imputed cells never make a row eligible for a band. The bands are the finding; the exact positions depend on the weights.

The profiled products

7 products get a deep profile: Spotify, SiriusXM Media, iHeartMedia, Amazon, Acast, and both in-game specialists, Audiomob and Odeco, so that neither is singled out.

Deep profiles — select a company

Each card shows the matrix scores as a bar strip. Open a company for its SWOT, what it sells, who buys it, how it earns, its verified capabilities with availability and evidence grade, performance evidence with sponsorship, limits, risks and fit. Pick a SWOT quadrant to isolate it and compare every profiled company on it. Each SWOT line is tagged record, vendor documentation, vendor claim or inference, and opportunities and threats are the author's reading of dated facts.

Acast **ACTIVE**

Acast AB (publ)

Stockholm-listed podcast network selling ads on hosted and represented shows; North America SEK 964.2m of 2025 net sales SEK 2,516.9m.

STRENGTHS

IAB Tech Lab's record certifies Acast's own counting against guidelines v2.2 for Download, Listener and Ad Delivery, last certified 18 February 2026. **RECORD** [15] [451]

North America net sales reached SEK 964.2m in 2025 (+60%) and grew 34% in Q2 2026; fourteen US advertisers spent over USD 1m in 2025. **RECORD** [73] [526]

Buyers get show-level delivery lists, IAB-validated impressions and CSV or XLS exports as standard, plus a documented self-serve Ad Platform. **VENDOR DOCUMENTATION** [304] [452] [527]

Automated channels rose from 35% to 55% of campaigns between December 2022 and December 2025, with programmatic at 42% and self-serve 13%. **RECORD** [73]

OPPORTUNITIES

If Barometer's pre-bid episode scoring, announced live on 22 January 2026, gets documented buyer controls, Acast could meet brand-suitability requirements for open-network podcast buys. **INFERENCE** [274] [532]

Exclusive ad-sales deals with Slate, Perfect Day Media and The Washington Post in 2026 could extend US represented supply, where North America grew 31% in H1. **INFERENCE** [526]

The July 2025 Magnite partnership puts Acast podcasts beside CTV and online video in one sell-

WEAKNESSES

Acast sells one audio channel, podcasts; its scale figures (115 million monthly unique persons, 4,436m listens) are global, with no US audience figure published. **RECORD** [73]

No outcome objective, automated outcome optimisation or public advertiser API is documented; the only public API is for publishing. **VENDOR DOCUMENTATION** [528] [529] [530]

Attribution uses Podscribe pixels with an IP macro but discloses no match rate or lookback, and the vendor list still names the defunct Chartable. **VENDOR DOCUMENTATION** [229] [531] [515]

Certification marks Client-Confirmed Ad Play not applicable and domain threat filtering not supported, so counted delivery is not confirmed playback. **RECORD** [451]

THREATS

Apple's iOS 17 change cut Q4 2023 listens 12% and forced a SEK -76m revaluation; further platform changes could again move counted listens and contract values. **INFERENCE** [534]

The Q2 2026 switch to listens-and-views, with YouTube due by Q3, mixes certified RSS counts with uncertified views, which could weaken buyer trust in the series. **INFERENCE** [526] [451]

One customer relationship supplied SEK 366.9m, over 10% of 2025 net sales; losing or repricing it

side platform, which could draw omnichannel programmatic budgets. [INFERENCE] [533] [73]

WHAT IS SOLD

Audio advertising in podcasts Acast hosts or represents, sold as (1) targeted pre-produced audio ads dynamically inserted across the network, (2) host-read sponsorships booked show by show with podcaster approval, (3) 'Sponsorship +' and talent-voiced ads (podcast talent voicing a brand's scripted ad, available through programmatic guaranteed deals from May 2025), and (4) branded content and omnichannel campaigns (audio, video, social, live) produced by Acast Creative Studios (formerly Wonder Media Network; Wake Word Studios added December 2025). Sales channels: direct sales, the self-serve Ad Platform, programmatic (PG and PMP, including through Magnite from July 2025), and omnichannel. From 2026 Acast also sells video ads in video podcasts on Apple Podcasts (HLS), which is video inventory and outside this paper's audio scope. Non-advertising SaaS (hosting, distribution, Podchaser data) was just over 4% of 2025 net sales.

HOW IT EARNS

Advertising and sponsorship revenue (more than 95% of group revenue) recognised over time: for impression-based contracts by the number of ads delivered against the contracted number, for fixed-period contracts straight-line. Creators receive a pre-agreed share of advertising spend; content costs (SEK 1,527.4m in 2025) sit in cost of content, giving a 39% gross margin, so reported net sales are before creator payouts (inference from the revenue note and income statement; the report does not use the words gross or net). The annual report models advertising net sales as listens x ad slots = inventory, x sell-through rate = delivered ads, x CPM.

BEST FIT

Buyers wanting broad podcast reach across all listening apps with IAB-certified ad-delivery counting and show-level delivery lists.

Small and mid-sized advertisers using the self-serve Ad Platform with location, category and audience-

would hit revenue across all segments. [INFERENCE] [73]

WHO BUYS IT

Media agencies are the main client base, plus direct advertisers (annual report revenue note). More than 4,000 advertisers globally (annual report front matter; 4,400 in the market overview). In the US, advertisers spending more than USD 1m a year with Acast rose from 1 in 2022 to 14 in 2025. One customer relationship exceeded 10% of 2025 group net sales (SEK 366.9m), attributable to all segments. Self-serve buyers range from small businesses to agencies; the self-serve terms and minimums were not read.

POOR FIT

Buyers needing radio, streaming music or in-game audio from one seller.

Buyers needing a published US audience figure, or US-only delivery metrics, from the seller.

segment targeting.

Brands wanting host-read or talent-voiced audio at scale, including through programmatic guaranteed deals.

Programmatic buyers using PG or PMP deals via Magnite or other SSPs with episode-level suitability screening.

Performance buyers needing outcome-based buying or automated optimisation toward conversions.

Buyers needing client-confirmed ad plays or listen-level attention metrics.

Teams needing a public advertiser API for campaign management or reporting.

Capabilities by dimension, performance evidence, financial record and timeline for this company are in the web edition and in data/deep-profile-records.csv.

Amazon

ACTIVE; RESTRUCTURED

Amazon Advertising LLC (US IO counterparty for Amazon Ads audio ads); ART19 LLC (hosting and insertion)

Audio ads on Amazon Music free tier, Alexa, Wondery and PAN podcasts via Amazon DSP; Wondery ad sales merged into Amazon Music in 2025.

STRENGTHS

ART19, Amazon's host, holds IAB Tech Lab v2.2 certification for downloads, listeners, ad delivery and client-confirmed ad plays, last certified 10 February 2026. RECORD [15] [535]

Interactive audio ads let Alexa listeners add to cart, set reminders or request information by voice, specified in Amazon's ad-spec documentation. VENDOR DOCUMENTATION [536] [537]

Audio became an inventory type in Amazon DSP's Campaign Management APIs on 11 June 2026, with a prospecting tactic added 30 June. VENDOR DOCUMENTATION [538]

ART19's help centre documents targeting, pacing, frequency capping and server-side third-party measurement in operational detail. VENDOR DOCUMENTATION [539] [540] [183]

OPPORTUNITIES

Amazon DSP opened rival podcast and streaming supply with PMP and PG deals in July 2026, positioning Amazon as audio's consolidated buying route. INFERENCE [135]

Buyers name ROI measurement as audio's main barrier; Amazon's closed-loop store data could

WEAKNESSES

No Amazon-published audience, impression or download figure for its audio inventory was found, and Amazon's filings never mention audio. RECORD [194] [457]

Amazon names no counting standard or attribution match level for its audio reporting; MRC accreditation covers Alexa display, not audio. RECORD [194] [157] [541]

No episode-level suitability controls are documented for Amazon audio; its November 2025 suitability controls exclude audio. VENDOR DOCUMENTATION [295] [294]

Published outcome figures are single-advertiser case studies on Amazon internal data, with no control group or design. VENDOR CLAIM [194] [542]

THREATS

Wondery was restructured in August 2025 and its advertising site no longer resolves, leaving sponsorship sales publicly undocumented. RECORD [545] [478] [546]

Inside Amazon DSP, Amazon's own audio now competes with Spotify, SiriusXM and iHeartMedia

answer it if the method were published.

[INFERENCE] [461] [542]

Publishers moving to ART19 (PodcastOne 2025, Beasley 2025) widen supply Amazon can sell through the Podcast Audience Network.

[INFERENCE] [543] [444] [544]

WHAT IS SOLD

Audio ads (10 to 30 seconds per the spec page; 10 to 60 seconds per the product page) with companion banners on Amazon Music's ad-supported tier, Alexa-enabled devices, Alexa News and Amazon Publisher Direct music and digital radio publishers; interactive Alexa audio ads with three voice calls to action; dynamically inserted podcast ads on Amazon Music and Wondery podcasts, Wondery partners and ART19-hosted shows, including the Podcast Audience Network, which fills unsold ad markers of ART19-hosted shows; sold on CPM through Amazon DSP self-service or managed service, with in-house creative production. ART19 separately licenses hosting, dynamic insertion, an ad server and IAB-certified measurement to podcast publishers, priced on bandwidth.

HOW IT EARNS

CPM media revenue on Amazon-owned and represented audio inventory, reported within Amazon's global 'advertising services' net sales with no audio split; ART19 earns usage-based hosting fees on bandwidth and a share of Podcast Audience Network ad revenue (split not disclosed).

BEST FIT

Advertisers selling in the Amazon store who want audio exposure tied to add-to-cart and new-to-brand reporting inside Amazon DSP.

Buyers already running Amazon DSP who want podcast and streaming audio in one omnichannel workflow with API access for audio line items.

Podcast publishers wanting certified hosting, dynamic insertion and backfill monetisation (ART19 plus PAN).

inventory for the same budgets. [INFERENCE] [135] [547]

PAN gives publishers no targeting controls and auto-approves pending brands after five days, a possible deterrent for premium podcast publishers.

[INFERENCE] [544] [548]

WHO BUYS IT

Advertisers and agencies buying through Amazon DSP, whether or not they sell in the Amazon store; interactive add-to-cart ads and Audio generator require an Amazon product listing (ASIN). ART19 is bought by podcast publishers and networks (named US customers include PodcastOne and Beasley Media Group).

POOR FIT

Buyers needing published audience scale, audited audio impression counts or disclosed attribution match rates before buying.

Brands needing episode-level suitability controls or transcript-based targeting on podcasts.

Advertisers seeking host-read sponsorships at scale, whose public route (Wondery's ad site) no longer exists.

Capabilities by dimension, performance evidence, financial record and timeline for this company are in the web edition and in data/deep-profile-records.csv.

Audiomob

ACTIVE

AUDIOMOB LTD (England and Wales, company no. 11944173); previous name JUKEBOX TECHNOLOGY LTD (12 Apr 2019 to 30 Jul 2019)

UK private company selling in-app and in-game audio ad units through its SDK; FY2024 unaudited accounts show net liabilities of £4.32M.

STRENGTHS

IAB Tech Lab lists the Audiomob SDK as OM SDK compliant for audio creatives on Android and iOS, recertified 3 June 2026. RECORD^[15]

TAG shows Brand Safety Certified by independent audit (global) and IAB UK lists Audiomob Gold Standard Certified, Buy Side Support. RECORD^[341]^[343]

US patent 11,681,494, granted June 2023, covers playing audio while pausing other audio and adapting to device volume. RECORD^[549]^[550]

Moments targets ads to developer-tagged in-game events such as wins, losses and rewards, a context signal below app level. VENDOR DOCUMENTATION^[307]^[326]

OPPORTUNITIES

Azerion's July 2026 resale of Moments names US advertisers, a route to US demand without a DSP build. INFERENCE^[326]

Bauer's audioXi integration (December 2025) places Audiomob inside a multi-channel European audio exchange buyers already use. INFERENCE^[325]

OM SDK compliance could support MRC-accredited third-party audibility or IVT measurement if a verifier extends accreditation to audio. INFERENCE^[15]^[116]

WEAKNESSES

FY2024 unaudited accounts show net liabilities of £4.32M, £0.37M cash and no public revenue. RECORD^[551]

Anti-fraud seal is self-attested and US-only, yet Audiomob presents both TAG seals as independent validation. RECORD^[341]^[342]

Scale claims are global, undated and pool gaming with non-gaming apps: 300m monthly active users versus 500M+ monthly users. VENDOR CLAIM^[334]^[326]

No named DSP integration, buyer self-serve interface or buyer API was found; buying runs through sales and resellers. INFERENCE^[307]^[552]^[324]

Retention and uplift claims lack controls; the Veritonic survey of 333 users found 56% would skip if possible. VENDOR CLAIM^[308]^[361]

THREATS

Confirmation statement overdue since July 2026 and FY2025 accounts due 30 September 2026; recheck before relying on status. RECORD^[306]

August 2026 buy-back, share cancellation and rights variation signal capital restructuring whose terms are not public. INFERENCE^[553]

Reseller Azerion also owns competing in-game audio supply through Targetspot's Targetplay, per the H verifier. RECORD^[319]^[326]

Gadsme and Odeeo describe device-volume detection too, eroding Audiomob's claimed exclusive audibility advantage. RECORD^[332]

WHAT IS SOLD

Audio ads played inside third-party mobile apps and games through Audiomob's SDK and Unity plugin: rewarded audio (a reward for listening, with countdown), standard audio (user can mute after five seconds) and Moments (ads targeted to developer-tagged events such as wins or losses), usually with a clickable companion banner. Ads play only when the device is not muted; rewarded ads prompt the user to raise volume below 30%, and other apps' audio is paused during playback. The homepage extends this from games to streaming, social and podcast apps; only these in-app and in-game audio units are in scope.

HOW IT EARNS

Not disclosed. Audiomob sells ad inventory in apps it does not own and pays developers a share (inference from the developer pages' impression-level revenue data and revenue-uplift claims); no take rate, CPM or gross versus net revenue is public, and the FY2024 accounts omit the profit and loss account.

BEST FIT

Brand-awareness and music-release campaigns that value completed, sound-on audio in mobile games, bought through a managed team.

Buyers who want audio in game moments (wins, losses, rewards) with a companion banner and third-party OM verification.

European buyers already on Bauer audioXi or Azerion who want in-app audio added to a wider audio buy.

WHO BUYS IT

Brands and agencies, often through local agencies or resellers (case studies name Media Plan, MediaCom, Mediazone, Moon Digital and music labels such as Sony Music, Warner Music Group, EMPIRE and Mass Appeal Records), and advertisers of partners that resell the supply: Azerion (announced July 2026, including US advertisers), Bauer Media Audio's audioXi exchange (eight European markets) and Apex Gaming Network (Canada). On the supply side, game and app developers integrate the SDK to monetise.

POOR FIT

Buyers who need a programmatic path from a named US DSP with documented deal types.

Outcome or attribution buyers: no documented attribution method, lift function or outcome objective.

Buyers requiring accredited counts or published US audience and delivery figures.

Capabilities by dimension, performance evidence, financial record and timeline for this company are in the web edition and in data/deep-profile-records.csv.

iHeartMedia ACTIVE

iHeartMedia, Inc. (selling entity in advertiser terms: iHeartMedia + Entertainment, Inc., on behalf of itself and its affiliates)

Sells ads on 868 owned US radio stations, their streams, the iHeartRadio app and iHeartPodcasts; Triton, Omny and Spreaker are scored as separate rows.

STRENGTHS

Filings record 868 owned US stations in about 160 markets, a local sales force covering 48 of the top 50 markets, and about 35,000 clients. RECORD ^[66]

Podtrac's August 2026 ranking puts iHeart first and second: 58.9 million US monthly audience for its sales network, 31.1 million for iHeartPodcasts.

RECORD ^[554]

Podcast revenue grew 25.6% to USD 563.7 million in 2025 and 20.7% in Q2 2026, while broadcast radio fell 5.4% in 2025. RECORD ^[66] ^[67]

Broadcast radio is buyable programmatically through named DSPs: StackAdapt since November 2025 and Viant since December 2025; Amazon DSP added iHeart podcast and streaming supply in July 2026. VENDOR CLAIM ^[137] ^[139] ^[135]

OPPORTUNITIES

If AudioGraph reaches general availability as planned for later 2026, broadcast could be bought on ID-based segments, which iHeart says expand to other broadcasters in 2027. INFERENCE ^[190] ^[377]

If broadcast becomes available through agentic transactions as announced for 2026, iHeart would hold the only documented agentic path to AM/FM inventory. INFERENCE ^[397] ^[398]

If Magellan's simulcast-based broadcast attribution launches, iHeart could offer measured broadcast outcomes exclusive to its advertisers, provided match method and rate are published. INFERENCE ^[191]

WHAT IS SOLD

Audio advertising across owned broadcast radio (868 US stations, 249 AM and 619 FM, in about 160 markets) and their simulcast streams; the iHeartRadio app (live, digital-only and custom artist stations); iHeartPodcasts (947 Podtrac-measured shows) and the iHeart Audience Network, a podcast sales network that includes represented shows (26,598 shows in Podtrac's August 2026 ranking); Premiere Networks syndicated programmes and

WEAKNESSES

Its standard terms call attribution and measurement third-party add-ons iHeart does not provide, and bar advertisers from using delivery data to build attribution models. VENDOR DOCUMENTATION ^[378]

Non-cash trade and barter revenue rose to USD 381.3 million in 2025 and USD 228.8 million in H1 2026, inflating reported growth. RECORD ^[66] ^[67]

MRC accredits Nielsen PPM in only 24 markets, and the diary service covering smaller markets has been unaccredited during a hiatus since 23 June 2026. RECORD ^[6] ^[118]

Episode-level brand safety dates from a 2023 release; its Sounder classifier is now group-owned, and no third-party verifier integration was found. VENDOR DOCUMENTATION ^[278] ^[279]

THREATS

With USD 5.0 billion of debt, USD 174.4 million of cash at June 2026, and about USD 2.8 billion maturing in 2029, refinancing risk grows each year. INFERENCE ^[66] ^[67]

If trade initiatives shrink in H2 2026 as iHeart expects, reported broadcast and digital growth could turn negative while cash spot demand keeps falling. INFERENCE ^[67]

A standing 2023 FTC order on deceptive endorsements means any repeat in host or personality reads carries order-violation penalties. INFERENCE ^[407] ^[408]

WHO BUYS IT

National and local advertisers and their agencies across categories (financial services, automotive, health care, telecommunications, insurance, education, food and beverage, entertainment, political); no category is more than about 5% of advertising revenue; about 35,000 clients (10-K). Programmatic buyers reach it through DSPs; small businesses were served by a self-serve tool

Total Traffic & Weather; host and personality endorsements; sponsorships and events. Sold direct by local and national sales forces under insertion orders, and programmatically through DSPs (StackAdapt, Viant, Amazon DSP) largely via its subsidiary Triton Digital's rail. SmartAudio (data targeting, dynamic creative, dashboards) and AudioGraph (ID-based broadcast planning, closed beta or launching in 2026) are sold as parts of the offer. Group companies described but not scored here: Triton Digital (TAP ad server, Triton Audio Marketplace exchange, Podcast Metrics, Webcast Metrics), Omny Studio (hosting), Spreaker and Voxnest (podcast hosting and programmatic), Jelli (programmatic broadcast), Sounder (brand safety and contextual), Unified; Katz Media (representation of 3,400+ non-iHeart radio stations) and RCS (software).

(AdBuilder) whose site was not reachable at the freeze.

HOW IT EARNS

Advertising sold per spot or impression, priced mainly on spot length and audience "as measured by independent ratings services", with drive times priced highest (10-K); podcast revenue is "primarily generated through the sale of advertising"; digital revenue also includes iHeartRadio subscriptions; networks earn advertising plus syndication fees; Katz earns representation commissions. Non-cash trade and barter was USD 381.3 million of 2025 revenue.

BEST FIT

National or multi-market advertisers wanting broadcast reach combined with streaming and podcasts in one IO.

Local and regional advertisers needing market-by-market broadcast presence in about 160 US markets.

Brands buying personality and host endorsements with talent approval.

Programmatic buyers on StackAdapt, Viant or Amazon DSP who want broadcast radio alongside digital audio.

Buyers testing agentic workflows in audio who can accept a pilot-stage, proprietary MCP-based setup.

POOR FIT

Buyers who need a documented attribution method with match level and rate, or a published control-group design, from the seller itself.

Buyers who need log-level delivery data they can keep and combine with other data (Order Terms s.6.10).

Buyers requiring third-party (non-group) brand-safety verification or show-level allow and block lists on podcasts.

Small advertisers wanting a self-serve interface (none observable at the freeze).

Buyers needing MRC-accredited audience estimates in every market bought.

Capabilities by dimension, performance evidence, financial record and timeline for this company are in the web edition and in data/deep-profile-records.csv.

Odeeo ACTIVE

Sonic Odeeo Ltd. (Israel; registration number 516329976 per a registry aggregator)

Israeli in-game audio seller; audio units only scored. US reach via DAX US representation, a small US team and one observed Amazon DSP deal.

STRENGTHS

A third-party buyer found one Odeeo private-auction deal in its Amazon DSP account in July 2026: US only, audio only, on Magnite DV+. RECORD [330] [329]

DAX's sellers.json lists an 'Odeeo US' account on 29 September 2026, four years after Global named DAX its exclusive UK and US sales partner. RECORD [100] [311]

Game Emotions targets audio ads on in-game events such as a new high score or a lost life, a context signal below the app level. VENDOR CLAIM [555]

Odeeo publishes a sellers.json with a TAG-ID and 226 seller IDs, plus an app-ads.txt naming AdsWizz, Triton, Magnite and DAX as resellers. RECORD [556] [557]

OPPORTUNITIES

Amazon DSP opened self-serve programmatic podcast and streaming audio in July 2026; Odeeo is the only in-game audio source one buyer found there. INFERENCE [135] [558] [330]

Walmart DSP availability, announced 13 August 2026, would pair in-app audio with retail audiences if Walmart's own documentation confirms it. INFERENCE [331]

Publishing the McDonald's Claritas design (30-day lookback) would give Odeeo rare third-party outcome evidence in audio; today it is gated. INFERENCE [359] [195]

WEAKNESSES

No issuing body certifies its counting: TAG shows enrolment only, and Odeeo is absent from IAB UK, MRC and IAB Tech Lab records on 29 September 2026. RECORD [345] [343] [116] [15]

Its advertisers page still shows an Oracle MOAT logo, although Moat reached end of life on 30 September 2024. RECORD [312] [346]

Its 2022 guide conceded 'minimal adverse impact on retention'; current 'no impact' claims publish no test, so they are coded insufficient evidence. VENDOR CLAIM [354] [313]

Scale is stated only as 300M+ global monthly active users and 12B+ bid requests, with no period, US figure or audio-only delivery count. VENDOR CLAIM [335] [329]

No advertiser self-serve interface, API or buyer brand-safety controls are documented; its Portal serves publishers. VENDOR DOCUMENTATION [313] [310] [312]

THREATS

Google Authorized Buyer status, Unity exchange supply and 11 sellers.json intermediaries blur whether an Odeeo impression is SDK-direct in-game audio. INFERENCE [315] [316] [556]

Audiomob holds IAB UK Gold Standard certification and TAG seals that Odeeo lacks, and both sellers claim overlapping developer partners. INFERENCE [343] [341] [349] [313]

Buyers requiring accredited counting or published retention evidence have reason to wait: this review found neither for in-game audio in the records screened. INFERENCE [116] [15] [354]

WHAT IS SOLD

Audio ads that play during live mobile gameplay (and, since 2026, in non-game apps), delivered through Odeeo's SDK in partner games: Standard (system-initiated, background audio with an Icon Audio 50×50 or Banner Audio 320×50 visual companion) and Rewarded Audio (opt-in, in exchange for in-game rewards). Serving depends on device volume (10% minimum for system-initiated and 20% for rewarded, per a third-party buyer relaying Odeeo). Direct buyers can add Game Emotions in-game event targeting. Since 2025-2026 the same platform also sells display, video and native, which belong to the gaming paper.

HOW IT EARNS

Advertising revenue shared with game developers who integrate the SDK (developers are paid for impressions: the privacy policy lists 'To calculate the monetization payments'). Publishers set per-placement floors (SDK 3.7). No revenue, take rate or CPM is disclosed; a company-stated 566% net revenue growth in 2023 is the only financial indicator found.

BEST FIT

US brand advertisers already buying audio in Amazon DSP who want a test line in a gameplay environment (single private-auction deal).

Direct buyers wanting moment-based creative tied to in-game events (Game Emotions).

Campaigns aimed at casual and hypercasual mobile players where a visual companion with a click-through is useful.

WHO BUYS IT

Brand and performance advertisers and agencies, directly (Odeeo sales, New York team since 2024), through DAX (Global's sales business, UK and US) and programmatically through DSPs: Amazon DSP (one US private-auction deal observed July 2026), Walmart DSP (announced August 2026) and, historically, Xandr Invest. AdsWizz's self-serve AudioGo lists Odeeo as a publisher. Named campaigns include McDonald's (US, Asian American audiences), Costa Coffee, EE, Hyundai, DWP and Red Bull.

POOR FIT

Buyers requiring MRC-accredited or IAB Tech Lab-certified counting, or published attention or retention evidence.

Buyers needing buyer-side brand-safety controls (allow and block lists, suitability tiers, verification of content).

Buyers needing podcast, radio or streaming music reach, midcore or console games, or a documented US audience figure.

Self-serve buyers who want Odeeo's own interface or API rather than a DSP or reseller.

Capabilities by dimension, performance evidence, financial record and timeline for this company are in the web edition and in data/deep-profile-records.csv.

SiriusXM Media

ACTIVE

Pandora Media, LLC, doing business as SiriusXM Media (sells for Pandora Media, SiriusXM Media Inc. and contracted entities)

Pandora Media, LLC d/b/a SiriusXM Media sells SiriusXM satellite, Pandora, SoundCloud US and podcast audio; YouTube audio representation not confirmed live at cutoff.

STRENGTHS

Sells three audio channels under one group: SiriusXM satellite, Pandora and SoundCloud streaming, and the SiriusXM Podcast Network, ranked second by US weekly reach in Q1 2026.

[RECORD](#) [34] [34] [97]

Its podcast counting system holds IAB Tech Lab v2.2 certification (report dated 30 April 2025), and Pandora holds IAB Tech Lab Data Transparency certification (December 2025).

[RECORD](#) [15] [107]

Display & Video 360, Amazon DSP and The Trade Desk list its inventory through the group-owned AdsWizz rail, with PMP and programmatic guaranteed deals.

[VENDOR DOCUMENTATION](#) [132] [135] [134]

Specification pages document host-read, live-read and announcer-read processes, A Million Ads dynamic creative and free Studio Resonate production for SiriusXM spots.

[VENDOR DOCUMENTATION](#) [559] [560] [561]

OPPORTUNITIES

Google stopped new US YouTube audio campaigns in its tools from 1 September 2026, leaving SiriusXM Media as the US sales route once its Fall 2026 launch happens.

[INFERENCE](#) [37] [36]

Podcasts, programmatic demand and technology fees drove Pandora and Off-platform advertising up 5% in H1 2026, suggesting growth is shifting away from streaming music.

[INFERENCE](#) [65]

Amazon DSP access (July 2026) and RampID across streaming and podcast inventory (May 2026) widen addressable programmatic demand for Pandora and podcasts.

[INFERENCE](#) [566] [567]

WHAT IS SOLD

WEAKNESSES

Pandora's ad revenue per thousand listener hours fell 9% to USD 91.78 in 2025, and SiriusXM segment advertising revenue fell 6% to USD 157 million.

[RECORD](#) [34]

No MRC accreditation covers its streaming or satellite counting, and its podcast certificate marks client-confirmed ad play not applicable and domain threat filtering unsupported.

[RECORD](#) [116] [107]

It names attribution and lift partners but publishes no match level, match rate or control-group design, and its ROAS case studies state no design.

[VENDOR CLAIM](#) [514] [562] [563]

Audience totals conflict across its own documents: 150, 160, 170 and 255 million, the last apparently including YouTube audio not yet live.

[RECORD](#) [564] [565] [34] [35]

THREATS

Its podcast certification was last listed on 15 May 2025 against an annual recertification rule, so a lapse would remove its only standards-body counting assurance.

[INFERENCE](#) [15] [20]

Represented supply (SoundCloud since 2019, licensed podcasts, YouTube from Fall 2026) rests on agreements whose terms are not public and could be renegotiated.

[INFERENCE](#) [447] [34] [36]

Pandora's own experiment found each extra ad per hour cut listening time by about 2%, which limits how far ad load can grow on owned streaming.

[INFERENCE](#) [224]

WHO BUYS IT

Audio ads (plus display, video and rewarded formats) on SiriusXM satellite radio (30- and 60-second spots, live reads and sponsorships on 72 ad-supported talk channels and select SiriusXM Play music channels), the SiriusXM Streaming Network (Pandora, SiriusXM streaming, SoundCloud US inventory as exclusive representative, and partner publishers the FAQ names as Audiomack and idobi), and the SiriusXM Podcast Network (owned, licensed and represented shows; host-read, announcer-read and custom ads). Sold by Direct IO and programmatically through the AdsWizz SSP in buyers' DSPs; self-serve buying is routed to AudioGO (an AdsWizz product listed separately). In-house creative by Studio Resonate. YouTube audio-first inventory is scheduled, not live.

National brands and agencies buying direct and programmatically, small and medium businesses (routed to AudioGO for self-serve), and retail media network campaigns that add Pandora audio off-site (S50). No public customer count or concentration disclosure was found for the advertising business.

HOW IT EARNS

Advertising revenue recorded in two segments of Sirius XM Holdings: SiriusXM (USD 157M in 2025) and Pandora and Off-platform (USD 1,615M in 2025), recorded net of agency fees and gross of revenue share paid to third parties. For licensed third-party podcasts the company generally acts as agent for the sale of advertising (AUD-B-S03). Pricing is not published ('Ads pricing varies'); rewarded video formats bill only on a completed 15-second view (S20).

BEST FIT

National advertisers wanting one buy across satellite, Pandora/SoundCloud streaming and a large podcast network with host reads.

Programmatic buyers already on Display & Video 360, Amazon DSP or The Trade Desk who want PMP or PG access to Pandora and podcast inventory.

Retail media and in-car reach plans where logged-in streaming data and satellite in-vehicle audience matter.

POOR FIT

Buyers needing MRC-accredited counting for streaming or satellite, or client-confirmed podcast ad plays.

Buyers needing documented person-level attribution or controlled lift as an integrated function from the seller.

Broadcast radio or in-game audio plans (not sold).

Buyers wanting a seller-operated self-serve API (self-serve is AdsWizz's AudioGO).

Capabilities by dimension, performance evidence, financial record and timeline for this company are in the web edition and in data/deep-profile-records.csv.

Spotify

ACTIVE

Spotify Technology S.A. (seller row operated in the US by Spotify USA Inc., the 'USA operating company'; IO contracting entity not confirmed)

Seller row for Spotify's ad-supported music and podcast inventory, including SPAN represented podcasts; bought direct, via Ads Manager and API, or Spotify Ad Exchange.

STRENGTHS

Spotify reported 494 million Ad-Supported monthly active users worldwide on 30 June 2026, up 14% year on year; the count is internal and unaudited.

RECORD [64]

One seller offers three buying routes: direct insertion orders, self-serve Ads Manager with a public, versioned API (v3), and its own programmatic exchange, launched April 2025.

VENDOR DOCUMENTATION [21] [568] [443]

Buyers can target podcast episode topics, playlist context, genres, interests, custom audiences and postal-code geography directly through the Ads API, not only via sales.

VENDOR DOCUMENTATION [443]

Attribution is free and documented in detail: household-IP matching, a stated 40-80% match rate, and modelling of unmatched impressions that buyers can switch off.

VENDOR DOCUMENTATION

[176] [199]

OPPORTUNITIES

Automated channels grew EUR 120 million in H1 2026; if that continues, programmatic could offset the shrinking direct music channel.

INFERENCE [64]

Megaphone moved onto the Spotify Ad Server on 15 July 2026, so third-party publishers' direct and private-marketplace demand now flows through Spotify's stack and auction.

INFERENCE [569] [11]

IAB Tech Lab's draft v2.3 podcast guidelines add invalid-traffic and measurement-window sections; certifying streamed impressions would close Spotify's counting-assurance gap.

INFERENCE [18]

[570]

WHAT IS SOLD

WEAKNESSES

Ad-Supported revenue fell 1% to EUR 1,836 million in 2025 while ad-supported users grew 12%; direct channels shrank in every reported period since.

RECORD [21] [64]

No IAB Tech Lab or MRC record covers Spotify's in-app impressions; only Megaphone's download-based counting is certified, with client-confirmed ad play not applicable.

RECORD [15] [453] [116]

Conversion Lift compares exposed impressions with a time-and-geography matched control, not a randomised holdout, and reports no confidence interval.

VENDOR DOCUMENTATION [204]

Its exchange names six DSPs against 'over 40' claimed, documents no VAST or OpenRTB version, and sells podcasts through Amazon DSP only as private marketplace deals.

VENDOR DOCUMENTATION [22] [158]

THREATS

Edison's 2026 survey found 37% of US weekly podcast consumers use YouTube most often, overtaking Spotify, which could weaken Spotify's podcast pitch to buyers.

INFERENCE [96]

Spotify's 20-F calls uncertain both the revenue effect and the buyer adoption of its shift from download proxies to 'real impressions'.

RECORD

[21]

Requiring SPAN-enabled shows for Megaphone private-marketplace deals and dropping third-party VAST ad serving could push publishers that want independent rails to other hosts.

INFERENCE [11]

[569]

WHO BUYS IT

Audio, video and display ads delivered as impressions across Spotify's Ad-Supported Service (music and podcasts; mobile, desktop and web player, with connected TV, car, console and speaker availability varying by market), and podcast ads across Spotify-owned and exclusive podcasts, Megaphone-hosted enterprise publishers and Spotify for Creators podcasts through the Spotify Audience Network (SPAN), which can also insert ads off Spotify. It is sold four ways: direct insertion orders, usually on CPM; self-serve Spotify Ads Manager, an auction with daily or lifetime budgets and reserved fixed-CPM podcast and music products through the API; the Spotify Ad Exchange for DSP buyers (PMP, programmatic guaranteed and auction); and 'advertising marketplace programs'. Custom podcast sponsorships, including host reads, are sold direct only. Free creative tools include AI-generated scripts and synthetic voiceovers in Ads Manager. Measurement add-ons are included at no charge: Spotify Ad Analytics, the Spotify Pixel and Conversions API, Spotify Brand Lift and Conversion Lift.

HOW IT EARNS

Ad-Supported revenue is recognised 'based on the number of impressions delivered'. Direct deals are typically CPM-priced insertion orders. Automated channels (internal and external exchanges, the self-serve platform and marketplace programmes) sell on 'a biddable auction or fixed CPM basis'. SPAN pays podcast publishers under agreements that 'mostly' share revenue and 'can include minimum guarantees'; those payments sit in cost of revenue. The filings opened do not state whether SPAN or exchange revenue is booked gross or net. FY2025: Ad-Supported revenue EUR 1,836 million and Ad-Supported cost of revenue EUR 1,506 million (82% of segment revenue, down from 88%), leaving a derived segment gross profit of about EUR 330 million.

BEST FIT

Buyers who want self-serve or API-driven audio and podcast buying with outcome objectives (clicks, page views, installs, leads) and free first-party attribution, and who accept household-IP matching.

Advertising agencies buying for their clients, and some large advertisers directly (20-F); self-serve advertisers of all sizes through Ads Manager; programmatic buyers through DSPs connected to SAX (The Trade Desk, DV360, Amazon DSP, Yahoo DSP, Adform and Hawk are named; 'over 40 DSPs' claimed). Spotify reported that the number of SAX advertisers rose 142% between the April 2025 launch and October 2025 (vendor figure, no base given).

POOR FIT

Buyers who require IAB- or MRC-certified counting for the impressions they are billed on (Spotify in-app impressions have no certification in the issuing bodies' records).

Programmatic buyers on The Trade Desk, DV360, Amazon DSP or Yahoo DSP who want music and podcast inventory from one seller, with episode-level suitability data from Barometer on The Trade Desk.

Advertisers targeting 18-34-year-olds (the 20-F says 'a large percentage' of Ad-Supported users are in that range) across music and podcasts.

Buyers needing a randomised holdout test with confidence intervals delivered by the seller (Conversion Lift uses a matched control without reported uncertainty).

Buyers wanting broadcast radio, satellite radio or in-game audio from the same seller.

Buyers who need open-auction podcast inventory, or host-read programmes bought programmatically (podcasts are PMP-only through Amazon DSP; host reads are direct only).

Capabilities by dimension, performance evidence, financial record and timeline for this company are in the web edition and in data/deep-profile-records.csv.

iHeartMedia is Well documented, on the cohort's highest Reach, with 868 owned and operated US stations and local sales in about 160 markets ^[66]. Workflow holds back its Depth: on 29 September 2026 its AdBuilder self-serve domain returned an HTTP 404 error and redirected to a lead form. Its certificate had lapsed two days earlier and 2026 third-party guides describe AdBuilder as live. A recheck on 30 September found the same 404 error and redirect ^[455, 456] ♦. Its brand-safety cell is n/e: iHeartMedia launched episode-level brand safety powered by Sounder in February 2023, but those sources are older than 24 months, and Triton announced its purchase of Sounder in March 2024 ^[278, 279] ♦.

Amazon's seller row is Well documented, and the band is provisional. This review found no Amazon-published US audience, impression or download figure for its ad-supported audio in the sources screened by the cutoff, so its inventory scale is n/e ^[457, 194] ♦. Its Art19 ad-technology row reaches the top counting-assurance anchor, since IAB Tech Lab lists ART19 for all four counting metrics ^[15]. The seller row inherits none of that.

Audiomob and Odeeo are both Partly documented, and both bands are provisional, and neither has a counting-assurance score. Audiomob's software development kit is listed as compliant with IAB Tech Lab's Open Measurement standard, and the rules do not treat that as counting assurance ^[15] ♦. No issuing-body record covers Odeeo's counting ^[345, 343, 116] ♦. Both state their scale only as global figures, which the rules cap.

What the evidence says about the starting claims

This paper set out to test the author's audio playbook and his standards page, and allowed either to fail. This chapter gives each registered hypothesis and question its verdict, the evidence behind it and what would change it.

IN SHORT

In the two buyer surveys found with a stated base and period, one Australian and one of unclear geography, measurement is the leading class of constraint and the narrative item ranks third and fourth among the items, so the playbook's claim that the buyer narrative is the bottleneck is not consistent with them ♦. H2 is supported: the podcast guidelines define four counting units, and certified scope covers counting only ♦ ♦. H3 is supported, narrowly: IP, household or pixel matching is the documented primary method in 11 of the 12 products that document one, and in 11 of 19 with undocumented products added ♦. This review found no independent causal test of commercial audio advertising on advertiser outcomes, in the sources screened ♦. Every public attention, intrusiveness and in-game retention claim this review coded is insufficient evidence, which is not refutation ♦ ♦. H5's ownership part is contradicted on its registered measure, a count of named integrations; that measure says nothing about spend, so whether most buying runs through owned rails is unresolved, as are access and pricing ♦. H6 is supported under its rule, with one documented agentic transaction found, whose sources name no agentic advertising protocol ♦.

What was tested

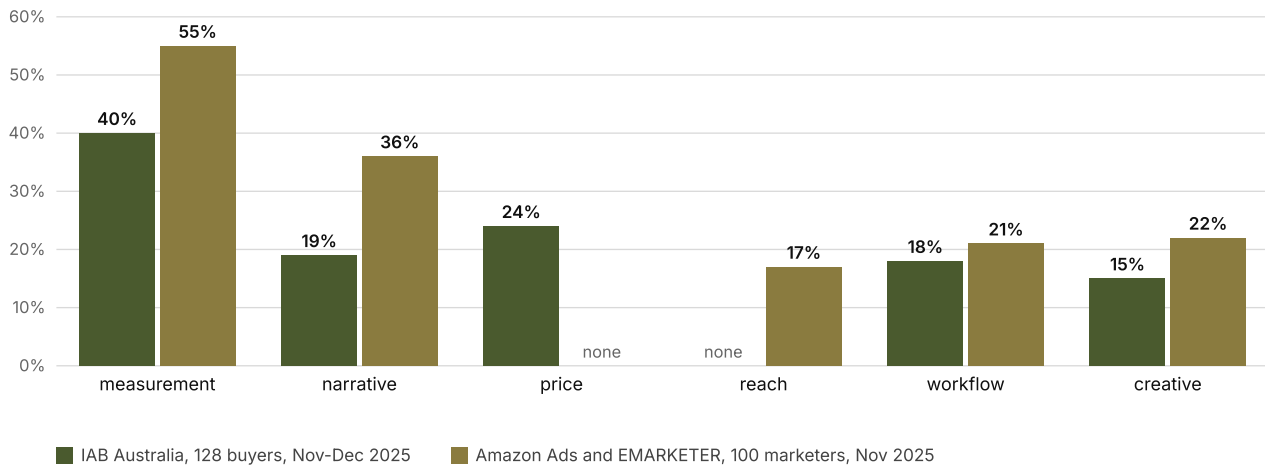
The author's audio playbook is a go-to-market plan for audio sellers. It says the bottleneck in audio is the buyer narrative rather than reach, and that audio sells on attention, intent signals, non-intrusiveness and consent-first. It contains no market data. His standards page says a download is not a listen, and that most podcast attribution is modelled. The author's own writing is not independent evidence, so each claim was followed to the original records.

The paper registered 6 items in its hypotheses file on 28 September 2026, before any research agent ran. Q1 and Q4 are research questions with no direction, answered with a coding rule; they cannot be disconfirmed. The other four are hypotheses, each with written rules for supported, contradicted and unresolved. The coding was one pass by the author's AI-assisted research process, checked by separate AI agents instructed to refute it, with no second coder. Chapter 14 describes the method.

Q1: what limits audio spend

Q1 codes every buyer-reported constraint in a survey with a stated base and period into six classes: reach, measurement, workflow, creative, price and narrative. A constraint that fits none is left unclassified. Sources are never pooled. The playbook's claim counts as consistent with a source only where narrative is that source's most frequent class.

WHAT BUYERS SAY HOLDS BACK AUDIO SPEND (LARGEST SHARE PER CLASS)



"none": no constraint in that class was reported in that survey, which is not a 0% response.

In both buyer surveys that could be coded, measurement is the leading constraint; narrative ranks third and fourth. Constraints reported by buyers, coded to the six classes registered for Q1. Each bar is the largest share reported for any constraint in that class in that survey. The Amazon Ads and EMARKETER question, as a seller's blog reports it, was: "What challenges prevent greater investment in digital audio at your organization?" Sources are never pooled.

Units: % of respondents · Scope: IAB Australia buy-side survey (n = 128, Australia) and the Amazon Ads and EMARKETER survey of 100 marketers, whose geography EMARKETER describes two ways (worldwide in its methodology note, US on the report page) · Sources ^[461] ^[463]

Multi-select questions, so shares do not sum. Budget (39% in the Amazon Ads and EMARKETER survey) fits none of the six classes and is left out. That survey was run with an audio seller; its question wording is known only from a seller's blog; the IAB Australia survey comes from a trade body that represents sellers.

Two surveys qualified. The first was run by EMARKETER with Amazon Ads, an audio seller, among 100 marketers in November 2025. EMARKETER describes the sample as worldwide in its methodology note and as US marketers on the report page, so this paper treats its geography as unclear (review round 2, R2-01) ^[458, 459]. The question, as Cumulus's Westwood One blog quotes it, was "What challenges prevent greater investment in digital audio at your organization?" EMARKETER's public articles do not print it, so the wording is known second-hand, from a seller (review round 3, R3-05) ^[460]. Difficulty measuring return on investment was cited by 55%, budget constraints by 39% and a perception that audio is less effective than other channels by 36% ^[461, 462] ♦. Budget fits none of the six classes and stays unclassified. The perception item is coded narrative. Limited scale or

reach was cited by 17%; the full item list is known only from Radio Ink's secondary summary [461].

The second is IAB Australia's survey of 128 buy-side respondents, 95% of them from agencies, fielded in November and December 2025. Asked for the three biggest issues stopping audio and podcast advertising from taking a larger share, 40% named evidence of effectiveness, 33% measurement and tracking, 24% cost and 19% understanding of audio advertising [463] ♦. Evidence of effectiveness is coded measurement, because it concerns proving outcomes. Understanding is coded narrative. No item in that survey was coded reach.

Measurement leads both sources. That holds whether a class is scored by its largest item or by the sum of its items. The narrative item ranks third among the items in the first survey and fourth in the second. The playbook's claim that the buyer narrative is the bottleneck is not consistent with these two sources ♦. Its other half, that reach is not the bottleneck, fits them: reach was a minor item in one and absent in the other.

The base is thin. There are two surveys, one of unclear geography run with a seller, the other Australian and run by a trade body whose members include audio sellers. Both use multi-select questions, so shares do not sum. Buyers who never consider audio may be missing from both samples, and such buyers could hold exactly the narrative constraint the playbook describes. That is an inference. Other US buy-side surveys screened yielded no codable audio constraint inside the window [464, 465] ♦. Two surveys describe their own respondents; they cannot establish the leading constraint for US audio buyers as a whole. A US survey with a stated base, question wording and a sample that includes non-buyers of audio would change this answer.

H2: counting versus listening

H2 is supported. The IAB Tech Lab Podcast Measurement Technical Guidelines v2.2, final since 2 May 2024, define four counting units: download, listener, ad delivered and client-confirmed ad play. None measures listening time, attention or outcomes [10] ♦. Client-confirmed ad play can carry quartile markers, but it needs a beacon from the listening app, and the guideline itself says aggregator apps such as Apple Podcasts and Spotify typically send no playback data.

IAB Tech Lab's public compliance record on 28 September 2026 listed 34 companies, all certified against v2.2: 33 for download, 33 for listener, 17 for ad delivery and 4 for client-confirmed ad play [15]. The record states certified scope as a guideline version and a list of counting metrics. It names no product, environment or geography [15, 107] ♦. Version 2.3 went to public comment on 21 July 2026 and was released as final on 29 September 2026. It keeps the same four metrics, so H2 holds on the final text [16, 19].

The standards page's line that a download is not a listen held. A final guideline defining a certified listening or outcome metric would change the verdict. Chapter 4 sets out the counting chain.

H3: attribution methods

H3 is supported, narrowly. Review round 3 found the first sample incomplete, and the paper rebuilt it under the registered rule: 23 products from the measurement table and the scored rows whose own documentation describes an attribution function, each counted once. IP, household or pixel matching is the documented primary method in 11 of the 12 products that document one (91.7%), and in 11 of 19 with the undocumented products added (57.9%) ♦. Four products, SiriusXM Media, iHeartMedia, Beasley and Acast, list several methods with no default and are reported apart; adding them gives 11 of 23 (47.8%), a sensitivity the rule does not use ^[186, 187, 188, 189]. Review round 2 recoded Triton Digital as IP matching done by the advertiser's attribution partner, because its document never says household (R2-22) ^[175]. Treating the two oldest supporting pages, Audacy's and DAX US's, as undocumented and recoding Claritas as an identity graph would together give 9 of 10 and 9 of 19 (47.4%), and the verdict would then be unresolved. This is a count of products. It says nothing about campaigns, spend or accuracy. Its codes say how an exposure is linked to a conversion, not whether the estimate is causal (chapter 6), so the result is a fragile basis for any general statement about audio attribution.

IP matching reaches households. Spotify says podcasting has no device- or browser-level identifiers, and Podscribe says only about 50-60% of impressions fall on residential IPs ^[199, 177] ♦. No product in the sample documents confidence intervals or any other uncertainty measure for attribution results in the pages opened.

The standards page says most podcast attribution is modelled. Spotify and Podscribe document modelling of unmatched impressions, which is consistent with the claim. No source opened publishes the share of reported conversions that is modelled, so "most" is not established.

The second part of H3 counts independent causal tests. This review found no independent causal test of commercial audio advertising on advertiser outcomes with published design and results, in the sources screened by the cutoff, which did not include a systematic academic database search ^[220, 221, 222] ♦. It found three academic randomised field experiments of non-commercial radio messages. H3 would be contradicted if new documentation, or a recoding, brought both shares to half or below; if only one fell that far, H3 would be unresolved.

Q4: attention, intrusiveness and retention claims

Q4 codes each public claim by the evidence behind it. Independent support needs a study whose design fits the claim, with published method and results and a funder with no financial interest in the answer. For in-game retention, the rule fixed before any study was read is non-inferiority on day-7 retention: the lower 95% confidence bound of the difference between exposed and unexposed players must exceed minus 1.0 percentage point.

Every public claim this review coded is insufficient evidence. That covers 19 audio attention, memory and intrusiveness claims ^[233, 239, 245, 232] ♦, 13 in-game retention claims and 6 in-game attention claims. The 19 is a count of coded rows; at least four more claims of the same kind were seen on pages already screened, and each would code the same way on the evidence shown. The retention claims state no assignment method, control condition,

retention window, sample size or confidence interval, so non-inferiority cannot be assessed [308, 348] ♦. None of the in-game attention evidence meets the attention paper's definitions; it is listen-through rate, self-reported recall or assertion.

Insufficient is not refuted. The strongest design found is Pandora's randomised ad-load experiment on almost 35 million listeners from June 2014 to April 2016, run by Pandora. One extra ad per hour cut mean listening time by $2.082\% \pm 0.227\%$ (95% interval). It has no other-format comparator, so it neither supports nor contradicts a claim that audio ads are less intrusive than other formats [254] ♦. The insufficient class is wide: it holds that experiment beside modelled scores and bare assertions. The playbook's claims that audio sells on attention and non-intrusiveness are unresolved from public sources. Chapter 7 codes each claim.

H5: rails and ownership

H5 is assessed in three parts. DSPs, or demand-side platforms, are the software buyers use to bid. The ownership part is contradicted on the registered pooled count. The three owners' rails are 15 of 43 named audio supply integrations in five DSPs' documentation (35%). Leaving out The Trade Desk's directory, which mixes publishers and rails, gives 9 of 17 (53%), a sensitivity test only [132, 134, 135] ♦. Review round 2 confirmed that the registered pooled count governs (R2-13). These are counts of named integrations. They say nothing about spend, so confidence is low. The verdict applies to that measure only; whether most audio buying runs through owner-controlled infrastructure is unresolved without spend or transaction data (R4-04).

Access is unresolved. No public term found gives an owner's inventory priority, and Megaphone's private marketplace deals deliver only in shows enabled for Spotify Audience Network [11, 141]. Pricing is unresolved: this review found no published fee or take rate for AdsWizz, Triton Digital, the Spotify Ad Exchange or Megaphone in the sources screened; Simplecast publishes a 70/30 revenue split for its own hosting customers, which cannot show an owner advantage [165, 140] ♦. Ownership alone never settles price or access. Published rail fees, or terms that restrict rivals or favour the owner's inventory, would settle those parts. Chapter 5 gives the counts by DSP.

H6: agentic readiness

H6 tests the author's July 2026 essay, which called audio "protocol-ready, deal-flow pending" [382]. It is supported under the registered rule. AdCP v3.1.24, the Ad Context Protocol release of 23 September 2026, represents audio in its published schema [383, 384] ♦. In the sources screened, only one row, iHeartMedia, has a documented transaction: the Butler/Till campaign announced as completed on 20 August 2026, in which paired agents bought just under \$10,000 of iHeart streaming audio and podcast inventory. Its sources name only an MCP server and no agentic advertising protocol [397, 398] ♦.

The public record does not link that transaction to AdCP or AAMP; AdCP itself runs over MCP, so its use is neither shown nor excluded. The essay's statement that no public agentic audio campaign existed was accurate at its date and was overtaken on 20 August 2026 ♦.

"Pending" now rests on the rule's threshold of three rows. Three or more rows with documented production use or a transaction would contradict H6.

Where the author's claims held and where they did not

Two of the author's lines held. A download is not a listen, on the guideline text and the certification record. Audio is protocol-ready with deal flow pending, under the registered threshold, though the essay's claim that no campaign existed did not survive the cutoff. One line is consistent with the record without being established: that most podcast attribution is modelled.

One line was not consistent with the evidence available. In both qualifying surveys buyers put measurement first, ahead of anything coded narrative. The playbook's diagnosis does not match what buyers in these samples report.

The attention and non-intrusiveness claims are unresolved. The playbook's intent-signal and consent-first claims were not registered as tests and get no verdict here. Chapter 11 bears on the second: IP and household matching handles data that California law treats as personal information, an inference from the statute and regulations ^[225, 226] ♦.

What would change the thesis

Three kinds of evidence would move these verdicts.

The first is independent listen-level measurement at scale. Today, client-confirmed ad play is certified for 4 of the 34 companies in IAB Tech Lab's record, and the large aggregator apps typically send no playback data ^[15, 10]. The Media Rating Council's Digital Audio Measurement Standards v1.0 of January 2018 define a client-side audible ad impression, at least two continuous seconds at non-zero volume ^[8]. Playback data at scale, measured by a party without a stake, would give H2 a listening metric to test and give Q4's attention claims an observed input.

The second is accredited podcast audience measurement. In the Media Rating Council's lists read on 28 September 2026, this review found no accredited or in-process podcast or streaming-audio measurement service. The one audio-related entry was Adelaide's attention metric, pre-audit reviewed in May 2026 with the audit not begun ^[115, 117] ♦. The industry task force AMP, the Alliance for Measurement in Podcasting, defines a podcast play as at least 30 consecutive seconds, according to a summary by Oxford Road, which convened it. AMP claims no accreditation ^[2].

The third is published incrementality studies with design and results. Podscribe sells randomised holdouts as a priced option, and the AMP summary recommends holding out 5-10% of each platform's audience ^[1, 2] ♦. What this review did not find, in the sources screened, is a published study with design, results and an independent funder. One would move H3's count of independent causal tests above zero. If measurement stopped being the constraint buyers cite first, Q1 would need a fresh survey to show what takes its place.

Method, limits and corrections

How the paper was built, what the checks caught and what could not be reached. The records behind each step are published so a reader can test any sentence against its source.

IN SHORT

AI research agents worked from one brief in ten topic workstreams, a vendor-universe sweep, eight capability sweeps and eight vendor profiles, and opened 993 sources. Separate AI verifiers, told to refute the work, checked 640 of the 641 ledger claims. Under the starting claims registered on 28 September 2026, the author's buyer-narrative claim is not consistent with the two coded buyer surveys ♦. The ownership part of H5 is contradicted on the registered pooled count ♦. On 29 September, before any cell was scored, the counting-assurance anchor was clarified to follow IAB Tech Lab's 12-month certification term; 11 of the 34 companies on its podcast record were last certified more than 12 months before 28 September 2026 ♦. One scoring pass and one calibration pass produced the scores. A blind AI second pass re-scored the 17 rows nearest a band line and matched 72% of their cells exactly. An adjudication of the 29 largest disagreements corrected 10 first-pass cells against their sources, and three bands remain sensitive to the scorer. The author ran five AI model review rounds, the first on the briefs, and a freeze recheck on 30 September 2026; with the calibration they produced the 74 entries in the corrections ledger. The paper has had no peer review or external audit.

What the paper asked, and how the work was split

The paper tests two of the author's public positions and lets either fail. His audio playbook says the bottleneck in audio is the buyer narrative. His standards page says a download is not a listen and that most podcast attribution is modelled. The brief turned these and related questions into 6 registered items.

The work ran in 20 research files: ten topic workstreams, the vendor-universe sweep, eight capability sweeps and the Podscribe profile, plus 7 deep profiles. Topic streams covered market size (A), sellers and restructurings (B), measurement and certification (C), programmatic rails and pricing (D), attribution and causal evidence (E), attention (F), brand safety (G), in-game audio (H), AI and agentic buying (I), and rules and privacy (K). Stream U built the product register. Capability sweeps M1 to M8 gathered the evidence for scoring, grouped by company or seller type. Deep profiles covered Spotify, SiriusXM Media, iHeartMedia, Amazon audio, Acast, Audiomob and Odeco. A separate profile described Podscribe, a measurement vendor, without scoring it.

Starting claims registered before extraction

Each item was written into `data/hypotheses.json` on 28 September 2026, before any research agent ran, with its population, comparator, outcome and the rules for supported, contradicted and unresolved. Q1 and Q4 are questions, answered under a coding rule and never disconfirmed. Absence of accessible evidence yields unresolved unless a hypothesis is about public documentation itself, as H6 is. Q4 fixed its retention test, including an acceptable loss of 1.0 percentage point in day-7 retention, before any study was read.

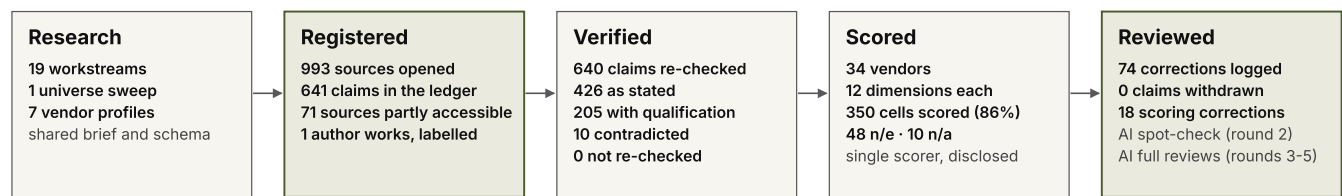
In the two buyer surveys found with a stated base and period, measurement is the leading class of constraint and narrative ranks third and fourth. The playbook's claim that the buyer narrative is the bottleneck is not consistent with these two sources ^[461, 463] ♦. The sample is thin. The first survey was run with Amazon Ads, an audio seller, and EMARKETER describes its sample as worldwide in the methodology note and as US marketers on the report page ^[459, 458] ♦. For H5, the three owners' rails are 15 of 43 named audio supply integrations in five demand-side platforms' documentation (35%), which meets the contradicted condition for the ownership part. Leaving out The Trade Desk's directory gives 9 of 17 (53%), a sensitivity test only ♦. Chapter 13 gives every verdict.

How the evidence was gathered and checked

Each stream wrote a structured file of sources and findings, each finding with its supporting passage. Agents had to open every source they cite. Each file then went to a separate AI verifier that had not seen the research and was instructed to refute it. It opened the cited sources, checked denominator, unit, date, entity and wording, and gave a verdict per finding or capability cell. The 27 verifier files hold 1114 verdicts: 678 supported as stated, 422 qualified, 14 contradicted and 0 unresolved. In the ledger, verifiers checked 640 of 641 claims; the other is derived by the author from checked claims and recomputed by the build. The ledger records 426 claims as supported as stated, 205 as qualified and 10 as contradicted. The text uses a qualified claim only in its qualified reading and never states a contradicted claim as fact.

A verified claim means a second agent opened the source and read the passage. Two agents reading one page are not two independent measurements, and a model checking another model is not an external audit. A shared web-search quota ran out during the run, so several verifiers could not run web searches and reached sources by direct address, and their checks of absence claims stayed bounded to the research streams' logged searches. So this review found no independent causal test of commercial audio advertising on advertiser outcomes with published design and results, in the sources screened; its verifier could not rerun the search, and the screen included no systematic academic database search ^[220, 221, 222] ♦.

THE PIPELINE, AND WHAT EACH STAGE PRODUCED OR REMOVED



What the process is not: two agents reading one source are not two measurements; a model checking a model is not an audit; one scorer means no inter-rater statistic.

Every count on this figure is computed from the ledgers at build time (data/stats.json); the prose quotes the same values.

Research cutoff 2026-09-30. Claims outside the verifier sample are marked unresolved with a note; they are not counted as supported.

Every stage was built to remove things, and the counts are computed, not typed.

The five stages of this project with the actual outputs of each. Each research file went to a separate verifier told to refute it; a claim no verifier checked would be labelled unresolved rather than assumed. Corrections include score changes from the calibration pass and dispositions from the external AI spot-check.

Units: counts · Scope: this research project, as of the cutoff

Counts describe process volume, not evidence quality; a claim that survived verification is supported by its source, not proven true.

Evidence classes, grades and the source hierarchy

Every finding carries one evidence class: direct record (a filing, registry or official document), independent measurement, commissioned measurement, vendor assertion, synthesis, inference, forecast or illustrative scenario. Provenance, funding, study design and claim status (actual, year to date or forecast) are recorded apart from the class. Independence is established claim by claim; where funding is unknown, independence is unknown.

The kind of claim decides which source settles it. Filings and registries settle ownership and transactions, with each form type checked on EDGAR, the SEC's filing system. The issuing body settles what a standard says and which version is final, and the certifier's own record settles certification within its stated scope. Vendor documentation can show that a feature is documented, but cannot show superior performance. Effectiveness needs a study whose design fits the claim. Of the 993 sources, 68 are filings, 77 are regulator or standards-body documents, 12 are studies and 474 are vendor pages. The author's own published work appears only as the claim under test^[382].

Each scored cell also carries an evidence grade: A for a filing or standards-body record, B for independent documentation, C for vendor technical documentation, D for vendor marketing or a case study, E for none. Grade C caps a cell at 4 and grade D at 3.

The product register and the scoring rules

On 28 September 2026, before any cell was scored, the paper froze the product register, the cohorts with their applicability masks, and the anchors for each dimension. A scored unit is a named product classified by what the buyer purchases. The register holds 83 products: 34 scored, 47 listed and 2 historical. Cohort A, audio inventory sellers, has 24 rows on all 12

dimensions. Cohort B, audio ad technology, has 10 on every dimension except creative. A 0 needs a source that documents absence or failure; missing evidence is n/e. Only verified or qualified cells count. Of 408 cells, 350 carry a score, 48 are n/e and 10 are n/a, so 86% of all cells carry a score. The quotient treats 1 unverified scored cells as n/e.

Spotify Ad Exchange is recorded, as an inference, as a buying route into Spotify-owned inventory and shows enabled for the Spotify Audience Network, an alias of the Spotify Advertising row ^[22, 11] ♦. AdsWizz and Triton Digital each appear as two cohort B rows, a publisher platform and a marketplace. These are analytical splits of one company's services, inferred from their documentation, and the sources show no separate contract for each ^[24, 26, 153] ♦ ♦. The splits may count some capability twice within cohort B. In cohort A, the sellers.json file of DAX, Global's digital audio business, lists "Odeeo US" as a DAX US intermediary, so the separate Odeeo row may count US inventory that DAX US also represents, an inference ^[100] ♦.

The anchor for counting assurance, dimension 10, had a 24-month fallback for certifications with no stated validity period. IAB Tech Lab's Compliance Guide states one: recertify within 12 months or the status changes to expired ^[20]. Its public list has no status column, and 11 of its 34 podcast listings were last certified more than 12 months before 28 September 2026 ^[15]. On 29 September, before any cell was scored, the anchor was clarified: a listing past the term with no status shown is read at anchor 3, a certification on the record that is not current, and earns 0 only if the record shows it expired or suspended.

How the Listen Quotient is computed

The Listen Quotient (LQ) is computed within each cohort. A row's counted numeric cells are averaged in three groups, Depth (dimensions 1 to 5), Reach (6 to 9) and Standing (10 to 12), skipping n/e and n/a. $Raw = 0.45 \times Depth + 0.25 \times Reach + 0.30 \times Standing$, renormalised over the groups present. The field mean F is the mean Raw of the cohort's admitted rows, thin rows included. This differs from the Contextual and Native Quotients in the author's earlier papers, which pooled group scores. Each row is shrunk toward F: $Shrunk = (k \times Raw + K \times F) / (k + K)$, where k is the row's counted cells and K, the prior strength, is 4. $LQ = 100 \times Shrunk / 5$.

Bands come from the unrounded offset $20 \times (Shrunk - F)$, using the Contextual Quotient's thresholds: Most documented at +12 or more, Well documented at +1 or more, Partly documented at -8 or more, Least documented below. Review round 4 renamed the bands, formerly Front rank, Strong, Mid and Narrow, so that the names describe documented capability; the thresholds did not change. A banded row needs at least 6 counted cells and a cell in every applicable group. K is an author-defined heuristic, not a statistical estimator, so the build reruns the index at K = 0, 2 and 8, under equal-thirds, Depth-led, Reach-led and Standing-led weights, with each cell deleted in turn, and with n/e cells filled at 1 and at 4. Chapter 12 reports the results. LQ summarises publicly documented capability. It does not measure product performance or business quality.

One scoring pass, calibration and a blind second pass

Scoring ran once. AI scoring agents scored each sweep's cells against the anchors after the verifier records were read. A calibration pass then compared every cell of each dimension within each cohort, so that the same evidence earns the same score. Its changes are listed under SC-01 in the corrections ledger, and SC-02 turned one 0 into n/e because it rested on inference. In all, 18 ledger entries change scores. After review round 4, separate AI scorers re-scored blind the 17 rows nearest a band line, from the rules, the sources and the verified claims, without the first scores. Exact agreement was 72% of 200 cells, agreement within one point 96% of the 168 cells both passes scored, and the quadratic-weighted kappa 0.86. On the second pass's scores, 4 of the 17 rows would change band (chapter 12). The second pass replaced no score by itself. Review round 5 adjudicated the 29 largest disagreements against the sources and corrected 10 first-pass cells, each for a factual, anchor-application or convention error; judgement calls kept the first pass (AJ-01 to AJ-10; chapter 12). Rows whose band still differs under the second pass are marked scorer-sensitive. No human scored any cell, and both passes are AI scorers reading the same rules, so this tests reproducibility, not independent judgement. That remains the largest gap in this method.

Review rounds and what they changed

All five review rounds were AI model reviews run by the author. Round 1, on 28 September 2026, read the research briefs before any research agent ran. Each factual point it raised was checked against its primary source before a brief changed; the dispositions are in [research/_briefs/ROUND-1-CHANGES.md](#). For this paper it corrected the ad-delivered counting rules and moved DAX US into cohort A.

Round 2, on 29 September 2026, spot-checked the evidence and the register. Each finding that made a factual claim was checked by a separate checker against its primary source before anything changed, and the two that turned on the registered rule and the register were re-read against those; dispositions are tagged R2 in the corrections ledger. Triton's integrations page, for example, names 41 partners, not all of them demand-side platforms, where the draft had said 39 ^[152]. Other entries qualified the EMARKETER survey's geography, cut Spotify Advertising's US coverage score from 5 to 4 because Spotify's 20-F documents no US advertising sales operation ^[21], and coded Triton's attribution as IP-address matching by the advertiser's partner, without household matching ^[175].

Round 3, also on 29 September 2026, reviewed the full draft and its package; its findings are tagged R3. It found the H3 sample incomplete: several scored sellers whose own pages describe attribution were missing. The sample was rebuilt under the registered rule to 23 products and recoded, with a separate verifier opening the pages, and H3 stayed supported, narrowly (chapter 6). It set two cells to n/e: Audioboom's scale figure mixes downloads with video views, and Audiomob's Open Measurement tags are not documented as verifying content. No band moved. It led the paper to publish the scoring conventions C1 to C16 in [data/scoring-rules.json](#) and to ship the shared research rules with the package, to show classes with no coded constraint as gaps rather than 0%, to reconcile chapter 8 with the sources behind two scores, to correct the ELVIS Act signing date in the rules table, and to bound the cover summary. One finding was rejected: the Amazon Ads and EMARKETER question wording is quoted in a seller's blog already in the record, so that survey still qualifies under Q1 ^[460].

Round 4, on 30 September 2026, reviewed the paper before publication; its findings are tagged R4. It recalculated all 34 quotient scores, found them consistent with the formula, and argued that the conclusions read more definitively than the evidence allows. Each point was checked against the paper's own data before anything changed. The bands were renamed to say what they measure, and every band sensitive to missing evidence is now marked provisional. The abstract now opens with what a buyer can do. The headline lines carry their bounds: the surveys are one Australian and one of unclear geography, the H5 verdict applies to a count of named integrations, and the H3 codes say how a match is made, not whether an estimate is causal. Grade caps and scale equivalences are named as assumptions. Two suggestions were taken only in part: capability and evidence confidence are not scored separately, and H3 was not recoded into collection method, matching unit, extrapolation and causal design, because neither was registered. Its suggestion of a blind second scoring pass was run, as described above.

Round 5, also on 30 September 2026, reviewed the published paper; its findings are tagged R5. It found that `data/second-pass.json`, cited in the text, was missing from the published data, and asked for a flag on bands the second scorer moves and an adjudication of the material disagreements. The file and a CSV are now published, scorer-sensitive bands are marked † beside the ± for missing evidence, and the adjudication corrected 10 cells (chapter 12). The interests note now says no vendor funded, reviewed or saw the paper before publication.

The corrections ledger has 74 entries. The print edition leaves it out; it is listed in full in the web edition and in `data/corrections-ledger.csv`, with the original wording, the challenge, the evidence checked, the verdict, the change made, how it was implemented and how it was verified.

What could not be reached

Of 993 sources, 71 were read only in part: as an abstract, a partial extract, or through another route after an access error. Nothing is quoted from a part that was not read.

Paywalls. EMARKETER's radio and digital audio benchmarks could be read only as an abstract, and its radio forecast could not be opened. With BIA's forecast local only, this review found no current public level estimate of total US radio advertising that includes national spot and network radio, in the sources screened by 28 September 2026 ^[48, 51] ♦.

Gated forms. No gated form was filled in. The full Amazon Ads and EMARKETER report sits behind one, so only its registration page, two EMARKETER articles and a trade summary were read ^[458, 459, 462, 461]. Podscribe's benchmark reports sit behind a request form, so their figures come from trade reporting and landing pages ^[466, 209]. The Accords of AMP, the Alliance for Measurement in Podcasting, were not read for the same reason ^[130].

Script-rendered and blocked pages. Spotify's Ads Help Center brand-safety pages returned no readable text to the tools used, so whether Spotify offers show-level allow or block lists is unresolved ^[467]. SoundStack's API documentation returned only an application shell ^[468]. An access error is not evidence that a thing does not exist.

Cutoff and freeze recheck

The research cutoff is 30 September 2026, the day the paper was published. The brief registered Friday 2 October; publishing earlier brought the cutoff forward. The scoring lines fixed from the registered date, 24 and 12 months before 2 October 2026, were kept, since no source or listing falls between the two dates in a way that changes a score. The sources were first opened on 28 and 29 September. On 30 September six agents rechecked every status-sensitive item on the freeze list against its primary record, and the coordinator reopened each changed source before editing.

Most items held. Cumulus Media had not emerged from Chapter 11 ^[38, 84] ♦. SiriusXM Media's FAQ still described YouTube audio in its buys as starting in Fall 2026 ^[35, 36, 37] ♦. IAB Tech Lab's record still listed 34 companies, all certified against v2.2 ^[15]. One status changed: IAB Tech Lab released guidelines v2.3 as final on 29 September, with the same four metrics, so H2 was re-tested and holds ^[16, 19] ♦. The recheck also found earlier items the record had missed or got wrong: an IAS product for Spotify podcasts, a reported successor to the NO FAKES Act, the AI Omnibus's delay to machine-readable marking, and the comment dates of the FCC's docket on AI in political ads. Each change is its own dated FR entry in the corrections ledger. None moved a band or a verdict.

Limits

The paper is US first: the geography dimension scores documented US availability only. Scores rest on public documentation, so a private company or one with thin public pages can score lower for that reason alone. Private contract terms are out of reach, which is why H5's access and pricing parts stay unresolved: no public term gives an owner's inventory priority, and no fee or take rate is published. Counts of named integrations are not counts of spend. The vendor universe is a reasoned sample from named seeds and discovery.

Round 4 named further limits. A score folds the type of evidence into the capability it rates, and the scale anchors treat stations, audience and deliveries as equivalent by assumption. H3's single code does not separate an identifier, a matching level and a collection mechanism, and says nothing about causal design. H5's registered measure counts named integrations, not spend. Only the rows nearest a band line were re-scored, and by AI; the other rows rest on one pass and the calibration.

The Q1 survey sample is thin, and one of its two surveys was run with an audio seller. Every public attention, memory, intrusiveness and in-game retention claim coded for Q4 is insufficient evidence: 19 audio claims, 13 in-game retention claims and 6 in-game attention claims ♦ ♦. Insufficient is not refuted.

The claim ledger

Each claim marked in the text is listed below with its evidence class, review outcome and sources.

The claim ledger lists the 216 claims marked in the text. The print edition leaves it out; it is listed in full in the web edition and in data/claim-ledger.csv, with each

Interests

The author has worked at Samba, a TV measurement and ad data company, since May 2025. He co-leads the Signals & Measurement working group of AgenticAdvertising.org, which publishes the AdCP agentic advertising protocol, and co-filed the group's radio measurement-parity work. No Fluff Advisory, his own practice, is an AgenticAdvertising.org member, and two agents in the public registry that chapter 10 counts, one for signals and one for sales, are registered under that membership; neither is an audio agent, and neither bears on any audio row ^[3]. Triton Digital, whose services are scored in cohort B, is an AdCP founding member. Spotify, scored and profiled, lists Samba among the measurement companies it integrates with directly ^[5]. Earlier he worked at Verve Group, Hearts & Science and Lotame. Membership, support or a working-group role earns no score and no protocol state. No vendor funded, reviewed or saw the paper before publication. Every vendor is scored under the same published rules.

Appendix: data, register and rebuild

The files that come with this paper, what each one holds, and how to rebuild the paper from them. The study table is in chapter 6, and the numbered source list follows as its own section.

Data downloads

The build writes every file below from the evidence records.

Downloads	
The data files are in the data/ folder beside this PDF, in the package and on the web page. Open the HTML edition to use these as links.	
The two other editions, then the data as CSV and JSON, UTF-8. The data files are the canonical files every chart, matrix and count in the paper was built from.	
1	audio-advertising-2026.pdf — the print edition: A4, with page numbers and chapter bookmarks
2	audio-advertising-2026.md — the reading edition in Markdown, with numbered references
3	data/source-register.csv — every source with publication, event and access dates, type, geography, funding, access limits and reliability notes
4	data/claim-ledger.csv — every material claim with sources, passage locator, scope, evidence class, review outcome, confidence and final wording
5	data/capability-matrix-wide.csv — vendors × dimensions, scores only (0–5, n/e, n/a)
6	data/capability-matrix-long.csv — one row per cell with availability, evidence grade, date, rationale and sources
7	data/capability-dimensions.csv — the dimension definitions and anchors
8	data/lq.csv — Listen Quotient per vendor: group means, coverage, band, the reweightings and every dimension score
9	data/lq-method.csv — LQ groups, weights, shrinkage, field mean, band thresholds, and the reweighting, shrinkage and missing-evidence tests
10	data/lq-missing-evidence.csv — every scored cell turned into n/e one at a time, with the LQ before and after
11	data/swot.csv — every SWOT line for the profiled vendors with its basis (record, vendor documentation, vendor claim, inference) and sources
12	data/deep-profiles.csv — the deep-profile summaries: what is sold, buyers, earnings, dependencies, fit, limits
13	data/deep-profile-records.csv — every profiled capability, performance claim, financial figure and timeline event with sources
14	data/study-evidence.csv — studies with design, sample, sponsor and limits
15	data/corrections-ledger.csv — every change made after verification and challenge passes, with implementation and verification

16	data/vendor-universe.csv — the reasoned vendor sample with scope group, owner, formats, routes and status
17	data/agentive-map.csv — AI and agentive capabilities with status labels and observability
18	data/rules.csv — rules and governance instruments by jurisdiction
19	data/estimates.csv — market-size estimates with inclusions, exclusions and combinability
20	data/product-register.csv — the product register: every scored or listed product with its purchased service, operating entity, owner, cohort, inclusion reason, aliases and US availability
21	data/hypotheses.csv — the hypotheses registered before extraction, with the rules for supported, contradicted and unresolved
22	data/figure-data.json — the canonical dataset behind every data figure
23	data/derived-checks.json — every derived number with its formula and inputs
24	data/stats.json — every count the prose and figures quote about the research itself, computed from the ledgers
25	data/second-pass.csv — the blind second scoring pass: one row per re-scored cell with both passes' scores, grades and reasons, and the adjudication of each material disagreement
26	data/second-pass.json — the same cells with both passes' sources, each re-scored row's band under both passes, and the agreement statistics' inputs
27	data/scoring-rules.json — dimension definitions, anchors, cell rules and the LQ definition, fixed before scoring

What the data files hold

data/hypotheses.csv holds the 6 starting claims as registered on 28 September 2026, before extraction. Q1 and Q4 are questions; the rest are hypotheses. Each row gives the statement, sample, comparator, outcome and the rules for each verdict, which chapter 13 applies.

data/product-register.csv lists all 83 products the vendor-universe sweep classified, with the purchased service, operating entity, owner, cohort, inclusion reason, aliases and US availability. Of these, 24 are audio inventory sellers, 10 are audio ad technology, 47 are listed and 2 are historical. Some decisions rest on inference. Spotify Ad Exchange is an alias of the Spotify Advertising row, read as a buying route into Spotify-owned inventory and shows enabled for the Spotify Audience Network; the publisher-side private-marketplace function is scored on the Megaphone row, and the classification is an inference ^[21, 22, 11] ♦. AdsWizz and Triton Digital each appear as two ad-technology rows, a publisher platform and a marketplace sold to buyers; that split is also an inference ^[24, 469, 26, 140] ♦ ♦. Simplecast is scored only on the hosting and analytics it documents itself, since its monetisation tools are AdsWizz products it resells ^[25] ♦. TuneIn is listed, because the record does not settle who sells its US inventory ^[27, 28] ♦.

capability-matrix-wide.csv gives one score per product and dimension (0 to 5, n/e or n/a). capability-matrix-long.csv has one row for each of the 408 cells, with evidence grade, date, verification status, reason and sources. capability-dimensions.csv gives the 12 definitions and their anchors.

`lq.csv` has one row per scored product. It gives the Listen Quotient (LQ), its offset from the cohort's field mean, the band, coverage, the group means, the reweighted quotients, the scenarios that fill n/e cells with 1 and then 4, and every dimension score. Bands hold within a cohort only; a seller's LQ is never ranked against an ad-technology row. `lq-method.csv` sets out the weights, the prior strength of 4, the band lines and the outcome of each sensitivity test. `lq-missing-evidence.csv` turns each counted cell into n/e in turn, 242 seller cells and 107 ad-technology cells, with the LQ and band before and after.

`source-register.csv` lists all 993 sources with dates, type, geography, period, funding and access limits. `claim-ledger.csv` holds 641 claims, each with its sources, supporting passage, evidence class, review outcome and final wording, which the paper uses where a verifier qualified a claim. `corrections-ledger.csv` records the 74 entries from review round 2 and the calibration pass, including those that needed no change, each with its implementation and check.

Rebuilding the paper

The package ZIP holds the published edition at its top level and everything needed to rebuild it under `source/`: the chapters, input data, evidence files and scripts. The author's private notes are never packaged.

From `source/`, run `npm ci` and then `npm run build:all`. That derives every computed number, builds the figures, matrix, LQ and ledgers, renders every edition except the print one, writes the CSV set and runs the checks. An unknown source, claim, figure, instrument or count fails the render. `npm run pdf` makes the print edition, and `npm run package` assembles the ZIP and re-reads it to check it. The build needs Node 22 or later, Python 3.10 or later with `pypdfium2`, and Chrome, Edge or Chromium. `README.md` is the full guide.

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Numbered sources

The 893 sources cited in this paper, numbered in order of first citation. The full register of 993 sources opened during the research, with access dates, access limits and reliability notes, is in [data/source-register.csv](#). Click any number in the text to open the same record.

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