

The State of Gaming Advertising in 2026

Gaming advertising is several markets sold under one name. This review found no public US figure for brand spend in games, MRC's record on 29 September 2026 listed no accredited intrinsic in-game metric, and every published field result found for a live brand campaign comes from a party with a stake in it. The paper audits that public proof, not whether games advertising works.

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RESEARCH CUTOFF 1 OCTOBER 2026 · ONLY INFORMATION AVAILABLE BY THAT DATE IS USED

982 sources opened and registered	807 claims in the research ledger	23 products scored
143 corrections logged		

ABSTRACT

Abstract

What brand advertising in games is in 2026, who sells it, and how much of the sellers' pitch the public record can support. Sources were read from 28 September to 1 October 2026, when the evidence was frozen, with the United States as the main market. It audits the public proof, not whether games advertising works.

FOR BUYERS

Treat games as three buys: placements inside other companies' games, ads a platform or publisher sells in its own games, and media around games. For each, ask for titles with live dates matched to the publishers' app-ads.txt, for the verifier's own record of the format and environment you are buying, and for a randomised or holdout test with a named funder. Expect no MRC accreditation for intrinsic placements, check the platform's age rules before targeting, and do not add up two networks' reach over the same titles. What it means sets out each buy.

IN SHORT

Gaming advertising is several markets sold under one name: networks that place ads inside other companies' games, platforms and publishers that sell ads in their own games, and media around games such as streams and communities. The only public US dollar series found counts ads placed in games, mostly bought, EMARKETER says, by game developers; this review found no figure for brand spend. Intrinsic in-game measurement has a finished standard, but the Media Rating Council's (MRC's) record shows no accreditation against it; other ad formats in game apps fall under the general mobile standards. Children's privacy rules and platform rules restrict in-game ad products. Every published field result found for a live brand campaign comes from a party with a stake in it.

The question

The author's gaming playbook argued that brands underspend in games because they cannot fit them into their planning, safety and measurement systems, not because the audience is small. This paper tests that argument against public evidence and lets it fail; as registered, the test does not cover which constraint causes lower spend. It asks what a brand can buy in and around games today, what of it can be checked, and where the evidence is weak.

What it found

1. **Three buying tasks.** Networks selling placements inside other companies' games sell mostly on their own documentation. Platforms and publishers selling their own games control the inventory, the rules and, in Roblox's managed campaigns, the reporting that settles the invoice ^[1] ♦. Much game-adjacent media is bought like other digital media, Twitch through Amazon's demand-side platform (DSP), for example ^[2].
2. **The numbers.** EMARKETER is the only publisher found with public US dollar figures; its March 2024 forecast put US game ad revenues at \$8.59 billion in 2024, 90.4% of it on mobile ^[3, 4, 5] ♦ ♦. As developers buy most of the ads, the series is probably mostly user acquisition, an inference, since no source splits the dollars by objective ^[6, 7, 8] ♦.
3. **Supply.** Six networks' sellers.json files (public lists of their sellers) name 1,619 publisher domains that collapse to 1,381 once duplicates are removed. A seller account shows an authorised connection, not a live title, so the lists cannot be added up as reach ^[9, 10, 11, 12, 13, 14] ♦.
4. **Assurance.** MRC's record, read on 29 September 2026, shows no accredited intrinsic in-game metric and no MRC-confirmed audit for any product scored in the in-game cohorts, and third-party verification rests mostly on announcements (H2, supported) ^[15, 16] ♦. Standard display and video ads in game apps plausibly fall within DoubleVerify's and IAS's accredited mobile in-app measurement, whose letters name no game ^[17, 18, 19] ♦.

5. **Rules.** Roblox and Microsoft bar personalised ads for users under 18, Discord keeps its age-assurance signals out of targeting, and compliance with the amended Children's Online Privacy Protection (COPPA) Rule was due for most regulated entities by 22 April 2026 (H4, supported) ^[20, 21, 22, 23] ♦.
6. **Console.** Apart from Microsoft's console integrations, whose location its documents do not establish, the Xbox and PlayStation placements found by 28 September 2026 sit outside gameplay or are in test; Electronic Arts sells placements inside its own sports games (H3, unresolved) ^[24, 25] ♦.
7. **Outcomes.** This review found no public randomised, holdout or matched-market test of an in-game or game-adjacent brand campaign funded by a party without a financial interest ^[26, 27, 28] ♦.
8. **Structure.** At least three specialist in-game ad companies were sold or put into insolvency since 2021, and no record attributes an exit to the format; comparable revenue series are not disclosed (H5, unresolved) ^[29, 30, 31, 32] ♦.
9. **Buyer constraints.** Two surveys put brand safety first among the obstacles, but neither is established as US and neither lead is shown to exceed sampling error (H1, unresolved) ^[33, 34, 35] ♦.
10. **The matrix.** Twitch is the one Most documented product in game-adjacent media, and Anzu, Advertly, Frameplay and Gadsme are Well documented among in-game networks; the platform cohort is too small for bands. The capability matrix has the scores, and What it means turns them into buyer questions.

How it was done

AI research agents gathered the evidence, and separate AI verifiers checked all 807 ledger claims against 982 registered sources with orders to refute them. Hypotheses and scoring rules were fixed before research began. The author ran three outside reviews with another AI model and three internal rounds with AI agents, checking every factual finding at its source before changing anything. One scorer scored 23 products; the Play Quotient (PQ) measures documented capability, not performance. This is AI-assisted research, not peer reviewed, externally audited or independently validated. Method, limits and interests has the detail.

INTERESTS

The author has worked at Samba (formerly Samba TV) since May 2025. At Verve Group he ran a P&L (profit-and-loss account) spanning mobile-gaming inventory. He co-leads the Signals & Measurement working group for AdCP (the Ad Context Protocol) at AgenticAdvertising.org. No vendor funded, reviewed or saw the paper before publication. Every vendor is scored under the same published rules.

What counts as gaming advertising

Gaming advertising is several markets sold under one name. This paper records where each ad renders and what it is bought to do as separate fields, scores brand products only, and compares each product only with others in its cohort. The author's GAP model (in-game, around-the-game and away-from-the-game) maps onto those fields in part, and no source screened sizes those lines apart.

IN SHORT

Placement and objective are recorded separately because the sources blur them. EMARKETER says most in-game ads promote installs of other mobile games, yet none of the statements screened splits the dollars by objective ^[6, 7, 8] ♦. User-acquisition and paid-discovery products are listed without scores. Brand products fall into 3 cohorts, scored apart. A supply claim needs named live titles and an audience with a metric and period, and the seller files screened show neither ^[9, 10, 11, 12, 13, 14]. The GAP model's away-from-the-game line includes app installs, an objective, so this review infers that its lines overlap ^[36, 8] ♦. No source screened sizes in-game, around-the-game and away-from-the-game advertising as mutually exclusive, reconcilable categories, so GAP totals stay unresolved ^[37, 4, 38] ♦.

This paper classifies every ad by two fields. Placement is where the ad renders: in-game (intrinsic placements, in-game video, rewarded and playable formats, in-game audio), game-adjacent media (streaming, creators, esports, communities, gaming sites, companion apps), or other media reaching players. Objective is what the buyer pays for: brand advertising, or user acquisition and paid discovery. Only brand products are scored. The US comes first, and global vendors are included.

The sources blur where an ad runs with why it was bought

EMARKETER said in 2023 that most in-game ads promote installs of other mobile games, and in 2024 that game developers buy most of the ads served in games ^[6, 7, 8]. Neither statement is a dollar split. Reading EMARKETER's US game ad revenue series as probably mostly user acquisition is the author's inference ^[6, 7, 8]. "Gaming ad spend" also has two opposite meanings. It can mean spend placed in games. Sensor Tower, a data vendor, leaves its term, game ad spend, undefined, but from context it means spend by game advertisers promoting their games; on mobile, most of that flows to app networks such as AppLovin and AdMob ^[39] ♦.

One partnership shows the split. As announced in May 2025, adWMG was to give its Xbox and PlayStation clients, advertisers of console games, access to Gadsme's mobile in-game

inventory to acquire players ^[40, 41] ♦. The placement is in-game on mobile. The objective is user acquisition. Nothing in it puts an ad inside a console title.

Placement follows the surface that draws the ad. Roblox's 24-hour homepage takeover and its tiles on Home and search sit outside gameplay and are not counted as in-game ^[42, 43] ♦. This review infers that Overwolf's app ads are drawn by a companion app over or beside the game, and keeps them in game-adjacent media as a recorded judgment ^[44, 45, 46] ♦. The device does not decide placement either. Twitch Premium Video runs in the Twitch app on consoles, and a Discord Play Quest can reward console play while the Quest renders in Discord ^[47, 48, 49] ♦.

Intrinsic is one kind of in-game ad

An intrinsic in-game ad is part of the game world, such as a billboard or a branded object. The Intrinsic In-Game (IIG) Advertising Measurement Guidelines 2.0 are a final joint release of the IAB (Interactive Advertising Bureau), IAB Tech Lab and the MRC (Media Rating Council), released in August 2022 ^[17, 50, 51, 52] ♦. They cover placements served by an ad server with an ad session. Hard-coded branded elements are not directly in scope, and interstitials, web banners and in-stream or outstream video fall under the general desktop, mobile web and in-app guidelines, though the guidelines say their in-game-specific guidance should also be considered for those placements ^[17] ♦.

In-game is wider than intrinsic. Anzu bundles intrinsic formats with interstitials and rewarded video, so part of its declared supply path carries impressions that are not intrinsic placements ^[9, 53, 54] ♦. Gameloft's COMBO! sells in-app units such as display, rewarded and interactive video, and playable ads ^[55] ♦. Both are in-game placements here, and this paper holds only intrinsic placements to the IIG guidelines.

User acquisition and paid discovery are filtered out first

Before any product joins a cohort, user-acquisition and paid-discovery products are listed and left unscored. Paid discovery here means a game's owner paying a platform to promote that game to players. Roblox's Plays-objective campaigns run on Home and search, outside experiences ^[56] ♦; the register lists these as Roblox Sponsored Experiences ^[57]. Medal Quests, which Medal describes as partnerships with game developers, are listed on the same rule ^[58] ♦, and so is Gadsme's Cross Promo, priced per install ^[59]. App-install networks are listed too; AppLovin calls Axon Ads Manager its user acquisition solution ^[60, 61] ♦.

The filter applies to each named product, and a scored product can still carry a mixed objective, which is recorded. Discord Quests are scored as a brand product, yet 14 of the 21 success stories on Discord's ads page on 29 September 2026 were games, several reporting acquisition or sales outcomes ^[62, 48, 63] ♦.

Brand cohorts, each compared only with itself

Brand products are classified by what the buyer purchases. Cohort A, in-game ad networks, sells brand placements rendered inside games across independent third-party titles. Cohort

B1, platform and publisher in-game ads, sells brand products on in-game inventory the platform or publisher controls. Cohort B2, game-adjacent media, sells brand products on gaming sites, companion apps, streams, communities and esports media. SSPs (supply-side platforms), DSPs (demand-side platforms) and publisher software are listed, and event sponsorship alone is described. A reseller of a platform's product takes that product's cohort, with the shared supply flagged.

The paper scores 23 products: 9 in cohort A, 4 in B1 and 10 in B2. The product register holds 59 rows, 28 of them listed and 8 historical.

Scores compare only within a cohort because the rules, fixed before scoring, differ by cohort. Coverage does not apply to game-adjacent media, whose ads do not render in a game. Supply means named live titles for a network, the platform's own ad-eligible inventory for B1, and properties or channels with an audience metric for B2. Each cohort's Play Quotient (PQ) is computed against its own field mean. The same supply score rests on different evidence in cohort A and in cohort B2. Chapter 11 holds the scores, which measure documented capability and say nothing about campaign performance.

A supply claim has to name what is live

A supply claim counts only with its fields filled: named titles, live placements, US availability, ad-eligible audience with a metric and period, selling rights and exclusivity. A `sellers.json` file, a network's public list of its sellers, shows a supply connection, not scale. In files downloaded on 28 September 2026, six cohort A candidates declared from 30 to 1,117 publisher seller accounts each; the files show no titles, ad-eligible audience or active integrations ^[9, 10, 11, 12, 13, 14] ♦. They overlap: 1,619 per-vendor unique publisher domains collapse to 1,381 unique domains ^[9, 11, 12, 10, 13, 14] ♦. Vendor reach is never summed here without deduplication. Entries also outlive their businesses. IION's file, last modified on 28 September 2026, still lists Bidstack as an intermediary seller, although Bidstack Ltd has been in creditors' voluntary liquidation since 18 June 2026 ^[11, 32, 64] ♦.

An installed SDK (software development kit) is a footprint. Kidoz's 2025 annual report on Form 20-F says its SDK is integrated into thousands of mobile apps ^[65, 66, 67] ♦, yet in the pages screened the only game Kidoz names as on its network is Minion Rush, in undated alt text ^[68, 69, 70, 71, 65, 72] ♦. A live integration needs a named title carrying placements inside the scoring period.

Announcements count once delivery is shown. IION and Frameplay said on 16 June 2025, in the future tense, that IION's 4,000+ titles (vendor-reported) "will be accessible through the Frameplay Exchange in the US" ^[73, 74] ♦. Frameplay's `sellers.json` lists IION as an intermediary, and of ten publishers' `app-ads.txt` files sampled on 28 September 2026, each a publisher's public list of the sellers it authorises, four authorise that route, but this review found no source showing US delivery, volume or a go-live date ^[10, 75, 76, 77, 78] ♦.

Coverage is recorded as tuples of device (mobile, PC, console), distribution (app store, web, cloud, platform launcher) and content environment (premium title, casual title, or UGC platform, for user-generated content). Each distinct tuple counts once, and only when a named live title or documented live integration evidences it. Adverty's SDK supports

WebGL (browser graphics) and Windows, but this review found no named live title documenting a web or PC tuple ^[79, 80, 81, 82] ♦.

The GAP model against the evidence

The author's gaming playbook proposes the GAP model: in-game, around-the-game and away-from-the-game, planned as separate buyer problems and sold as one media line ^[36]. It maps roughly onto this paper's placement field: in-game to in-game, around-the-game to game-adjacent media, and away-from-the-game in part to other media reaching players. Away-from-the-game lists app install and re-engagement, which is an objective. Since EMARKETER says most in-game ads promote installs, this review infers that an install ad inside a game fits two GAP lines; separate fields remove the overlap ^[36, 81].

Venatus sells in these terms, and this review infers that its categories do not line up with this paper's placement field. It packages its offer as In the Game, Around the Game and Away from the Game; its home page calls its playable formats around-the-game, although this paper counts playable formats as in-game, and its away-from-the-game formats embed Twitch live streams in website takeovers, which this paper counts as game-adjacent media ^[83, 84] ♦. A vendor using the labels gives the model no independent support.

The published series do not line up with GAP either. EMARKETER keeps a US total game ad spending series that counts in-game ads on mobile, console, PC and handheld devices and excludes esports, gaming video content and creator sponsored content ^[85, 86], and separate US series for mobile in-game ads, esports and gaming video content, with values for subscribers only ^[37, 87, 88] ♦. Together they cover in-game advertising and parts of around-the-game, and the overlap between the esports and video series is unsettled. PwC's published video games and esports segment combines in-game and esports advertising, WPP Media publishes one undefined gaming line, and no publisher screened sizes an away-from-the-game category ^[37, 4, 38]. That answers QG, the registered question on the model: GAP totals are unresolved, and this paper never adds them. WPP's forecast carries gaming as an ad-revenue line and is not a published planning media mix ^[89, 90] ♦. IAB Australia used the same three names in July 2023 with different contents, which How big it is, and by whose definition sets out ^[34, 91].

The playbook's line that gaming draws under 5% of worldwide media investment is dropped. Its likely source is dentsu's 2025 Gaming Trends Report, repeated without attribution by EMARKETER, and no accessible text gives a denominator, year or definition; the trace is inferred from wording and dates ^[36, 92, 93, 94] ♦.

The argument this paper allows to fail

The playbook argues that gaming is a media-mix reallocation problem: buyers hold back because gaming does not fit their planning, safety and measurement systems, whatever the audience's size ^[36]. This paper tests that argument and allows it to fail. Hypothesis H1, registered before extraction, is supported only if at least two surveys from different publishers, each with a stated base and period, rank measurement, suitability or planning fit above audience reach or scale, and documented ad-eligible inventory or measurement coverage is either stated with a metric smaller than the player audience for the same

geography and period or excludes named device or environment combinations. Under that rule the gap between gaming time and ad spend is context only, and EMARKETER's attribution of it to measurement or fragmented buying cites no study ^[5, 92] ♦. How big it is, and by whose definition codes the result, and What it means summarises it.

What the companion papers own

In-game audio is scored in the companion audio paper, and mixed packages are split. Gadsme's audio format and Cross Promo run through the same contracts and supply files as its managed network; those components go to the audio paper and the listed Cross Promo row ^[95, 59, 96, 97] ♦. Attention metric definitions belong to the companion attention paper; here attention is only a measurement function a vendor documents. The published mobile app growth paper owns user-acquisition economics, AppLovin and Unity, and retention benchmarks. Its exclusions cover acquisition economics, so any brand product those companies sell is still classified here.

How big it is, and by whose definition

This review found no public US figure for brand advertising in games. The one public US dollar series found counts ads placed in games, mostly on mobile, and EMARKETER says most of those ads are bought by game developers promoting other games. The buyer surveys found do not show that measurement and safety hold brands back more than reach.

IN SHORT

EMARKETER is the only publisher found with public US dollar figures for game advertising ^[3, 4, 38, 98] ♦. Its March 2024 forecast put US game ad revenues at \$8.59 billion in 2024, 90.4% of it on mobile ^[5] ♦. Its later public statements give no single year in which the series passes \$10 billion: "nearly" by 2029 in one piece, "surpass" by 2029 in another, and \$10.2 billion in 2028 in figures Digiday reported in July 2026 ^[99, 92, 86] ♦.

EMARKETER says developers buy most of the ads served in games, so this paper reads the series as probably mostly user acquisition; that reading is an inference, because no source splits the dollars by objective ^[6, 7, 8] ♦.

Player counts are not ad-eligible audiences ^[100, 3] ♦. Two buyer surveys from different publishers put brand safety first among the obstacles, but neither is established as US, neither lead is shown to exceed sampling error, and the same publisher says the belief that the same audiences can be reached more effectively elsewhere is growing ^[33, 34, 101] ♦. H1 stays unresolved.

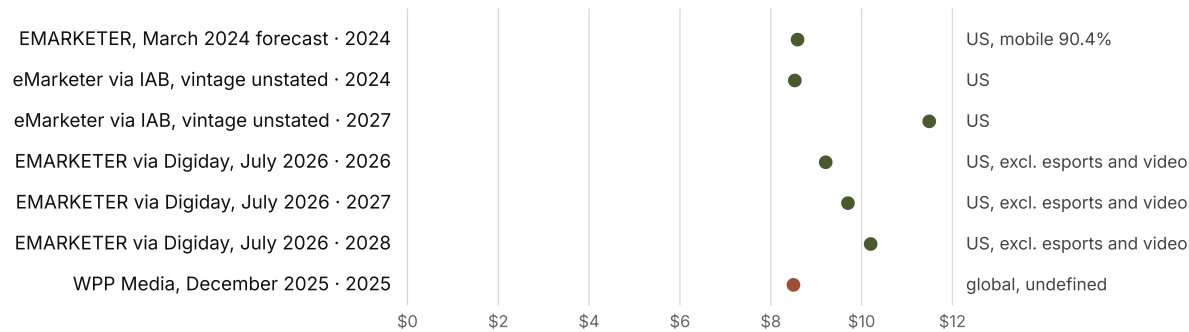
One US series, and what it counts

EMARKETER's forecast database keeps a US total game ad spending series, which counts in-game ads on mobile, console, PC and handheld devices and excludes esports, gaming video content and creator sponsored content ^[85, 86]. It also keeps three further US series that touch gaming: mobile game ad spending (ads placed inside games on mobile devices only), esports ad spending (advertising and sponsorship on digital platforms) and gaming video content ad spending (video ads on recorded and live game content, such as YouTube or Twitch) ^[37, 87, 88] ♦. The values are for subscribers only. What the public can read are the headline numbers in EMARKETER's articles and guides.

Its March 2024 forecast put US game ad revenues at \$8.59 billion in 2024, of which \$7.77 billion, or 90.4%, was mobile, and put mobile game ad revenues at 2.8% of all US digital ad spending ^[5] ♦. The same forecast put the year the series passes \$10 billion at 2026 ^[5, 6].

The later public statements do not agree with each other. An EMARKETER article of 26 December 2025 says US game ad revenues "will reach nearly \$10 billion in the US by 2029" and puts in-game advertising at 2.3% of US digital ad spending in 2026, falling to 2% by 2029 ^[99] ♦. EMARKETER's FAQ of 10 January 2026 says they "will surpass \$10 billion by 2029" and gives only the 2026 share ^[92] ♦. Both pieces link to the total game ad spending series, so the two statements conflict, and the vintage behind each is not stated ^[99, 92] ♦. Digiday reported on 3 July 2026 EMARKETER figures of \$9.21 billion in 2026, \$9.7 billion in 2027 and \$10.2 billion in 2028 for total US game ad spend, excluding esports, gaming video content and creator sponsored content ^[86]. This paper cites each statement in its own words and derives no crossing year from them.

GAME AD REVENUE ESTIMATES, \$ BILLION, EACH IN ITS OWN VINTAGE



EMARKETER in words: December 2025 article: "nearly \$10 billion" by 2029; January 2026 FAQ: "will surpass \$10 billion by 2029". Points are never added across publishers.

The US total moves with the vintage, and no source found splits brand from user-acquisition spend Published estimates of game ad revenue or spend, each shown with its publisher, vintage and year. The EMARKETER series count ads placed in games, mostly on mobile; EMARKETER says developers buy most of them, so reading the series as mostly user acquisition is this paper's inference. WPP Media's figure is global and undefined, so it is not comparable with the US series.

Units: \$ billion (nominal) · Scope: US unless labelled global; forecasts · Sources ^[5] ^[108] ^[86] ^[38] ^[99] ^[92]

Each point is a forecast in its own vintage and definition. They are not a time series and must not be summed or averaged.

Mostly user acquisition, by inference

EMARKETER has said that most in-game ads promote installs of other mobile games (May 2023), that game developers buy most of the ads served in games (May and June 2024) and that most in-game ad spend goes to mobile (June 2024) ^[8, 7, 6] ♦. The first two describe shares of ads, the third a share of spend by platform. None splits the dollars by buyer or between brand and user-acquisition objectives. This paper therefore reads the EMARKETER series as mixed objective and probably mostly user acquisition. That reading is the author's inference, and the paper never presents it as a measured share.

The word "gaming" makes the numbers harder to compare. Sensor Tower's State of Gaming 2026 blog says the majority of mobile game ad spend flows to app networks such as AppLovin and AdMob, and that PC and console spend is more concentrated in social and video channels, with YouTube taking the largest share ^[39]. Read in context, that is spend by

game companies promoting their games, which the blog does not define ^[39] ♦. Spend placed inside games and spend by game companies overlap, because an install ad shown in a game is both, but they are different quantities and are never added. User-acquisition economics are covered in the author's published mobile app growth paper; this paper covers brand advertising.

Other estimates, and why none can be combined

The other publishers screened offer a growth rate, a share or a global total, each with its own definition. WPP Media put global gaming ad revenue at \$8.5 billion in 2025, up 29.5% and 0.7% of all global ad revenue, and Marketing Brew reported the same forecast at \$10.7 billion for 2026; WPP's public pages do not define gaming ^[38, 102] ♦. Its June 2026 midyear text says only that gaming continues to grow, and its public chart carries no calendar years ^[89, 90] ♦. That a global total is smaller than EMARKETER's US-only 2024 forecast suggests, by this review's inference, that the two publishers count different things; WPP publishes no definition to check it against.

The IAB/PwC Internet Advertising Revenue Report for 2025, a report on US advertising revenue, says "video games and esports" advertising revenue grew 22.0% in 2025, after 8.7% in 2024, and publishes no dollar value; the chart labels neither the geography nor the edition of PwC's Outlook it comes from, and the report does not say whether the 2025 figure is a reported actual or a model estimate ^[4] ♦. PwC's Outlook release puts total global video games revenue at \$224 billion in 2024, a whole-industry total that includes consumer spending, and gives a share for "advertising in video games" (32.8% in 2024, rising to 38.5% in 2029) without stating what the percentage is a share of ^[103, 104] ♦. Circana's \$60.7 billion for 2025, in the Entertainment Software Association's (ESA's) report, is US consumer spending on games, not advertising ^[3] ♦.

The estimates table lists each figure with its publisher, vintage, metric, geography and what it includes, excludes or leaves unstated. The "combinable" column is no for every row.

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
EMARKETER (FAQ)	2026-01-10	US game ad revenues	will surpass \$10 billion	2029	US	in-game advertising (FAQ framing: mobile, console, PC)	not stated	no	[92]
EMARKETER (FAQ)	2026-01-10	in-game advertising share of overall US digital ad spending	2.3%	2026	US	in-game advertising	not stated	no	[92]

ESTIMATE	PUBLISHED	METRIC	VALUE	YEAR	GEOGRAPHY	INCLUDES	EXCLUDES	COMBINABLE WITH	SRC
EMARKETER (article)	2025-12-26	US game ad revenues	nearly \$10 billion	2029	US	game ad revenues (definition not in visible excerpt)	not stated	no	[99]
EMARKETER (article)	2025-12-26	in-game advertising share of overall US digital ad spending	2.3%	2026	US	in-game advertising	not stated	no	[99]
EMARKETER (article)	2025-12-26	in-game advertising share of overall US digital ad spending	2%	2029	US	in-game advertising	not stated	no	[99]
EMARKETER (guide; March 2024 forecast)	2024-03	US game ad revenues	\$8.59 billion	2024	US	all game ad revenues, mobile and non-mobile	not stated	no	[5]
EMARKETER (guide; March 2024 forecast)	2024-03	US mobile game ad revenues	\$7.77 billion	2024	US	mobile game ad revenues	not stated	no	[5]
EMARKETER (guide; March 2024 forecast)	2024-03	mobile share of US game ad revenues	90.4%	2024	US	mobile game ad revenues over total game ad revenues		no	[5]
EMARKETER (guide; March 2024 forecast)	2024-03	mobile game ad revenues share of total US digital ad spending	2.8%	2024	US	mobile game ad revenues		no	[5]
EMARKETER (guide)	2024	mobile gaming ad revenues share of total US mobile ad spend	3.8%	2024	US	mobile gaming ad revenues		no	[5]
EMARKETER (guide)	2024	time spent in mobile games share of total US mobile time (context, not spend)	10.7%	2024	US	time spent		no	[5]
EMARKETER (guide; March 2024 forecast)	2024-03	year US game ad revenues pass \$10 billion	passes \$10 billion	2026	US	all game ad revenues	not stated	no	[5]
EMARKETER (article, June 2024; March 2024 forecast)	2024-03	US game ad revenues	\$8.59 billion (+6.7% vs 2023)	2024	US	game ad revenues	not stated	no	[6]
eMarketer as cited by IAB	vintage not stated (cited 2024-03-26)	US ad spend in games	\$8.53 billion	2024	US	not stated	not stated	no	[108]
eMarketer as cited by IAB	vintage not stated (cited 2024-03-26)	US ad spend in games	\$11.49 billion	2027	US	not stated	not stated	no	[108]

ESTIMATE	PUBLISHED	METRIC	VALUE	YEAR	GEOGRAPHY	INCLUDES	EXCLUDES	COMBINABLE WITH	SRC
EMARKETER (report)	2019-10-17	US in-game advertising, all devices	will exceed \$3 billion	2019	US	in-game advertising on all devices; mobile the majority	not stated	no	[544]
EMARKETER (FAQ; October 2025 forecast)	2025-10	digital gamers, share of US population (audience, not spend)	59.2%	2026	US	internet users of any age playing online or internet-updated games on any device at least monthly (definition in GAM-A-S11)	offline-only play	no	[92]
EMARKETER (guide; August 2023 forecast)	2023-08	digital gamers, share of US population (audience, not spend)	54.6%	2024	US	digital gamers (definition as above)		no	[5]
ESA Essential Facts 2026 (YouGov survey)	2026-06	Americans aged 5-90 who play video games (audience, not spend)	212.3 million	2026	US	people who play at least 1 hour a week on smartphone, tablet, PC, console or VR	ages under 5 and over 90; play under 1 hour a week	no	[3]
ESA Essential Facts 2026 (YouGov survey)	2026-06	share of US population playing 1+ hours a week (audience, not spend)	67%	2026	US	as above		no	[3]
ESA Essential Facts 2025	2025	Americans who play video games (audience, not spend)	more than 205 million	2025	US	not restated on the page		no	[545]
Newzoo (author-confirmed; not opened by agent)	2026-08-25	players worldwide (audience, not spend)	3.7 billion (+4.4%)	2026	global	Newzoo player definition (not read)		no	[105]
dentsu 2025 Gaming Trends Report (via Variety)	2025-07-01	gamers worldwide (audience, not spend)	over 3.4 billion	not stated	global	not stated		no	[93]
dentsu 2025 Gaming Trends Report (via Variety)	2025-07-01	gaming share of global media investment	less than 5%	not stated	global	not stated	not stated	no	[93]
WPP Media This Year Next Year (end-of-year)	2025-12-10	global gaming ad revenue	\$8.5 billion (+29.5%)	2025	global	not published	not published	no	[38]
WPP Media This Year Next Year (end-of-year)	2025-12-10	gaming share of total global ad revenue	0.7%	2025	global	not published	not published	no	[38]

ESTIMATE	PUBLISHED	METRIC	VALUE	YEAR	GEOGRAPHY	INCLUDES	EXCLUDES	COMBINABLE WITH	SRC
WPP Media (as reported by Marketing Brew)	2025-12-09	global gaming ad spend	\$10.7 billion	2026	global	not published	not published	no	[102]
PwC Global E&M Outlook 2025-29	2025-07-24	global video games revenue, all sources (not advertising only)	\$224 billion	2024	global	consumer spending and advertising	hardware	no	[103]
PwC Global E&M Outlook 2025-29	2025-07-24	global video games revenue, all sources (not advertising only)	nearly \$300 billion	2029	global	consumer spending and advertising	hardware	no	[103]
PwC Global E&M Outlook 2025-29	2025-07-24	'advertising in video games' (base not stated in release)	32.8%	2024	global	not stated	not stated	no	[103]
PwC Global E&M Outlook 2025-29	2025-07-24	'advertising in video games' (base not stated in release)	38.5%	2029	global	not stated	not stated	no	[103]
IAB/PwC FY2025 report (PwC Outlook data)	2026-04	video games and esports advertising revenue, year-on-year growth	+22.0%	2025	US	advertising via video games; advertiser spend on esports; digital and non-digital	not stated	no	[4]
IAB/PwC FY2025 report (PwC Outlook data)	2026-04	video games and esports advertising revenue, year-on-year growth	+8.7%	2024	US	as above	not stated	no	[4]
Circana (via ESA Essential Facts 2026)	2026-06	US consumer spending on video games (not advertising)	\$60.7 billion	2025	US	content \$52.3B, hardware \$5.4B, accessories \$2.95B	advertising	no	[3]
EMARKETER via Digiday	not stated (reported 2026-07-03)	US total game ad spend	\$9.21 billion	2026	US	ads placed in games on all devices (per report)	esports, gaming video content, creator sponsored content	no	[86]
EMARKETER via Digiday	not stated (reported 2026-07-03)	US total game ad spend	\$9.7 billion	2027	US	ads placed in games on all devices (per report)	esports, gaming video content, creator sponsored content	no	[86]

ESTIMATE	PUBLISHED	METRIC	VALUE	YEAR	GEOGRAPHY	INCLUDES	EXCLUDES	COMBINABLE WITH	SRC
EMARKETER via Digiday	not stated (reported 2026-07-03)	US total game ad spend	\$10.2 billion	2028	US	ads placed in games on all devices (per report)	esports, gaming video content, creator sponsored content	no	[86]

Players are not an ad-eligible audience

Each player count screened uses a different definition, and none measures who can be reached by a brand ad ^[100, 3, 93] ♦. EMARKETER forecasts that 59.2% of the US population will be digital gamers in 2026, counting internet users of any age who play online or internet-updated games at least once a month ^[92, 100] ♦. ESA's 2026 Essential Facts reports 212.3 million Americans aged 5 to 90 who play, and 67% of the population playing at least one hour a week, from a YouGov survey of 13,545 people fielded 11 to 25 February 2026 ^[3] ♦. Newzoo forecasts 3.7 billion players worldwide in 2026, up 4.4% ^[105] ♦. Newzoo's site blocked this review's tools; the author confirmed the figure and the article date, 25 August 2026, in a browser.

The gap between time spent and money spent is context, not evidence. EMARKETER's 2024 guide sets mobile games' 10.7% of US mobile time against 3.8% of mobile ad spend in 2024, and its January 2026 FAQ sets more than an hour of daily gaming against in-game advertising's 2.3% of digital ad spend in 2026 and says the gap "suggests marketers lack confidence in measurement or struggle with fragmented buying processes" without citing a study ^[5, 92] ♦. The author's playbook line that gaming gets "under 5%" of worldwide media investment matches dentsu's 2025 Gaming Trends Report as Variety reported it; no accessible text gives that figure a denominator, a year or a definition, so the paper does not use it as a share ^[36, 93, 94] ♦.

What buyers say holds them back

Hypothesis H1 tests whether buyers cite measurement, suitability or planning fit as constraints more often than audience reach, and whether documented ad-eligible inventory or measurement coverage is narrower than the player audience; as registered, it does not test which constraint causes lower spend. Its survey leg needs two surveys from different publishers, each with a stated base and fieldwork period, that rank measurement, suitability or planning fit above audience reach or scale.

Two surveys qualify on the wording. Advertiser Perceptions' 2024 Gaming Advertising Report asked 200 marketer and agency contacts in July 2024 for the biggest obstacles: brand safety 29%, reaching the same consumers more effectively elsewhere 26%, difficulty of measurement 26%, lack of scale or reach 26%, and organisational resistance 25% ^[33, 35] ♦. IAB Australia's Game Advertising State of the Nation 2023 asked 100 agency and brand decision makers in June and July 2023 for their three biggest barriers: brand safety 47%, measuring campaign success 36%, brand suitability 36%, evidence of effectiveness 34%, and how games work with other media 32%; no reach barrier appears among the five shown ^[34, 91] ♦.

The support is weak. Neither sample is established as US or limited to brand advertising. On a base of 200, brand safety's three-point lead sits inside the margin of a single share of about six points either way, and whether gaps between answers to the same multiple-choice question are real depends on overlaps neither publisher reports ^[33, 34] ♦. Counting IAB Australia as ranking safety above reach rests on the inference that its 2023 wave offered a reach option, as its 2022 wave did ^[34, 106] ♦. And Advertiser Perceptions' own summary says brand-safety concerns are fading while the belief that the same audience can be reached more effectively elsewhere is growing ^[101, 33] ♦. In the same survey, the top two benefits cited are reach: hard-to-reach audiences 43% and incremental reach 38% ^[33].

The US evidence points both ways. IAB's March 2024 study with Advertiser Perceptions, sponsored by Admazing and Venatus (both scored in this paper), surveyed 300 US buyers already investing in games and asked no barrier question; 86% of them agreed games advertising is brand safe, second only to digital audio, and 85% said they were confident measuring it, while 79% agreed it is easy to buy, the same as CTV, above online video and below display, social media and digital audio ^[107, 108] ♦ ♦. Among the 51% who treat games as part of other channels rather than a channel of their own, the first of four unnumbered reasons listed is "not yet enough scale", but the report's illustrative quote for that group ties scale to the advertiser's own spend rather than to audience size, so it is weak evidence of a reach constraint ^[107] ♦. In the sources screened by 28 September 2026 and rechecked on 29 September 2026, this review found no US survey that publishes a base, a fieldwork period and shares for the constraints on brand advertising in games; Advertiser Perceptions' 2025 gaming results, IAS's 2026 Industry Pulse and IAB's August 2026 guide "The Business Case for Gaming" could not be read in full ^[109, 110, 111] ♦.

H1's second leg holds: the documented measurement coverage for in-game brand ads excludes named device and environment combinations. MRC's accredited services use desktop, mobile web, mobile in-app and connected-TV environments, with no gaming or console environment ^[15, 16] ♦. But H1 needs both legs. Its survey leg is met only on point estimates, and only if IAB Australia's 2023 wave offered a reach option, which is inferred from its 2022 wave; without that inference one usable survey remains, which the registered rule codes as unresolved. Neither sample is shown to be US, and Advertiser Perceptions gives contrary signals. Coded under its registered rule, H1 is unresolved ^[33, 34, 35] ♦. The public survey record neither shows that infrastructure holds brands back more than audience nor shows the reverse, and no study design in the record identifies which constraint causes lower spend.

The GAP model meets the published categories

The author's playbook proposed selling gaming as one media line across in-game, around-the-game and away-from-the-game placements ^[36]. No source screened sizes those three as mutually exclusive, reconcilable categories ^[37, 4, 38] ♦. EMARKETER comes closest: its total US game ad spending series counts in-game ads on mobile, console, PC and handheld devices and excludes esports, gaming video content and creator sponsored content, and it keeps separate esports and gaming video content series whose overlap it does not settle; most values are for subscribers only ^[85, 86, 87, 88]. The playbook's own categories overlap, because its away-from-the-game line includes app installs, an objective, while

EMARKETER said in 2023 that most in-game ads promote installs of other mobile games [36, 8] ♦.

IAB Australia's July 2023 report already sorted game advertising into "in the game", "around the game" and "away from the game", the same three names, with different contents: its around-the-game covers rewarded video, interstitials and overlaid audio ads during the gaming session, and its away-from-the-game covers streaming, esports and influencers [34, 91] ♦. This paper keeps placement and objective as separate fields and adds no GAP totals.

Who sells inventory inside games

Specialist networks sell brand placements inside games that other companies publish. Their public files show which publishers have authorised them more clearly than what they sell, where, or to how many players. The same large publishers authorise several networks at once, and some networks are authorised to resell one another.

IN SHORT

The cohort A networks are Anzu, Frameplay, IION, Gadsme, Adverty, Gameloft for brands (COMBO!), Super League, Kidoz and Admazing. This review moved AdInMo out of the cohort after its operator applied to be struck off and its ad-serving hostnames did not resolve, and Trivver is listed because this review found no live title for it ^[112, 113, 114]. Their audience figures are vendor statements, and most lack a metric, a period or both ^[115, 116, 117]. Six networks' sellers.json files, read on 28 September 2026, hold 1,619 publisher domains between them; deduplicated, they come to 1,381, and miniclip.com appears in five ^[9, 10, 11, 12, 13, 14] ♦. Frameplay and IION list other cohort A networks as intermediary sellers ^[10, 11]. IION's route to US buyers through the Frameplay Exchange, announced in the future tense in June 2025, now appears as a reseller line in some publishers' app-ads.txt files, with no go-live record found ^[73, 10, 75, 77] ♦ ♦. Such lines show authorisation, not active buyable supply. Gadsme calls all its publisher relationships direct and exclusive, yet its own file lists three intermediary sellers ^[118, 12]. Few demand-side platforms (DSPs), the systems buyers bid through, confirm a network integration on their own sites, and no cohort A network documents any state of an agentic buying protocol in the sources screened ^[119, 120, 121]. No cohort A vendor gives a market share with a denominator in the sources screened, so concentration is unresolved ^[55, 74, 122].

The networks and what each names as live

Cohort A holds the networks that sell brand placements rendered inside games across independent third-party titles, the boundary set in What counts as gaming advertising. Anzu, Frameplay, Gadsme and Adverty sell intrinsic display and video drawn into the game's own scenes ^[123, 124, 59, 125]. COMBO! sells rewarded, interstitial, interactive and playable units in mobile games from Gameloft and partner publishers ^[55, 126]. IION sells in-game formats beside placements around and away from the game, which Around the game covers ^[127, 115]. Super League sells managed programmes in Roblox, Minecraft and Fortnite and in mobile and PC titles ^[128]. Kidoz reaches young audiences through its software

development kit (SDK), code a developer builds into an app, which it says is integrated into thousands of mobile apps ^[65] ♦. Admazing sells brand campaigns in third-party mobile games ^[129, 130].

The table gives each network's scale claim, the publisher accounts in its sellers.json and the titles that it, a publisher or an independent observation dates inside the scoring period (2 October 2025 to 2 October 2026), the only titles the coding rule for research question 2 (Q2) counts as live.

NETWORK	SCALE AS THE VENDOR STATES IT	PUBLISHER ACCOUNTS IN ITS SELLERS.JSON	TITLES DATED INSIDE THE SCORING PERIOD	SOURCES
Anzu	"Hundreds of live cross-platform games"; 250 million monthly active users (blog, 9 September 2025)	1,117	UFL (partnership and inventory announced 13 May 2026, no delivered campaign reported), Gangsta Island: Crime City, Asphalt 8: Airborne and Dragon Mania Legends (case study of 26 November 2025, go-live date not stated), Fashion Battle, Drill & Collect	~~[132, 133]~~ ♦
Frameplay	"a network of 5,000+ mobile games" (9 June 2026)	30	none named	[138]10,
IION	"60,000+ games"; "4,000+ gaming titles" (June 2025); "3.6 billion" as "Unique Audience"	268	none named as carrying IION placements	[115], 73, 8116,
Gadsme	"more than 1,600 mobile games" (October 2025)	223	Football Manager 26 (PC and Mac): exclusive announced by its publisher on 29 September 2025, just before the period; in-period delivery rests on partner content co-produced by Gadsme (December 2025)	~~143, 212,~~
Adverty	"600+ games" (unaudited pages of its 2025 annual report)	121 (119 later the same day)	Parking Master 3D (14 January 2026)	[143, 13, 82]
Gameloft for brands (COMBO!)	1.3 billion monthly active players (March 2026 data)	31	none; its dated campaigns predate the period	[117, 14, 55]
Super League	Misfits portfolio of "more than 100 million monthly active users"	no file	Hide or OOF! and My Avatar!, which its 10-Q of 14 August 2026 describes as generating "differentiated inventory for playable advertising"; no campaign in either is dated (it took a 15.0% stake with some brand rights in Hide or OOF! in January 2026 and an ownership interest in My Avatar! in April 2026)	~~[304, 146]~~ ♦
Kidoz	40,000+ kid-safe games; 500M+ monthly reach	about 270 (29 September 2026)	none; Minion Rush is named without a date	[68, 66]
Admazing	7.3 billion+ impressions served, no period	no file	none named	[130, 147]

The columns count different things. A seller account records an authorised supply connection; it says nothing about titles, ad-eligible audience or active monetised integrations, and Adverty's count changes from day to day ^[9, 13] ♦. Anzu's file also reaches beyond games: a keyword screen by this review found at least 118 of its unique publisher

domains to be television, streaming, radio, news or weather properties, such as roku.com and cnn.com ^[9] ♦.

AdInMo and Trivver sit outside the cohort

AdInMo was operating when the scoring period began: PocketGamer.biz reported on 24 October 2025 that it had launched its monetisation technology as a software-as-a-service offering for mobile developers, with free and paid tiers ^[148]. On 6 September 2026 the sole remaining director of AdInMo Ltd signed a strike-off application declaring that no circumstance in sections 1004 and 1005 of the Companies Act 2006 applied, and section 1004 bars an application by a company that traded in the previous three months ^[112, 149]. The application was gazetted on 15 September and suspended on 17 September 2026 after an objection, and on 29 September the register showed the company as active with a proposal to strike off ^[150, 151] ♦. Every Internet Archive capture of its website from 11 July to 27 September 2026 shows a server error, and on 29 September the site still returned one and its ad-serving hostnames did not resolve ^[152, 113] ♦. This review therefore moved AdInMo to the historical rows, unscored, an inference from those records ^[112, 153, 113] ♦. Frameplay's and IION's sellers.json files still list it as an intermediary; this review infers that the entries are stale rather than evidence of current trading ^[10, 11].

Trivver is listed. MRC (the Media Rating Council, which audits and accredits measurement services) shows Trivver's audit as "in process as of 4/2026" across desktop, mobile and gaming consoles, the only gaming entry on its list of services under review ^[16, 154] ♦. Trivver calls a PlayCanvas SDK for browser games, released on 11 June 2026, its "first commercial deployment", although its use-case page says it already integrates with Unity, Unreal and PlayCanvas ^[155, 156] ♦. This review found no named title, brand campaign or supply file for Trivver in the scoring period, in the sources screened by 29 September 2026 ^[114, 157]. The register therefore lists it, and Measurement treats its audit ^[155, 16] ♦.

Audience figures lack a metric, a period or both

The audience numbers are the vendors' own, and few say what is counted over what period. IION's advertisers page says it is "Home to a premium audience of 3.6 billion" and repeats "3.6 billion" as "Unique Audience" in a block about gaming in general, with no period ^[116, 115, 73] ♦. The figure matches common estimates of the world's players, so it reads as a player-population figure rather than a measured reach of IION's own supply; that reading is this review's inference ^[116]. COMBO!'s 1.3 billion monthly active players, from Gameloft data of March 2026, was already its headline at launch in September 2022, and its four regional figures, under four metric names, sum to 1,004 million ^[117, 158] ♦ ♦.

Other counts disagree with one another. Kidoz's site claim sits beside 500M+ global monthly unique users in a fact sheet covering its children's and all-ages platforms together, over 350 million a month in its SDK documentation and "hundreds of million" in its annual report ^[68, 70, 71, 65] ♦. Between December 2024 and May 2026 Gadsme cited over 1,500 games, more than 1,600 mobile titles and more than 100 game developers, and its undated advertisers page claims 200+ game studios, none with a period ^[159, 139, 118, 160] ♦. Frameplay's "5,000+ mobile games" cannot be reconciled with its own supply records and plausibly includes resold supply, since IION alone was announced as bringing 4,000+ titles

(inference) ^[136, 73, 10] ♦. Super League's Misfits figure has no reference month, measurement source or deduplication across games ^[144, 161]. Because the same publishers sit behind several networks, these reaches must never be summed ^[11, 10, 162].

US availability is documented unevenly. Anzu has run US campaigns, and NBCUniversal was named its US and UK sales partner in March 2022 ^[163, 164]. Kidoz booked \$9,041,962 of its \$18,433,172 revenue in 2025 in North America, by impressions served ^[65] ♦. Adverty reports US sales activity, COMBO! fields North America sales staff, Super League targets US audiences and Gadsme opened a New York office in December 2024 ^[79, 165, 30, 159]. IION's one documented US route is the Frameplay path announced in June 2025 ^[73, 166] ♦.

Frameplay, Adverty, Gadsme, Kidoz and Super League publish no US audience or coverage figure in the sources screened ^[74, 79, 139, 65, 30]. Admazing's home page cites "191 million US mobile gamers", which this review reads as a market-wide count rather than Admazing's own reach (inference), and COMBO!'s 57 million monthly users covers all of North America ^[129, 130, 117] ♦.

Seller files record authorisation, and fewer integrations are confirmed

HOW TO READ A SELLER FILE

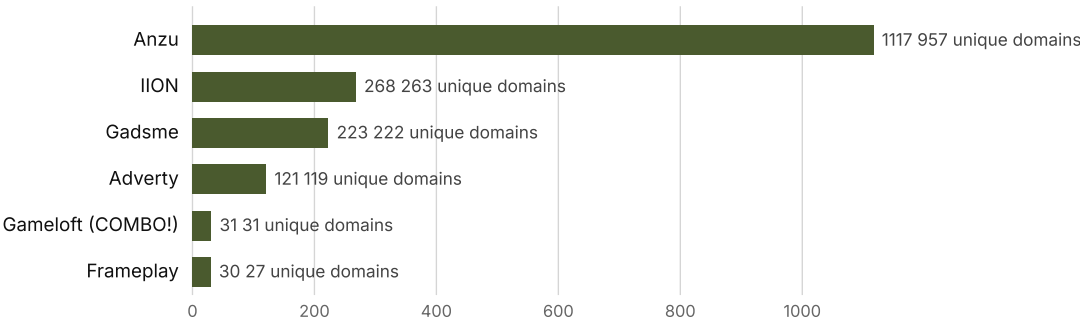
A sellers.json file, in the format of IAB Tech Lab (the Interactive Advertising Bureau's technical standards body), lists the accounts a network sells for and types each as PUBLISHER, INTERMEDIARY or BOTH; all six cohort A files read on 28 September 2026 declared version 1.0, as did Kidoz's, read a day later ^[9, 10, 11, 12, 13, 14, 66] ♦. A publisher's app-ads.txt file lists the ad systems it authorises to sell its app inventory, each under a seller ID marked DIRECT or RESELLER ^[53, 76]. When a DIRECT line matches a PUBLISHER entry, both sides record that the network may sell that publisher's inventory. The match does not say which titles, placements or countries the network sells ^[14, 53, 76] ♦.

Some relationships match from both sides. Anzu's do for seven sampled publishers, among them Miniclip, Zynga, Rovio, Gameloft and Helium9 Games ^[9, 75, 77, 54, 78, 96] ♦. COMBO!'s do for King, Zynga, Miniclip, Rovio and Outfit7 ^[14, 53, 77, 75, 54, 76] ♦. IION's in-game supply is documented mainly through Voodoo, whose app-ads.txt authorises the ID that IION assigns to Voodoo SAS; IION's case study on Voodoo reports 70 to 80 million monthly impressions after Voodoo moved to a direct integration across rewarded video, interstitial, banner and native formats, a delivery count for the publisher's monetisation rather than for placements drawn into the game's scenes ^[138, 167, 11] ♦. Lihuhu, publisher of Adverty's one named live title, authorises the Adverty ID assigned to it ^[162, 13].

Other accounts do not match. At least five of Frameplay's 30 publisher accounts match a DIRECT line in the publisher's file, while seven sampled accounts have no frameplay.gg line at all ^[10, 75, 96] ♦. Miniclip and Helium9 Games authorise Adverty seller IDs that Adverty's sellers.json does not contain ^[75, 96, 13] ♦. IION's file assigns to another publisher, Big Cake, an ID that Lihuhu authorises as a DIRECT IION seller ^[11, 162]. Admazing serves no sellers.json at the domains checked, so the seller of record behind its exchange's reseller account cannot be resolved ^[147, 75, 54, 77] ♦.

Adding the files together double counts. Across the six sellers.json files read on 28 September 2026, 1,619 per-network unique publisher domains collapse to 1,381 unique domains, or 1,380 with Adverty's later file ^[9, 10, 11, 12, 13, 14] ♦. Of these, 176 appear in two or more files, 51 in three or more and 10 in four or more; miniclip.com appears in the files of Anzu, IION, Gadsme, Gameloft and Frameplay ^[9, 11, 12, 14, 10]. A simple sum therefore carries 238 surplus domain appearances ^[9, 10, 11, 12, 13, 14] ♦. Kidoz's file, read a day later, is outside this count ^[66].

PUBLISHER ACCOUNTS IN EACH NETWORK'S SELLERS.JSON, 28 SEPTEMBER 2026



1619 domains across the six files collapse to 1381 unique; 176 appear in two or more files.

Seller accounts are not titles, and the networks list many of the same publishers

Publisher accounts declared in each cohort A network's sellers.json, with the unique publisher domains behind them. A seller account shows an authorised supply connection, not a live title, a placement or scale. Anzu's file also includes connected-TV, streaming and news properties.

Units: publisher seller accounts · Scope: the six cohort A networks whose sellers.json files were read on 28 September 2026 · Sources ^{[9] [11] [12] [13] [14] [10]}

Files change often; counts are for the reads on 28 September 2026. Kidoz's file, read on 29 September, is outside this count; Super League and Admazing serve no file at the domains checked.

Networks are authorised to resell one another

Frameplay's sellers.json lists IION, Adverty and AdInMo as INTERMEDIARY sellers, and IION's lists Anzu, AdInMo, Adverty and Bidstack ^[10, 11] ♦. These entries authorise resale without showing which inventory is resold, so a buyer of one network may be buying another's supply; that step is an inference ^[10, 11]. They also go stale: IION's file, modified on 28 September 2026, still lists Bidstack, whose operating company entered creditors' voluntary liquidation on 18 June 2026 ^[11, 32] ♦ ♦.

The Frameplay Exchange opened on 9 October 2024 for programmatic and direct buying aimed at buyers in the US and other markets, carrying Adverty's and AdInMo's inventory beside Frameplay's ^[74, 168]. On 16 June 2025 Frameplay and IION announced, in the future tense, that IION's 4,000+ titles, a vendor figure, "will be accessible through the Frameplay Exchange in the US" ^[73] ♦. Frameplay's sellers.json, last modified on 19 August 2025, assigns seller ID 9251981480 to IION as an INTERMEDIARY, and the app-ads.txt files of Miniclip, Outfit7, Zynga and Gameloft, four of ten publisher files sampled, authorise "frameplay.gg, 9251981480, RESELLER" ^[10, 75, 76, 77, 78] ♦. No source found shows US

delivery, volume or a go-live date, and Frameplay's resources feed has no post after 4 June 2025 [73, 169].

Large publishers authorise several networks at once. Zynga's app-ads.txt, last modified on 23 September 2026, authorises Gadsme, Anzu, Gameloft, IION and PubMatic as DIRECT sellers and Frameplay, Adverty and Kidoz as resellers [77, 141] ♦. King's file, whose owner domain is Activision Blizzard Media, carries 153 DIRECT and 2,452 RESELLER lines, among them a Gameloft DIRECT line and Anzu and Gadsme reseller entries [53]. King, Zynga, Miniclip and Rovio also authorise Admazing's exchange as a reseller [53, 77, 75, 54]. Gameloft sits on both sides, authorised by five publishers and itself listed as a publisher by Anzu, Gadsme and Frameplay; that some King inventory is offered through both COMBO! and Microsoft's XBOX Media Solutions is this review's inference, unverified at title or placement level [14, 53, 78] ♦. Super League, which serves no seller file at the domains checked, says it sometimes includes inventory from in-game ad firms such as Anzu, Bidstack, AdInMo and Frameplay in its programmes, without saying whose it has used [128, 30, 145] ♦. The same paths carry in-game audio, such as Audiomob in Anzu's and IION's files, which the companion audio paper covers [9, 11].

Exclusivity claims against the vendors' own files

Gadsme's exclusivity claims are unqualified, and its own documents narrow them. Its pages say "All our publisher relationships are direct and exclusive" and "No reseller stacking" [118, 170]. Its sellers.json lists Digital Turbine, LoopMe and Unity as INTERMEDIARY sellers, and King, Miniclip, Rovio, Gameloft and Zynga authorise gadsme.com as a RESELLER under the Digital Turbine ID [12, 53, 75] ♦. Sixty of its publisher domains also appear in Anzu's file [12, 9]. Its Publisher General Terms, updated on 19 May 2026, restrict exclusivity to 3D and audio ads, apply it per player or game session, and let a publisher test a competing 3D network while Gadsme runs for at least 50% of players [59] ♦. One title-level exclusive is confirmed by its publisher: Sports Interactive announced on 29 September 2025 a three-year exclusive partnership bringing Gadsme's SDK into the PC and Mac edition of Football Manager 26 [140] ♦.

Anzu calls its inventory "exclusive", but no publisher- or placement-level exclusivity is documented in the sources screened, and its Marketplace Terms grant publishers a non-exclusive licence to its technology [122, 171] ♦. Super League's exclusive with Misfits, signed on 1 May 2026, covers brand partnerships in Misfits' Roblox games that Misfits has not already discussed; it excludes games Misfits does not solely control, needs Misfits' approval before any brand is approached, and runs for an initial year [172] ♦.

Programmatic rails

Networks name DSPs more often than DSPs name networks. Google's exchange list for Display & Video 360 (DV360), its DSP, updated on 10 June 2026, names 89 exchanges, none of them Anzu, Frameplay, Gadsme, Adverty, AdInMo, IION or Gameloft, though it names intermediaries from their files such as Unity, InMobi and Smaato [119] ♦. Frameplay's SDK guide names DV360 as demand, but the route by which DV360 buys Frameplay inventory is undocumented in the sources screened: GumGum, a named DV360 exchange that an

undated testimonial on Frameplay's advertiser page quotes as offering Frameplay inventory, lists no Frameplay entry in its own sellers.json ^[173, 119, 137, 174] ♦.

DSP-side documentation was found for Anzu and Gadsme. Anzu's PRWeb release names The Trade Desk, StackAdapt, Basis, Smadex and Adikteev as onboard for its click-enabled formats; StackAdapt's own page (modified 27 August 2026) says it is partnered with Anzu for non-clickable blended ads, and a Smadex partner post confirms a performance partnership ^[122, 120, 175] ♦. Gadsme sells through private marketplace (PMP) deals, curated deals and direct programmatic partnerships, and the Eskimi DSP documents a Gadsme integration on a page updated in August 2025 with content from 2022 ^[118, 176] ♦.

Elsewhere the record stops at the vendor's side. The latest public list of Frameplay's DSP integrations found dates from December 2021, and this review found no DSP's own documentation of a current one in the sources screened by 29 September 2026 ^[177, 119] ♦. IION named DV360 and The Trade Desk in posts of February and March 2025, before the scoring period, and neither DSP's own documentation was found ^[178, 179] ♦. Advertly named PubMatic as its preferred PMP partner in December 2023, Kidoz offers PMP and programmatic guaranteed deals, and neither names a DSP in the sources screened ^[180, 181] ♦. COMBO! and Super League claim programmatic routes. At IAB PlayFronts in September 2026, Gameloft for brands' Jean-Baptiste Godinot weighed telling advertisers "you can buy me through DV360 or The Trade Desk", which names DSPs without documenting an integration, and no DSP's own documentation or deal type was found for either network ^[182, 183, 30, 145] ♦.

No cohort A network documents support for an agentic buying protocol, or any protocol state this paper records, in the sources screened by 29 September 2026 ^[9, 10, 11, 121] ♦. AgenticAdvertising.org's public registry of Ad Context Protocol (AdCP) agents listed 34 agents on 28 and 29 September 2026, none operated by Anzu, Frameplay, IION, Gadsme, Advertly, Gameloft, Super League, Kidoz, Admazing or AdInMo, and AdCP's schema can represent in-game products by channel but defers in-game creative formats ^[121, 184, 185] ♦. Exits, platform growth and the agentic question takes up what the protocols could carry.

Concentration without a denominator

No cohort A vendor publishes a market share with a stated denominator in the sources screened. Gameloft calls COMBO! "the largest premium in-game ad network", Frameplay's president called its exchange "by far, the biggest pool that you can access" at its launch in October 2024 while declining to share figures, and Anzu calls itself "the leading intrinsic in-game ad solution" ^[55, 74, 122] ♦. The operators that file public reports publish revenue, in different scopes. Advertly reported net sales of 12.9 million Swedish kronor for the second quarter of 2026, up 79% year on year ^[79] ♦. Super League reported media and advertising revenue of \$1.4 million for the same quarter ^[30] ♦. Kidoz Inc.'s \$18.4 million of 2025 revenue mixes programmatic, partner and direct brand sales, cost-per-install units and an all-ages division ^[65] ♦. Gadsme publishes no revenue, and Anzu discloses funding statements without a revenue series, in the sources screened ^[186, 164] ♦.

Without a denominator, shares and concentration stay unresolved under the rule for Q2. A ranking by declared supply would mislead, because one publisher can sit behind five networks ^[9, 10, 11, 12, 14]. The same gap leaves part (b) of H5 untested.

Platforms and publishers selling ads in their own games

Roblox, Microsoft, Electronic Arts and Zynga sell brand ads inside games they own or run. They sell mostly through their own teams, and their programmatic routes are documented mainly in announcements. None of them reports the revenue of its in-game brand product in the filings and releases this review screened.

IN SHORT

Roblox sells Immersive Ads and Rewarded Video; its programmatic routes appear only in announcements and marketing dated April 2024 to September 2026, and no demand-side platform (DSP) documenting a live integration was found in the sources screened ^[187, 188, 42, 189, 183] ♦. Its Advertising Standards bar personalised ads for users under 18 ^[20]. Two Roblox documents still disagreed on 29 September 2026 about when developers start paying Roblox a revenue share on brand integrations: 30 September 2026 or 1 January 2027 ^[57, 190]. XBOX Media Solutions sells formats in Candy Crush Saga and Microsoft Casual Games, and its gaming pages screened name no programmatic route for them ^[191, 192]. Electronic Arts (EA) launched EA Advertising on 15 June 2026, and by 15 September 2026 Digiday reported programmatic buying across EA's mobile games ^[25, 193]. Zynga Ads sells brand formats inside Zynga's own mobile games and announced a PubMatic partnership in July 2026 ^[194, 195, 196]. Among the cohort's parents only Take-Two reports advertising in its games as a separate revenue line, and that line covers every ad type; the disclosed revenue series differ in metric, currency, period and scope, so part (b) of the market-structure hypothesis cannot be tested ^[197, 198, 199, 200, 143, 128].

Owned inventory, and what sits beside it

Cohort B1 holds brand ad products sold on in-game inventory that the platform or publisher controls. It has 4 scored rows at the cutoff: Roblox's brand ads, XBOX Media Solutions' in-game ads, EA Advertising and Zynga Ads. Placements these companies sell outside the game are listed and not scored. They include Roblox's homepage takeover, Homepage and Search tiles and a Homepage Feature still labelled beta on 29 September 2026 ^[188, 201, 42, 43] ♦, and Microsoft's ad-supported cloud streaming test, begun for Xbox Insiders on 23 July 2026, which plays ads before sessions ^[202]. Zynga Ads+, a third-party network announced on 17 September 2026, is listed and not scored because no participating app was named and no product documentation was found ^[183, 203].

Roblox's product also reaches buyers through resellers: Venatus in the UK, France and Germany, Playwire in select Asia-Pacific markets, and SuperAwesome as exclusive partner for under-13 inventory ^[204, 205, 206] ♦. A resale route carries the same inventory, so this paper never adds its reach to Roblox's.

The capability matrix shows quotient bands only for a cohort with at least 6 band-eligible rows, and this cohort has 4. A band measures a row's distance from its own cohort's mean, and in a cohort this small each product is a large part of that mean, so one product's evidence moves the reference for the others. The chapter on the capability matrix and the Play Quotient therefore reports this cohort's quotients and coverage without bands, and nothing here compares these products with the networks in "Who sells inventory inside games".

On 29 September 2026 the Media Rating Council (MRC) showed no accreditation and no MRC-confirmed audit for any product scored in cohorts A and B1; the one gaming audit in MRC's process is Trivver's, a listed product ^[15, 16] ♦.

Roblox sells two formats through routes announced over two years

Roblox sells two in-experience formats that creators place as ad units and Roblox serves ^[197, 207]. Immersive Ads are video billboards of up to 30 seconds, static image ads and portal ads that teleport users into an advertiser's experience; Rewarded Video is a full-screen ad of 6 to 30 seconds shown only to users 13 and over ^[208, 207, 20] ♦. Roblox reported Rewarded Video in over 400 experiences on 6 January 2026 and over 1,200 games on 20 May 2026, said over 1,000 brands had run it, and warned that supply "will take some time to scale" ^[188, 209, 201]. Its Q1 2026 letter told creators running independent brand integrations to register campaigns in Roblox's Ads Manager and to move to native formats such as Rewarded Video and immersive billboards ^[210, 57] ♦.

The programmatic routes arrive as a sequence of announcements ^[187, 188, 189]. PubMatic said on 10 April 2024 that Roblox video inventory would "ultimately" reach its buyers through programmatic guaranteed deals, private marketplaces, auction packages and open exchange ^[189]. On 1 April 2025 Roblox announced Rewarded Video through Google Ad Manager and direct insertion orders "in the coming weeks", with Billboards and Google Authorized Buyers to follow ^[187]. On 6 January 2026 it announced expansion "this year" with the DSPs Amazon DSP and Liftoff and the supply-side platforms (SSPs) Index Exchange, Magnite and PubMatic; Magnite's post that day said its integration "will make" Rewarded Video available to its buyers ^[187, 188, 42, 189, 211] ♦. Roblox's brands page, read on 29 September 2026, calls "Magnite, Index Exchange, and Display & Video 360" major DSPs, although the January release classed two of them as SSPs, and limits programmatic targeting to 18-plus inventory ^[42]. AdExchanger reported that at the Interactive Advertising Bureau's (IAB) PlayFronts event on 17 September 2026 Roblox pointed to integrations with Display & Video 360 and other programmatic platforms ^[183]. This review found no Amazon DSP or Liftoff page about Roblox in the searches logged ^[212, 211, 189] ♦.

Roblox's rules bind its own ads and every other ad in its games

Roblox's Advertising Standards, last updated 5 June 2026, state that ads may not be personalised for users under 18, allow rewarded video only for users 13 and over, and ban rewards for under-13 ad engagement ^[20, 213, 214] ♦. The under-18 personalisation rule reaches most of the age-checked base (73%, derived): of users who had age-checked in the seven days to 30 June 2026, 35% were under 13 and 38% were 13 to 17, and Roblox warns that this group may not represent all users ^[43, 210, 197].

Roblox announced on 20 March 2026 that from 4 May 2026 age-appropriate formats, billboards included, could reach users under 13 ^[215]. Its frequently asked questions say those ads "will be contextual and sold directly via Roblox or creators" and will not run through programmatic partners such as Google ^[215, 216] ♦. Roblox's brand-safety page still said on 29 September 2026 that users under 13 cannot see ads ^[217].

Under Roblox's managed-campaign terms, effective 30 April 2026, Roblox's reporting is the sole and controlling measurement, advertisers get aggregate reporting only, and an advertiser can dispute invalid-traffic counts, through the invoice dispute process, only when its approved verifier finds a gap above 10% ^[1] ♦.

Ads that developers place outside Roblox's own products fall under the Advertising Integrations Terms, effective 1 May 2026 ^[57]. They require Roblox's prior approval of every asset, bar programmatic calls to third-party advertising and measurement services, and bar sharing personally identifiable engagement data with advertisers ^[57] ♦. Roblox's 20 March 2026 announcement also says third parties may not run software development kits (SDKs) that serve, target or measure ads ^[57, 215]. The Terms keep a registered, Roblox-approved integrations programme for work that does not replace Roblox's formats, so the Q1 letter describes a channelling rule rather than a ban ^[210, 57].

Roblox's own documents conflict on the developer revenue share ^[57, 190]. The Terms, created 27 March 2026 and last edited 30 April 2026, say it begins on 30 September 2026, charged per thousand visits while an integration is present, at unstated pricing ^[57]. The Creator Hub page, live on 29 September 2026, applies it to campaigns starting on or after 1 January 2027, at \$1.50 per 1,000 qualified visits in the US for the first 28 days and \$0.10 afterwards, with a \$400,000 cap per 2027 campaign ^[57, 190, 215, 218] ♦. In Roblox's public documentation repository the 2027 date first appears in a commit of 17 June 2026, though a Roblox forum post of 20 March 2026 and a Reuters report of 27 March 2026 had already placed the start in 2027 ^[190, 219, 215, 218] ♦. The two documents still conflicted on 29 September 2026, one day before the Terms' date ^[57, 190]. This paper records both with their access dates and treats neither as settled.

H4, the paper's hypothesis on children's and platform rules, is supported, because for at least five products or platforms, against a registered threshold of three, a primary rule document restricts targeting, personalisation, third-party calls or measurement: Roblox's rules on personalisation, third-party calls and measurement on its platform, Microsoft's Privacy Statement ruling out personalised ads for Microsoft accounts of users under 18, and rules from Discord, Epic for Fortnite and Google Play ^[20, 213, 57, 21, 22, 220, 221] ♦. The Federal Trade Commission's amended COPPA Rule, made under the Children's Online Privacy Protection Act, adds separate parental consent for advertising disclosures in child-directed games ^[23]. The registered rule names Roblox's two revenue-share dates as an example of an

unresolved condition; on this review's reading, that conflict concerns developer fees rather than any restriction counted, so it does not block the verdict ^[57, 190]. The chapter on suitability, user-generated worlds and children's rules covers the law.

XBOX Media Solutions sells Microsoft's casual games

XBOX Media Solutions sells formats inside Microsoft-owned casual games; the pages screened name no programmatic route for them and do not establish any console placement inside gameplay ^[191, 192, 24].

It is the former Activision Blizzard Media, renamed in an announcement of 4 February 2026 that describes it as part of Microsoft Advertising ^[222, 223]. Its pages document in-game Rewarded Video, In-Game Interactive Video, Playables and custom integrations: "Candy'fied Sponsored Moments" in Candy Crush Saga, a Solitaire Event Takeover in Microsoft Casual Games on PC and mobile, and console "XBOX Experiences" described as native display formats and branded content ^[191, 224, 24]. The pages call these integrations "100% owned and operated" and do not say which console placements, if any, render inside gameplay ^[191, 224, 24] ♦.

On 12 May 2026 Microsoft announced Rewarded Portals, a Candy Crush Saga format on the level screen, as "currently available in closed beta across select markets" ^[225, 226]. Candy Crush Saga is the one title named in dated campaigns inside the scoring period (Hershey's, holiday 2025; KitKat, published 18 August 2026); Solitaire appears only on an undated page, and no console title is named ^[226, 227, 24, 228] ♦.

The four gaming pages opened on 28 September 2026 name no DSP, private marketplace, deal type or other programmatic route for the in-game formats ^[192, 191] ♦. They route buyers to account managers and a contact form ^[191, 225]. King's inventory is also authorised to or sold through other routes, including Gameloft's COMBO!, Anzu and Gadsme reseller paths, Meta Audience Network (facebook.com DIRECT lines in King's file; Meta's story cites Q4 2020 data) and Microsoft Advertising's own gaming deals, described on 26 September 2024 with their status in the scoring period not established; this paper never adds reach across those routes ^[53, 229, 230] ♦.

The unit's general manager, describes Xbox's approach as "the idea of game-adjacent rather than in-game", and no Microsoft document screened by 29 September 2026 confirms a live in-gameplay console product ^[231, 232, 233] ♦. The chapter on console, PC and cloud explains why the console hypothesis, H3, stays unresolved.

Microsoft's Privacy Statement (September 2026) says Microsoft does not deliver personalised advertising to children whose account birthdate shows them to be under 18 ^[21], while King's privacy policy (26 February 2026) says King does not knowingly target interest-based advertising to anyone under 13 ^[234]. No document read states which rule governs XBOX Media Solutions inventory in King titles ^[21, 228, 234] ♦.

EA Advertising launched in June 2026, weeks before EA went private

EA Advertising sells units inside EA SPORTS gameplay; it was sold direct at launch, and mobile programmatic buying was reported by September 2026 ^[25, 193].

Electronic Arts launched it on 15 June 2026, saying advertisers "can now" reach players through native ad units (digital ad boards, scoreboards and brand broadcast overlays) served dynamically in select, unnamed EA SPORTS games from its own ad server and SDK built for the Frostbite engine ^[25] ♦. Digiday reported on 3 July 2026 that the ad server was live on a handful of titles ^[25, 86]. Comcast dated dynamic LED ad-boards in EA SPORTS FC 26 Ultimate Team matches in the US on 17 November 2025; no source screened states which platforms carry them ^[235, 236, 25, 237]. Madden NFL 26, dated only by a fan database, and College Football 26, whose integrations went live in July 2025, before the scoring period, bring the EA console titles with documented brand placements to three ^[25, 235, 238, 239] ♦. EA documents none of the three as an ad placement buyable in the US, so at most three qualify under H3, and any count from this screen is a floor for the market, because other publishers' console titles were not screened ^[25].

At launch EA sold console integrations and ad units directly and bespoke, with "expanded buying capabilities" planned ^[25]. On 3 July 2026 its advertising vice president said EA was not yet working with programmatic partners such as The Trade Desk or Criteo ^[25, 86] ♦. By 15 September 2026 Digiday reported that EA already offered programmatic buying across its mobile games and was extending more dynamic capabilities to console and PC titles; no DSP or deal type is named ^[86, 193]. EA's app-ads.txt, the file in which an app declares who may sell its inventory, names Anzu as manager domain and authorises Anzu as a direct seller under IDs that Anzu's sellers.json assigns to Electronic Arts and Playdemic; its one IION DIRECT line uses ID 10329, which IION's sellers.json assigns to another publisher, Big Cake ^[240, 9, 11, 25] ♦.

Electronic Arts has been privately owned by PIF (Saudi Arabia's Public Investment Fund), Silver Lake and Affinity Partners since the acquisition closed (Form 8-K and Form 25-NSE filed 4 August 2026) ^[241]. A Form 15-12G filed on 14 August 2026 gives notice of the termination of its registration with the Securities and Exchange Commission (SEC) and of the suspension of its duty to file reports, so filings will no longer provide new EA facts ^[241] ♦.

Zynga Ads sells Zynga's own mobile games

Zynga Ads sells brand formats and integrations inside Zynga's mobile games, and Take-Two, which owns Zynga, is the only parent in the cohort that reports advertising in its games as a separate revenue line ^[194, 242, 200, 197, 198, 243] ♦.

In-period activations name titles: Survivor's 50th season across five Zynga games in March 2026, with commercial terms not stated, and the Hyundai NEXT Cup Tour in Top Eleven in June 2026 ^[194, 242, 200]. Zynga Ads names seven brand offers, from non-skip video to sponsorships, and claims 85 to 95% video completion and 96% viewability, but its readable pages publish no specifications or counting approach ^[244, 245] ♦.

Zynga has a programmatic sales team ^[195]. In July 2026 it announced a partnership with PubMatic under which Zynga will integrate PubMatic's OpenWrap SDK and advertisers will be able to buy Zynga inventory through PubMatic's Activate and AgenticOS ^[196]. No DSP, deal type or protocol state is named ^[195, 196] ♦. Zynga's app-ads.txt, last modified 23 September 2026, also authorises Gadsme, Anzu, Gameloft, IION and PubMatic as direct sellers, and reach is never summed across these paths ^[139, 77, 14, 200].

Disclosed revenue series do not compare

The series that are disclosed differ in metric, currency, period and scope ^[200, 198, 197, 243, 143, 128, 65].

COMPANY	WHAT IS DISCLOSED	LATEST FIGURE	PERIOD	LIMIT
Roblox	Advertising and licensing revenue called "insignificant"	none	Fiscal 2025 and second quarter of 2026	No figure ^[197, 246]
Microsoft	XBOX revenue, advertising included	\$21,790 million	Year to 30 June 2026	Includes hardware, content, subscriptions, cloud ^[198]
Electronic Arts	Advertising inside live services and other net revenue	none	Fiscal 2026	No figure; no further filings ^[243, 241]
Take-Two	Advertising net revenue, primarily mobile	\$494.3 million	Year to 31 March 2026	All ad types and offers ^[200]
Amazon	Advertising services, company-wide	\$68,635 million	2025	Twitch not broken out ^[199]
Advertly	Net sales	SEK 33.7 million	2025	In Swedish kronor (SEK) ^[143]
Super League	Media and advertising revenue	\$5.6 million	Fiscal 2025	Includes influencer work ^[128]
Kidoz	Revenue	\$18.4 million	2025	Mixes performance units and the all-ages Prado division ^[65] ♦

Roblox's 10-K for fiscal 2025 (filed 11 February 2026) and its 10-Q for the second quarter of 2026 (filed 30 July 2026) describe revenue from advertising and licensing as "insignificant" and report no advertising line ^[197, 246] ♦. In its Q4 2025 letter Roblox called advertising revenue "modest" and said its nearly \$7 billion of 2025 bookings came "without significant reliance on advertising" ^[201].

Microsoft's XBOX revenue was \$21,790 million for the year to 30 June 2026, against \$23,455 million the year before, in a line that combines advertising with hardware, content, Game Pass and cloud gaming ^[198] ♦. Its new reporting for fiscal 2027 leaves XBOX unchanged, so gaming advertising stays inside XBOX content and services ^[247]. EA's fiscal 2026 10-K folds advertising into live services and other net revenue ^[243].

Take-Two reports Advertising net revenue of \$494.3 million for the year to 31 March 2026, \$466.1 million for fiscal 2025 and \$656.1 million for fiscal 2024, or 7.4%, 8.3% and 12.3% of total net revenue (derived); its 10-K places this advertising primarily in mobile titles and includes offers and sponsorships ^[200] ♦. Take-Two contracts with ad networks, agencies,

brokers and directly with advertisers, so the line cannot isolate Zynga Ads' brand sales [194, 242, 200].

Part (b) of H5, the market-structure hypothesis, asks whether platform ad revenue grew faster than specialist revenue over the same periods. It cannot be tested: Roblox gives no figure, Microsoft reports gaming advertising only inside a broader gaming line, Amazon reports only company-wide advertising services, and the disclosed series (Take-Two in dollars for years to March, Adverty net sales in kronor, Super League including influencer work) differ in metric, currency, period and scope [197, 198, 199, 200, 143, 128] ♦. Part (a) meets its threshold: primary records show three specialist companies sold or put into insolvency since 2021 (Bloxbiz, Bidstack and Let's Bounce), and none of the records attributes an exit to the in-game format [29, 31, 32, 30] ♦. H5 is unresolved; chapter 10 classifies each event.

Around the game: game-adjacent media

Brands buy the media around games through a few routes: Amazon for Twitch, a sales team for Discord, and direct, private or outsourced programmatic deals for companion apps, gaming sites and esports channels. The accreditor's list names none of the products scored here. Every audience figure is the seller's own, counted its own way.

IN SHORT

Twitch is sold by Amazon, self-service through Amazon's demand-side platform (DSP) or as a managed service ^[2] ♦. During the scoring period Discord sold Quests only through its sales team, and on 29 September 2026 it announced an auction-based Ads Manager in managed access ^[48, 248]. Overwolf's companion-app ads, gaming sites and esports channels sell direct, through private marketplaces and through outsourced intermediaries ^[44, 249, 250, 251]. The Media Rating Council (MRC) accredits Amazon DSP for supply sources that do not include Twitch, and its list names no product scored in this cohort ^[15] ♦ ♦ ♦ ♦. Audience claims run from Medal's 10 million monthly users to IGN's more than 440 million, on different metrics, and cannot be added ^[252, 253]. YouTube is listed only: the one named gaming product found in Google's own sources, a Shorts lineup announced in April 2024, could not be confirmed live ^[254, 255] ♦.

Where the ad renders sets the cohort

This paper puts a product in cohort B2 when the ad renders in media around a game: a stream, a community app, a companion app, a clip site, a gaming website or an esports channel. Event sponsorship on its own is described and never scored. Placement and objective are separate fields (What counts as gaming advertising), so a game publisher buying play counts as paid discovery wherever the ad appears. The capability matrix and the Play Quotient scores 10 products here: Twitch, Discord Quests, Overwolf, IGN, Venatus, Playwire, Enthusiast Gaming, ESL FACEIT Group, LIVAD and Medal.

YouTube is listed only. The one named gaming-specific YouTube buying product found in Google's own sources is a gaming lineup of YouTube Select Shorts, announced on 17 April 2024 for six markets including the US, and its status at the cutoff could not be established ^[254, 255] ♦.

The author's GAP model splits the category into in the game, around the game and away from the game. Venatus sells in those three categories, but it puts in-game audio under the first and embeds Twitch streams in website takeovers, so its categories, by inference,

overlap this paper's ^[83, 256, 84] ♦. No source screened by 28 September 2026 sizes the three as mutually exclusive, reconcilable categories, so GAP totals stay unresolved ^[37, 4, 38] ♦.

Streams: Twitch through Amazon, overlays through LIVAD

Twitch media is bought from Amazon. Amazon Ads sells video and display on Twitch's homepage, discovery pages and streamer channels, self-service through Amazon DSP or managed with an unpublished minimum spend, and sells creator activations through account executives ^[2] ♦. Twitch's Terms of Service give Twitch the exclusive right to sell and serve ads on Twitch and bar third-party ad networks ^[257]. Amazon DSP is the only demand-side platform named in the documents opened: display as open auction from 14 December 2022 in the US, and video through premium preferred deals, generally available to self-service buyers from 25 October 2023 ^[258, 259]. Amazon's streaming TV ads, which Amazon says can appear on Twitch, are a further route open to US brands ^[260] ♦.

Creator routes are sold separately: Bounty Board sponsorships, Channel Takeovers with streamer-read ads, and a Brand Partnership Studio ^[261, 262, 2] ♦. One Twitch product renders inside games: Streamables plays an opt-in, non-skippable 30-second livestream in "Twitch Partnered" mobile games, none of them named ^[263] ♦. Premium Video also runs on consoles, where it is not clickable ^[47]. By inference, it plays in the Twitch app outside gameplay, which makes it adjacent media on a console device that Console, PC and cloud weighs under H3, the paper's console hypothesis ^[47, 264] ♦.

Twitch documents advertiser suitability controls in operational detail. Since 20 June 2023 streamers must apply Content Classification Labels (six at launch, seven in Twitch's current help article and API reference), and a Mature-rated game label is added automatically to streams of games the Entertainment Software Rating Board (ESRB) rates M ^[265, 266, 267, 268] ♦. Amazon's guide of 22 February 2026 says the labels inform Twitch's suitability tools, among them three inventory tiers (Expanded, Standard, Restrictive) and Contextual Collections that target or exclude content such as Family Friendly games, and that new creators cannot carry ads ^[266] ♦. A launch note of 6 November 2023 named the tiers Expanded, Moderate (Default) and Restrictive; neither document says what each tier excludes ^[269, 266] ♦.

LIVAD sells brand overlays inside creators' live streams, with gaming as its documented focus and no published split of its streams by category ^[270, 271, 272]. Trade reporting of 18 September 2026 describes overlays and sidebars as its core business, but no named campaign inside the scoring period was found ^[273, 274, 272] ♦. Its streamer contract defines a view as the count of viewers during each branded overlay session, billed per view or per thousand ^[275] ♦. Its ads.txt (a site's public list of authorised sellers) names Adform, Improve Digital and the in-game network Anzu, and Adform's and Anzu's sellers.json files (intermediaries' public lists of their sellers) list LIVAD, while Improve Digital's does not; no buyer-side route is documented ^[276, 277, 9, 278] ♦. Its contracting company is in Istanbul, and no US campaign, sales contact or buyer terms were found ^[279, 275] ♦.

Communities and clips: Discord Quests and Medal

Discord sold Quests, rewarded ad units inside the Discord client, only through its sales team during the scoring period, and its advertiser pages still said so on 30 September 2026 ^[48] ♦. On 29 September 2026 it announced Discord Ads Manager, its own auction-based campaign tool with objective-based bidding, available with managed access to a select group of advertisers and planned as fully self-serve in early 2027, with a new mobile-first Video Quests format sold through it; the earlier Video Quests became Video Quests Reserve, a reservation-based offering ^[248]. Buyers sign an insertion order under the Interactive Advertising Bureau (IAB) Standard Terms, as amended by Discord's addendum, updated 12 May 2026 ^[280]. The addendum treats Quests as flat-fee deliverables with no third-party ad server, gives Discord "ultimate authority and control" over the placement and frequency of Quest prompts, and makes impression and reach numbers non-binding estimates ^[280] ♦.

The formats move faster than the advertiser pages, which listed two on 29 September 2026: Play Quests and Video Quests ^[62]. Discord's releases added Video Quests on Mobile and an Arena Quests alpha (2 October 2025), announced Instant Play Quests as forthcoming (9 March 2026), announced Mission Quests on 22 July 2026 after a beta running by December 2025, and announced Play Quest+ on 20 August 2026, with a first campaign for Electronic Arts' Battlefield 6 planned for September 2026 ^[62, 281, 282, 283, 284] ♦. No later Discord source found states the Arena Quests alpha's status ^[281].

Quests mix objectives. Of the 21 success stories on Discord's ads page on 29 September 2026, 14 are games, several reporting acquisition or sales outcomes; 4 are film or TV releases; and 3 are non-entertainment consumer brands (Mountain Dew, Wendy's, Walmart), two of them tied to entertainment properties (World of Warcraft; Netflix's Wednesday) ^[62, 48, 63] ♦. Play Quests are completed by playing the advertised game for a set time or by a linked in-game action ^[285, 62]. Bought by a game publisher, a Play Quest sits close to paid discovery. This review keeps Quests as one brand row with the mix recorded, since no split by objective is public ^[62, 63].

Targeting is audience-based: countries, interests, games already played and broad age ranges from self-declared age, with no buyer-selectable contextual signal documented ^[62, 286, 22, 287] ♦. Age rules restrict the product itself. Users aged 13 to 17 can complete at most three Quests in 24 hours, and Discord says it uses age-assurance signals only to keep adult ads away from teens and does not use them to target ads ^[285, 22] ♦. Its Ads Policy bars ads intended solely for children under 13, its minimum age ^[288]. On 22 September 2026 Discord began placing accounts worldwide into adult (18+) and teen (13 to 17) age groups; the post, as read, says nothing about ads ^[289] ♦. These rules are among those that support H4, as Suitability, user-generated worlds and children's rules sets out ^[22] ♦.

Medal, a gameplay-clip app and website, entered the register after the second AI-model review. On 29 September 2026 it sold IAB-standard units, a homepage roadblock, sponsored stories, branded watermarks and clip contests in its own app and site, and its ads.txt listed Google, OpenX, Magnite and PubMatic as direct sellers ^[252, 290]. Its one case study is undated and reports game-promotion outcomes, and Medal Quests are partnerships with game developers, so the Quests are listed as paid discovery ^[252, 58] ♦. The ad units themselves are scored in cohort B2 ^[252] ♦.

Companion apps: Overwolf

Overwolf's app ads render inside third-party desktop companion apps that run over the game ^[44]. Overwolf says they appear within the app's boundaries, during downtime or when the player opens the app, with placement set by the app developer, and it describes them as served in-game on the game screen ^[44, 291] ♦. This review keeps the product in cohort B2 as a recorded judgment. By inference, Overwolf's software development kit draws the ad inside the companion app's window, so the ad is rendered by the companion app, not by the game ^[44, 45, 46] ♦. Its custom activations in Minecraft and Fortnite maps are listed separately ^[292].

Overwolf also sells ads on more than 500 gaming websites through Nitro, formerly NitroPay, whose acquisition it announced on 8 May 2024 ^[293] ♦. Buyers deal direct or through a Deal ID or private marketplace (PMP) ^[44]. Its FAQ names The Trade Desk and other DSPs within a list of mostly supply-side platforms, and no confirmation from the DSPs themselves was found ^[44, 294, 46] ♦.

Gaming sites: IGN, Venatus, Playwire and Enthusiast Gaming

Gaming sites sell through direct teams, private marketplaces and outsourced monetisation firms. IGN advertising is sold by IGN Entertainment, Inc., a Ziff Davis subsidiary, through sales teams in the US, UK and Australia ^[295, 253, 296, 297] ♦. It publishes specifications for 24 ad units across eight named sites but no counting approach for impressions or views ^[297, 298] ♦. IGN documents measurement only as support for the buyer's own vendors. It supports monitoring tags but no blocking tags, because gaming content is often falsely flagged as unsafe ^[299, 298] ♦. Its IMAGINE audience platform, announced on 24 September 2025, sat behind a sign-in on 29 September 2026, so its general availability at the cutoff is unconfirmed ^[300, 301] ♦.

Venatus changed owner in the scoring period. On 19 June 2026 Media Scale Capital Limited, a UK holding company incorporated that month and controlled by the Dutch company To Media Groep, took control of Venatus's holding chain, and the private equity fund Livingbridge 7 Global LP ceased to control it the same day ^[302, 303, 304, 305] ♦. Venatus sells takeovers, video and banners on a publisher network it says reaches 400 million or more monthly active users ^[84, 256] ♦. Buyers use a curated PMP or direct sales with guaranteed impressions, and no Venatus page opened names a DSP ^[249, 306] ♦. Its claim of exclusive inventory on OP.GG does not hold globally or in the US: OP.GG's ads.txt of 28 September 2026 authorises Nitro and Overwolf as direct sellers and names Venatus as manager only for the UK, France, Germany, Australia and New Zealand ^[84, 307, 308, 309] ♦.

Playwire, a publisher monetisation company, sells an advertiser-facing product, "Access 74M passionate gamers across 200+ premium communities", bought on insertion orders under terms of 21 November 2025 ^[310, 311, 312] ♦. Its 74M+ figure, labelled both "Monthly Active Gamers" and "total US gaming reach", has no measurement provider or dated period ^[313] ♦. Its PC in-game video and Minecraft video are listed, because its pages do not say where either ad renders ^[314, 313] ♦. Playwire places the Minecraft video on third-party multiplayer servers whose core audience it describes as aged 13 to 15 ^[315, 316] ♦.

Enthusiast Gaming sold its direct sales business to Vertiqal Studios for C\$900,000 in cash plus assumed liabilities, closing on 30 August 2025, and kept U.GG, Icy Veins, The Sims Resource, PocketGamer and other sites ^[317] ♦. Its filings say the retained inventory is sold programmatically and only "to a much lesser extent" through direct sales ^[318, 250] ♦. They name Playwire as its partner, yet on 29 September 2026 the ads.txt files of all five retained sites checked were hosted by Freestar, with Freestar as manager ^[250, 319, 320] ♦. No measurement function or independent verification was documented for the retained inventory in the sources screened ^[15, 250] ♦. A sale does not show that a format failed; Exits, platform growth and the agentic question covers the category's exits.

Esports media: ESL FACEIT Group

ESL FACEIT Group (EFG) sells media on its esports broadcasts and channels. Savvy Gaming Group, wholly owned by Saudi Arabia's Public Investment Fund, bought ESL and FACEIT and merged them in a deal announced on 24 January 2022, and the ESL sale closed on 21 April 2022 ^[321, 322] ♦. EFG's Ad Solutions page, published on 28 July 2026, sells premium media on live and on-demand broadcasts and its own channels, alongside custom integrations such as Fortnite worlds; only the premium media line is the cohort B2 product ^[323] ♦. The page names no DSP or deal type, but EFG's web inventory is offered programmatically through Publift for faceit.com and through Nitro for mobalytics.gg ^[251, 324, 325, 326] ♦. Esports Insider reported on 17 March 2025 that EFG had acquired the analytics platform Mobalytics ^[327] ♦. Much of the audience sits on other platforms: in December 2025 EFG listed 374 Twitch channels and 277 YouTube channels ^[328] ♦. A FACEIT mission privacy notice, updated 22 July 2026, says it does not provide personalised ads to players under 18 ^[329, 330] ♦. EFG's case studies report delivery metrics only, and no US sales contact or buyer terms were found ^[323, 331] ♦ ♦.

What is measured, and by whom

MRC's accredited list, read on 29 September 2026, names no product scored in this cohort ^[15]. Its Amazon DSP entry covers Retail and IMDb, Amazon Publisher Services, Fire TV, third-party exchanges and Alexa connected devices, and no entry names Twitch, Discord, Overwolf, Playwire, Venatus, Enthusiast Gaming or ESL FACEIT Group ^[15] ♦. MRC's letter of 7 November 2025 accrediting the Amazon DSP integration of Integral Ad Science (IAS) says "FireTV and Twitch supply sources are excluded" ^[332] ♦. Searches of MRC's list and of the Trustworthy Accountability Group (TAG) registry found no record for LIVAD, IGN or Medal ^[15, 333, 334] ♦ ♦ ♦.

MRC's accreditations for Google's video tools and for YouTube data are wider and have no gaming scope. They cover Google Ads video impressions and TrueView views, including on connected TV; video viewability on desktop, mobile web and mobile app only; YouTube Brand Safety; and DoubleVerify, IAS and Zefr reporting of YouTube data ^[15]. No entry is gaming-specific ^[15] ♦.

Third-party verification rests on announcements. DoubleVerify (31 October 2023) and IAS (29 May 2024) each announced server-to-server measurement of viewability and invalid traffic on Twitch ^[335, 336] ♦. TAG records Twitch as Brand Safety Certified for its global operations and Venatus for its UK operations only ^[337, 338] ♦. Overwolf's FAQ still lists

MOAT among its monitoring tools, although Oracle's end-of-life FAQ set 30 September 2024 as Moat's end date [44, 339] ♦. Discord uses no third-party ad server for Quests, which leaves no documented route for verification tags; it measures through Kantar brand lift, AppsFlyer and a Gamesight integration in beta [280, 340, 281] ♦ ♦.

Measurement finds H2 supported for cohorts A and B1: no accredited intrinsic in-game metric, and verification resting mostly on partnership announcements dated 2022 to 2025. H2's rule does not cover this cohort; by inference, the game-adjacent record shows the same pattern. Outcome figures here also come from sellers, such as Discord's Kantar study for DOOM: The Dark Ages, whose headline tiles cite "Discord Internal Data, 2025" [341] ♦. What the outcome evidence shows weighs such results; attention claims belong to the companion attention paper.

Audience figures do not add up

Every audience figure in this cohort is the seller's own, and each counts something different.

SELLER	FIGURE	WHAT IT COUNTS
IGN	more than 440 million	monthly users of 15 properties, worldwide (Ziff Davis 10-K); no period or US split [253]
Venatus	400 million or more	monthly active users across its publisher network; undated [84]
ESL FACEIT Group	287 million	social fan reach, labelled 2025 [342]
Discord	200 million or more; 90 million or more	monthly active users (2025 releases); daily active users (fourth quarter of 2025); global [281, 48]
Overwolf	113 million and 100 million	monthly active gamers, both shown; no period or deduplication [343, 291]
Twitch	105 million	average monthly site visitors, global, 2023 [2]
Enthusiast Gaming	89 million	unique visitors in the quarter ("gamers served"), second quarter of 2026 [318, 344]
Playwire	74 million or more	"monthly active gamers", also called "total US gaming reach"; no provider or period [313]
Medal	10 million	monthly active users, 45% in the US; listed under "In the past 12 months" on an undated page; base unstated [252]
LIVAD	none	"thousands" of creators; no figure with a metric and period [345, 346]

These figures cannot be summed. They count site visitors, quarterly unique visitors, daily users and social reach, several have no period, and none is stated as an ad-eligible audience [281, 2, 344, 342] ♦. The supply overlaps as well. Playwire's sellers.json lists 22 Enthusiast Gaming entries, 34 Overwolf entries and OP.GG, and shares roughly 66 to 67 root domains with Venatus's file and 82 to 84 with Nitro's [309, 311, 308, 326] ♦. IGN sells pre-roll on its YouTube channels, and EFG's reach sits partly on Twitch and YouTube [298, 328] ♦. Without a deduplicated measurement, audience overlap across these properties stays unresolved.

Measurement: standards, verification and accreditation

Intrinsic in-game advertising has a finished measurement standard and no product accredited against it. The Media Rating Council's (MRC's) own record, read on 29 September 2026, shows no accredited intrinsic in-game metric and no MRC-confirmed audit for any in-game product this paper scores. Interstitial, banner and video ads in game apps fall under the general mobile in-app standards, where DoubleVerify and IAS hold accreditations that name no game. What buyers can measure is documented mostly by sellers; who checked it is documented mostly in partnership announcements.

IN SHORT

The Intrinsic In-Game (IIG) Measurement Guidelines 2.0 are a final joint release of the Interactive Advertising Bureau (IAB), IAB Tech Lab and MRC, dated August 2022, and set counting and viewability rules for ad-served intrinsic placements only ^[17, 52]. The IAB Gaming Measurement Framework of 26 June 2025, issued by the IAB alone, is a menu of metrics without thresholds ^[347, 348]. On 29 September 2026 MRC's accredited digital list had no gaming environment, and the one gaming audit in MRC's process was Trivver's, a product this review lists but does not score ^[15, 16]. MRC removed Integral Ad Science's (IAS's) in-game service from its process in January 2026 after IAS withdrew ^[349]. DoubleVerify's and IAS's current MRC letters name no gaming or console environment ^[18, 19]. Third-party verification rests on announcements dated 2022 to 2025, and several sellers' certification claims are missing from the certifiers' own lists ^[350, 351, 333, 352]. The paper's hypothesis H2, that verification and accreditation of in-game products are thin, is supported.

Two documents with different jobs

The IIG Guidelines 2.0 are a joint release of the IAB, IAB Tech Lab and MRC, the US body that accredits measurement services ^[17, 15]. The first version appeared in September 2009 ^[17]. Version 2.0 opened for public comment on 14 June 2022, closed on 15 July 2022 and was released in August 2022; MRC's standards list, read on 28 September 2026, still shows August 2022 as the last update ^[17, 50, 51, 52] ♦.

The guidelines cover impression, viewable-impression and audience measurement of in-game placements served by an ad server with an ad session, on desktop, mobile and console, including augmented and virtual reality headsets ^[17]. Hard-coded branded elements sit outside direct scope because they generally lack an ad session ^[17]. Interstitials,

web banners and in-stream or outstream video fall under the general IAB and MRC guidelines, and interaction, engagement and outcomes are not covered ^[17] ♦. A claim of IIG compliance therefore speaks mainly to ad-served intrinsic placements; for the excluded formats the guidelines say only that their in-game guidance should also be considered ^[17].

WHAT THE IIG GUIDELINES COUNT

An impression counts on the client once the ad has loaded and begun to render ^[17]. Nothing need be visible, and server-side count-on-decision is not acceptable ^[17]. A viewable impression needs at least 50% of the creative in view for one continuous second (two for video) and a visible ad area of at least 1.5% of the screen ^[17]. The 55-degree angle limit on any one axis is a recommendation, and measurers may use other thresholds they can support empirically ^[17]. Occluded impressions are reported separately, polling runs every 200 milliseconds unless a measurer validates and discloses a less frequent interval, and the power state of the TV or monitor must be measured and considered ^[17] ♦. Reporting is split by platform and by format ^[17].

The guidelines strongly encourage independent audits of in-game ad serving but do not require them ^[17]. They do require measurers to vet and periodically review software development kit (SDK) and application programming interface (API) inputs to measurement ^[17] ♦. On this review's reading, a seller can claim compliance without breaching the guidelines and without anyone having checked ^[17, 353].

The IAB Gaming Measurement Framework does another job ^[347]. The IAB released it alone on 26 June 2025, with no version number, and the ungated text of its guideline page does not mention MRC, accreditation or audit ^[348, 354]. It lists gaming ad formats by media type (display, video, audio, custom) and sets baseline and additional metrics for each; viewability is a baseline metric, with no counting thresholds ^[347] ♦. Its display matrices refer the intrinsic column to the IIG guidelines, and its closing page calls them "the primary guideline for gaming platforms and providers", although the guidelines' own scope stops at ad-served intrinsic placements ^[347, 17]. It says its general metrics, invalid traffic among them, are not always readily available on PC and console ^[347].

What buyers can measure

Sellers document their own counting ^[355, 59]. Frameplay aggregates player view metrics for up to 60 seconds per displayed ad into one impression, weighted by time on screen, screen share, orientation, skew and obstruction ^[355]. Its 2022 release says viewability follows Frameplay's own proprietary requirements, and no source opened states alignment with the IIG guidelines ^[355, 356, 357] ♦. Gadsme's terms count a display impression when the ad is displayed and visible and a video impression at video start ^[59, 95]. For publisher-sold campaigns on its supply-side platform (SSP), display impressions are counted by "the proprietary viewability method designed by Gadsme" ^[59].

Anzu's developer guide of 4 December 2024 lists the IAB and MRC viewability thresholds and defines "Billable Impressions" as views that meet all visibility criteria ^[358]. Its measurement guide of 22 August 2024, under a heading about separating impressions from

viewable impressions, misstates the standard: it says an ad must be viewed for at least one second at under 55 degrees "to be considered an impression" and that "having the ad load no longer counts" ^[359, 17] ♦. Counting only viewable impressions may be Anzu's own stricter policy; the guide presents it as the rule ^[359].

Roblox's image-ad impression uses the same headline numbers as the IIG criteria for a viewable display impression: 50% of pixels, 1 second, 1.5% of the viewport and an angle of up to 55 degrees ^[208, 17]. Its wording does not say the second is continuous, that the 1.5% refers to the visible part of the ad, or how repeat exposures in a session are counted, so equivalence is unverified ^[208, 17]. Its autoplay video impression, at 0.5 seconds, is shorter than the guidelines' two continuous seconds ^[208, 17] ♦. Roblox applies these definitions to its Ads Manager (beta) reports and does not claim alignment with the guidelines ^[208].

IION lists attention metrics from Amplified Intelligence, brand-lift surveys and viewability guarantees of 90% for display and interstitials and 95% for rewarded video, figures its page calls illustrative, and it documents no counting aligned to the IIG guidelines ^[127, 360].

Adverty added Open Measurement SDK (OM SDK) viewability reporting on Android on 31 March 2026 and on iOS on 19 June 2026 ^[80]. Electronic Arts (EA) says its impression measurement is "aligned to IAB standards" without naming the standard ^[25, 237]. Super League's 10-K lists brand lift studies and measurement and reporting, with no viewability, attention or reach function and no method ^[128, 30]. XBOX Media Solutions names eight measurement partners without saying what each measures, and footnotes its headline 98% viewability and 96% completion figures to Moat mobile in-app benchmarks from Q1 2023 ^[361, 362, 224] ♦.

Contracts decide whose numbers settle the invoice. Roblox's managed-campaign terms, effective 30 April 2026, make its own reporting "the controlling measurement for all campaigns" and give advertisers aggregate reporting only ^[1]. An advertiser may raise an invalid-traffic discrepancy through the invoice dispute process when its approved third-party verifier finds one exceeding 10% ^[1] ♦. Anzu's advertiser terms make its reports conclusive unless the advertiser's weekly independent reports differ by more than 5%, in which case an Anzu-approved third-party vendor settles the amount ^[363].

Oracle's end-of-life FAQ of 12 August 2024 set 30 September 2024 as the end date for all its advertising products, Moat Analytics and Moat Reach included ^[339]. On 28 September 2026 Anzu's media-value page still listed MOAT among its measurement partners ^[364, 339] ♦. Overwolf's advertising FAQ and Playwire's advertiser terms also still name MOAT ^[44, 312].

Who checked it: MRC accreditation

MRC's record shows no accredited intrinsic in-game metric ^[15]. Its Accredited Services: Digital list uses four environment codes (desktop, mobile web, mobile in-app, connected TV) and has no gaming, in-game or console entry ^[15] ♦. On 29 September 2026 MRC's records showed no accreditation and no MRC-confirmed audit for any of the 9 cohort A and 4 cohort B1 products scored in this paper ^[15, 16] ♦.

The one gaming entry in MRC's process is Trivver: pre-audit reviewed July 2022, audit in process as of April 2026, for impressions, "T-Views" and product actions across desktop, mobile web, mobile in-app and gaming consoles ^[16] ♦. MRC's entry does not name the

standard applied, and an audit in process confers no accreditation ^[16]. This review lists Trivver's product and does not score it: Trivver calls a browser-game SDK released on 11 June 2026 its "first commercial deployment", and this review found no named live title or brand campaign in the scoring period, in the sources screened ^[155, 16].

A verifier's in-game service entered MRC's process and left it ^[349]. MRC's under-review list, captured on 10 October 2025, showed "IAS In-Game" in pre-audit for display and video rendered and viewable impressions in desktop, mobile and gaming console environments ^[365]. In January 2026 MRC removed it from in-process status because IAS did not intend to engage in a third-party audit and withdrew from the accreditation process ^[349, 16] ♦.

MRC's current letters for DoubleVerify (13 April 2026) and IAS (9 July 2026) accredit measurement in desktop, mobile web, mobile in-app and, for some metrics, connected TV ^[18, 19]. None of their current letters, including IAS's 7 November 2025 letter for third-party reporting of Amazon's demand-side platform (DSP), names a gaming or console environment or lists the IIG guidelines among the standards the accredited statistics comply with ^[18, 19, 332] ♦.

Both accreditations reach mobile in-app traffic measured through IAB Tech Lab's OM SDK ^[18, 19]. This review infers that standard display and video ads served through the OM SDK in mobile game apps plausibly fall within accredited measurement, while rendered 3D intrinsic placements, billboards on user-generated platforms and console environments fall outside it ^[18, 366]. MRC's record names no game, so that reach is unattested ^[18, 15] ♦.

For game-adjacent media, MRC's accreditations touch YouTube only in general terms, with no gaming-specific scope, and no MRC accreditation was found for Twitch, Discord or Venatus; MRC's letter for IAS's Amazon DSP reporting excludes Twitch supply ^[15, 332] ♦. The chapter Around the game covers those products.

IN-GAME PRODUCTS: MEASUREMENT AND STANDING CELLS

	Measurement	Assurance	Transparency	Suitability
Admazing	3	n/e	n/e	2
Adverty	3	1	4	3
Anzu	3	2	3	4
Frameplay	3	3	3	2
Gadsme	3	2	3	3
Gameloft for brands	3	3	3	2
IION	3	1	3	2
Kidoz kid-safe	1	3	3	3
Super League	3	n/e	2	1
EA Advertising (B1)	3	1	3	3
Roblox (B1)	3	2	3	4
XBOX Media Solutions (B1)	3	3	2	2
Zynga Ads (B1)	3	1	3	2

MRC's record lists no accredited intrinsic in-game metric; assurance rests on verifier announcements Scores from the capability matrix for the cohort A and B1 rows on four dimensions. No product reaches 4 on independent assurance, which needs third-party verification documented in the product's own environments together with a certification on the certifier's record, or with an MRC accreditation for an adjacent environment or an audit in progress. MRC's own record, read on 29 September 2026, shows no accredited intrinsic in-game metric for any of these products; interstitial, banner and video ads in game apps fall under the general mobile in-app standards instead. Third-party verification rests mostly on partnership announcements dated 2022 to 2025.

Units: score 0 to 5 (n/e = no evidence) · Scope: cohort A and B1 rows admitted to the matrix · Sources [546] [396] [130] [15] [16] [389] [147] [53] [547] [129] [548] [80] [353] [549] [386] [385] [13] [81] [550] [125] [123] [364] [394] [358] [350] [551] [339] [383] [382] [9] [171] [397] [363] [445] [356] [552] [475] [479] [553] [369] [406] [355] [357] [387] [10] [75] [96] [78] [76] [77] [464] [554] [555] [466] [372] [373] [118] [531] [59] [556] [392] [398] [12] [97] [170] [95] [444] [55] [377] [14] [126] [54] [405] [127] [360] [388] [116] [11] [162] [557] [558] [559] [399] [560] [561] [562] [563] [564] [66] [565] [69] [181] [65] [128] [30] [566] [145] [400] [567] [568] [569] [57] [25] [376] [240] [410] [1] [42] [187] [351] [370] [486] [488] [208] [17] [570] [380] [538] [571] [572] [539] [573] [217] [20] [213] [214] [190] [414] [215] [408] [361] [362] [227] [226] [224] [390] [391] [352] [223] [574] [409] [234] [21] [228] [425] [244] [203] [378] [411]

Scores measure public documentation against the anchors, capped by evidence grade. They are not measures of product quality.

Verification rests on announcements

Third-party verification of in-game inventory is documented mainly in partnership announcements^[350, 351]. IAS's own in-game announcements name viewability and invalid-traffic (IVT) functions only: Anzu on mobile (28 July 2022), extended in an IAS post of 11 July 2023 to 2D and intrinsic 3D placements on mobile, PC and console, Gadsme (15 December 2022), Frameplay (5 October 2023, IVT and impression counts) and Roblox (announced on 1 May 2024 for later that year, with an IAS page dated 12 September 2024)^[350, 367, 368, 369, 370, 371] ♦. In the sources opened, none dated inside the scoring period confirms that the Frameplay integration is still live, and no verifier record confirms that

Gadsme's is running in 2025 or 2026 ^[369, 137, 372, 373]. Roblox restates its relationships on a current page: on 28 September 2026 its brands page named IAS and DoubleVerify for independent verification ^[42].

DoubleVerify formally entered in-game measurement on 27 July 2023, Digiday reported, and a DoubleVerify product director said none of its tools needed a significant update ^[366]. Its Roblox post of 1 April 2025 splits coverage by format: for in-game billboards it extended fraud and viewability measurement through a custom integration on Roblox's direct-sold inventory; for Rewarded Video, then about to launch, it described its functions in the future tense ^[351]. In the sources screened by 29 September 2026, DoubleVerify's own records document gaming coverage in two places, Roblox and Microsoft Casual Games (named in a 15 October 2025 release among Microsoft properties), and an IAB event listing for a Zynga Ads session reports a DoubleVerify attention figure for Zynga ^[351, 374, 375, 203]. No DoubleVerify record was found for Anzu, Frameplay, Gadsme, Advertly, IION, Gameloft for brands, Super League, Kidoz or Admazing ^[351, 375, 203] ♦.

Other sellers state partnerships for which no verifier record was found ^[25, 55]. EA says it measures viewability and invalid traffic "in partnership with Integral Ad Science", but IAS's published sitemaps, read on 29 September 2026, hold no page about Electronic Arts while they hold in-game pages for Anzu and Gadsme ^[25, 376] ♦. Gameloft labels its COMBO! offer "IAS compliant" and cites an IAS data study; no IAS record of the relationship was found ^[55, 377] ♦. Zynga shows DoubleVerify's logo on its ad-solutions page; no verifier or MRC record for Zynga Ads was found, and on 29 September 2026 the Trustworthy Accountability Group (TAG) registry listed Zynga as enrolled in Verified by TAG with no seal ^[244, 378, 333, 379].

DoubleVerify agreed on 6 August 2026 to be acquired by the parent company of Nielsen Company (US), LLC, with closing expected by Q1 2027 subject to a stockholder vote and regulatory approvals ^[380, 381] ♦. Roblox named DoubleVerify and Nielsen as new measurement partners on 1 April 2025, so if the deal closes, two of Roblox's named measurement partners would be under common ownership; this is an inference from the records ^[187, 381].

Certification claims against certifier records

Several sellers claim certifications that the certifiers' own lists did not show on 28 or 29 September 2026; each absence is bounded to the names queried, and none is a documented lapse ^[333, 352]. Anzu announced on 12 August 2021 that it had earned TAG's Brand Safety Certified seal, validated by the third-party auditor ABC, TAG's Certified Against Fraud seal and IAB UK Gold Standard 2.0 ^[382]. Neither the TAG registry nor IAB UK's certified and registered list showed Anzu on 28 September 2026, while a control query for Gadsme returned its record ^[382, 333, 352, 383] ♦.

Anzu's boilerplate of January 2024 called Anzu "compliant with the industry measurement standards outlined by the MRC and IAB", and Advertly's home page says its tracking is "verified by leading industry stakeholders and 100% in line with the latest IAB and MRC measurement guidelines" without naming a verifier; neither appears on MRC's lists ^[384, 353, 15, 16] ♦. The TAG registry has no Advertly record, and IAB Tech Lab lists it only in an other-industry-compliance tab linked to IAB UK's member directory ^[385, 386]. Frameplay's

about page says it was among the first to be Certified for Transparency by TAG in 2023; the registry returned no Frameplay record ^[357, 387].

XBOX Media Solutions claims "IAB UK Gold Standard 2.1 Certified", but IAB UK's list does not include XBOX Media Solutions, Activision Blizzard Media, King or Microsoft ^[223, 352] ♦. IION says it is "officially accredited" for the OM SDK (10 September 2024) and shows TAG seal images, yet IAB Tech Lab's compliant-companies page has no IION entry and the TAG registry returned no company ^[388, 116, 386, 385]. Gameloft's only third-party assurance on record is IAB Tech Lab's OM SDK compliance for its mobile apps, last certified 16 January 2026; its "IAS compliant" and "IAB gold standard in 2018" labels have no certifier record behind them in the sources opened ^[386, 389].

TAG does record some gaming sellers: Activision Blizzard Media and King.com Ltd. each hold Brand Safety Certified for the United Kingdom only, by independent validation, and Certified Against Fraud by self-attestation for North America and other regions ^[390, 391]. Gadsme is enrolled in Verified by TAG with no seal, and DoubleVerify and IAS hold both seals globally ^[333, 390, 391, 392] ♦. TAG seals certify company-level programmes on fraud, brand safety and transparency; they say nothing about in-game measurement ^[333]. IAB Tech Lab's programmes page, read on 28 September 2026, lists no gaming-specific compliance programme, and its OM SDK compliance certifies an SDK integration only ^[393, 386].

Attention metrics in games

Attention measurement in games is offered by several parties, each on its own statement, and no accreditor record found attests it for an in-game environment ^[351, 18, 356].

DoubleVerify said on 1 April 2025 that advertisers would be able to measure attention with DV Authentic Attention on Roblox Rewarded Video, then about to launch ^[351]. Its MRC accreditation for Authentic Attention covers display and video in desktop, mobile web and mobile in-app and does not name Roblox or in-game environments ^[351, 18] ♦. An IAB event listing for a Zynga Ads session reports a DoubleVerify Attention Index of 204 across more than 250 million Zynga impressions measured from April to June 2026 ^[203]. Frameplay announced an "Intrinsic Time-in-View" metric on 5 April 2022, which it says Lumen and eye square each validated against their own eye tracking on one campaign ^[356]. IION offers attention metrics from Amplified Intelligence, and Anzu's release of 27 March 2025 says its partnerships already covered attention ^[360, 394]. Around the game, Overwolf cites Adelaide's Attention Score on its audience page and lists Adelaide among its "Measurement & Analytics" service providers, and Venatus announced a Lumen attention analysis on 18 March 2026 with no sample, period or geography ^[294, 343, 395].

The IAB framework lists attention, brand lift and incremental sales as additional metrics that are not guaranteed for every implementation ^[347]. What attention metrics define, and whether they are valid, is the subject of the companion paper on attention measurement. The results reported with them are weighed in the chapter What the outcome evidence shows.

H2 coded as supported

H2 holds that intrinsic in-game measurement is standardised but that independent verification and MRC accreditation of in-game ad products are thin. The first part of its registered rule holds: MRC lists the IIG Guidelines 2.0 as last updated in August 2022, a final release of the issuing bodies, and the IAB published its framework on 26 June 2025 [52, 17, 348]. The second part needs MRC's record to show accreditation for no more than one third of the products scored in cohorts A and B1, or verification documented in operational detail for no more than half. MRC's record shows no accredited intrinsic in-game metric and no MRC-confirmed audit for any of them; the one gaming audit in process is Trivver's, a listed product [15, 16]. Third-party verification rests on announcements dated 2022 to 2025 for Anzu, Gadsme, Frameplay and Roblox, while EA Advertising and Admazing state IAS or DoubleVerify partnerships and Zynga Ads shows DoubleVerify's logo, none with a verifier record [350, 368, 369, 351, 25, 396, 244]. The rule would leave H2 unresolved with fewer than six scored products; 9 cohort A and 4 cohort B1 products are scored. No product is accredited, so H2 is supported.

MRC's Multimedia and Services Outside the U.S. pages returned only short pages, so the absence rests mainly on the Digital lists, read on 29 September 2026 and unchanged at the rechecks on 30 September and 1 October 2026 [15, 16]. If accredited mobile in-app measurement reaches rewarded and interstitial formats in mobile games, as inferred above, assurance for those formats is thicker than for intrinsic placements [18, 19].

Suitability, user-generated worlds and children's rules

Suitability in games is written mostly by the platforms that own the worlds, on top of age ratings and labels that creators declare. Third-party verifiers document little suitability coverage inside games. Children's privacy rules tightened in 2025 and 2026, and Roblox, Microsoft and Discord restrict functions of their own ad products by age.

IN SHORT

Among in-game ad networks (cohort A), Anzu, Gadsme, Adverty and Kidoz document suitability controls in operational detail, IION only in its inventory-partner terms, and Super League and Admazing only in marketing language in the pages opened; AdInMo, since moved out of the cohort, did so in a copy archived in October 2025 ^[397, 398, 81, 69, 399, 400, 129, 401]. Content ratings are the common signal in the controls documented, and a title's rating does not cover what players build in user-generated content (UGC) worlds ^[20, 266, 220]. Roblox restricts ad content by rating for each age band and, since 4 May 2026, allows direct-sold, mainly contextual ads to under-13s ^[20, 215, 216]. The Global Alliance for Responsible Media (GARM) was discontinued in August 2024, yet guidance from IAB Technology Laboratory (IAB Tech Lab), the Interactive Advertising Bureau's technical standards body, still cites its framework ^[402, 403]. DoubleVerify described suitability measurement on Roblox Rewarded Video in the future tense ^[351]. The amended Children's Online Privacy Protection (COPPA) Rule took effect on 23 June 2025, with compliance due for most regulated entities by 22 April 2026 ^[23]. Hypothesis H4 is supported: rule documents from Roblox, Microsoft, Discord, Epic and Google restrict ad targeting, personalisation, third-party calls or measurement ^[20, 57, 21, 22, 220, 221]. The verdict rests on rule documents and does not show that any product complies with them.

Suitability controls, product by product

HOW THIS REVIEW CODES A CONTROL

A control counts when its documentation states what is set, how it is applied and its scope. A marketing adjective or a partner's name does not count. Whether a control works needs an independent test.

Among in-game ad networks (cohort A), Anzu, Gadsme, Adverty and Kidoz document controls in operational detail, Kidoz on its marketing pages ^[397, 398, 81, 69, 181] ♦. Gameloft for brands and Frameplay document them in outline, and Super League and Admazing show marketing language only in the pages opened ^[404, 405, 137, 406, 400, 129] ♦. For IION, only its inventory-partner terms document a control in operational detail: partners may not deliver its ads to properties with excluded content, including content directed to children under 13 ^[127, 399]. AdInMo, which this review moved out of the cohort on 29 September 2026, documented controls in operational detail in a copy archived on 7 October 2025 ^[401]. Among platform sellers screened (cohort B1), Roblox documents ad-content and publisher rules in operational detail but defines its advertiser-selectable tiers only in a January 2024 post, and XBOX Media Solutions documented controls in operational detail only on a page archived on 21 January 2026 that its live site no longer serves, its live pages using marketing language ^[20, 407, 408, 409, 224] ♦. Of the cohort's other two sellers, EA Advertising has no brand-suitability control documented in the pages this review read, and Zynga Ads offers only a claim that its owned platform guarantees "a 100% brand safe environment" ^[410, 244, 411] ♦ ♦. Among game-adjacent media screened (cohort B2), Twitch documents advertiser controls in operational detail and Discord an ad-content policy with no placement control ^[266, 288] ♦.

Who applies a control differs by network ^[397, 398]. Anzu gives advertisers allow and block lists by publisher, game, country and platform, checks direct creatives by hand, and aims for suitability to each game's PEGI rating, the European age rating, on a reasonable-efforts basis ^[397] ♦. Gadsme reviews each new game's PEGI rating, checks placements before a game goes live, and blocks brand-safety discriminators by default on campaigns it manages ^[398]. Frameplay's Terms of Use, updated 1 January 2023, make publishers "solely responsible" for each game's content restrictions ^[406, 137]. XBOX Media Solutions sells "100% brand safe" rewarded video, and the former Activision Blizzard Media page that let buyers avoid age-restricted titles now redirects to Microsoft's gaming hub ^[224, 409, 191].

Content ratings are the signal these documents share ^[20, 397]. Roblox restricts ad content by Entertainment Software Rating Board (ESRB) and PEGI level per age band, Twitch labels streams of ESRB M-rated games automatically, and Epic requires ratings from the International Age Rating Coalition (IARC) for every Fortnite island ^[20, 266, 220] ♦. A title rating describes the game, not what players build inside it; Roblox, Twitch and SuperAwesome add experience-level or stream-level signals ^[412, 265, 266, 206].

User-generated worlds write their own rules

Roblox turns film, television and game ratings into ad rules by audience age ^[20]. Its Advertising Standards, launched on 15 March 2023, were last updated on 5 June 2026 ^[20]. Self-serve and independent ad integrations may not promote Mature-rated games or R and TV-MA content, and Roblox-managed ads may promote them only to audiences aged 18 and over ^[20]. Ads to users aged 9 to 12 may not promote M or PEGI 18 games, and ads to users aged 5 to 8 also may not promote Teen or PEGI-12 games or PG-13 and TV-14 content ^[20] ♦. These age-band rules were added on 5 June 2026 to an under-13 section that took effect on 4 May 2026 ^[20, 213, 214].

Which experiences carry ads rests largely on what publishers declare ^[407, 408]. An experience qualifies for immersive ads only if it is public, its owner is ID-verified with two-

factor authentication, Roblox has approved its Maturity and Compliance Questionnaire, and it keeps at least 2,000 unique visitors a month ^[407, 20] ♦. Publishers may not misclassify an experience's guideline rating to raise ad delivery, and in the sources screened this review found no published audit of questionnaire accuracy ^[20, 407].

The advertiser side is documented in less detail ^[42, 217]. Roblox's brand pages name "Suitability Tiers, Age and Geo controls" and Advertiser Select, a hand-curated list of experiences, without operating detail ^[42, 217]. The only tier definitions found come from a January 2024 post, which keyed them to experience age recommendations and said they "may change over time" ^[408] ♦.

Experiences carry Roblox's Content Maturity Labels (Minimal, Mild, Moderate and Restricted), set from creators' questionnaire answers and content descriptors; Restricted experiences are open only to age-checked users aged 18 and over ^[412, 413] ♦. Roblox announced on 3 September 2025 that IARC ratings (ESRB in the US) would replace the labels "when implemented", but its Creator Hub documentation, updated 26 September 2026, still describes its own four ^[413, 412, 414]. The labels do not cover user-generated items that players bring into an experience ^[414].

Since 4 May 2026, Roblox's rules allow ads to under-13s ^[215]. The FAQ of its 20 March 2026 announcement, in the edited version read on 29 September 2026, says all under-13 ads "will be contextual and sold directly via Roblox or creators", with no programmatic partners such as Google ^[215] ♦. AdExchanger reported on 4 June 2026 that SuperAwesome had been named exclusive partner for under-13 users, and a Roblox spokesperson said these ads exclude rewarded video and can also be targeted by country, gender and age range ^[216]. The sources opened do not show when under-13 ads first served, and Roblox's brand-safety page still said on 29 September 2026 that users under 13 are not eligible to see ads ^[216, 217].

SuperAwesome says its staff play each title by hand and check it against 11 brand-suitability flags, which it does not list in full ^[206]. How manual play keeps pace with the roughly 15,000 new games it says are uploaded daily is not documented ^[415, 206] ♦.

Epic's Fortnite Developer Rules, last updated 29 April 2026, require IARC ratings for islands, cap content at Fortnite's maximum rating, and refuse content aimed mainly at under-13s or island promotion that targets them ^[220]. Paid commercial content must be disclosed, individual developers must be at least 18 to create or publish it, and commercial content may not promote categories including tobacco, alcohol, marijuana and firearms ^[220] ♦. This review found no Epic ad-serving product for brands in the sources screened ^[220].

Minecraft's undated usage guidelines bar brands from using Minecraft gameplay to promote unrelated products without written approval from Mojang or Microsoft, and require all servers and advertising to suit audiences of all ages ^[416]. Discord's Ads Policy, updated 9 September 2026, covers all ads, including in Activities, and bans ads intended solely for children under 13 ^[288]. It documents no advertiser-side placement control ^[288] ♦.

Twitch builds advertiser controls on labels that streamers apply ^[265, 266]. Since 20 June 2023 streamers must apply whichever Content Classification Labels fit their stream; there were six at launch, and Twitch's current help article and application programming interface (API) reference list seven after a Politics and Sensitive Social Issues label was added in

November 2024 ^[265, 266, 267, 268, 417] ♦. Per Amazon's guide of 22 February 2026, the labels inform three inventory tiers and impression-level content reporting, which the guide, as modified on 29 September 2026, places in Amazon Ads Agent; the guide does not say what each tier excludes ^[266, 269].

GARM ended, and verifiers say little about suitability inside games

GARM is gone, but its framework is still referenced ^[402, 403]. The World Federation of Advertisers (WFA) discontinued GARM on 9 August 2024 ^[402]. On 29 July 2026, announcing a settlement of the GARM litigation with X Corp., WFA said it will not form or restart GARM or a similar initiative ^[402, 418] ♦.

IAB Tech Lab's Content Taxonomy 3.0 guidance, in a version last changed on 5 August 2025, maps game genres to taxonomy categories and defines suitability risk levels by reference to the September 2020 framework of GARM and the American Association of Advertising Agencies' (4A's) Advertiser Protection Bureau ^[419, 403]. WFA's notice does not say that framework was withdrawn ^[419, 403, 402] ♦.

Verifier coverage of suitability inside games is thin in the documents opened ^[351, 371]. DoubleVerify's post of 1 April 2025 extended only invalid-traffic (IVT) and viewability measurement to Roblox's in-game billboards, through a custom integration on direct-sold inventory ^[351]. For Rewarded Video, then about to launch, it said advertisers "will be able to" measure brand safety and suitability, and no later record opened confirms that function in operation ^[351] ♦. Integral Ad Science (IAS) announcements for Roblox, Anzu and Gadsme name only viewability and IVT functions, and its Frameplay page names IVT and impression counts ^[371, 370, 350, 368, 420]. Roblox says IAS pre-bid suitability is available for programmatic Roblox buys through enabled demand-side platforms (DSPs), but no IAS document opened describes suitability classification inside an in-game placement ^[187, 371]. In DoubleVerify's own records screened on 29 September 2026, including its sitemap, this review found none naming a cohort A network; Gadsme's policy says only that advertisers can wrap their tags with IAS or DoubleVerify ^[351, 375, 398]. On Twitch, Amazon's guide says the two verifiers are approved for brand safety at domain or app level, which, on this review's reading, rates Twitch as a whole rather than the stream an ad runs in ^[266].

Children's rules

Federal children's privacy law tightened in 2025 ^[23]. The Federal Trade Commission (FTC) announced its amended COPPA Rule on 16 January 2025; it took effect on 23 June 2025, and most regulated entities had until 22 April 2026 to comply ^[23, 421] ♦.

A covered operator needs separate verifiable parental consent before disclosing a child's personal information to third parties unless the disclosure is integral to the service, and the Commission gives third-party advertising as an example of a disclosure that is not integral ^[23, 421]. The amended Rule lists serving contextual advertising and capping ad frequency among the activities that support internal operations, and the Commission also places ad attribution within them ^[23]. It exempts from parental consent only the collection of a persistent identifier, with no other personal information, used solely for that support and disclosed in the operator's notice, and it bars using that information for behavioural

advertising or profiling^[23]. The Commission's statement says the Rule does not prohibit collecting personal information for targeted advertising where the parent gives opt-in consent, which must be off by default and cannot be a condition of the child's access^[23]. Read together, which is an inference, contextual in-game ads in child-directed games can run without parental consent under those conditions, while behaviourally targeted ads need prior parental opt-in consent, plus separate consent where the child's data goes to third parties^[23] ♦.

The FTC's policy statement on age verification of 25 February 2026, adopted 2-0, applies only to mixed-audience and general-audience operators; services primarily directed to children must still treat every user as a child^[422, 423]. The FTC will not bring COPPA actions over personal information collected, used or disclosed solely to determine age if six conditions are met: use only for age verification, disclosure only to third parties that give written assurances, prompt deletion, notice in the privacy policy, reasonable security, and reasonable steps to ensure accurate results^[422, 423] ♦. The statement never mentions advertising^[422]. Its first condition bars any other use of age-verification data, so, on this review's reading, an operator relying on it cannot use that data to target or measure ads^[422] ♦.

FTC COPPA enforcement in games has named game makers and platform owners^[424, 425, 426]. The FTC announced a \$275 million civil penalty for Epic Games on 19 December 2022, alleging that Fortnite collected children's personal information without parental notice or consent^[424]. Microsoft's \$20 million settlement, announced on 5 June 2023, concerned an Xbox sign-up flow that, the complaint said, included a pre-checked box allowing data sharing with advertisers until 2019^[425]. Genshin Impact maker Cognosphere's \$20 million penalty, announced on 17 January 2025, was over alleged COPPA violations that included sharing user IDs and device identifiers with analytics firms and advertisers^[426]. The FTC's COPPA Safe Harbor page, read on 29 September 2026, lists 20 related case entries, and its only ad-technology respondent is OpenX^[427]. In that list this review found no FTC COPPA action against an in-game ad network or game-ad vendor filed from January 2023 to 29 September 2026^[427] ♦.

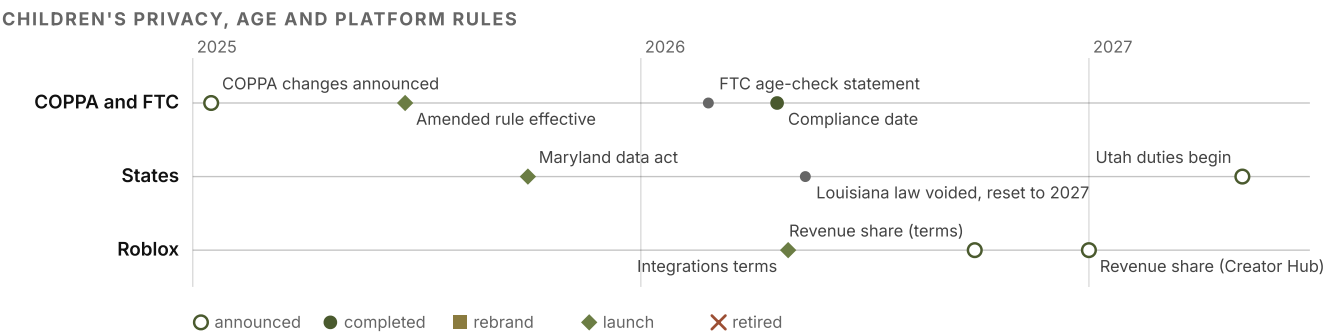
State laws make app stores and operating systems a source of age data, and courts have shaped when they apply^[428, 429, 430]. Texas SB 2420, the App Store Accountability Act, was due to take effect on 1 January 2026 and was preliminarily enjoined in December 2025^[428]. After the Fifth Circuit stayed that injunction, the Supreme Court declined on 6 July 2026 to reinstate it, so the law can be enforced while the appeal continues^[428, 431, 221] ♦. Utah's HB 498 moved the app-store and developer duties of its 2025 act from 6 May 2026 to 6 May 2027^[432, 433]. Louisiana's 2025 act, HB 570, never took effect: Act 185 of 2026, signed on 15 May 2026, provides that it shall not become effective and re-enacts app-store rules from 1 July 2027^[429, 434] ♦. From 1 January 2027, California's Digital Age Assurance Act, as amended on 10 September 2026, deems a developer that receives an age-bracket signal to know the user's age range unless it holds clear and convincing internal information of a different age, which then governs, and bars sharing the signal with a third party for a purpose the Act does not require^[430, 435] ♦. This review reads that as bringing COPPA's actual-knowledge duties to under-13 signals in general-audience games, an inference the Act does not state^[430].

Maryland's Online Data Privacy Act took effect on 1 October 2025 and bars a controller from processing a consumer's personal data for targeted advertising, or selling it, if the controller knew or should have known the consumer is under 18 [436] ♦.

Google wrote an advertising ban into its age signals; Apple limited their purpose without naming advertising [221, 437]. Google's Play Age Signals terms, last modified October 2025, forbid use of the signals for advertising, marketing, user profiling or analytics [221] ♦. Apple's Declared Age Range API returns the Texas law's age brackets for new Texas accounts from 4 June 2026, and Apple's developer agreement, updated 18 August 2026, allows requests only for age-appropriate content or features or to comply with laws that require age-range information [438, 439, 437, 440].

Platforms write rules on top of the law [20, 57]. Roblox bars personalised ads for users under 18, bars developers from rewarding under-13s for engaging with ads, and bans whole categories, including all food and beverage, when the intended audience includes users under 13 [20, 213, 214]. Its Advertising Integrations Terms, effective 1 May 2026, bar ads that developers place in experiences from making programmatic calls to third-party advertising and measurement services [57] ♦. Its managed-campaign terms give advertisers only aggregate reporting and make Roblox's reporting the controlling measurement [1]. Two Roblox documents give different start dates for a developer revenue share on integrations, 30 September 2026 and 1 January 2027, and no document read says which governs [57, 190].

Microsoft's Privacy Statement says it does not deliver personalised advertising to children whose Microsoft account birthdate shows them to be under 18, while King, whose games carry XBOX Media Solutions ads, says it does not knowingly target interest-based ads to anyone under 13 [21, 234] ♦. No document read says which rule governs XBOX Media Solutions inventory in King titles [21, 234]. Discord says signals from its age-assurance process are never used to target ads, although advertisers can target broad age ranges from signals such as self-declared age [285, 22]. None of the Twitch documents opened states an age-based rule for ad delivery, targeting or personalisation [257, 441, 442].



Children's rules tightened through 2025 and 2026, and platforms wrote their own on top Dates from the Federal Register, the FTC, state statutes and court orders, and Roblox's own documents. Roblox's Advertising Integrations Terms and its Creator Hub give different start dates for the developer revenue share; both are shown and neither is settled.

Units: dated events · Scope: US federal and state rules and Roblox platform rules · Sources [23] [422] [436] [434] [433] [57] [190]

Documentation is not legal compliance. Utah's duties and the Creator Hub date fall after the cutoff.

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
United States (federal)	COPPA Rule as amended (16 CFR Part 312; 90 FR 16918)	Separate verifiable parental consent before disclosing children's data to third parties unless integral (advertising disclosures are not integral); written data retention policy, no indefinite retention; neutral age screen for mixed-audience services; notice naming third parties; contextual ads and frequency capping remain within the internal-operations exception	Effective 2025-06-23; compliance 2026-04-22	Operators of services directed to children under 13, mixed-audience services for users identified as under 13, and operators with actual knowledge	Federal regulation	[23]
United States (federal)	COPPA safe-harbor duties (16 CFR 312.11)	Public member lists by 2025-07-21, updated every six months; annual report by 2025-10-22; proposed guideline modifications by 2025-10-22; technological-capabilities report by 2028-04-22 and every three years	2025-07-21; 2025-10-22; 2028-04-22	FTC-approved safe-harbor programmes	Federal regulation	[23]
United States (federal)	FTC Enforcement Policy Statement Promoting the Adoption of Age-Verification Technology	No COPPA enforcement for data collected, used or disclosed solely to determine age, if six conditions are met (purpose limit, vetted third parties with written assurances, prompt deletion, notice, security, reasonable accuracy) and COPPA is otherwise complied with; creates no substantive rights	Issued 2026-02-25; until final rule amendments or withdrawal	General-audience and mixed-audience operators; not services primarily directed to children	Regulator enforcement policy statement (non-binding)	[422]
Texas	SB 2420 App Store Accountability Act	App-store age assurance and parental consent for minors' downloads, purchases and significant changes; age categories under 13, 13-15, 16-17, over 18	Scheduled 2026-01-01; enjoined December 2025; injunction stayed by the Fifth Circuit June 2026; Supreme Court declined to reinstate the injunction 2026-07-06; merits appeal pending	App stores and developers; users in Texas	State statute	[428] [438] [431]
Utah	App Store Accountability Act (SB 142, 2025; amended by HB 498, 2026)	Developers verify age category and parental consent through the app store; may use age category data only for age restrictions, legal compliance and safety features; may not share age category data	Developer and app-store duties from 2027-05-06 (HB 498); SB 142 had set 2026-05-06	App store providers and developers; users located in Utah	State statute	[433] [432]

JURISDICTION	INSTRUMENT	WHAT IT REQUIRES	EFFECTIVE	SCOPE	LAW OR PRACTICE	SRC
Louisiana	HB 570 (2025 Regular Session), R.S. 51:1771-1775	As enacted in 2025: developers verify age category and obtain verifiable parental consent for minors via the app store; may not share age category data; Attorney General enforcement, fines up to \$10,000 per violation. The re-enacted rules from 2027-07-01 bar developers from selling age category data	Never took effect: Act 185 of 2026, signed 2026-05-15, provides that the 2025 act shall not become effective and re-enacts app-store rules from 2027-07-01	Covered application stores and developers; users in Louisiana	State statute	[429] [434]
California	Digital Age Assurance Act (AB 1043, Ch. 675, Stats. 2025)	OS providers and app stores send age-bracket signals; a developer receiving a signal has actual knowledge of the age range; may not share the signal with third parties for other purposes	Operative 2027-01-01	Operating system providers, covered application stores and developers	State statute	[430]
Maryland	Maryland Online Data Privacy Act (Ch. 455 of 2024)	No processing for targeted advertising and no sale of personal data where the controller knew or should have known the consumer is under 18; contextual, first-party and measurement-only processing excluded from targeted advertising	Effective 2025-10-01; § 14-4612 not applied to processing before 2026-04-01	Controllers meeting the Act's thresholds (not checked here)	State statute	[436]
California	Age-Appropriate Design Code Act	Default high-privacy settings and age estimation for services likely to be accessed by under-18s; certain data-use and dark-patterns provisions enjoined	Partly enjoined; Ninth Circuit narrowed the injunction on 2026-03-12; remanded	Businesses with online services likely to be accessed by children under 18	State statute (in litigation)	[575]
European Union	Digital Services Act, Article 28(2)	No ads based on profiling with personal data when the platform is aware with reasonable certainty that the recipient is a minor	Applies from 2024-02-17	Providers of online platforms	EU regulation	[576]
United Kingdom	ICO Age Appropriate Design Code, standard 12 (Profiling)	Profiling off by default for children unless there is a compelling reason; a privacy setting for behavioural advertising	In force (date not checked in this review)	Online services likely to be accessed by children under 18	Statutory code of practice	[577]
Platform: Roblox (global)	Roblox Advertising Standards	No personalised ads for users under 18; restricted ad categories where the intended audience includes under-13s; no reward mechanisms for under-13 ad engagement; rewarded video only for 13+ via Roblox's product	Last updated 2026-06-05; U13 section effective 2026-05-04	Advertisers and publishers on Roblox	Platform policy	[20]

JURISDICTION	INSTRUMENT	WHAT IT REQUIRES	EFFECTIVE	SCOPE	LAW OR PRACTICE	SRC
Platform: Roblox (global)	Roblox Advertising Integrations Terms	Developer-placed ads may not make programmatic calls to third-party advertising and measurement services; no personally identifiable engagement data to advertisers; revenue share per thousand visits from 2026-09-30	Effective 2026-05-01	Developers placing ads directly in experiences	Platform terms	[57]
Platform: Roblox (global)	Roblox Creator Hub, Ad integrations	Revenue share on qualified visits for campaigns starting on or after 2027-01-01 (US \$1.50 per thousand for 28 days, then \$0.10); campaigns under review served only to users 18 and over	Published text read 2026-09-28; conflicts with the Integrations Terms	Developers running ad integration campaigns	Platform documentation	[190]
Platform: Roblox (global)	Roblox Advertising Terms (Managed Campaigns)	No personal data exchanged with advertisers; aggregate reporting only; Roblox reporting is the controlling measurement	Effective 2026-04-30	Advertisers buying managed campaigns	Platform contract terms	[1]
Platform: Microsoft (global)	Microsoft Privacy Statement	No personalised advertising to children whose Microsoft account birthdate shows under 18	Last updated September 2026	Microsoft products and accounts	Company policy	[21]
Platform: King / Microsoft (global)	King Privacy Policy	No knowing targeting of interest-based ads to anyone under 13 (or higher where local law requires); opt-in to targeted ads by default where local law allows	Last updated 2026-02-26	King games and services	Company policy	[234]
Platform: Discord (global)	Discord Quests FAQ; age-group help article	Age-assurance signals used only for safety and not to target ads; teens 13-17 limited to three Quests per day; users can opt out of Quest personalisation	Articles edited 2026-08-31 and 2026-09-24	Discord users and Quest advertisers	Platform policy	[22] [285]
Platform: Epic Games Fortnite (global)	Fortnite Developer Rules	No gathering of personal information in islands; no targeting of under-13s with island advertising; paid commercial content disclosed; only developers 18+ may publish paid commercial content	Last updated 2026-04-29	Fortnite island developers and brand collaborations	Platform rules	[220]
Platform: Google Play (global)	Play Age Signals API terms of service	Age signals may be used only for age-appropriate content and experiences in compliance with laws; not for advertising, marketing, user profiling or analytics	Terms last modified October 2025; Texas signals for accounts created after 2026-05-28; Brazil from 2026-03-17	Apps distributed through Google Play using the API	App-store rule	[221]

JURISDICTION	INSTRUMENT	WHAT IT REQUIRES	EFFECTIVE	SCOPE	LAW OR PRACTICE	SRC
Platform: Apple App Store (global)	Declared Age Range API notices	Age categories shared on developer request for new accounts in Utah (from 2026-05-06 per Apple) and Texas (from 2026-06-04, after a pause from 2025-12-23 while the injunction stood); Apple's February 2026 notice also named Louisiana from 2026-07-01, before Louisiana's Act 185 of 2026 stopped that state's 2025 law from taking effect	2026-05-06 (Utah, per Apple); 2026-06-04 (Texas)	Apps distributed through the App Store	App-store rule	[578] [431] [439] [434]

Age data, litigation and the H4 verdict

Roblox reported that 57% of its global daily active users (DAUs) had completed an age check by the end of Q2 2026, and more than 70% in the US ^[43]. Of users who had age-checked globally, 35% were under 13, 38% were 13 to 17 and 27% were 18 or over in the seven days ended 30 June 2026 ^[43, 246] ♦. Roblox says this population may not represent all users, and its Form 10-Q quarterly report says its user metrics have not been validated by an independent third party ^[43, 246]. This review infers no user's age from these shares, which are neither impressions nor ad-eligible reach ^[43].

On that global split, 73% of age-checked users were under 18, and Roblox's standards bar personalised ads for all of them ^[43, 20] ♦. Contextual Roblox ads can still reach users aged 13 to 17 and, subject to the under-13 category and format restrictions, users under 13 ^[43, 20].

Roblox's Form 10-K for 2025 says its age-check methodology has misclassified users' ages ^[197]. AdExchanger reported on 4 June 2026 that Roblox faced at least 130 child-safety lawsuits in federal court plus suits by several states; the federal cases are centralised as a multidistrict litigation (MDL No. 3166) ^[216, 443]. Roblox's Q2 2026 10-Q lists settlement agreements with states including Alabama, Mississippi, Nevada, South Dakota and West Virginia, and \$91 million accrued in the first half of 2026 for settlement agreements and settlement discussions ^[216, 246] ♦. The sources screened document no advertiser pulling spend from Roblox over these matters, and none of them is a finding of liability ^[216].

H4 is supported on its registered rule, which needs at least three products or platforms. This review found five for which a primary rule document restricts a targeting, personalisation, third-party-call or measurement function the product offers elsewhere: Roblox (personalisation under 18, third-party calls in developer-placed ads, reporting beyond aggregates), Microsoft (personalised ads for accounts under 18), Discord (age-assurance signals in targeting), Fortnite (island advertising aimed at under-13s) and Google Play (advertising use of age signals) ^[20, 213, 57, 21, 22, 220, 221, 23] ♦. COPPA's separate-consent rule adds a legal restriction for child-directed games, and the registered rule names the conflict between Roblox's two revenue-share documents as an example of an unresolved condition ^[23, 57, 190]. On this review's reading, that conflict concerns developer fees rather than any restriction counted here, so it does not block the verdict ^[57, 190]. The verdict does not show that products comply or that restrictions are enforced, and most of the strongest restrictions are platform practice that a platform can change on its own ^[23, 20].

Children's-data documentation among the in-game networks is thin ^[444, 445]. Gadsme's privacy policy of 24 February 2026 lists a "COPPA flag" among the data its services collect without saying how flagged traffic is handled ^[444] ♦. Anzu's December 2025 policy offers publishers a Kids Safe-Mode that treats users as children and limits collection, although the publisher may share additional information at its discretion ^[445]. Documentation is not legal compliance, and its absence is not evidence of non-compliance. Chapter 11 scores these documents under its dimension for suitability, age and data controls.

Console, PC and cloud

On consoles and cloud services, most ad placements that platforms document sit on the dashboard, in the store, in a TV app or in the queue before play. The documented exception is a publisher, Electronic Arts, selling boards and overlays inside its own sports games. Microsoft markets console integrations its own pages cannot place, so the console hypothesis stays unresolved.

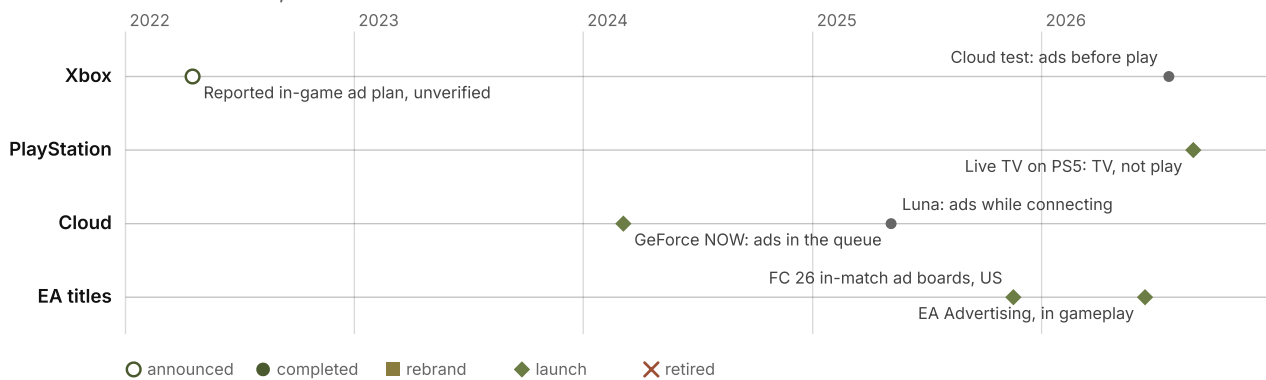
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Xbox sells dashboard and store placements, and its cloud streaming test, begun on 23 July 2026, plays ads before sessions begin ^[24, 202]. Live TV on PS5 (PlayStation 5), launched in the US on 31 August 2026, is TV inventory in the console's Media section ^[446] ♦. GeForce NOW has shown free members ads before play since March 2024, and a 2025 explainer says Amazon Luna shows ads while connecting ^[447, 448]. Reported plans, patent applications and hiring are not products ^[231, 449, 450, 451]. This review found no Nintendo ad product in the sources screened by 28 September 2026 ^[452]. Steam does not support advertising models in games it distributes, and Epic requires paid placements to be disclosed ^[453, 454]. EA names brand integrations in two console titles and in its Madden NFL franchise, and documents none as an ad placement buyable in the US ^[25]. This review codes H3, the console hypothesis, as unresolved because Microsoft markets console integrations "into gameplay" and names no title ^[24].

Most console placements sit outside gameplay

Console and cloud platforms document ad placements on the dashboard, in the store, in TV apps and before streamed sessions; in the sources screened, the one documented case of brand placements inside the gameplay of console titles is a publisher selling its own games ^[24, 446, 447, 25]. H3, the console hypothesis this review registered on 28 September 2026, tracks each placement on Xbox, PlayStation, Nintendo and cloud-gaming services separately, with a dated source for each stage, and first asks whether the ad renders inside gameplay. A console device does not make a placement in-game. Twitch Premium Video runs in the Twitch app on consoles, and Discord Play Quests reward play on console while the Quest renders in Discord ^[47, 48, 49] ♦. Discord also announced on 9 March 2026 that Instant Play Quests, game trials streamed from the cloud and played directly on Discord, "will be made available" for games on NVIDIA GeForce NOW or Amazon GameLift Streams ^[282] ♦. Around the game covers all three.

AD PLACEMENTS ON CONSOLE, CLOUD AND PUBLISHER TITLES



On console, most ad placements sit outside gameplay; the in-game exception is a publisher selling its own games Dated placements from platform and publisher documents and trade reporting. Apart from Microsoft's console integrations, whose location its own documents do not establish, the Xbox and PlayStation placements found by the cutoff are outside gameplay (dashboard, store, TV apps, pre-session ads) or in test; EA sells placements rendered inside its own sports games. Microsoft's console custom integrations could not be placed inside or outside gameplay from its own documents, so H3 stays unresolved.

Units: dated events · Scope: console, cloud and EA titles, 2022 to the cutoff · Sources [231] [202] [446] [447] [448] [235] [25]

A console device does not make a placement in-game. Patent applications and reported plans are not products.

Xbox sells around play, plus one product its pages do not place

Xbox's documented console placements render outside gameplay or leave their location unstated [24, 455, 456, 457] ◆. On 30 June 2025 Microsoft announced an updated Xbox Activities offering, "available now as part of Xbox Landing Experiences", and its retired Invest page describes an invite-only private marketplace for Xbox Home and Store banners [455, 457]. CNBC reported that in 2024 some players complained about a McDonald's ad on a screen for selecting games [458].

XBOX Media Solutions, Microsoft's gaming ad unit, markets the one console product whose location its own pages do not establish [24]. Its custom-integrations page says it integrates brands "into gameplay across mobile, PC, and console", in solutions that range "from immersive in-game moments to XBOX dashboard & store placements" [24] ◆. Its console product, XBOX Experiences, is built on "native display formats and branded content" [24]. The page names no console title, launch date, specification, US availability or programmatic route, and does not say whether XBOX Experiences render inside gameplay [24]. A sponsored article produced by The Drum Studios in January 2026, built on an interview with the unit's general manager, Greg Carroll, describes Xbox's approach through "the idea of game-adjacent rather than in-game" [233] ◆.

Xbox's ad-supported cloud streaming is a test: on 23 July 2026 Xbox began a limited-time test, open to Xbox Insiders, in which players stream games they own free with ads [202] ◆. Ads play before sessions begin, sessions are limited to one hour, and Microsoft states that it does not interrupt the flow of gameplay [202]. Variety reported the same day a two-minute block of ads from market-specific brands before the player joins the cloud queue [459]. The

five games Variety named, from Forza Horizon 6 to War Thunder, are titles eligible to stream, not titles carrying ads ^[459] ♦. Xbox's 3 September 2026 announcement of cloud-gaming hour limits from November 2026 does not mention the ad test, and this review found no dated general-availability plan for ad-supported streaming in the sources screened by 28 September 2026 ^[460] ♦.

A 2022 press report and a 2026 Microsoft patent application point at ads inside play, and neither is a product ^[231, 449]. In April 2022 TechCrunch and XDA, relaying Business Insider's unnamed sources, reported a program for brands to advertise in free-to-play Xbox games, for example as rendered billboards in racing games, through a private marketplace, set to launch by the third quarter of 2022 ^[231, 461] ♦. Microsoft said it had nothing further to share, and this review found no product-specific evidence of a launch in the sources screened by 28 September 2026 ^[231, 461]. Microsoft Technology Licensing's patent application US 2026/0260258 A1, filed on 23 April 2026 as a continuation of an abandoned 2023 application and published on 3 September 2026, describes in its abstract a system that suspends a player's interaction with a game on a promoted-content trigger, presents promoted audiovisual content and grants a credit that delays the next suspension ^[449] ♦.

Networks claim console reach and name no console title

Anzu, an in-game ad network, calls itself "the sole officially licensed in-game ad provider for Xbox" on an undated page and announced its participation in the Xbox Tools and Middleware Program in November 2019 ^[232, 462] ♦. This review found no Microsoft record confirming the licence or its exclusivity; Anzu's own listing on Microsoft Marketplace repeats the claim in copy the publisher supplies ^[463]. It also found no console title named as carrying Anzu placements in the twelve months to the cutoff ^[232, 462, 164].

Frameplay's developer page claims console availability, and its Unity changelog lists "PS5 Ad Loading Support (Experimental)" in November 2023; no live console title was found in the sources screened by 29 September 2026 ^[464, 465, 466] ♦. Gadsme markets "mobile, PC and console" placements, but no source opened names a console title, and Gadsme's own press page describes the adWMG deal cited for it on Xbox and PlayStation as mobile inventory for console-focused advertisers (What counts as gaming advertising) ^[170, 40, 467] ♦. Roblox's client runs on Xbox and PlayStation, but no Roblox document opened states on which devices its immersive ads are served ^[197, 207] ♦. DoubleVerify's post of 1 April 2025, before the twelve-month window, says its Roblox coverage spans mobile, desktop and console, without naming a console title or experience ^[351].

PlayStation sells TV on the console, and patents and hires for more

The one PlayStation ad placement this review found launched by the cutoff is TV inventory ^[446, 451]. Live TV on PS5 launched for players in the US on 31 August 2026 as a free ad-supported service from Sony Pictures Television, with more than 100 live channels in the console's Media section, outside gameplay ^[446]. Variety reported, in an interview with Sony Pictures Entertainment's Peter Wood, that Sony will work with Publica and PubMatic, two companies it describes as focused on connected-TV (CTV) advertising ^[468] ♦. In the sources screened by 28 September 2026, no Sony, Publica or PubMatic release was found, and deal types are not described, so reading the buying route as a CTV route is inference

[468]. The same report cites more than 95 million PS5 units sold worldwide as of 30 June 2026, which counts consoles and does not measure viewers eligible for ads [468].

Sony's other signals are a patent application and a job posting [450, 451]. Sony Interactive Entertainment's application US 2026/0138036 A1, filed on 15 November 2024 and published on 21 May 2026, describes in its abstract a console that determines that an appropriate time for alternate content is about to begin during gameplay, estimates how long it will last and shows alternate content on part of the screen for a shorter duration [450] ♦. Its figure shows a "waiting in queue" screen, and the abstract does not mention advertising [450]. Digiday reported on 5 August 2026 that Sony Interactive Entertainment Media Solutions posted a global director role in mid-July 2026 to scale client-partnership sales in programmatic, FAST (free ad-supported streaming TV) and CTV and "emerging ad solutions" [451] ♦. This review found no PlayStation in-game ad product in the sources screened by 28 September 2026 [451].

Nintendo: one reported rule, no product found

This review found no Nintendo advertising product and no public Nintendo policy text on in-game advertising in the sources screened by 28 September 2026 [452] ♦. The one record found is a developer's account: AUTOMATON reported on 20 May 2025 that Nintendo Switch store review flagged an indie game's parody commercials as in-game advertising "against the platform's rules", and that the developer had to remove them [452]. Nintendo's developer terms are gated, so the rule's scope is unknown [452].

Cloud services put ads in the queue

NVIDIA's GeForce NOW help page says free members have seen up to two minutes of video ads before each free session, while in queue, since 5 March 2024, and that ads do not interrupt gameplay [447] ♦. Members under 16 cannot opt in to personalised ads [447]. On 28 September 2026 the page said NVIDIA is moving to a new advertising provider, so free members may see fewer ads or none; the page does not disclose the provider, advertisers, buying route or volume [447].

In the sources screened by 28 September 2026, this review found no Amazon document on Luna ads [448]. An Android Authority explainer dated 6 May 2025 says Luna shows ads while connecting to a game and not while the game loads or during gameplay [448] ♦.

Steam and Epic set rules for ads inside games

Valve's Steamworks documentation states that Steam contains no paid advertising and does not support advertising models in games distributed on Steam [453] ♦. It bars requiring players to watch ads to play and rewarding them for engaging with ads, and it allows real brands as product placement when they are not disruptive [453]. Whether programmatically served intrinsic placements in a Steam build count as product placement or as an advertising model is not stated, and the page documents no enforcement [453]. The Epic Games Store requires developers to disclose paid advertisements and promotional content, including product placement, logos and slogans for real-world brands, and labels a

declared offer as promotional content ^[454] ♦. This review found no Epic Games Store ad product for advertisers in the sources screened ^[454].

On 13 May 2026 Anzu announced a partnership with Strikerz Inc. to sell LED perimeter boards, pitch-side assets, branded scoreboards and referee kits in the free-to-play football game UFL on PC only, although UFL launched on console in December 2024 ^[469] ♦. Its 7 million players worldwide is a cumulative claim, and no ad-eligible audience is given ^[469]. UFL's PC version is reportedly distributed through the game's own launcher; on 29 September 2026 its Steam page said the game was not yet available there ^[470, 471, 132] ♦. This review infers that Steam's policy does not govern Anzu's UFL inventory ^[453, 471]. Gadsme's documented PC integration is in Football Manager 26, which is sold on Steam ^[170, 141, 472] ♦. No document read says how Steam's policy classifies that placement ^[453].

EA sells placements inside its own console games

Electronic Arts (EA) launched EA Advertising on 15 June 2026, with native ad units such as digital ad boards, scoreboards and brand broadcast overlays dynamically served in select, unnamed EA SPORTS games from its own ad server and SDK (software development kit) built for the Frostbite engine ^[25] ♦. Platforms and publishers selling ads in their own games covers the product and its buying routes.

EA's release names brand integrations in two console titles, EA SPORTS FC 26 and EA SPORTS College Football 26, and in its Madden NFL franchise ^[25] ♦. In EA SPORTS FC 26, Comcast's release of 17 November 2025 dates dynamic LED ad-boards for Xfinity and Peacock in Ultimate Team matches in the US ^[25, 235]. FC 26 runs on PlayStation 5, Xbox Series X|S, PC, Nintendo Switch and Switch 2, but no source opened states which platforms carry the ad-boards ^[235, 236] ♦. In EA SPORTS College Football 26, Mountain Dew's "DEW University" went live on 15 July 2025, and Lowe's release of 11 April 2025 said Lowe's would feature on the Stadium Pulse broadcast overlay ^[25, 239, 473]. MUT.GG, a fan database, places a Lowe's Ultimate Team program, with releases on 27 September and 18 October 2025, in Madden NFL 26; EA's release names only the franchise ^[25, 238]. The release reports engagement with these integrations as games played, matches played and challenges completed, and no impressions ^[25].

Why H3 stays unresolved

This review codes H3 as unresolved under its registered rule ^[25, 202, 24, 446, 447, 469] ♦. Support needs fewer than ten named console or cloud titles documented, by the network, the platform or the game's publisher, as carrying live in-game brand placements buyable in the US in the twelve months to the cutoff, no console platform documenting a generally available in-game brand ad product, and other placements outside gameplay or in test. The rule codes H3 as unresolved when a placement's location or status cannot be established from the platform's, network's or publisher's own documents.

The title count is far below ten. At most three EA console titles qualify ^[25, 235, 238, 239]. FC 26 has a dated, US-specific counterparty record inside the window ^[235]. Madden NFL 26 is dated only by a fan database ^[238]. College Football 26's integrations went live in July 2025, before the twelve-month window opened, so their presence inside it is inferred ^[239]. EA

documents none of the three as an ad placement buyable in the US; US availability is read from the US advertisers named and from Comcast's "in the US" ^[25, 235] ♦. Any count from this screen is a floor for the market, because this review did not screen other publishers' console titles and networks may run console campaigns they do not publicise ^[25].

The platform clause is where the coding stops. In the sources screened, no console platform documents a named, generally available in-game brand ad product with a buying route ^[24, 446, 452]. Microsoft, a console platform, does market brand integration "into gameplay" on console, sold through its gaming experts and a contact form, without naming a title ^[24, 191]. Its own documents do not establish whether those integrations render inside gameplay or what stage they are at, which is the unresolved condition as registered ^[24]. The 2022 plan stays unresolved for the same reason: the rule asks for product-specific evidence, and none was found ^[231, 461].

Two disclosures would move the coding. If Microsoft named a console title and placement for XBOX Experiences, the platform clause could be tested. If EA named its "select EA SPORTS games", the title count could rise, though it would still rest on one publisher ^[25]. The contradiction clause's product test names console platforms, not publishers, so EA's launched product could trigger it only through a count of ten or more titles.

What the outcome evidence shows

The published outcome evidence for brand ads in and around games Every published field result found for a brand campaign in or around games comes from a party with a stake in it: a seller of the inventory, a measurement firm selling the method or an agency that trades on its norms; the academic studies are few and mostly laboratory work. The agency-led dentsu study across three gaming formats found high attention and overall brand recall below the agency's own norms, with livestream ads the exception on recall. This review found no public randomised, holdout or matched-market test of an in-game or game-adjacent brand campaign whose funding is documented as coming from a party without a financial interest, in the sources screened by 29 September 2026.

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The Play Attention report by dentsu and Lumen, published in January 2024, found gaming ads more viewable and more attended than dentsu's norms, and brand recall of 21%, lower than those norms ^[27, 384]. Sellers' own studies compare exposed players with a survey control group or with a measurement firm's database, and Frameplay supplied about half of the campaigns (nearly 90 of 173) in the in-game benchmark it reports beating (inference) ^[474, 475, 28]. Roblox, Discord and Microsoft publish lifts from their own studies or internal data, often without magnitudes, units or method ^[28, 341, 476, 227]. The field comparison with the largest survey base found, an Ipsos analysis drawing on 37,000 interviews in 16 European countries, rests on self-selected exposure ^[477]. The only study with documented independent funding is a laboratory experiment, in which 26.6% of 79 players reported noticing any in-game ad unaided ^[26]. This review found no public randomised, holdout or matched-market test of an in-game or game-adjacent brand campaign whose funding is documented as coming from a party without a financial interest, in the sources screened by 29 September 2026 ^[26, 27, 28].

How the studies were coded

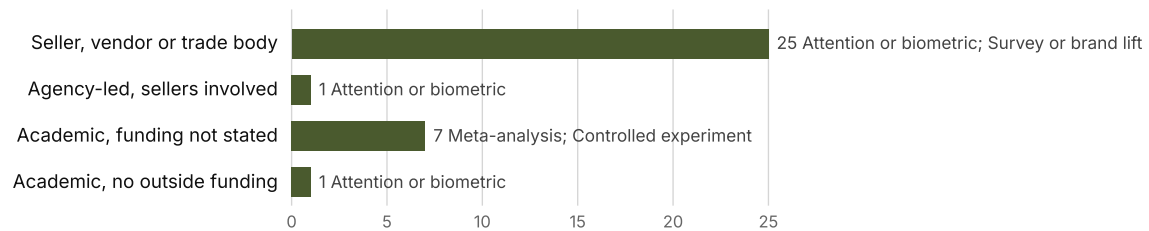
Research question 8 asks what outcome evidence exists for brand advertising in and around games, and who paid for it. Each study is coded by design, sample, comparator, sponsor and funding. A study counts as independent only when its funding is documented as coming from a party without a financial interest; unstated funding is recorded as unknown.

Attention metrics are defined in the companion paper on attention measurement, and Measurement covers who offers attention measurement in games.

The screen combined web searches for brand lift, attention, sales and incrementality studies, sellers' newsrooms and case-study pages, and title searches of scholarly records from 2019 to the cutoff, followed by a verifier re-screen. Field experiments with live in-game campaigns and academic studies of children and Roblox advertising were screened by title search only, after the web-search budget ran out, so the absence finding is weaker on those topics. Form-gated reports from Gameloft, Roblox and Anzu with Lumen were not opened.

This review found no public randomised, holdout or matched-market test of an in-game or game-adjacent brand campaign whose funding is documented as coming from a party without a financial interest, in the sources screened by 29 September 2026 [26, 27, 28] ♦. Every field result for a specific live brand campaign was published by the seller of the measured inventory, by a measurement firm selling the method, or by an agency that trades on its norms [27, 28, 477]. The table at the end of this chapter holds 34 study records, one per study, with every publication of a study attached to its record; the figure counts the same records. Each record says what its design can support (a causal result for the tested stimulus, an association, a description, or nothing assessable) separately from who paid for it [475, 478, 479, 477]. Ipsos's GameTrack analysis, discussed below, is not in the table [477].

OUTCOME STUDIES OF IN-GAME AND GAME-ADJACENT ADS, BY WHO RAN OR PAID FOR THEM



Of 34 studies screened, one academic study reports no outside funding; none is an independent randomised or holdout test of a brand campaign.

Most outcome studies of in-game and game-adjacent ads were run or paid for by interested parties, and none is an independent field test Studies screened by the cutoff that report brand lift, recall, attention, sales or incrementality for in-game or game-adjacent brand ads, classed by who ran or paid for them, with their most common designs. Seller studies often compare the seller with its own benchmark.

Units: studies · Scope: studies found by the review, published by the cutoff · Sources [482] [483] [474] [579] [478] [475] [479] [28] [484] [486] [488] [341] [476] [489] [490] [580] [492] [494] [495] [395] [496] [118] [356] [553] [477] [27] [498] [499] [500] [505] [503] [501] [502] [26]

A bounded count of the sources screened, not a census. Funding is recorded as stated; "not stated" is not independence.

The dentsu study: more attention, less recall

The Play Attention report, published by dentsu in January 2024 with the research firm Lumen, measured livestream ads charted as Twitch, Activision Blizzard mobile rewarded video and intrinsic in-game ads with Anzu [27, 384]. Gaming scored 99% viewability, 6,736 attentive seconds per 1,000 impressions (APM) and a \$3.38 attention cost per 1,000 (aCPM), all better than dentsu's norms [27, 384]. Brand recall was 21%, which dentsu calls highly

variable across gaming environments and lower than its norms ^[27] ♦. The comparator is dentsu's cross-media normative database, and the report gives no sample size, fieldwork dates, uncertainty or funding ^[27].

The formats diverged. Rewarded video had 10,043 APM against 6,100 for dentsu's online video norm ^[27] ♦. Intrinsic ads with Anzu had 3,442 APM, above online display at 1,416 but below social at 3,975 and online video ^[27]. APM depends on dwell time and viewability, so a full-screen, opt-in rewarded video starts with an advantage over a billboard in a scene (inference) ^[27]. Livestream ads, shown in a simulated livestream environment and charted as Twitch, produced 57% brand recall against a dentsu norm of 38%, and a 17% average brand-choice uplift against dentsu norms of 7.25%, with uplift measured from a control-group baseline ^[27] ♦. The report itself does not describe Twitch's role, but Lumen's release of it carries a Twitch Ads company description beside Anzu's, and Microsoft's October 2024 post credits the study to dentsu in partnership with Lumen, Twitch Ads, Activision Blizzard Media and Anzu; not all ad categories shown were gaming-specific ^[27, 384, 480].

Anzu's blog is the only source found for the sample: 200 gamers aged 18 or over in a Las Vegas lab and 250 online controls ^[481] ♦. It gives Anzu's attention figure as 3,422 where dentsu and Lumen give 3,442 ^[481, 27, 384].

Microsoft's April 2026 gaming ad blog says, citing research with dentsu, that "100% of gaming ads are fully viewed", although the report gives 100% on-screen only for rewarded video ^[456, 27] ♦. The same passage says immersion predicts sales with 83% accuracy; that figure is not in dentsu's report, and no source for it was found ^[456, 27]. Microsoft's October 2024 post credits its immersion findings to a seller-commissioned study run by Alter Agents in March 2024, with no public method ^[480].

Seller studies against seller benchmarks

Specialist in-game networks report results against a measurement partner's benchmark, and the benchmarks shift. In October 2022 Anzu reported in-game ads viewed for 2.9 seconds against a Lumen benchmark of 1.5 seconds; in June 2023 it reported 3.1 seconds against a digital ad norm of 2.9 seconds ^[482, 483] ♦. Neither release gives geography or a sample for these results, or says whether the benchmarks share ad sets or definitions ^[482, 483]. The same releases report 36% average spontaneous recall in 2022 and 49% average prompted recall in 2023; these are different measures, and both are levels among exposed players ^[482, 483].

An Anzu and Happydemics study of 110 intrinsic campaigns, released on 26 March 2024, reports ad recall 13 points above the digital media average and purchase consideration 5 points above the online media average ^[474] ♦. The comparator is Happydemics' database of over 600 advertisers, with no control group, and the release does not say who commissioned the study ^[474].

Frameplay's release of 27 October 2025 reports a Happydemics in-game benchmark of 173 campaigns, nearly 90 of them Frameplay's ^[475] ♦. In-game ads had the highest ad recall of any digital format at 32%, a level among respondents with no control reported, and Frameplay scored 24% on consideration, 2 points above the in-game benchmark ^[475]. With nearly 90 of the 173 campaigns, Frameplay is compared with a benchmark about half made

up of its own campaigns, unless Happydemics excluded them, which the release does not say (inference) ^[475] ♦. Gadsme's advertiser page states an average 35% ad recall and +25 points on brand image and consideration from brand lift surveys on its inventory, with no provider, sample or period ^[118] ♦.

Platforms that measure their own ads

Roblox, Discord and Microsoft sell the inventory and publish the studies of it. Roblox's own brand lift study, run with Latitude from 20 to 27 March 2024, surveyed 2,100 US monthly users: 300 in a control group and 1,800 exposed users aged 13 to 49 ^[28] ♦. It reports statistically significant increases in awareness, opinion, consideration and recommendation averaged across three brands, without magnitudes, and stated intentions up by 3 to 10 points ^[28]. How exposure was assigned is not stated, and the sample includes 13- to 17-year-olds, which Suitability, user-generated worlds and children's rules takes up ^[28].

Digiday reported on 12 May 2025 that a MediaScience study for Roblox measured 140 US users aged 13 to 34 with eye tracking and skin-conductance sensors, and that Roblox figures showed unaided recall 211% higher than for social ads ^[484] ♦. For recall against streaming TV, Digiday reports 95% and Tubefilter 38%; no Roblox-issued document was found, and funding is not stated ^[484, 485]. Roblox's Immersive Is Effective study with Ipsos, fielded from 6 to 27 May 2026, found that 52% of 200 Roblox users said they pay more attention to ads on Roblox than they usually do, 13 points above a separately recruited streaming base ^[486] ♦. That is self-reported attention, and the release does not say who paid ^[486, 487]. EDO, which named Roblox its first gaming measurement partner on 18 June 2026, reported measurable lifts from a pilot but published no effect sizes ^[488].

In AdExchanger's report on the Interactive Advertising Bureau's (IAB's) PlayFronts event of September 2026, a Roblox executive pointed to an 18% lift in sales per cardholder and a 6% lift in conversions for a Sam's Club rewarded video campaign, attributed to Cint, with no published design ^[183] ♦. Agency marketers had told Digiday in May 2025 that Roblox would need metrics such as direct sales conversions to convince brands more firmly ^[484] ♦.

Discord's Quest case studies cite Kantar and Discord's own data. For Bethesda's DOOM: The Dark Ages, a 7-day Video Quest in the US and Canada, the page reports +11.3 points in ad awareness and +3.4 points in play intent at 90% confidence, with the headline figures sourced to Discord internal data; the advertiser is a game publisher ^[341] ♦. Its film cases for The Black Phone 2 and Obsession do not say whether their Kantar lifts are points or relative changes ^[476, 489]. Mountain Dew's World of Warcraft Quest reports +16 points in brand favorability from Discord internal data with no named partner or method, and Wendy's reports only a 1.30% lift in Discord ad awareness ^[490, 491] ♦.

Microsoft's XBOX Media Solutions case studies for KitKat and Hershey's in Candy Crush Saga report ad recall lifts of 29 and 55 percentage points, KitKat's measured in the UK, France, Germany, India and Australia and Hershey's in markets not stated, naming no measurer, sample, control design or period ^[227, 226] ♦. KitKat's campaign also ran retail and product activations, so its lift cannot be credited to in-game exposure alone ^[227]. Gameloft for brands, in paid content on The Drum on 1 June 2026, reported 18% more positive

attention for an in-game interactive video ad than for a YouTube pre-roll, giving no sample, period or funding details ^[492, 493] ♦.

Attention figures for video in and around games

Sellers of mobile and gaming-site video publish attention multiples against short benchmarks. Digital Turbine and Amplified Intelligence reported in April 2023 that, across seven brands in June 2022, viewers attended to Digital Turbine's in-game mobile video ads for a combined 22 seconds, against 1.6 seconds for mobile web video and 2.5 seconds for social video ^[494] ♦. The release calls the 22 seconds "combined" and credits the ads' end cards with "an attention boost" without saying what the total adds together; if it counts end-card time, the units are not like-for-like with the web and social video figures (inference) ^[494]. IION's Garnier case, measured with Amplified Intelligence across 674,343 impressions in 2024, reports 7.38 seconds of attention per video impression against a 1.10-second benchmark, and gives two different display figures, 1.48 and 2.4 seconds ^[495] ♦. A Venatus release of 18 March 2026 says Lumen found Venatus video audiences viewing ads for 8 seconds on average against a 2-second benchmark, with no sample, period, geography, benchmark source or funding ^[395] ♦. Whether such measures predict brand outcomes is examined in the companion attention paper.

Sales and incrementality claims

The purchase outcomes found for in-game brand activations are vendor claims without a published method. Super League's case studies report a 6.3% lift in purchase rate for a Lunchables virtual world designed to keep children coming back, and a highest-ever mobile sales day for Chipotle's Roblox maze ^[496] ♦. Anzu said on 27 March 2025 that a December 2024 beta with Claritas for a major US advertiser found an incremental lift in conversions, giving no figure or method ^[394]. Its April 2025 release claims that intrinsic ads beat advertisers' cost-per-acquisition (CPA) goals by 21% on average and gives no campaign count, objective mix, period or method; user-acquisition economics belong to the published mobile app growth paper ^[497].

The field comparison with the largest survey base found is Ipsos's analysis of its GameTrack survey, published on 7 August 2026: 37,000 interviews in 16 European countries in the first quarter of 2026, run on behalf of the trade body Video Games Europe; Ipsos does not publish the sizes of the exposed and control samples for the nine campaigns ^[477] ♦. Across nine campaigns, players of titles with brand integrations showed an average uplift of 31% on seeing the brand as one for people like them, against 6% for brands that did not advertise in the games; the campaigns include Electronic Arts' EA SPORTS FC integrations for Beats, Pepsi and Visa ^[477]. The non-advertising brands serve as a placebo check, but exposure is self-selected by who played which game, the uplifts are relative, and Ipsos markets the method ^[477]. This review found no public randomised or holdout sales-lift or incrementality study with published design and results for in-game brand advertising, in the sources screened by the cutoff ^[496, 488].

What academic research finds

Academic work on in-game ads is small, mostly run in laboratories, and less favourable on memory than the seller studies (inference). In a peer-reviewed eye-tracking study with no external funding, published in December 2025, 79 adults played a mobile tennis game with embedded static brand ads for ten minutes; only 21 of them, 26.6%, reported noticing any advertisement unaided ^[26] ♦. Whether an ad sat in a task-relevant zone predicted recall better than fixation time did, in one game with a convenience sample of young adults in Turkey ^[26]. Seller recall levels of 32% to 49% come from live campaigns whose recall questions and timing are not published; Anzu's 36% is spontaneous recall, the same kind of unaided measure, and its 49% is prompted, so the figures differ in setting, exposure and wording and sit in tension with that result without contradicting it (inference) ^[475, 118, 482, 483, 26].

A 2021 meta-analysis of 38 data sets found more positive attitudes toward advergames themselves than toward other advertising, but brand information in them seemed less likely to be remembered, they were less often recognised as advertising, and younger consumers were more susceptible ^[498] ♦. Advergames are games built by brands, so the result bears on branded worlds on user-generated platforms by analogy only (inference) ^[498]. Experiments by Ingendahl and colleagues find that brand placements gain in attitude only when met during positive in-game experiences, and the 2022 paper calls the overall effect of placements on brand attitudes small and variable between studies ^[499, 500] ♦. Experiments published in 2026 measure attitudes and intentions only, such as tap intention for rewarded banners among 600 Japanese smartphone users ^[501, 502].

The only peer-reviewed field-data study found, by Huang and Morozov in Marketing Science in February 2025, followed 60,000 Twitch streamers for eight months ^[503, 504] ♦. It estimates an elasticity of 0.027 of a game's concurrent players to its live-stream viewers, an effect the authors call moderate and short-lived, and suggests that only about one sixth of games profit from sponsored streams ^[504]. Its subject is game promotion through creators, and its funding is unknown, as is the funding of most academic papers read only as abstracts ^[503, 498, 505].

What the record supports

The record supports statements about viewability, attention and survey-measured recall in campaigns that sellers chose to publish. Its weakness is design, not volume: the comparators are a measurement firm's database, a benchmark partly built from the seller's own campaigns, a survey control with unstated assignment, or a self-selected exposed group ^[474, 475, 28, 477]. Many published lifts give no unit, sample or uncertainty, so a buyer cannot tell a point change from a relative one ^[476, 489].

The evidence that would change this finding is a randomised or holdout test of an in-game brand campaign, with published design and results, funded by a party without a financial interest. Ipsos's placebo check and Roblox's control group move toward that design, but neither documents randomised exposure or disinterested funding ^[477, 28]. The capability matrix and the Play Quotient scores what each product documents about outcome measurement; those scores record documented capability and say nothing about how the ads perform.

Study evidence table

Outcome measures are deliberately not pooled: different outcomes are different quantities. What a study can support (a causal result, an association, a description or nothing assessable) is recorded apart from who paid for it. 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	WHAT IT CAN SUPPORT	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
dentsu / Lumen: Play Attention (Twitch, Activision Blizzard, Anzu)	2024	lab eye-tracking + survey; online control cell	Association (control cell, assignment not documented)	200 gamers + 250 online controls (per Anzu)	lab, Las Vegas; real games on mobile and PC; simulated livestream	livestream video; rewarded video; intrinsic	viewability, APM, aCPM, brand recall, brand choice	gaming recall 21% (below norms); Twitch recall 57% vs 38% norm; Twitch brand choice uplift 17% vs 7.25% norm; rewarded APM 10,043 vs online video 6,100; intrinsic APM 3,442 vs display 1,416 and social 3,975	not reported	dentsu (agency); sellers collaborated	US adults 18+; lab exposure; norms are cross-media database	[27]
Anzu / Lumen campaign attention tests	2022	eye-tracking panel on live campaigns; Lumen benchmark	Descriptive (against a norm or benchmark)	5,000 respondents (quoted)	Anzu mobile and PC campaigns	intrinsic	% viewed, view time, spontaneous recall, purchase intent	83% viewed vs 62%; 2.9 s vs 1.5 s; spontaneous recall 36%; purchase intent 61% ('uplift of 9%', comparator unstated)	not reported	Anzu (vendor) with Lumen	global; vendor campaigns	[482]
Anzu / Lumen State of In-Game Advertising	2023	eye-tracking; Lumen digital norm	Descriptive (against a norm or benchmark)	not stated	two-year study	intrinsic	viewability, view time, prompted recall	98% vs 78% norm; 3.1 s vs 2.9 s; prompted recall 49% (high 97%)	not reported	Anzu (vendor) with Lumen	global; report gated	[483]

STUDY	YEAR	DESIGN	WHAT IT CAN SUPPORT	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Anzu / Happydemics full-funnel benchmark	2024	brand lift surveys vs normative database	Descriptive (against a norm or benchmark)	110 campaigns	intrinsic campaigns, multiple countries	intrinsic	ad recall, brand identification, purchase consideration	+13 pts recall, +11 pts identification, +5 pts consideration vs digital/online media averages	not reported	Anzu (vendor) with Happydemics	global; database comparator	[474]
Anzu creative best practices	2024	observational: blind creative scoring matched to lift results	Association (observational)	55 campaigns; 15K+ respondents	Anzu campaigns	intrinsic video and display	brand recommendation, purchase intent	guideline-following video +21% recommendation, +5% intent; display +8%, +9%	not reported	Anzu (vendor)	global; correlational	[579]
Frameplay / Happydemics meta-analysis	2024	brand lift surveys vs channel benchmarks	Descriptive (against a norm or benchmark)	29 studies	Frameplay network	intrinsic	attribution, likeability, consideration	attribution 55% vs 40% all media; likeability 52% vs 49%; consideration +21 pts vs +19	not reported	Frameplay (vendor) with Happydemics	global; vendor campaigns	[478] [478]
Frameplay / Happydemics in-game benchmark	2025	brand lift surveys vs normative database	Descriptive (against a norm or benchmark)	173 in-game campaigns (Frameplay nearly 90)	Happydemics database since 2021	in-game (mostly intrinsic)	ad recall, attribution, likeability, consideration	in-game ad recall 32% (highest format); attribution 52% (+9 vs media average); Frameplay 54% attribution and likeability, 24% consideration	not reported	Frameplay (vendor) with Happydemics	global; benchmark about half seller's own campaigns	[475] [475]
Comscore / Frameplay snack-brand survey	2021	exposed vs control brand lift survey	Association (exposed vs control, assignment not documented)	not stated	one campaign	intrinsic	ad recall, sponsor fit, purchase intent	+31.8 pts mobile ad recall; +26.2 pts purchase intent	not reported	Comscore and Frameplay (both interested)	single campaign	[479] [479]
Roblox / Latitude audience impact and brand lift	2024	exposed vs control survey	Association (exposed vs control, assignment not documented)	2,100 (1,800 exposed, 300 control)	US monthly Roblox users 13-49	Roblox immersive video ads	brand and ad awareness, opinion, consideration, recommendation; intended actions	significant increases in all key metrics (no magnitudes); visit brand's Roblox experience +10 pts; search +3 pts	significance stated; level not given	Roblox (seller)	US; includes teens; three brands	[28]

STUDY	YEAR	DESIGN	WHAT IT CAN SUPPORT	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Roblox / MediaScience biometric study	2025	lab eye tracking + electrodermal	Descriptive (lab measures; comparison design not published)	140	US Roblox users 13-34; branded experiences vs feed ads and streaming TV	branded Roblox experiences	attention, unaided recall	attention 100x social, 35x streaming; unaided recall +211% vs social; vs streaming +95% (Digiday) or +38% (Tubefilter)	not reported	Roblox (seller) with MediaScience	US; lab; format not like-for-like	[484]
Roblox / Ipsos Immersive Is Effective	2026	self-report survey of three platform bases	Descriptive (self-report)	600 (200 per base)	Roblox, streaming and social users 13-34	Roblox ads (unspecified)	self-reported attention, memorability	52% pay more attention to ads on Roblox (+13 pts vs streaming, +11 vs social); 63% say product info memorable	not reported	Roblox (seller) with Ipsos	geography not stated; no exposure measurement	[486]
EDO / Roblox outcomes pilot	2026	engagement-rate norms; event-window branded-search lift vs adjacent weeks	Association (before-and-after search lift)	not stated	Roblox campaigns and branded events	rewarded video, billboard video, branded events	branded search engagement	'clear, measurable lifts' (no figures published)	not reported	EDO (measurement vendor) and Roblox	US; proxy outcome	[488]
Discord / Kantar: DOOM: The Dark Ages	2025	Kantar brand lift survey	Association (exposed vs control, assignment not documented)	not stated	7-day Video Quest, US and Canada	Video Quest (rewarded video)	ad awareness, play intent, top-of-mind	+11.3 pts ad awareness; +3.4 pts play intent; +5.7 pts TOMA (frequent FPS players)	play intent at 90% confidence	Discord (seller); Kantar	game advertiser; US and Canada	[341]
Discord / Kantar: The Black Phone 2	2025	Kantar brand lift survey	Association (exposed vs control, assignment not documented)	not stated	multi-Quest film campaign	Video Quests + Mission Quest	awareness, favorability, intent	ad awareness +30.7%; favorability +4.8%; action intent +2.7%; TOMA +1.9% (units unstated)	90% significance stated	Discord (seller); Kantar	film advertiser	[476]
Discord / Kantar: Obsession	2026	Kantar brand lift survey	Association (exposed vs control, assignment not documented)	not stated	three-phase film campaign	Video Quests + Mission Quest	awareness, action intent	+12.9% awareness; +5.2% action intent (units unstated)	not reported	Discord (seller); Kantar	film advertiser	[489]

STUDY	YEAR	DESIGN	WHAT IT CAN SUPPORT	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Discord: World of Warcraft x Mountain Dew	2025	survey of exposed users (method not stated)	Not assessable (method not published)	not stated	Quest: stream WoW to a friend	Quest	brand favorability, perception	+16 pts favorability; +6 pts positive perception	not reported	Discord (seller), internal data	non-endemic FMCG brand	[490]
Activision Blizzard Media rewarded video (unnamed research)	2025	not stated	Not assessable (method not published)	not stated	mobile games	rewarded video	ad recall	+17% ad recall lift	not reported	Microsoft (seller)	no method	[580]
Gameloft for brands: Attention & Emotion in Play	2026	lab eye tracking + facial coding across three environments	Descriptive (lab measures across environments)	not stated	in-game interactive video vs YouTube pre-roll vs web video	in-game interactive video	positive attention, emotional engagement	+18% positive attention and +24% engagement vs YouTube	not reported	Gameloft (seller); protocol by Mediamento and ActFuture	report gated	[492]
Digital Turbine / Amplified Intelligence	2023	attention panel + virtual-store brand choice (STAS)	Association (attention and brand choice, assignment not documented)	seven brands (respondents not stated)	mobile games	in-game mobile video with end card	active attention, STAS	22 s combined active attention vs 1.6 s mobile web video, 2.5 s social video; STAS 160 vs 100	not reported	Digital Turbine (seller) with Amplified	not like-for-like durations	[494]
iiion / Amplified Intelligence: Garnier	2024	attention model on campaign impressions	Descriptive (modelled attention)	674,343 impressions	'Around the Game' placements on mobile and tablet	display and video between levels	active attention per impression	video 7.38 s vs 1.10 s benchmark; display 1.48 s vs 0.40 s (also stated as 2.4 s)	not reported	iiion (seller) with Amplified	single campaign; internal inconsistency	[495]
Venatus / Lumen 'In the Zone'	2026	eye-tracking attention model	Descriptive (modelled attention)	not stated	Venatus gaming, sports and entertainment sites	video (web)	% viewed, view time, APM	about 2x likely to view; 8 s vs 2 s; up to 5x APM	not reported	Venatus (seller) with Lumen	gaming websites, not in-game	[395]
Super League: Lunchables Playables world	undated	case study; method not stated	Not assessable (method not published)	not stated	virtual world for children	branded world	purchase rate	+6.3% lift in purchase rate	not reported	Super League (seller)	no method; child audience	[496]

STUDY	YEAR	DESIGN	WHAT IT CAN SUPPORT	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Gadsme inventory brand lift surveys	undated	brand lift surveys (count and provider not stated)	Not assessable (method not published)	not stated	Gadsme inventory	intrinsic	ad recall, brand image, consideration	35% average ad recall; +25 pts brand image and consideration	not reported	Gadsme (seller)	no method	[118]
Büyükakgöl, Yüce, Katırcı: in-app ads in a mobile sports game	2025	lab eye tracking (Tobii Pro Glasses 2), GLMM	Association (lab observation)	79	adults, mean age 25.8, Turkey; 10 min play	embedded static ads in mobile tennis game	noticing, unaided and aided recall	26.6% noticed any ad unaided; task-relevant placement strongest predictor of recall (p < 0.001)	p-values reported	no external funding (university)	one game, convenience sample, non-US	[26]
van Berlo, van Reijmersdal, Eisend: advergame meta-analysis	2021	meta-analysis	Pooled estimate across studies (meta-analysis)	38 data sets	published studies	advergames	attitude, memory, persuasion, choice, ad recognition	more positive attitudes; lower brand memory than other ads; less recognised as advertising; younger more susceptible	effect sizes not read (abstract only)	funding unknown	advergames, not in-game ads	[498]
Ingendahl, Vogel, Maedche, Wänke: brand placements and in-game experiences	2022	two lab experiments	Causal, for the lab stimulus (randomised experiment)	not in abstract	3D first-person game	brand placement	brand attitude	only placements met during positive experiences benefit; overall placement effect small and variable across studies	not read	funding unknown	lab	[499]
Ingendahl, Brückner, Vogel: attribute associations	2024	2 × 2 within-subjects lab experiment	Causal, for the lab stimulus (randomised experiment)	76	third-person adventure game	brand placement	brand attitude, attribute associations	attitudes more positive with positive in-game experiences; attribute associations mediate	not read	funding unknown	lab	[500]
Min, Kim, Ko: esports in-game situations and ad animation	2025	2 × 2 between-subjects lab eye tracking	Causal, for the lab stimulus (randomised experiment)	not in abstract	recorded esports broadcast	in-broadcast ads	fixation, memory, brand attitude, intention	non-battle moments raise fixations; fixations raise memory; implicit memory raises attitude and intention	not read	funding unknown	esports viewing, lab	[505]

STUDY	YEAR	DESIGN	WHAT IT CAN SUPPORT	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Huang, Morozov: promotional effects of Twitch live streams	2025	observational panel: high-frequency data on 60,000 Twitch streamers sampled every 10 minutes for eight months, with within-day variation in top influencers' broadcast hours	Quasi-experimental (observational panel)	60,000 streamers	Twitch influencer live streams	sponsored game streams	game usage and purchases	elasticity of 0.027 of a game's concurrent players to its live-stream viewers, which the authors call moderate and short-lived; about one sixth of games profit from sponsored streams	not stated in the abstract	funding unknown	game promotion, not non-endemic brand	[503] [504]
Zagni, Rizzo, Filieri: perceived benefit and in-game ads	2026	2 × 2 between-subjects experiment + qualitative	Causal, for the lab stimulus (randomised experiment)	not in abstract	not stated	in-game ads (congruity x interactivity)	perceived benefit, attitude toward IGA	interactivity and congruity raise perceived benefits and attitudes	not read	funding unknown	attitudes only	[501]
Hatakeyama: rewarded in-game banner tap intention	2026	2 × 3 between-subjects online experiment	Causal, for the lab stimulus (randomised experiment)	600	Japanese smartphone users with RPG involvement	rewarded in-game banner	tap intention	in-game currency raised tap intention vs no reward; not vs e-money points; category fit no effect	significance stated	funding unknown	Japan; intention only	[502]
Lumen and eye square validation of Intrinsic Time-in-View	2022	eye-tracking comparison	Descriptive (method comparison)	not stated	one McCormick campaign in Basketball Battle	intrinsic	viewable time, attention	1.4x attention vs Lumen mobile display norm	not reported	Frameplay (release); study funding unknown	one campaign, one title	[356]
Kochava attribution case	undated (before 2024-10)	attribution counts, no control	Descriptive (attribution counts, no control)	1 campaign	power-sports brand; supply-side partner apps	intrinsic	web engagements	60,000+ attributed web engagements from 2.7M impressions	not reported	Kochava (partner)	single campaign	[553]

STUDY	YEAR	DESIGN	WHAT IT CAN SUPPORT	SAMPLE	SETTING	FORMAT / CHANNEL	OUTCOME MEASURE	HEADLINE RESULT	UNCERTAINTY	SPONSOR	GENERALISABILITY	SRC
Ipsos GameTrack: brand integrations in games	2026	exposed vs unexposed survey across nine in-game campaigns, with brands that did not advertise in the games as a placebo check; exposure self- selected by who played which game	Association (exposed vs unexposed, self-selected; placebo brands)	37,000 interviews, 16 European countries	GameTrack consumer survey, first quarter of 2026	brand integrations in games, including EA SPORTS FC	"a brand for people like me"	average uplift of 31% across nine campaigns, against 6% for brands that did not advertise in the games; EA SPORTS FC integrations: Beats +97%, Pepsi +26%, Visa +18%	not stated; uplifts are relative	Ipsos (measurement firm) for Video Games Europe (trade body)	Europe, not US; players only; self- selected exposure	[477]

Exits, platform growth and the agentic question

Since 2021, specialist in-game ad companies have been bought, merged, put into insolvency or wound down, while platforms and publishers launched or widened their own ad sales. No record reviewed says the in-game format caused an exit, and no comparable revenue series shows which side grew faster. Artificial intelligence (AI) features are few and mostly in test, and in the sources screened no in-game seller documents use of an agentic buying protocol.

IN SHORT

Primary records show at least three specialist companies sold or put into insolvency since 1 January 2021: Super League bought Bloxbiz and Let's Bounce, and Bidstack Group Plc entered administration with a pre-packaged sale in March 2024, and its former operating company, Bidstack Ltd, entered creditors' voluntary liquidation in June 2026; Super League's purchase of the Misfits Ads business line from an esports company and Admix's merger with LandVault, announced in 2022, are recorded but not counted ^[29, 30, 31, 32, 506, 507] ♦. Bidstack's administrators cite liquidity and record that a 242-party sale process drew no third-party offer amid doubts about future revenue and sector outlook; no record reviewed attributes an exit to the in-game format ^[31, 507]. Roblox announced programmatic routes from April 2025, Electronic Arts (EA) launched EA Advertising in June 2026 and Zynga announced Zynga Ads+ in September 2026 ^[187, 188, 25, 183]. H5, the market-structure hypothesis, is unresolved: part (a) holds, and part (b) cannot be tested because comparable revenue series are not disclosed ^[197, 198, 199, 200, 143, 128]. The Ad Context Protocol (AdCP) can represent a gaming channel at schema level, but in the sources screened no in-game seller shows a connector, test, production use or transaction ^[184, 185, 121]. Documented AI features for in-game products are few: Roblox's are in test or announced, and Super League reports a partner's AI creative service, announced in January 2026, with no documented controls ^[209, 508, 30].

Each event, classified from its record

The primary records since 2021 show acquisitions, a merger and pivot, an administration with a pre-packaged sale, a dissolution, creditors' voluntary liquidations, an undated court liquidation, a strike-off application, and one product retirement announced and another in progress ^[29, 30, 507, 31, 509, 32, 510, 150, 339, 511].

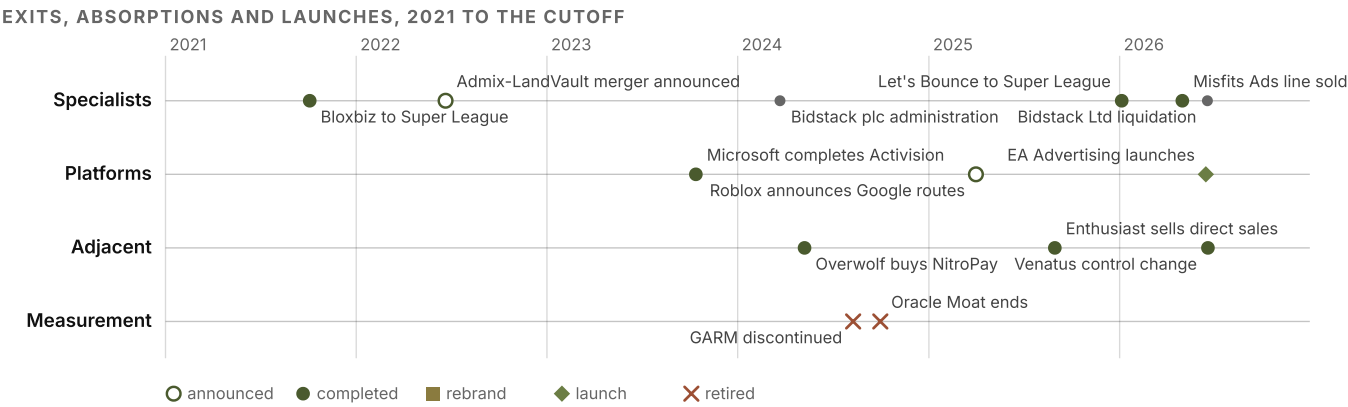
COMPANY OR PRODUCT	LANE	CLASSIFICATION	DATE	RECORD
Bloxbiz	Specialist	Acquisition (asset purchase by Super League)	4 October 2021	Form 8-K ^[29]
ESL Gaming	Around the game	Acquisition (by Savvy Gaming Group)	21 April 2022	Seller's release ^[322]
Admix	Specialist	Merger with LandVault, and pivot	21 June 2022	Party release ^[507]
Bidstack Group Plc	Specialist	Administration with pre-packaged sale	22 March 2024	Administrators' proposals, registry ^[31, 512]
NitroPay	Around the game	Acquisition (by Overwolf)	8 May 2024	Buyer's release ^[293]
Oracle Moat	Measurement	Retirement announced, effective 30 September 2024	FAQ of 12 August 2024	Oracle notice ^[339]
Enthusiast Gaming	Around the game	Sale of its direct-sales business line	30 August 2025	Seller's release ^[317]
Let's Bounce	Specialist	Acquisition (asset purchase by Super League)	5 January 2026	Form 10-Q ^[30]
Misfits Ads	Specialist	Acquisition (asset purchase by Super League)	1 May 2026	Form 8-K ^[506]
Bidstack Ltd and its parent	Specialist	Creditors' voluntary liquidation	18 June 2026	Registry ^[32, 64]
Venatus	Around the game	Acquisition (change of control)	19 June 2026	Registry ^[302, 303]
AdInMo Ltd	Specialist	Strike-off application, suspended	7 and 17 September 2026	Registry ^[112, 151]
Super Biz (formerly Bloxbiz)	Specialist	Retirement (in progress)	Undated; read 28 September 2026	Vendor page ^[511]
Sayollo Media Ltd	Specialist	Court liquidation	Undated in the record	Israeli registry ^[510]

Super League bought Bloxbiz, Let's Bounce and the Misfits Ads business line ^[29, 30, 506]. For Bloxbiz it paid \$6.0 million at closing plus up to \$11.5 million contingent on revenue milestones through fiscal 2023 ^[29] ♦. Bloxbiz became Super Biz, and the Super Biz site now says the platform is being deprecated, with sign-ups closed and work continuing with a small group of studios ^[128, 511] ♦. For Misfits Ads, a business line of Esports Now, LLC, it paid \$1.5 million in cash plus shares and warrants on 1 May 2026, with a fixed \$300,000 cash payment due on the first anniversary and an earn-out of up to \$1.2 million in cash and 105,571 shares ^[506] ♦. On 5 January 2026 it had bought Let's Bounce, Inc., a marketing technology company for brand engagement inside gaming and user-generated content environments, in an asset acquisition priced at \$200,000, with up to \$325,000 more payable on net revenue milestones for 2026 ^[30]. The buyer may itself change hands: under agreements signed on 18 August 2026, Metaplanet would hold about 95.7% of Super League's common stock, subject to a stockholder vote on 16 October 2026, after the cutoff ^[513, 514] ♦.

Admix, an in-play product-placement company, announced a merger with the metaverse builder LandVault in a release dated 21 June 2022 ^[507]. The merged entity would carry the LandVault name, Admix's founder and chief executive would lead it and LandVault's founders would leave, and the release gives the growth of Admix's metaverse revenue as context, so this paper classifies the event as a merger, rebrand and pivot away from in-game

placements, not a sale ^[507] ♦. Infinite Reality announced a \$450 million all-stock acquisition of Landvault on 9 July 2024; this review did not establish that it completed ^[515] ♦. An "Admix" ad network now runs at admixplay.com under W Media International Ltd, and no record opened links that operator to the original company ^[516, 517].

Israel's Registrar of Companies records Sayollo Media Ltd as "in liquidation by court", with 2021 as its last annual report and no order date ^[510] ♦. In December 2021 it had launched gComm, an in-game marketplace, which suggests the liquidation came later (inference) ^[518]. The record gives no cause and no order date, and H5 needs a primary record dating each event after 1 January 2021, so Sayollo is left out of the H5 count ^[510]. AdInMo Ltd applied for voluntary strike-off on 7 September 2026, and the action was suspended on 17 September after an objection ^[112, 150, 151] ♦. That is neither an insolvency nor a completed dissolution; Who sells inventory inside games explains why AdInMo moved to the historical rows ^[150, 153]. The product register holds 8 historical rows, none of them scored.



Specialists were sold, merged or wound up while platforms and publishers built their own ad sales Events classified from primary records (filings, registries, party releases); grey dots mark insolvency events (administration, liquidation). An exit does not show that a format failed: Bidstack's administrators cite liquidity, and no record reviewed attributes an exit to the in-game format.

Units: dated events · Scope: in-game specialists, platforms, game-adjacent sellers and measurement, 2021 to the cutoff · Sources ^{[29] [507] [31] [30] [506] [32] [522] [187] [25] [293] [317] [303] [402] [339]}

Comparable revenue series are not disclosed, so the growth half of H5 stays unresolved.

Bidstack: what the administrators recorded

Bidstack's record is the fullest of the exits, and its administrators name liquidity as the cause ^[31]. Bidstack Group Plc, a listed holding company, entered administration on 22 March 2024 ^[512]. The same day its administrators sold the business and assets, including its shareholdings in subsidiaries, for £804,848 to Virtual Sport Technology Limited, a vehicle owned by the plc's then management team ^[31, 512, 519] ♦. A marketing process that contacted 242 parties had produced no third-party offer ^[31].

The administrators attribute the administration to liquidity constraints ^[31]. Further drawdowns on an October 2023 convertible loan note facility from Irdeto could not be

made, because its conditions, City Code requirements among them, could not be met ^[31] ♦. Group turnover, across all Bidstack activities, had fallen to £3.1 million in 2023 from £5.3 million in 2022, on unaudited management accounts ^[31]. The parties approached in the sale cited strategic fit, timelines, uncertainty over future revenues and the outlook for the media, advertising and gaming sectors ^[31]. Those are doubts about one company's revenue and a sector's prospects; the administrators do not say the in-game format failed ^[31].

The plc moved from administration to dissolution and was dissolved on 26 June 2025 ^[509, 512]. Bidstack Ltd and its parent, Virtual Sport Technology Limited, entered creditors' voluntary liquidation on 18 June 2026 ^[32, 64] ♦. IION's sellers.json, last modified on 28 September 2026, still lists Bidstack as an intermediary seller, although Bidstack Ltd has been in creditors' voluntary liquidation since 18 June 2026 ^[11, 32] ♦.

Around the game, owners changed and the products kept selling

Game-adjacent sellers changed owners, and the records show the products continuing ^[323, 293, 520, 521]. Savvy Gaming Group, wholly owned by Saudi Arabia's Public Investment Fund (PIF), bought ESL and FACEIT and merged them, and the ESL sale closed on 21 April 2022 ^[321, 322] ♦. Overwolf announced on 8 May 2024 that it had bought NitroPay, renamed Nitro and run as a division ^[293] ♦. Enthusiast Gaming sold its direct-sales business line to Vertiqal Studios for C\$900,000 in cash plus assumed liabilities, closing on 30 August 2025, and kept reporting quarterly results through the second quarter of 2026 ^[317, 520] ♦. On 19 June 2026 Media Scale Capital Limited, controlled by the Dutch company To Media Groep, took control of Venatus's holding chain from the private equity fund Livingbridge 7 Global LP and two individuals; Venatus's operating company stayed active on the UK register ^[302, 303, 305, 521] ♦.

Measurement was set to lose a service: Oracle's end-of-life FAQ of 12 August 2024 states that Oracle would end all its advertising products, Moat Analytics and Moat Reach included, on 30 September 2024, and this review opened no record of the retirement itself ^[339] ♦. Measurement records the pages that still name Moat ^[364].

Platforms launched or widened their own ad sales

Platforms and publishers widened their own ad sales over the same years, and the growth shows in products and routes, not in disclosed revenue ^[187, 188, 25, 197]. Microsoft completed its acquisition of Activision Blizzard on 13 October 2023, and the former Activision Blizzard Media now sells as XBOX Media Solutions, a rename announced on 4 February 2026 ^[522, 222, 223] ♦.

Roblox announced Rewarded Video through Google Ad Manager and direct insertion orders on 1 April 2025 ^[187]. On 6 January 2026 it announced expansion with the demand-side platforms (DSPs) Amazon DSP and Liftoff and the supply-side platforms Index Exchange, Magnite and PubMatic; no DSP's own documentation of a live integration was found in the sources screened ^[187, 188, 42] ♦. Its filings call advertising and licensing revenue "insignificant" and say it plans to "invest in and expand" its advertising business ^[197, 246] ♦.

EA launched EA Advertising on 15 June 2026, saying advertisers "can now" reach players through native ad units served dynamically in select, unnamed EA SPORTS games ^[25] ♦. At launch EA described direct, bespoke work with brands, with expanded buying planned, and on 3 July 2026 an EA advertising executive told Digiday that EA was not yet working with partners such as The Trade Desk or Criteo; on 15 September 2026 Digiday reported that EA already offers programmatic buying across its mobile games and is extending more dynamic capabilities to its console and PC titles, with no DSP or deal type named ^[25, 86, 193] ♦. Zynga, a Take-Two label, presented Zynga Ads+ on 17 September 2026 as a third-party publisher network of about 100 casual mobile games; no participating app is named, so this paper lists it as unconfirmed ^[183, 203, 200] ♦. A platform-owned seller is moving into third-party supply, the specialists' business; that reading is this review's inference ^[183].

H5: part (a) holds, part (b) cannot be tested

H5 needs two parts to hold: (a) at least three specialist in-game ad companies entered insolvency, liquidation or dissolution, retired their product, or were sold since 1 January 2021, each shown by a primary record; and (b) comparable disclosed series showing platform ad revenue growing faster than specialist revenue.

Part (a) holds on the registered wording: primary records show three specialist companies sold or put into insolvency, Bloxbiz and Let's Bounce bought by Super League and Bidstack's plc in administration and its operating company in liquidation, and Super League's purchase of the Misfits Ads business line from an esports company is recorded and not counted ^[29, 30, 31, 32, 506] ♦. Admix's merger, announced in June 2022, under which Admix's own chief executive would lead the combined company under the LandVault name, is a merger, rebrand and pivot, which the rule does not list, so it is recorded and not counted ^[507]. Super Biz, Sayollo and AdInMo are also recorded beside them and not counted ^[511, 510, 150]. Three of these events, Bloxbiz, Let's Bounce and Misfits Ads, were purchases by one buyer, Super League, which reads as consolidation as much as departure; that reading is an inference ^[29, 30, 506]. Anzu, Gadsme, IION, Advertly and Frameplay remain active on registry or vendor evidence, Kidoz and Admazing were live in the period, and Zynga presented Zynga Ads+ in September 2026, so exits alone do not show the category shrinking ^[523, 524, 525, 143, 10, 136, 65, 526, 183]. Advertly, a listed specialist, reported net sales of 33.7 million Swedish kronor for 2025 against 31.8 million for 2024 ^[143, 79] ♦.

Part (b) cannot be tested: Roblox gives no advertising figure, Microsoft reports gaming advertising only inside an XBOX line that also holds hardware, content, subscriptions and cloud gaming, and Amazon reports only company-wide advertising services ^[197, 198, 199]. The disclosed series, Take-Two's advertising in dollars, Advertly's net sales in kronor and Super League's media revenue including influencer work, differ in metric, currency, period and scope ^[200, 143, 128] ♦. Platforms and publishers selling ads in their own games sets them side by side. H5 stays unresolved overall, and part (a) stands as a count of classified events ^[29, 30, 507, 31, 506].

AI features are few, and most are in test

Documented AI capabilities for advertising inside games are thin at the cutoff: an asset generator for a paid-discovery product, tests and announcements, and claims without

documented controls ^[527, 209, 508, 528]. Roblox's Ads Manager offers "AI generate", which creates three thumbnail variations from a text prompt for Sponsored games on the Home page and in search, a product this paper lists and does not score; no AI generation or AI-assisted placement is documented for Immersive Ads or Rewarded Video in the Roblox documentation read ^[527, 529, 530] ♦. On 20 May 2026 Roblox was testing a drag-and-drop Studio plugin for Rewarded Video ^[209]. MediaPost reported on 15 September 2026 a Studio plug-in with rewarded-video templates "expected to launch in Q4 2026", and said a Roblox presentation described the upcoming placement options as no-code and using AI; no primary Roblox document for the timing or the AI was found ^[209, 508] ♦.

Super League's 10-K for 2025 states that it does not currently incorporate AI or machine learning into its products ^[128]. Its second-quarter 10-Q reports its partner AdArcade's "AI-powered Creative-as-a-Service" that converts brands' video ads into playables, announced in January 2026, with no controls documented in the filing ^[128, 30] ♦. Anzu's dynamic channels change the creative after an impression and a cool-off period, and Gadsme's SDK, the software development kit publishers build in, selects ads from several demand sources at run time; no AI-assisted placement was found in the Gadsme pages opened ^[358, 59, 531] ♦. Around the game, Amazon documents user review and creative moderation for a generative-AI workflow that makes Twitch-sized assets ^[532] ♦. Under the coding rule for research question 11, an announcement counts as announced, and AI-assisted placement counts only with documented controls; The capability matrix and the Play Quotient applies that rule.

Agentic buying: a gaming channel in the schema, no seller on it

At the cutoff a gaming channel exists in the AdCP schema, and in the sources screened no in-game seller documents a connector, test, production use or transaction under it or under any other agentic protocol ^[185, 121, 9]. This paper records five protocol states for each seller: schema representation, implemented connector, demonstrated interoperability test, documented production use and demonstrated transaction. Each state needs its own source; membership of a protocol body, working-group roles and announcements earn no credit.

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
Roblox	AI-generated ad thumbnails in Ads Manager ('AI generate', three variations from a text prompt)	LIVE	documentation as of 2026-09-28	Creator Hub documentation	Applies to Sponsored games and search ads (paid discovery, listed not scored); not documented for Immersive Ads or Rewarded Video; no AI-specific controls documented	[527]
Roblox	Drag-and-drop Rewarded Video plugin in Studio (no-code placement)	UNCONFIRMED	2026-05-20	Developer Forum announcement	Q1 2026 letter: releasing 'in the coming months'; AI element not stated by Roblox	[209]
Roblox	'Join with Reward' rewarded placement on the experience details page before entry	UNCONFIRMED	2026-05-20	Developer Forum announcement	Renders before gameplay, outside the experience	[209]
Roblox	Studio plug-in with 2D and 3D templates, pre-gameplay rewarded surface, multi-reward rotation; described as no-code and using AI	UNCONFIRMED	2026-09-15	trade press report read in summary	No primary Roblox source for the date or the AI element found	[508]
Roblox	Homepage Feature: brand video turned into an immersive 3D environment without custom development	BETA	2026-01-06	vendor release; 8-K exhibit	Template-based asset tooling; AI not stated; homepage is outside gameplay	[188]
Microsoft (XBOX Media Solutions)	AI or agentic features for in-game formats	UNCONFIRMED	2026-09-28	four gaming pages searched	Bounded to pages opened	[191]
Microsoft Advertising	MCP Server for AI assistants (campaigns, ad groups, ads, keywords, performance metrics)	LIVE	accessed 2026-09-28	vendor page	Not documented for XBOX Media Solutions in-game inventory	[192]
Super League	AI-powered Creative-as-a-Service (AdArcade Native Playables) converting video ads to playables in rewarded mobile video inventory	ANNOUNCED	2026-01	10-Q narrative	Partner technology; 10-K of 31 Mar 2026 says the company does not incorporate AI/ML into its products; no controls documented	[30]
Super League	AI and data-driven play-persona engine	UNCONFIRMED	accessed 2026-09-28	website	Planning, not placement; no controls documented	[528]

PLATFORM / PRODUCT	CAPABILITY	STATUS	DATE	INDEPENDENTLY OBSERVABLE?	WHAT THE RECORD SUPPORTS	SRC
AdCP (AgenticAdvertising.org)	Protocol release	LIVE	2026-09-23; 2026-09-27	GitHub releases	v3.1.24 channels enum includes 'gaming' ('In-game advertising across platforms', present since v3.0.0); canonical creative formats defer in-game ('Out of scope until cross-engine standards land')	[184] [185]
AdCP (AgenticAdvertising.org)	Rule-12 states for in-game sellers in the product register (schema representation; connector; interoperability test; production use; transaction)	UNCONFIRMED	2026-09-28	public agent registry (34 agents) and v3.1.24 docs	Public tier only; members-only agents not visible	[121] [185]
IAB Tech Lab	ARTF (Agentic Real Time Framework)	LIVE	2026-07-20	GitHub release; standard page	Bidstream container framework; not game-specific	[533]
IAB Tech Lab	AAMP 2.0 buyer and seller agent SDKs; seller agent v2.4.2	LIVE	2026-04-23; 2026-08-18	blog post; GitHub release	Connectors to Google Ad Manager, FreeWheel, PubMatic, Index Exchange, Magnite; no game seller named	[536]
IAB Tech Lab	Agentic Mobile specification with REWARDED placement type	BETA	accessed 2026-09-28	specification text	Schema representation of rewarded in-app placements only; no intrinsic in-game object	[537]

AdCP's latest stable release is v3.1.24 (23 September 2026) ^[184]. Its channels list includes "gaming" ("In-game advertising across platforms", present since v3.0.0), which its taxonomy defines to include in-game display, rewarded video and playable ads, while its canonical creative formats defer in-game ("Out of scope until cross-engine standards land") ^[185] ♦. Its public agent registry listed 34 agents on 28 and 29 September 2026, none operated by Roblox, Microsoft, EA, Zynga, Anzu, Frameplay, Gadsme, Advertly, Gameloft, IION, Super League, Kidoz, Admazing or AdInMo ^[121]. Two of the 34 entries are listed under the name of No Fluff Advisory, this paper's publisher ^[121]. No in-game seller in this paper's register therefore shows an implemented AdCP connector, interoperability test, production use or transaction in the sources screened; the registry's public tier omits members-only agents ^[184, 185, 121].

In the sources screened, the cohort A networks document no agentic protocol at all; the only supply-chain standard observed in use is the sellers.json format, version 1.0, published by six of them ^[9, 10, 11, 12, 13, 14] ♦. Microsoft Advertising's Model Context Protocol (MCP) Server describes access to campaigns, ad groups, ads and keywords without mentioning gaming inventory ^[192, 121] ♦. Zynga and PubMatic announced in July 2026 that advertisers will be able to buy Zynga inventory through PubMatic's AgenticOS; the announcement names no protocol state ^[196] ♦.

The agentic specifications screened from the Interactive Advertising Bureau's Tech Lab (IAB Tech Lab) have no game-specific object ^[533, 534, 535, 536, 537] ♦. IAB Tech Lab's seller agent, released in its AAMP 2.0 kits, connects to Google Ad Manager, FreeWheel, PubMatic, Index Exchange and Magnite, with no game seller named ^[535, 536]. Its Agentic Mobile specification, a draft for public comment, has a REWARDED placement type for mobile in-app inventory and no intrinsic in-game object ^[537]. Some intermediaries that Roblox's app-ads.txt authorises list sales agents in AdCP's registry or connect to IAB Tech Lab's seller agent, but no source screened shows game inventory offered to buyers' agents through any of them ^[538, 539, 121, 536] ♦.

A buyer seeking in-game inventory through an agent would find a gaming category in AdCP's schema, no seller from this paper's register among its agents, and one announced route, Zynga through PubMatic's AgenticOS, with no protocol state documented ^[185, 121, 536, 196].

The capability matrix and the Play Quotient

The matrix scores 23 products on what their public record documents, within three cohorts that are never compared with each other. The field is thin in similar places in every cohort: creative tooling and format specifications score low throughout, coverage is the lowest-scoring dimension among in-game networks, and independent assurance has the most cells with no evidence to score.

IN SHORT

The Play Quotient (PQ) summarises documented capability within a cohort; it is not a measure of performance. In-game ad networks (cohort A) average a field PQ of 46: 4 rows are Well documented, 4 Partly documented and 1 Least documented. Platform and publisher products (cohort B1) average 46, but with 4 rows the cohort is too small to carry bands. Game-adjacent media (cohort B2) average 47, with 1 Most documented row, 2 Well documented and 7 Partly documented. Across the matrix 249 of the 276 cells carry a score, 17 are n/e and 10 are n/a. Vendor documentation caps a cell at 4 and vendor marketing at 3, and 52% of the scored cells rest on vendor marketing, so the scores measure how much a seller has put in writing and how independently it can be checked. No in-game product reaches 4 on independent assurance, and MRC's own record shows no accredited intrinsic in-game metric for any of them ^[15, 16] ♦.

How to read a cell

Each cell scores one product on one dimension from 0 to 5 against written anchors, then applies the evidence cap: vendor documentation (grade C) caps a cell at 4, vendor marketing (grade D) at 3, so the type of evidence is folded into the number. A 5 needs an official document, a filing or independent observation. A cell with no basis to score is n/e and never counts as zero; n/a comes only from the cohort's mask, which in game-adjacent media removes the coverage dimension. Only cells a verifier re-checked count. Open any cell in the matrix below for its rationale, availability, evidence grade, date and sources.

The anchors describe a brand buyer who wants to buy games like other digital media: by context rather than personal data, through named programmatic routes, with creative that can change in flight and measurement someone else can check. Three choices follow and were fixed before scoring: targeting that uses only personal data scores no higher than targeting without a named signal; the top creative score needs AI-assisted tooling with documented controls; and a product sold only direct scores 0 on programmatic access. A managed sponsorship, a seller-built branded world or a contextual specialist can be the right buy and still score low there, so a buyer with such a brief should read the matching

dimension columns, not the composite; reweighting the groups cannot undo a preference built into an anchor. What it means turns the cells into buyer questions.

Availability is a label on each cell. A cell is live when a source dated inside the scoring period, or a vendor page this review found still served, shows the capability. It is unconfirmed when the only evidence is older and survives in a case study, a slide, a reseller's copy or an archive. Under the registered rules an unconfirmed cell still counts, so the quotients include 9 such cells. Treating them as n/e changes 0 bands in cohort A and 1 in cohort B2: LIVAD livestream video ads, whose record rests mostly on material from before the period, falls to a thin record.

Rows are compared only within their cohort. A network selling placements inside other companies' games, a platform selling its own inventory and a streaming service answer different buying tasks, and the anchors for supply and measurement differ between them. Positions inside a band move under reasonable weights, so the paper reports bands, not ranks.

The capability matrix														
Each cell scores publicly documented capability from 0 to 5 against the dimension's anchors, capped by the evidence grade; n/e means no evidence and n/a means outside the cohort's mask. Open a cell for its sources and reasoning. 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	PQ	Formats	Targeting	Measurement	Outcomes	Creative	Supply	Coverage	Programmatic	US	Assurance	Transparency	Suitability	Counted
COHORT A: IN-GAME AD NETWORKS														
BANDED, BY PQ														
Anzu ANZU IN-GAME AD NETWORK · COHORT A	57 Well documented	3	3	3	3	3	3	3	3	3	2	3	4	12/12
Adverty in-game ad network COHORT A	52 Well documented	2	4	3	2	3	3	1	3	3	1	4	3	12/12
Frameplay FRAMEPLAY INTRINSIC IN-GAME NETWORK · COHORT A · ACTIVE (OPERATING; NO EXIT, INSOLVENCY OR RETIREMENT RECORD FOUND)	51 Well documented	2	3	3	3	3	2	1	3	3	3 ?	3	2	12/12

Product	PQ	Formats	Targeting	Measurement	Outcomes	Creative	Supply	Coverage	Programmatic	US	Assurance	Transparency	Suitability	Counted
Gadsme GADSME MANAGED AD NETWORK · COHORT A	49 Well documented 	1	3	3	2	3	2	2	3	3	2	3	3	12/12
Kidoz kid-safe ad network COHORT A	47⁺ Partly documented 	1	3	1	3	1	3	1	3	3	3	3	3	12/12
Gameloft for brands GAMELOFT FOR BRANDS (COMBO!) · COHORT A	45 Partly documented 	1	2	3	2	1	3	n/e	1	3	3	3	2	11/12
Admazing mobile gaming ads for brands COHORT A	41⁺ Partly documented 	1	2	3	2	1	2	n/e	1	3	n/e	n/e	2	9/12
IION in-game brand network COHORT A	40 Partly documented 	1	3	3	2	1	2	1	2	1	1	3	2	12/12
Super League SUPER LEAGUE IN-GAME ADVERTISING · COHORT A · ACTIVE; LISTED; PENDING CHANGE OF CONTROL (NOT CLOSED AT THE CUTOFF)	38[±] Least documented 	1	1	3	3	1	2	n/e	1	3	n/e	2	1	10/12
COHORT B1: PLATFORM AND PUBLISHER IN-GAME ADS														
NO BANDS IN THIS COHORT, A TO Z														
EA Advertising COHORT B1	44 Cohort too small 	1	2	3	3	1	3	2	1	3	1	3 [?]	3	12/12
Roblox ROBLOX BRAND ADS (IMMERSIVE ADS AND REWARDED VIDEO) · COHORT B1	56 Cohort too small 	4	3	3	3	3	3	1	3	3	2	3	4	12/12
XBOX Media Solutions (Microsoft) XBOX MEDIA SOLUTIONS IN-GAME ADS · COHORT B1	43 Cohort too small 	1	2 [?]	3	2	1	3	2	n/e	2	3	2	2	11/12
Zynga Ads COHORT B1	41 Cohort too small 	1	2	3	2	1	3	1	2	3	1	3	2	12/12
COHORT B2: GAME-ADJACENT MEDIA														
BANDED, BY PQ														
Twitch (Amazon) TWITCH ADVERTISING · COHORT B2	64 Most documented 	3	4	4	3	4	3	n/a	3	3	3	4	4	11/11
Overwolf ads OVERWOLF ADS (COMPANION APPS AND GAMING WEBSITES) · COHORT B2	54 Well documented 	2	3	3	2	3	3	n/a	3	3	2	3	4	11/11

Product	PQ	Formats	Targeting	Measurement	Outcomes	Creative	Supply	Coverage	Programmatic	US	Assurance	Transparency	Suitability	Counted
IGN advertising COHORT B2	50 [±] Well documented 	3	2	2	1	3	3	n/a	3	4	n/e	3	2	10/11
Venatus gaming media COHORT B2	47 ⁺ Partly documented 	1	2	3	2	1	3	n/a	3	3	3	3	2	11/11
LIVAD livestream video ads COHORT B2	47 [±] Partly documented 	3 [?]	2 [?]	3 [?]	3 [?]	1	3	n/a	2	1 [?]	n/e	3 [?]	2	10/11
Discord Quests COHORT B2	46 Partly documented 	2	1	3	3	1	3	n/a	0	3	n/e	3	3	10/11
Playwire gaming media COHORT B2	43 Partly documented 	2	2	2	1	1	3	n/a	n/e	3	1	3	2	10/11
Medal advertising MEDAL ADVERTISING (AD UNITS AND SPONSORED PLACEMENTS) · COHORT B2	42 Partly documented 	1	1	1	2	1	3	n/a	2	2	n/e	3	3	10/11
Enthusiast Gaming media COHORT B2	41 [±] Partly documented 	2	1	n/e	n/e	n/e	3	n/a	2	2	n/e	3	1	7/11
ESL FACEIT Group esports media COHORT B2	41 [±] Partly documented 	2	2	1	2	1	3	n/a	2	2	n/e	2	2	10/11

How PQ is built. The Play Quotient is built like the author's Contextual and Native Quotients, except that its field mean is the cohort's mean Raw score rather than pooled group scores; that does not validate it. Three groups: **Depth** (format execution, targeting and context, measurement functionality, optimisation and outcomes, creative and insertion tools), **Reach** (supply, coverage, programmatic access, us availability and coverage) and **Standing** (independent assurance, transparency, suitability, age and data controls). 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. PQ summarises publicly documented capability within a cohort, not product performance, and is not calibrated to buyer outcomes.

Read the band, not the rank. Cohort A: in-game ad networks (9 rows, field PQ 46.4). Band lines: Most documented 58.4, Well documented 47.4, Partly documented 38.4, 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 1 places and by 0.1 on

average. Of the 9 banded products, 6 keep their band under every weighting (Admazing mobile gaming ads for brands, Advertly in-game ad network, Anzu, Frameplay, Gadsme, Gameloft for brands); IION in-game brand network, Kidoz kid-safe ad network, Super League 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 3 points up (Advertly in-game ad network, independent assurance) or 3 down (Advertly in-game ad network, transparency); 0 deletions would drop a row below admission and 1 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), 2 of the 3 banded rows with n/e cells change band (Admazing mobile gaming ads for brands, Super League; marked ±). **Cohort B1: platform and publisher in-game ads** (4 rows, field PQ 46.0). Only 4 rows are band-eligible, under the 6 a cohort needs, so its scores and coverage are shown without bands. Deleting one counted cell at a time moves a score by up to 3 points up (EA Advertising, independent assurance) or 2 down (Roblox, suitability, age and data controls); 0 deletions would drop a row below admission and 0 would cost a row its band eligibility. **Cohort B2: game-adjacent media** (10 rows, field PQ 47.4). Band lines: Most documented 59.4, Well documented 48.4, Partly documented 39.4, Least documented below. Under four reweightings (equal thirds, depth-led, reach-led, standing-led), with Raw and the field mean recomputed, the product in the top band keeps it, while positions move by up to 2 places and by 0.5 on average. Of the 10 banded products, 9 keep their band under every weighting (Discord Quests, Enthusiast Gaming media, ESL FACEIT Group esports media, IGN advertising, LIVAD livestream video ads, Medal advertising, Overwolf ads, Playwire gaming media, Twitch (Amazon)); Venatus gaming media crosses 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, 1 and 0 places. Deleting one counted cell at a time moves a score by up to 4 points up (Enthusiast Gaming media, suitability, age and data controls) or 3 down (Enthusiast Gaming media, transparency); 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), 4 of the 7 banded rows with n/e cells change band (Enthusiast Gaming media, ESL FACEIT Group esports media, IGN advertising, LIVAD livestream video ads; marked ±). **Missing evidence is not neutral:** every deletion case is in data/pq-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/pq.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.

Cohort A: in-game ad networks

The 4 Well documented networks are Anzu, Advertly, Frameplay and Gadsme. Each documents at least two contextual targeting signals, at least one measurement function and a sellers.json file, and each has a counted score on every dimension; Anzu, Advertly and Frameplay also document specifications for at least one format. Kidoz, Gameloft for brands (COMBO!), IION and Admazing are Partly documented. Super League is Least documented.

What separates the bands is documentation, not size. Super League files with the SEC, but its filings describe its product only in the company's own words, which grades those cells C: they name formats without specifications, claim programmatic access without naming a DSP or deal type, and document no suitability control in operational detail; no assurance record was found ^[128, 30, 15]. Admazing sells brand campaigns in third-party mobile games but names no titles, gives its inventory count without a period, and serves no sellers.json, ads.txt or app-ads.txt at the domains checked, so its supply cell is 2 and its transparency cell has no basis to score ^[130, 129, 147]. Its assurance cell is n/e: it names IAS and DoubleVerify as

delivery-verification partners, and a partner's name alone is not evidence under the anchors ^[396, 15].

Across the cohort, the weakest dimensions are coverage, format execution and creative tooling: most networks name their formats without publishing specifications, a counting approach and creative guidelines together. Coverage is scored only where a named live title or documented integration shows a device, distribution and environment combination; Anzu reaches three such tuples, and the count depends on an inferred mobile device for its Gameloft titles and on classing Asphalt 8: Airborne as premium, both flagged in the cell ^[134, 135, 132]. Independent assurance tops out at 3: third-party verification rests on announcements dated 2022 to 2025, and several certification claims are missing from the certifiers' own lists ^[350, 351, 333]. Chapter 3 has the supply evidence behind these rows; chapter 6 the measurement.

Cohort B1: platforms and publishers

Roblox documents the most in the cohort on formats and on suitability, age and data controls, its two cells scored 4. It documents unit-level specifications (unit sizes and video lengths, not advertiser asset specifications), a counting approach and creative guidelines for every in-game brand format it sells, and its filed audience and age mix, combined with its published age rules, would put its ad-eligible base above the supply threshold only by this review's derivation, an inference that counts accounts rather than people, so its supply cell stays at 3 ^[208, 207, 246, 43]. Its coverage cell is 1, because the PC and console tuples rest on a partner's announcement from before the scoring period, and its assurance cell is 2, because verification is documented for only some formats and environments ^[211, 351].

XBOX Media Solutions, EA Advertising and Zynga Ads have thinner records. None names DSP integrations with deal types for its in-game inventory; the best documented route is Zynga's exchange partnership with PubMatic ^[195, 378]. In the sources screened, none publishes specifications for its brand formats. The cohort has 4 rows, below the 6 the rules require before any band is shown, so its quotients are shown without bands. That is a limit of the market's public record: in the sources screened, few platforms and publishers document brand ads on their own games in public.

Cohort B2: game-adjacent media

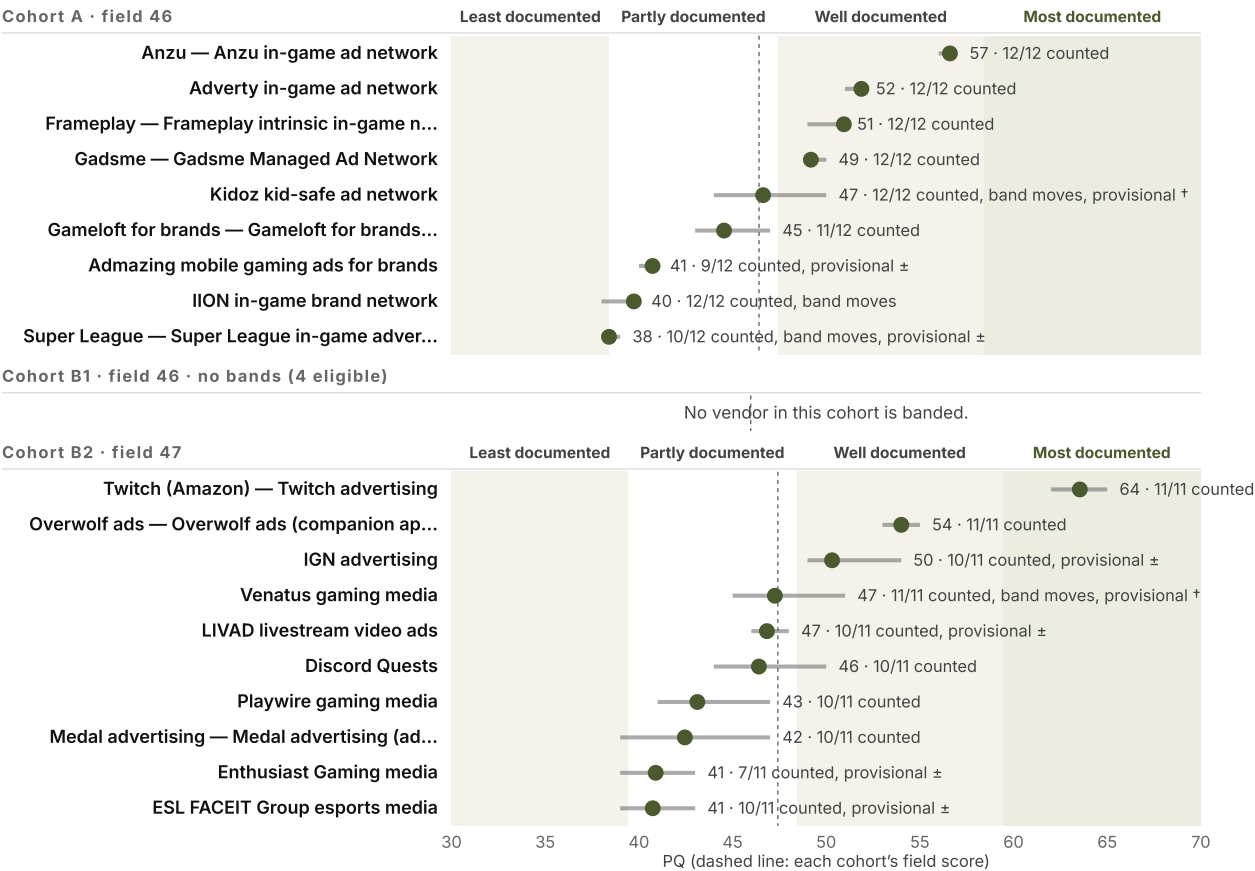
Twitch is the one Most documented row, and it holds that band under all 4 reweightings tested. Its record is documented in vendor detail on most dimensions: formats with specifications for at least one unit, three or more measurement functions, Amazon DSP as a named buying route, advertiser suitability tiers built on mandatory content labels, and a TAG Brand Safety certification on TAG's own record ^[540, 264, 2, 266, 337]. It stops short of 5 on measurement because its evidence is vendor documentation, which caps the cell at 4, and MRC's letter on IAS's Amazon DSP integration does not extend to Twitch supply ^[332].

Overwolf and IGN are Well documented: Overwolf on documented programmatic access, transparency and suitability controls, IGN on documented US availability, formats and creative tooling. 7 rows are Partly documented. Discord Quests scores 0 on programmatic access, because Discord's advertiser pages state that its ads can only be purchased through

its sales team; the Ads Manager it announced on 29 September 2026 is an auction on Discord's own platform, in managed access, with no DSP or deal type named [48, 280, 248]. Medal, added after the second outside review, documents formats only by name and targeting only through personal data, and is Partly documented [252, 541]. Independent assurance is the thinnest dimension here: for most rows this review found no assurance record, so the cell is n/e rather than a low score.

How stable the results are

PLAY 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. Not plotted, A to Z: EA Advertising (cohort too small), Roblox — Roblox brand ads (Immersive Ads ... (cohort too small), XBOX Media Solutions (Microsoft) — XBOX M... (cohort too small), Zynga Ads (cohort too small). Their scores are in data/pq.csv.

Read the band, not the rank: one product clears the most documented line, and four rows are not banded. The Play Quotient for the products with enough evidence to band, one section per cohort. The Play Quotient is built like the author's Contextual and Native Quotients, except that its field mean is the cohort's mean Raw score rather than pooled group scores; that 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 2 places within a cohort, and 15 of the 19 banded products keep their band under every weighting. PQ measures publicly documented capability within a cohort, not product performance.

Units: PQ points on a 0–100 scale, pulled toward the cohort field mean; shown rounded, plotted unrounded · Scope: the banded products in the capability matrix, scored on 29 September 2026, with later score changes logged in the corrections ledger

One full scoring pass, with blind AI re-scoring of the rows nearest a band line. The index inherits every limit of the dimension scores and is sensitive to the weights; the bands, not the positions, are the finding.

The tests are reported per cohort in the matrix and in the downloads. Under 4 reweightings of Depth, Reach and Standing, positions move by at most 1 place in cohort A and 2 in cohort B2. Three rows in cohort A change band under at least one reweighting, IION between Partly and Least documented, Kidoz between Partly and Well documented and Super League between Least and Partly documented, and one in cohort B2, Venatus between Partly and Well documented.

Missing evidence is not neutral. When each row's n/e cells are filled with 1 and then with 4, with every other row frozen, 2 rows in cohort A and 4 in cohort B2 change band: Admazing and Super League in cohort A, and Enthusiast Gaming, ESL FACEIT Group, IGN and LIVAD in cohort B2. Their bands are provisional, and the matrix marks them $\pm$. Deleting one counted cell at a time moves a quotient by at most 3 points up and 3 down in cohort A; the largest single effect is Advertly in-game ad network's independent assurance score of 1, whose removal lifts its quotient from 52 to 55. A low score that is documented costs more than a missing one, which is why the paper publishes coverage for every row and flags the band-sensitive ones. Setting the prior strength to 0 instead of 4, which removes the shrinkage, changes 3 bands in cohort A and 2 in cohort B2; at 2 the changes are 0 and 0, and at 8 they are 1 and 0.

These tests vary the weights, the prior strength and the missing cells. They do not vary evidence grades or the scorer's reading of an anchor, so stability under reweighting is not the same as confidence in the evidence: 52% of the scored cells rest on vendor marketing, and one scorer read every anchor.

A blind second scoring pass tested the scorer. Separate AI scorers re-scored every applicable cell of the 10 banded rows nearest a band line, those within 2 points of a line or whose band moves under a reweighting or prior strength, from the rules, each row's sources and the verified claims, without the first scores, grades or reasons. They matched the first pass on 98 of 115 cells (85%), came within one point on 106 of the 106 cells both passes scored, a quadratic-weighted kappa of 0.9, and differed on whether 3 cells could be scored at all. The 5 material disagreements were adjudicated against the deciding sources and none showed an error in the first pass, so no score changed; Kidoz and Venatus, which the second pass would lift from Partly to Well documented, are marked $\dagger$. Both passes are AI scorers reading the same rules and the same verified claims, some of which were written with the anchors in mind, so the test shows reproducibility, not independent human judgement. In all, 8 of the 19 banded rows carry $\pm$ or $\dagger$; data/second-pass.csv holds both passes cell by cell.

The deep profiles

The profiles cover seven scored products and one verification vendor, DoubleVerify, whose gaming product is described but not scored. Each profile gives what is sold, who buys it, how it earns, its supply dependencies, its capabilities by dimension with availability and evidence grade, its performance evidence with sponsorship, and a SWOT analysis (strengths, weaknesses, opportunities and threats) in which every line carries a source and a basis. Opportunities and threats are the author's reading of dated facts.

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 capabilities with availability and evidence grade, performance evidence, limits, risks and fit. Each SWOT line is tagged record, vendor documentation, vendor claim or inference; opportunities and threats are the author's reading of dated facts.

Full records for each company: [web edition](#) and [data/deep-profile-records.csv](#).

Anzu ACTIVE

Anzu Virtual Reality Ltd. (Israeli private company no. 515647808); its advertiser terms also name a subsidiary, Anzu Inc., whose jurisdiction this review did not establish

STRENGTHS

On 29 September 2026 its sellers.json listed about 1,117 publisher seller accounts, none confidential; these are declared accounts, not titles, audience or active integrations. VENDOR DOCUMENTATION^[9]

It sells intrinsic display and video across mobile, PC and console, added web games on 19 November 2025 and click-enabled formats on 9 February 2026. VENDOR CLAIM^{[123] [133] [122]}

Buyers can use IO, open auction or Deal ID private auction; StackAdapt (August 2026) and Smadex (February 2026) confirm the partnership from the DSP side. VENDOR DOCUMENTATION^{[397] [120] [175]}

Its brand-safety policy documents allow and block lists, category blocking, manual creative checks within 24 hours and takedown within one Israeli business day. VENDOR DOCUMENTATION^[397]

OPPORTUNITIES

Click-enabled formats sold through named performance DSPs (PRWeb release, 9 February 2026) give Anzu a route to performance budgets beyond brand campaigns. INFERENCE^{[122] [175]}

The Playgama web route (19 November 2025) and the UFL PC partnership (13 May 2026) widen supply beyond mobile, though UFL reported no delivered campaign. INFERENCE^{[133] [132]}

Trivver is the only gaming service under MRC review (audit in process April 2026), so an Anzu

WEAKNESSES

On 29 September 2026 Anzu was on neither MRC digital list, and the TAG registry and IAB UK Gold Standard lists returned no Anzu record. RECORD^{[15] [16] [383] [352]}

The only verifier-published verification record is IAS mobile viewability and invalid-traffic measurement from July 2022; no verifier document covers web or click-enabled formats. VENDOR DOCUMENTATION^{[350] [551]}

Its sellers.json is not game-only: a keyword screen found at least 118 of about 958 publisher domains to be TV, streaming, radio, news or weather properties. INFERENCE^[9]

No revenue or dated impression series is disclosed, and no public source documents title-level reporting to buyers as standard; advertiser terms leave billing reports to each IO. VENDOR DOCUMENTATION^{[164] [131] [363]}

THREATS

July 2026 Marketplace Terms bar primarily child-directed apps, yet sellers.json lists children's video properties as publishers; an undocumented mode invites regulatory and buyer scrutiny. INFERENCE^{[171] [9]}

Its media-value page still names Moat, retired 30 September 2024, and its brand-safety policy dates from April 2023, which buyers auditing assurance may discount. INFERENCE^{[364] [339] [397]}

Super League's FY2025 10-K (filed 31 March 2026) names Anzu as a competitor while sometimes

audit would close its assurance gap before peers pull ahead. [INFERENCE] ^[16] ^[15]

WHAT IS SOLD

Brand placements rendered inside third-party games: intrinsic ('blended') display and video on in-game surfaces such as billboards and stadium boards, plus custom ads, sold to advertisers by insertion order and programmatically through open and private auctions (GAM-ANZU-F04, GAM-ANZU-F05). Since 9 February 2026 Anzu also sells click-enabled intrinsic formats to performance DSPs and bundles intrinsic units with interstitials and rewarded video (GAM-ANZU-F04); that performance and user-acquisition use is recorded here but its economics belong to the mobile app growth paper. Since September 2025 it also sells third-party audience-segment targeting (GAM-ANZU-F17).

HOW IT EARNS

Advertisers pay Anzu per IO, in advance unless the IO says otherwise, at rates set in the IO, with Anzu's own reports conclusive unless an advertiser's weekly independent reports differ by more than 5% (GAM-ANZU-F15). As an SSP it sells publisher inventory through real-time bidding under its Marketplace Terms and pays publishers; the revenue share is not public. It recruits Unity mobile developers with a bonus of \$100 per \$500 earned in the first three months, capped at \$10,000 (GAM-ANZU-F36). No revenue, margin or impression series is disclosed; funding totals are vendor statements (GAM-ANZU-F03).

BEST FIT

Brand buyers who want intrinsic display or video in named mobile titles, with allow and block lists by game and PMP or IO buying (GAM-ANZU-F05, GAM-ANZU-F22).

Programmatic buyers already on StackAdapt or Smadex, where the DSP confirms the integration (GAM-ANZU-F06).

Buyers who need a documented contextual or child-directed data mode on the publisher side (GAM-ANZU-F23).

packaging such firms' inventory, so resellers can also compete for budgets. [INFERENCE] ^[128]

WHO BUYS IT

Brands and agencies buying direct (named US examples: SUPERPRETZEL via 160over90 in Philadelphia and Pittsburgh, QuikTrip), programmatic buyers through DSPs (Anzu names The Trade Desk, StackAdapt, Basis, Smadex and Adikteev), and resellers: NBCUniversal was its third-party sales partner for the US and UK from March 2022 (current status not established), and Super League says it sometimes includes such networks' inventory in its brand programmes (GAM-ANZU-F06, GAM-ANZU-F25, GAM-ANZU-F33).

POOR FIT

Buyers who need MRC-accredited in-game measurement or a current TAG seal (GAM-ANZU-F20, GAM-ANZU-F21).

Plans that need named console titles or verified Xbox inventory in 2025-2026 (GAM-ANZU-F13).

Buyers who need a deduplicated US ad-eligible audience figure before committing budget (GAM-ANZU-F11).

Campaigns that must avoid audiences under 18 without their own title-level checks, given the family-audience marketing and the advertiser-side

DoubleVerify

ACTIVE; ACQUISITION PENDING

DoubleVerify Holdings, Inc. (Delaware corporation, SEC CIK 0001819928); its operating subsidiary DoubleVerify, Inc. is the addressee of MRC's accreditation letter

STRENGTHS

MRC's letter of 13 April 2026 continues accreditation of DoubleVerify's Pinnacle platform, covering impressions on desktop, mobile web, mobile app and CTV, viewability, Authentic Attention and pre-bid. [RECORD](#) ^[18]

TAG's registry lists DoubleVerify as Certified Against Fraud and Brand Safety Certified through an independent third-party auditor, globally, and Certified For Transparency in North America and Europe. [RECORD](#) ^[581]

DoubleVerify says it has extended fraud/IVT and viewability measurement to Roblox in-game billboard image and video ads through a custom integration on Roblox's direct-sold inventory. [VENDOR CLAIM](#) ^[351]

DoubleVerify reported FY2025 revenue of \$748.3 million, 90% from advertisers, charged as a Measured Transaction Fee per thousand impressions. [RECORD](#) ^[582]

OPPORTUNITIES

Zynga launched Zynga Ads+ on 17 September 2026 with inventory scored by DoubleVerify, reading as a route into mobile game supply beyond Roblox. [INFERENCE](#) ^{[183] [203]}

Its 15 October 2025 Microsoft release names Microsoft Casual Games; placement and devices are unstated, so a scoped gaming product is still unclaimed. [INFERENCE](#) ^[374]

Its MRC mobile in-app accreditation, including OM SDK, plausibly covers standard display and video in mobile game apps, though no record attests it. [INFERENCE](#) ^{[18] [15]}

WEAKNESSES

None of MRC's accreditation letter, MRC's accredited list or DoubleVerify's 10-K, 10-Q and merger proxy mentions gaming; MRC's standards exclude intrinsic in-game ads. [RECORD](#) ^{[18] [15] [582] [583] [584]}

DoubleVerify's site lists no gaming channel or gaming product page; its Roblox Rewarded Video functions were framed prospectively in the 1 April 2025 post. [VENDOR DOCUMENTATION](#) ^{[375] [351]}

Roblox's Managed Campaign terms make Roblox's reporting the controlling measurement; an advertiser may raise a verifier's IVT discrepancy above 10% through invoice disputes. [RECORD](#) ^[1]

Q2 2026 revenue grew 3% to \$193.8 million, and Activation revenue fell 1% on lower programmatic revenue. [RECORD](#) ^[583]

THREATS

Nielsen's parent agreed 6 August 2026 to acquire DoubleVerify for \$13.60 a share; close is expected by Q1 2027; no HSR outcome was public by 29 September. [RECORD](#) ^{[380] [584]}

Roblox named both DoubleVerify and Nielsen as measurement partners on 1 April 2025; if the deal closes, two of its measurement partners share an owner. [INFERENCE](#) ^{[187] [381]}

No DoubleVerify record was found for any intrinsic in-game network screened, such as Anzu, Frameplay or Gadsme, where rendered 3D formats sit outside its accreditation. [INFERENCE](#) ^{[375] [398]}

WHAT IS SOLD

Software that measures and verifies digital advertising: post-bid measurement of fraud and invalid traffic, viewability, brand safety and suitability, geography and attention ('Measurement'), the same signals applied before purchase through demand-side platforms and ad platforms ('Activation'), and verification and analytics sold to publishers and platforms ('Supply-side') (GAM-DOUBLEVERIFY-F02). In games DoubleVerify sells no inventory, and no DoubleVerify gaming product page was found (GAM-DOUBLEVERIFY-F25). Its documented gaming activity consists of: its standard measurement applied to in-game ads from 27 July 2023, which it said needed no significant tool update (F07); a custom integration for IVT and viewability measurement of Roblox in-game billboard image and video ads on Roblox's direct-sold inventory, plus tag-based Rewarded Video coverage announced in the future tense (1 April 2025) (F09); approval on Twitch for invalid traffic, viewability and domain- or app-level brand safety (F16, game-adjacent); and a measurement-partner role for Zynga, whose Zynga Ads+ network was announced on 17 September 2026 (F17).

HOW IT EARNS

Advertisers pay a Measured Transaction Fee per thousand impressions measured; most prices are fixed. Programmatic activation is bought through DSPs, which collect the fee and remit it; DoubleVerify books the gross amount and records the DSP's share as cost of revenue. Supply-side customers pay under monthly or annual contracts with minimum guarantees and tiered pricing (GAM-DOUBLEVERIFY-F02). Revenue from gaming environments is not disclosed: the FY2025 10-K, the Q2 2026 10-Q and the merger proxy contain no occurrence of 'game', 'gaming' or 'console' (F04).

BEST FIT

Advertisers buying Roblox direct-sold billboard campaigns who want an independent IVT and viewability read alongside Roblox's controlling reporting (F09, F11).

WHO BUYS IT

Advertisers and agencies generate most revenue (90% in 2025; over 2,500 customers, 131 of them at \$1 million or more of annual revenue); publishers and platforms buy supply-side products (GAM-DOUBLEVERIFY-F02). In gaming, buyers are advertisers placing DV tags on Roblox campaigns (F09, F10) and advertisers who wrap tags on networks that allow it, such as Gadsme (F19); a publisher, Zynga, is reported as using DoubleVerify as its measurement partner for Zynga Ads+ (F17). Whether Zynga pays DoubleVerify as a supply-side customer is not stated in the sources opened.

POOR FIT

Buyers who need MRC-accredited measurement of intrinsic in-game placements: no verifier's accreditation, including DoubleVerify's, covers them (F12, F13).

Advertisers buying standard display and video in mobile game apps through DSPs, where DoubleVerify's accredited mobile in-app measurement and app-level pre-bid controls apply to the app environment (inference; the record does not name games) (F12, F14, F27).

Game-adjacent buys on Twitch where IVT, viewability and domain/app-level brand safety are sufficient (F16).

Console in-game campaigns: no documented DoubleVerify console integration beyond its unconfirmed Roblox device claim (F09).

Buyers who need content-level suitability inside UGC experiences or livestreams: DoubleVerify documents only app/domain-level safety on Twitch and a future-tense Rewarded Video announcement on Roblox (F09, F16).

Age-based controls: DoubleVerify documents none (F21).

Frameplay

ACTIVE (OPERATING; NO EXIT, INSOLVENCY OR RETIREMENT RECORD FOUND)

Frameplay Corporation (per its Terms of Use and Technology Privacy Policy and the IAB Europe Global Vendor List; state registry record not opened)

STRENGTHS

The Frameplay Exchange opened on 9 October 2024 for programmatic and direct buys aimed at US buyers, reselling Adverty and AdInMo inventory as listed intermediaries. RECORD [74] [10]

Publisher app-ads.txt files read on 29 September 2026 show matching DIRECT authorisations for at least five of Frameplay's 30 publisher accounts, including Miniclip and Helium9 Games. RECORD [75] [96] [585] [586] [587]

The SDK supports Unity, Unreal and Cocos2dx and documents a single-sided billboard with seven image ratios, four of them video-capable. VENDOR DOCUMENTATION [466] [124] [465]

Frameplay and IAS both document IAS invalid-traffic measurement and impression counts for Frameplay campaigns; neither names viewability or brand-suitability verification. VENDOR CLAIM [369] [420]

OPPORTUNITIES

The June 2025 iion announcement said iion's 4,000+ titles will be accessible through the Exchange in the US; a go-live would widen resold supply. INFERENCE [73]

Trivver is the only gaming service under MRC review at 29 September 2026, so an audit building

WEAKNESSES

Frameplay is on neither MRC list as of 29 September 2026, and counts impressions with its own method; no source states alignment with IAB in-game guidelines. RECORD [15] [16] [355]

Its about page claims TAG Certified for Transparency, but a TAG registry search returned no Frameplay entry. RECORD [357] [387]

The IAB Europe vendor list records Frameplay's TCF registration as deleted on 24 March 2025, while its privacy policy still cites vendor ID 970. RECORD [555] [406]

Frameplay supplied nearly 90 of the 173 campaigns in the October 2025 Happydemics benchmark, so beating that benchmark is largely a comparison with itself. INFERENCE [475]

THREATS

Much of the Exchange's supply belongs to Adverty, AdInMo and iion, which buyers can reach directly, and the 5,000+ games figure cannot be reconciled with supply records. INFERENCE [10] [136] [73]

Frameplay's own releases thin after mid-2025 (newest Unity SDK 16 October 2024, newest

on the IAS integration would set Frameplay apart. [INFERENCE] ^[16] ^[369]

The 9 June 2026 NexTide partnership, a Scott's Lawn Care livestream campaign reaching 3.3 million views, extends selling into game-adjacent streaming. [INFERENCE] ^[136]

WHAT IS SOLD

Intrinsic in-game brand placements: billboard-style "Ad Spaces" rendered inside the 3D environments of third-party games that integrate Frameplay's SDK, carrying static image or video creative in 7 image and 4 video aspect ratios [GAM-FRAMEPLAY-F09]. They are sold direct and through the Frameplay Exchange, which is open to programmatic and direct buyers [GAM-FRAMEPLAY-F03]. The June 2026 boilerplate also lists rewarded experiences, sponsorships and live streaming [GAM-FRAMEPLAY-F07]. The livestream offer with NexTide renders on streamers' channels, not inside games, so it belongs to game-adjacent media (cohort B2) and is excluded from this row [GAM-FRAMEPLAY-F30].

HOW IT EARNS

Advertisers pay per impression. Frameplay's developer guide calls this the CPI (cost per impression) and ties the CPI to impression quality and to targeting data such as player age and sex [GAM-FRAMEPLAY-F10, GAM-FRAMEPLAY-F12]. Game developers who host Ad Spaces earn a share of that revenue (developer revenue guide and developer page) [GAM-FRAMEPLAY-S10, GAM-FRAMEPLAY-S03]. The revenue split, pricing and company revenue are not public. The company is private, and no public filing or financial statement was found [GAM-FRAMEPLAY-F33].

BEST FIT

US brand campaigns that want intrinsic billboard exposure in casual mobile games through one buying point, and that accept network-level rather than title-level planning [GAM-FRAMEPLAY-F03, GAM-FRAMEPLAY-F06, GAM-FRAMEPLAY-F07].

resources post 4 June 2025), which buyers may read as reduced investment. [INFERENCE] ^[465] ^[169] ^[588]

Without a live TCF registration since March 2025, consent-based buying of EEA supply depends on developer CMPs that may not list Frameplay. [INFERENCE] ^[555] ^[554]

WHO BUYS IT

Brands and agencies, primarily US media buyers according to the Exchange's launch reporting [GAM-FRAMEPLAY-F03, GAM-FRAMEPLAY-F28]. Named buyers in the sources are all before the scoring period or unnamed: dentsu for McCormick's Frank's RedHot (2022) [GAM-FRAMEPLAY-F19], an unnamed snack brand (2021) [GAM-FRAMEPLAY-F24], an international power-sports company (Kochava case) [GAM-FRAMEPLAY-F20], and unnamed brands in the case studies [GAM-FRAMEPLAY-F07]. The only named brand inside the period is Scott's Lawn Care, in a livestream campaign outside this row [GAM-FRAMEPLAY-F30]. GumGum appears as a reseller in an undated testimonial, with no documented integration [GAM-FRAMEPLAY-F26].

POOR FIT

Buyers who require MRC-accredited or IIG-aligned measurement, or third-party viewability and suitability verification inside placements [GAM-FRAMEPLAY-F10, GAM-FRAMEPLAY-F16, GAM-FRAMEPLAY-F18].

Upper-funnel objectives measured by vendor-arranged brand lift studies (Happydemics) or attribution feeds, where buyers accept normative benchmarks [GAM-FRAMEPLAY-F20, GAM-FRAMEPLAY-F21].

Buyers who already buy Adverty or AdInMo inventory and want it in the same deal as Frameplay's own supply, provided reach is deduplicated [GAM-FRAMEPLAY-F03, GAM-FRAMEPLAY-F31].

Plans that need named titles, US audience figures or exclusivity [GAM-FRAMEPLAY-F07].

Console or premium PC campaigns: no live console title was found [GAM-FRAMEPLAY-F27, GAM-FRAMEPLAY-F03].

Campaigns directed at children or needing documented age-based delivery limits: the controls are in outline only, and the services are not directed to children [GAM-FRAMEPLAY-F11, GAM-FRAMEPLAY-F13].

EEA personalised campaigns relying on TCF consent, given the GVL deletion [GAM-FRAMEPLAY-F14].

Gadsme

ACTIVE

GADSME (Societe par actions simplifree), SIREN 884197799, per the French company register; Gadsme's Publisher General Terms also name 'Gadsme FRANCE SAS' and 'Gadsme Ltd' as contracting entities

STRENGTHS

Sports Interactive announced a three-year exclusive on 29 September 2025, and its partners page still names Gadsme its exclusive in-game ads partner, starting with Football Manager 26.

VENDOR DOCUMENTATION [140] [589]

On 29 September 2026 its sellers.json listed 226 entries, including a Sports Interactive Games publisher account, and its app-ads.txt held 898 lines across 166 ad systems. VENDOR DOCUMENTATION [12] [97]

It holds US patent 12,211,141 B2, issued 28 January 2025, for calculating object visibility in a 3D scene; the record documents a method, not its use in counting. RECORD [590]

Its February 2026 brand-safety policy requires a PEGI and environment review for each new game, checks placements before live and commits to takedown within 48 hours.

VENDOR DOCUMENTATION [398]

OPPORTUNITIES

WEAKNESSES

On 29 September 2026 Gadsme was on neither MRC digital list, and the TAG registry showed it enrolled in Verified by TAG with no seal. RECORD [15] [16] [392]

Marketing says '100% exclusive' and 'No multi-SSP exposure', but its terms limit exclusivity to 3D and audio ads, and its CEO named Magnite, Xandr and Equativ routes. VENDOR DOCUMENTATION [95] [59] [591]

Its advertisers page reports 35% ad recall, IVT below 0.5% and 98% viewability without naming a provider, sample, period or method. VENDOR CLAIM [118] [592]

Developer documentation sits behind a sign-in, no public creative specifications were found, and the register put 2023 headcount at 6 to 9 salaried employees. RECORD [593] [594] [186]

THREATS

ARROVA, a Hakuhodo DY ONE subsidiary, began selling Gadsme in Japan on 13 May 2026; this reads as a route into a new market through an agency-group seller. [INFERENCE] [160]

Football Manager 27 is announced for November 2026 and the Sports Interactive exclusive runs three years from September 2025, which reads as a second premium PC season. [INFERENCE] [595] [140]

Its SDK was extended in October 2024 to Unreal, Godot, Cocos2d and custom C++ including console, yet no console title is named; console supply remains open. [INFERENCE] [596] [40]

WHAT IS SOLD

The Gadsme Managed Ad Network: Gadsme buys ad space inside third-party games that run its SDK and fills it with ads from its buyer partners, sold direct and programmatically through private marketplace deals, curated deals and direct programmatic partnerships (GAM-GADSME-F03, GAM-GADSME-F17). Its contract catalogue lists display and video ads in menus, cutscenes and 2D and 3D game scenes, plus audio ads; click-enabled units are marketed (GAM-GADSME-F04). Audio ads belong to the audio paper, and the SSP and Cross Promo services are separate listed rows (GAM-GADSME-F27).

HOW IT EARNS

Under the Publisher General Terms (updated 19 May 2026), Gadsme purchases the publisher's ad space, bills and collects from buyers, and pays the publisher a fee set in each term sheet out of 'Transaction Revenues' (amounts received less agency commissions, DSP and exchange fees, invalid-traffic deductions, serving and measurement fees, refunds and taxes); revenues are stated in USD (GAM-GADSME-F03). Cross Promo is priced per install or as a fixed fee and is not scored. No revenue figure is published (GAM-GADSME-F29).

BEST FIT

Brands wanting in-match stadium or cutscene billboards in Football Manager 26 on PC, bought through Gadsme (inference from GAM-GADSME-F10).

Sixty of its 222 publisher domains also appear in Anzu's sellers.json on 29 September 2026, so buyers can reach part of the same supply through a competitor. [INFERENCE] [12] [9]

King's and Zynga's app-ads.txt authorise Gadsme only as a reseller under a Digital Turbine seller ID, which reads as supply dependence on an intermediary. [INFERENCE] [53] [77] [12]

Google's DV360 API v4 exchange list of 10 June 2026 has no Gadsme value, which limits direct selection by DV360 buyers. [INFERENCE] [119]

WHO BUYS IT

Brands and agencies, direct or through DSPs and private marketplaces (GAM-GADSME-F17). Buyers named in opened records: Easy Cash through L'Agence Bradford (France, Q4 2025, GAM-GADSME-F10) and Make-A-Wish International (December 2025, GAM-GADSME-F11). Resellers: ARROVA, a Hakuhodo DY ONE subsidiary, in Japan from 13 May 2026 (GAM-GADSME-F15), and adWMG for console-focused advertisers (GAM-GADSME-F14). Brand logos on Gadsme's pages are not treated as evidence of buying. Game studios are the supply-side counterparties.

POOR FIT

US buyers who need quantified US reach, named US titles or MRC-accredited in-game measurement before committing budget (GAM-GADSME-F16, GAM-GADSME-F19).

European programmatic buyers using PMPs or curated deals for intrinsic mobile placements, where IAS or DoubleVerify tag wrapping is acceptable as buyer-side verification (inference from GAM-GADSME-F05, GAM-GADSME-F17, GAM-GADSME-F23).

Buyers requiring console in-game placements with named titles (GAM-GADSME-F14).

Buyers whose supply-path policy requires a single direct path without reseller authorisations (GAM-GADSME-F08, GAM-GADSME-F09).

Roblox

ACTIVE

Roblox Corporation (advertiser contracts for managed campaigns are with Roblox Advertising Services, LLC)

STRENGTHS

Roblox reported 123 million average DAUs in Q2 2026, about 82% outside the US and Canada; DAUs count accounts, not people, and are not an ad-eligible audience. [RECORD](#) [246]

Its Creator Hub documentation defines a counting rule for each format, from autoplay billboard video (0.5 seconds looked at) to Rewarded Video (first frame counted). [VENDOR DOCUMENTATION](#) [208] [207]

Its Advertising Standards (updated 5 June 2026) bar personalised ads to under-18s, limit rewarded video to users 13 and over, and ban categories for under-13 audiences. [VENDOR DOCUMENTATION](#) [20]

Roblox says over 1,000 brands had run Rewarded Video by 5 February 2026 and over 1,200 games had used it by 20 May 2026. [VENDOR CLAIM](#) [201] [209]

OPPORTUNITIES

Magnite (6 January 2026) and PubMatic (April 2024) describe programmatic access to Roblox inventory in future tense; if delivered, buyers gain routes beyond managed campaigns. [INFERENCE](#) [211] [189]

A Join with Reward test (20 May 2026) and Studio plug-in expected in Q4 2026 could widen Rewarded Video supply, which Roblox says will take time to scale. [INFERENCE](#) [209] [508] [188]

Since 4 May 2026 under-13 users can see contextual billboard ads sold directly or through SuperAwesome, which opens an age band closed to

WEAKNESSES

Roblox does not disclose advertising revenue; its filings call it insignificant and its Q4 2025 letter says it currently remains modest. [RECORD](#) [197] [246] [201]

On 29 September 2026 neither MRC digital list had a Roblox entry, and a TAG registry search returned no Roblox record. [RECORD](#) [15] [16] [570]

Its managed-campaign terms make Roblox's own reporting the controlling measurement, give advertisers aggregate reports only, and allow IVT disputes only above a 10% discrepancy. [VENDOR DOCUMENTATION](#) [1]

On 29 September 2026 its brand-safety page still said under-13s cannot see ads, and its Terms and Creator Hub gave different integration revenue-share start dates. [VENDOR DOCUMENTATION](#) [217] [57] [190]

THREATS

Its Q2 2026 10-Q records youth-safety settlements with five states and says its age checks have misclassified users, which bears on every age-gated ad rule. [INFERENCE](#) [246]

Nielsen agreed on 6 August 2026 to acquire DoubleVerify, a named Roblox verification partner; the deal was still pending on 29 September 2026. [INFERENCE](#) [380] [597]

Magnite and Index Exchange sellers.json files list Roblox as reached through Google's exchange bidding, a declared supply connection through

most programmatic sellers. [INFERENCE] [215] [216] [206]

Roblox added EDO and Ipsos as measurement partners in June 2026; a published EDO result could add outcome evidence, independent only with disclosed funding and design. [INFERENCE] [486] [488]

WHAT IS SOLD

Two in-experience brand products that Roblox serves into ad units creators place in their games (GAM-ROBLOX-F06, F07): Immersive Ads, meaning billboards (video up to 30 seconds, click-to-play or autoplay, and static image ads) and portal ads that teleport users into an advertiser's experience; and Rewarded Video, a full-screen 6 to 30 second opt-in video that grants an in-game reward and is shown only to users 13 and over (GAM-ROBLOX-F11). Managed campaigns are sold by insertion order under Roblox Advertising Services, LLC terms (GAM-ROBLOX-F17); programmatic access is marketed through Google (Ad Manager and Display & Video 360) and named SSPs and DSPs (GAM-ROBLOX-F14, F15). Roblox also sells placements outside gameplay (Homepage Hero, Homepage Feature in beta, Home and Search tiles) and paid discovery (Sponsored Experiences); these are outside this scored product (GAM-ROBLOX-F27). Developer-placed Advertising Integrations are a separate, creator-sold route that Roblox regulates and plans to charge for (GAM-ROBLOX-F21, F22).

HOW IT EARNS

Roblox sells the inventory and shares ad revenue with the publishing creators in Robux: per impression for image and autoplay video ads, per 15-second view for click-to-play video, per teleport for portals, and per impression (EPM) for Rewarded Video (GAM-ROBLOX-F07). Roblox does not disclose advertising revenue; its filings call advertising and licensing revenue 'insignificant' and its Q4 2025 letter calls advertising revenue 'modest' (GAM-ROBLOX-F02). Separately, Roblox plans to charge developers a revenue share on Advertising Integrations they sell directly, with conflicting start dates and bases in its own documents (GAM-ROBLOX-F22).

Google; no delivery through that route was observed. [INFERENCE] [539] [573]

WHO BUYS IT

Brands and agencies, through Roblox's managed service or programmatically (GAM-ROBLOX-F14). Roblox says over 1,000 brands have run Rewarded Video (vendor claim, GAM-ROBLOX-F10). US examples in the record include a Sam's Club rewarded video campaign described by a Roblox executive at IAB PlayFronts in September 2026 and H&R Block's 2025 paid-media campaign (GAM-ROBLOX-F29). Campaigns aimed at under-13 audiences are sold by direct deal only, with SuperAwesome as exclusive partner (GAM-ROBLOX-F12). Resellers sell the product in named markets outside the US: Venatus (UK, France, Germany) and Playwire (select APAC markets) (GAM-ROBLOX-F23).

BEST FIT

Brand campaigns aimed at users aged 13 and over that can run on opt-in rewarded video or in-world billboards, bought direct or through Google's DV360 (GAM-ROBLOX-F07, F14).

Advertisers who need strict published age rules and no personal-data exchange, and who accept aggregate reporting (GAM-ROBLOX-F11, F17, F33).

Contextual campaigns to under-13 audiences that can be bought by direct deal through Roblox or SuperAwesome, within the category bans (GAM-ROBLOX-F12).

POOR FIT

Buyers who need MRC-accredited in-game metrics or independent verification across every format and device (GAM-ROBLOX-F18, F19).

Buyers who need title-level reporting, user-level data or their own third-party ad tags inside experiences (GAM-ROBLOX-F17, F21).

Programmatic buyers targeting under-18 audiences, or US buyers expecting a quantified US ad-eligible audience (GAM-ROBLOX-F12, F14, F29).

Console- or PC-specific plans, since delivery on those devices is not documented by Roblox (GAM-ROBLOX-F06).

Super League

ACTIVE; LISTED; PENDING CHANGE OF CONTROL (NOT CLOSED AT THE CUTOFF)

Super League Enterprise, Inc. (formerly Nth Games, Inc. and Super League Gaming, Inc.)

STRENGTHS

SEC filings document its products, pricing, revenue recognition and deals, so buyers can check terms against primary records rather than marketing.

RECORD [128] [30]

It runs fully managed programs for US brands and agencies across Roblox, Minecraft and Fortnite, priced by CPM, other cost-per-measure or flat fee.

RECORD [128] [30]

In 2026 it added supply rights: 15% of Hide or OOF! with exclusive brand rights, a stake in My Avatar!, and the Misfits Ads business assets.

RECORD [30]

[506]

About 60% of revenue comes through agencies and over half from returning clients, per the FY2025 10-K.

RECORD [128]

OPPORTUNITIES

The Misfits brand-partnership agreement of 1 May 2026 gives first access to Misfits' Roblox games, which could deepen owned supply if Misfits approves deals.

INFERENCE [172]

WEAKNESSES

FY2025 revenue fell 30% to \$11.3 million with a \$20.7 million net loss; two customers made up 22% of revenue.

RECORD [128]

Much supply runs through platforms it does not own, such as Roblox Immersive Ads; its own Super Biz platform is being deprecated, sign-ups closed.

RECORD [30] [128] [511]

No viewability, attention or IIG-aligned counting is documented; published outcomes such as '13x ROAS' are case-study figures without method.

VENDOR DOCUMENTATION [128] [496] [528]

It reports programmatic sales, but no DSP or exchange is named and no major SSP sellers.json listed it on 29 September 2026.

RECORD [145] [572]

[598]

THREATS

Roblox's Advertising Integrations Terms (effective 1 May 2026) require asset approval and bar programmatic third-party ad calls, narrowing what Super League can sell there.

INFERENCE [57] [600]

Q2 2026 on-platform revenue rose \$431,000 and programmatic \$199,000; with new US sellers hired, the ad line could stabilise. [INFERENCE] [30] [598]

The June 2026 Play.Works CTV role and the Poki web-games partnership extend selling beyond UGC platforms, outside the scored product. [INFERENCE] [599] [567]

WHAT IS SOLD

Fully managed advertising and branded-content programs aimed at people who play video games, sold to brands and agencies (GAM-SUPERLEAGUE-F03). The scored product is the media part: brand placements inside third-party Roblox, Minecraft and Fortnite experiences. The filings name the on-platform media assets as static billboards, video billboards, portals, 3D characters and Pop Ups, sold on a CPM, other cost-per-measure or flat-fee basis over one week to two or three months (GAM-SUPERLEAGUE-F04). The company also sells playable and rewarded video ads in mobile inventory (partly through AdArcade), in-game ads in mobile and PC titles (partly using other networks' inventory), CTV advergaming as Play.Works' US sales partner, web-game integrations with Poki, and influencer campaigns (GAM-SUPERLEAGUE-F05, GAM-SUPERLEAGUE-F23). Custom builds, custom integrations and sponsorships inside Roblox, Fortnite and Minecraft are its larger 'publishing and content studio' line; they are recorded descriptively and not scored (GAM-SUPERLEAGUE-F13). Since May 2026 it also holds preferred, qualified rights to present brand partnerships in Misfits' Roblox games (GAM-SUPERLEAGUE-F08) and ownership or economic interests in two Roblox experiences, Hide or OOF! and My Avatar! (GAM-SUPERLEAGUE-F10).

HOW IT EARNS

Two revenue lines. The first is media and advertising: on-platform media, off-platform media (including Native Playables and gamified video), programmatic media sales and influencer marketing. It was \$5.6 million in FY2025 and \$3.1 million in H1 2026, and it is not an in-game ad series. The second is publishing and content studio (custom game development and immersive experiences), \$5.4 million in FY2025 (GAM-SUPERLEAGUE-F13, GAM-

The Q2 2026 call cites evolving Roblox policies affecting brand activations; the 10-K names platform operators like Roblox as potential direct competitors. [INFERENCE] [598] [128]

Metaplanet would own about 95.7% after a Q4 2026 closing, with a bitcoin treasury expected to drive value, leaving advertising a secondary segment. [INFERENCE] [513] [514] [601]

WHO BUYS IT

Brands and agencies. About 60% of revenue comes through agency relationships and 40% from direct brand engagements; over 50% comes from returning clients; two customers accounted for 22% of FY2025 revenue (GAM-SUPERLEAGUE-F28). The filings describe the programs as targeting US audiences (GAM-SUPERLEAGUE-F22). Named FY2025 custom-experience clients include Lions Gate, Panda Express, Chipotle's CMG Strategy Co., Google and Logitech (GAM-SUPERLEAGUE-F13); case studies name Panda Express, Chipotle, Maybelline and Lunchables (GAM-SUPERLEAGUE-F21).

SUPERLEAGUE-F14). Revenue is reported gross as principal except where a reseller partner is used (GAM-SUPERLEAGUE-F05). On-platform media is recognised impression by impression against a contracted number of impressions (GAM-SUPERLEAGUE-F04). The company also earns a share of revenue from game properties, for example 15.0% of Hide or OOF!'s gross revenue and a 12.0% fee on certain direct brand transactions (GAM-SUPERLEAGUE-F10). It reported a net loss of \$20.7 million for FY2025 and \$8.4 million for H1 2026 (GAM-SUPERLEAGUE-F13, GAM-SUPERLEAGUE-F14).

BEST FIT

US brands and agencies that want a managed, cross-platform program in Roblox, Fortnite and Minecraft that combines placements with custom builds and creators, and that accept vendor-reported results (GAM-SUPERLEAGUE-F03, GAM-SUPERLEAGUE-F22).

Buyers seeking brand partnerships in specific Roblox experiences where Super League holds rights (Hide or OOF!, My Avatar!, Misfits Games subject to Misfits' approval) (GAM-SUPERLEAGUE-F08, GAM-SUPERLEAGUE-F10).

POOR FIT

Programmatic buyers needing named DSP paths, deal IDs, sellers.json or supply-path verification (GAM-SUPERLEAGUE-F15).

Buyers requiring MRC-accredited or independently verified in-game measurement, or IIG-aligned counting (GAM-SUPERLEAGUE-F16, GAM-SUPERLEAGUE-F17).

Buyers needing documented, operational suitability and age controls for UGC or child audiences (GAM-SUPERLEAGUE-F18).

Buyers who need title-level reach or ad-eligible audience figures to plan against (GAM-SUPERLEAGUE-F09, GAM-SUPERLEAGUE-F10).

Twitch (Amazon) ACTIVE

Twitch Interactive, Inc. (registered in Delaware, file no. 4221511, per Twitch's Terms of Service). Twitch advertising is sold through Amazon Ads (Amazon DSP self-service or managed service); the Amazon contracting entity for Twitch ad buys was not established in the sources opened.

STRENGTHS

Twitch media has a documented Amazon DSP route: display open auction since December 2022, premium preferred deals since October 2023, and desktop vertical video via programmatic guaranteed. VENDOR DOCUMENTATION ^[258] ^[259] ^[602]

WEAKNESSES

No MRC record names Twitch as accredited: the November 2025 IAS letter excludes Twitch supply, and the May 2026 Amazon DSP letter does not mention Twitch. RECORD ^[332] ^[603] ^[15]

None of the eleven Twitch spec pages defines when an impression, view or completion is counted; they

Amazon documents three inventory tiers, contextual collections such as Family Friendly games, mandatory Content Classification Labels and impression-level content reporting as standard for Twitch buyers. VENDOR DOCUMENTATION [266] [265]

TAG's registry records Twitch with the Brand Safety Certified seal, validated by a third-party auditor as a Direct Seller and applying to global operations (read 29 September 2026). RECORD [337]

Premium Video runs pre-roll and mid-roll on desktop, mobile, console and streaming TV, and server-side stitching reaches console, CTV and ad-block users on desktop. VENDOR DOCUMENTATION [47] [264]

OPPORTUNITIES

Sponsorships opened to Creator Sponsorship Certified Affiliates on 20 August 2026, with Wehype surfacing offers, which widens the creator pool game publishers can buy. INFERENCE [607]

Chat Sentiment Analysis and Campaign Assist, announced by 9 June 2026, could give creator campaigns in-stream reporting; general availability is not stated. INFERENCE [608]

Amazon says Twitch campaigns can be measured through Amazon Marketing Cloud including store sales (June 2026), which lets game advertisers read sales outcomes, not only reach. INFERENCE [608]

WHAT IS SOLD

Two families of brand advertising on Twitch, sold by Amazon Ads (GAM-TWITCH-F03). (1) Twitch media: video and display ads on the Twitch homepage, discovery pages and streamer channels, bought self-service in Amazon DSP or through managed service. Named units are First Impression Takeover (one advertiser per day per geo, daily rate), Headliner, Premium Video (pre-roll and mid-roll in live broadcasts across desktop, mobile, tablet, console and streaming TV; 6 to 60 seconds; unskippable), Vertical Video Ads, Stream Display Ads (beside or below the live player), Mid-Feed Ads, Super Leaderboard, Medium Rectangle and Homepage Carousel (GAM-TWITCH-F04). Twitch video inventory is also reachable inside Amazon's Streaming TV ads product, which bundles Prime

list tracking events and creative rules only.

VENDOR DOCUMENTATION [47] [604]

Amazon's Twitch audience figures are internal, global and dated 2022-2023; the only in-period US reach figure pools Twitch with Prime Video, Fire TV and exchanges. VENDOR CLAIM [2] [260]

Some DIRECT lines in Twitch's ads.txt resolve to Amazon-held seller accounts, and APS sellers.json has no entry for the APS seller ID Twitch lists.

RECORD [605] [606] [573] [572]

THREATS

A 2025 Marketing Science article finds Twitch influencer streams have a small positive effect on game usage and purchases, suggesting most games do not profit from sponsoring them. INFERENCE [503]

Twitch added teen Parental Controls in July 2026 but no document states an age-based ad rule, and its ad-policy URL now redirects to Amazon's global policies. INFERENCE [442] [441] [609]

Turkey's data regulator fined Twitch 2 million lira in November 2024 over a breach, and Twitch's privacy notice allows combining Twitch data with Amazon customer data. INFERENCE [610] [611]

WHO BUYS IT

Brands and agencies through Amazon Ads: Amazon says 'Advertisers can buy Twitch ads whether or not they sell products in the Amazon store' and names auto, tech, apparel and food and beverage advertisers as buyers (GAM-TWITCH-F03). Programmatic buyers use Amazon DSP (self-service or managed; premium preferred deals are for self-service advertisers); smaller advertisers can reach Twitch through Streaming TV ads with no minimum spend (GAM-TWITCH-F07). Game publishers are a named buyer group for Bounty Board ('promote gameplay features and trailers'), which is paid discovery for games and sits outside the brand-advertising objective (GAM-TWITCH-F05). Case studies opened name KITKAT, Kraft Heinz Canada, Reebok, Premier Inn and Lacoste; none is a US case

Video, Twitch, Fire TV Channels and third-party publishers (GAM-TWITCH-F07). (2) Creator activations: Creator Sponsorships, Bounty Board (creators accept paid bounties to play a game or watch a trailer on stream), Channel Takeover (channel skins, 30-60 second streamer-read ads, follower promotions, sponsored subscriptions) and custom work by the Brand Partnership Studio (GAM-TWITCH-F05). Streamables, an opt-in 30-second livestream unit shown inside 'Twitch Partnered' mobile games, is sold from the same catalogue but renders inside third-party games, so it is flagged as a possible separate product row rather than scored here (GAM-TWITCH-F06). Ads render on a game-adjacent livestreaming service, never inside gameplay; on consoles they run in the Twitch app and are not clickable (GAM-TWITCH-F28).

HOW IT EARNS

Advertising revenue from media sold by Amazon Ads; Amazon's filings recognise advertising revenue 'as ads are delivered based on the number of clicks or impressions' and report it only as a company-wide line (FY2025: \$68,635 million), with no Twitch break-out (GAM-TWITCH-F02). Pricing is not published: Twitch media needs 'a minimum spend' in Amazon DSP, Premium Video lengths carry 'varying fees', and First Impression Takeover is 'priced on a daily rate' per geo (GAM-TWITCH-F03, GAM-TWITCH-F04); Streaming TV ads bought through sponsored ads are billed per thousand impressions with no minimum budget (GAM-TWITCH-F07). Creators at Affiliate or Partner level 'can receive revenue from running ads on their channel' and control mid-roll timing; the revenue share was not opened (GAM-TWITCH-F05; open question).

BEST FIT

Brands buying adult Gen Z and millennial video reach through Amazon DSP that want stream-level suitability tiers and Amazon's first-party outcome reporting (GAM-TWITCH-F09, GAM-TWITCH-F12, GAM-TWITCH-F17).

Game publishers and entertainment advertisers promoting launches and trailers through creator bounties or channel takeovers, noting this is paid

with a stated method (GAM-TWITCH-S01, GAM-TWITCH-S14, GAM-TWITCH-S15).

POOR FIT

Buyers who require MRC-accredited impression or viewability counting in the specific environment (GAM-TWITCH-F14).

Buyers who must buy through a non-Amazon DSP or need multi-DSP deal access (GAM-TWITCH-F07).

Campaigns aimed at under-13 audiences (the service is closed to them) or requiring documented teen-specific ad rules (GAM-TWITCH-F18).

discovery rather than brand advertising in the paper's objective filter (GAM-TWITCH-F05).

Advertisers already buying Prime Video or Streaming TV who want to add a livestreaming line in the same platform (GAM-TWITCH-F07, GAM-TWITCH-F23).

Buyers wanting in-game placements: Twitch ads render beside or within streams, not inside games (Streamables excepted and unevidenced by named titles) (GAM-TWITCH-F06, GAM-TWITCH-F28).

XBOX Media Solutions (Microsoft) ACTIVE

Microsoft Corporation (XBOX Media Solutions is a business unit name, not a registered entity found in this review; the contracting entity for XBOX Media Solutions campaigns was not established)

STRENGTHS

It sells Rewarded Video, interactive video, Playables, Interactive End Cards and custom integrations it describes as '100% owned and operated' across King, Xbox and Microsoft Casual Games.

VENDOR DOCUMENTATION

 [224] [612] [24]

King's app-ads.txt, last modified 29 September 2026, declares activisionblizzardmedia.com as owner domain and as a DIRECT seller.

RECORD

 [53]

The TAG registry shows Activision Blizzard Media and King.com Ltd. Brand Safety Certified by independent validation, for the United Kingdom only.

RECORD

 [390] [391]

Microsoft bought Activision Blizzard, including King, for \$75.4 billion on 13 October 2023; its FY2026 XBOX revenue was \$21,790 million.

RECORD

 [522] [198]

OPPORTUNITIES

Rewarded Portals for Candy Crush Saga entered closed beta in select markets on 12 May 2026, a format the vendor could widen.

INFERENCE

 [225] [226]

An ad-supported cloud streaming test began for Xbox Insiders on 23 July 2026; its ads run before sessions, so it adds console-adjacent, not in-game, supply.

INFERENCE

 [202]

A Microsoft patent application published 3 September 2026, reported secondhand, describes

WEAKNESSES

No public specifications, counting rules or creative guidelines were found for its in-game formats; the only spec sheet covers a retired Xbox Home and Store offer.

VENDOR DOCUMENTATION

 [191] [457]

MRC lists no gaming accreditation for it, and IAB UK's certified list omits it despite the vendor's 'Gold Standard 2.1 Certified' claim.

RECORD

 [15] [16] [352] [223]

Headline 98% viewability and 96% completion cite Moat Q1 2023 benchmarks, and the KitKat and Hershey's brand-lift figures name no measurer or method.

VENDOR CLAIM

 [361] [227] [226]

Audience is stated only as 'hundreds of millions' of players, and Microsoft's filings do not break out gaming advertising revenue.

RECORD

 [223] [198] [247]

THREATS

King's app-ads.txt, dated 29 September 2026, authorises Gameloft, Anzu, Gadsme and Meta routes, so buyers can reach the same inventory without XBOX Media Solutions.

INFERENCE

 [53] [229]

XBOX revenue fell 7% to \$21,790 million in FY2026, which may constrain investment in the unit whose revenue sits inside that line.

INFERENCE

 [198]

Microsoft's September 2026 privacy statement bars personalised ads to under-18 accounts while King's

ads at paused gameplay moments; it is a filing, not a product. [INFERENCE] [613]

policy uses under-13, complicating targeting across its titles. [INFERENCE] [21] [234] [228]

WHAT IS SOLD

Directly sold, opt-in in-game brand formats in Microsoft-owned titles: Rewarded Video, In-Game Interactive Video (Video Explorer, Tappable Video, Video Selector), Playables built from six game templates, Interactive End Cards, and custom integrations ('Candy'fied Sponsored Moments in Candy Crush Saga, a Solitaire Event Takeover in Microsoft Casual Games on PC and mobile) (GAM-XBOX-F03). Rewarded Portals, a level-screen format in Candy Crush Saga, is in closed beta in select markets (GAM-XBOX-F04). The same unit also sells console placements outside gameplay (XBOX Experiences, Xbox Landing Experiences, dashboard and store), which belong to the listed row 'Xbox dashboard and store placements', not to this scored product (GAM-XBOX-F13).

HOW IT EARNS

Advertising revenue inside Microsoft's XBOX line. Microsoft's 10-K says XBOX revenue 'is mainly affected by subscriptions and sales of first- and third-party content, as well as advertising'; advertising is not broken out, so the unit's revenue, pricing and growth are not public (GAM-XBOX-F25, GAM-XBOX-F26). Pricing models and CPMs are not published for the scoring period.

BEST FIT

Consumer brands wanting managed, custom, opt-in rewarded and playable activations inside Candy Crush Saga, including multi-market campaigns (GAM-XBOX-F09).

Buyers who value title-level control through owned-and-operated game packages and direct takedown on request (GAM-XBOX-F06).

WHO BUYS IT

Brands and their agencies buying managed campaigns; the documented advertisers inside the scoring period are consumer brands (Hershey's holiday 2025, KitKat/Nestlé across 40 markets) (GAM-XBOX-F09). Buying is through account managers and a contact form; no self-serve or programmatic route is documented (GAM-XBOX-F16).

POOR FIT

Programmatic buyers who need DSP access or standard deal types (GAM-XBOX-F16).

Buyers requiring MRC-accredited in-game measurement or scoped third-party verification (GAM-XBOX-F19).

Advertisers seeking in-gameplay placements on console (GAM-XBOX-F13).

Plans that need a quantified US audience for the product (GAM-XBOX-F29).

What it means

The author's playbook said gaming is a media-mix reallocation problem, not a niche test. The public record does not settle that. What it does settle is narrower and more useful: brand buyers in games are buying on sellers' documentation, and the independent checks that exist for other digital media mostly do not exist here yet.

IN SHORT

Two hypotheses are supported and three are unresolved. Standards exist, but MRC's record, read on 29 September 2026, shows no accredited intrinsic in-game metric for any product scored in cohorts A and B1 (H2, supported) ^[15, 16] ♦. Children's and platform rules restrict what in-game ad products can do (H4, supported) ^[20, 21, 22] ♦. Whether buyers report measurement, safety and planning constraints more often than reach (H1), whether console is in-game inventory at scale (H3), and whether platform ad sales are growing faster than specialists' (H5) cannot be settled from public sources ^[33, 24, 198]. The playbook's GAP model shares its names with IAB Australia's 2023 categories and cannot be sized ^[34, 37] ♦ ♦.

The hypotheses, coded

HYPOTHESIS	OUTCOME	WHY
H1. Buyer constraints	Unresolved	Two surveys not established as US put brand safety first, and neither lead is established as larger than sampling error; no US survey with constraint shares found in the sources screened; the inventory leg holds
H2. Standards and assurance	Supported	IIG 2.0 is a final release; MRC's record shows no accredited intrinsic in-game metric for any product scored in cohorts A and B1; interstitial, banner and video ads in game apps fall under the general mobile in-app standards
H3. Console	Unresolved	Microsoft's console integrations cannot be placed inside or outside gameplay; at most three EA titles qualify
H4. Children's and platform rules	Supported	Rule documents from Roblox, Microsoft, Discord, Epic (Fortnite) and Google Play restrict targeting, personalisation, third-party calls or measurement; COPPA as amended adds separate consent
H5. Market structure	Unresolved	At least three specialist companies sold or put into insolvency since 2021, by primary record; comparable revenue series are not disclosed
GAP model (question)	Unresolved	No source screened sizes the three lines as mutually exclusive categories

Each coding follows the rule registered on 28 September 2026 before research began. Unresolved means public sources cannot settle the question; it does not mean the hypothesis is false. Each verdict holds only for its registered measure: H2 for MRC's record

and the verifiers' own documentation of the scored products, not for the quality of the measurement; H4 for primary rule documents, not for compliance or enforcement.

What the playbook got right, and what it did not

The playbook names EMARKETER as the source of its market figures, although its 3.4 billion player count matches a figure dentsu cites ^[36, 93] ♦. Among the publishers screened by 28 September 2026, EMARKETER is the only one found with public US dollar figures ^[3, 4, 38, 98] ♦, and its public statements disagree about when the series passes \$10 billion ^[99, 92] ♦. The series counts ads placed in games, and most of its dollars are on mobile; EMARKETER also says game developers buy most of the ads served in games, a share of ads rather than of dollars ^[6, 7]. The series is therefore probably a poor proxy for brand demand; that reading is an inference, since no source splits the dollars by buyer or objective ^[6, 7, 8] ♦. The playbook's "under 5% of worldwide media investment" most likely traces to dentsu, has no denominator in any accessible text and is not used here ^[36, 93] ♦.

The playbook argued that buyers cannot fit gaming into their planning, safety and measurement systems. The supply-side facts behind the measurement half are well supported: MRC's record lists no accredited intrinsic in-game metric for any scored in-game product, verification rests on announcements, and several sellers' certification claims are missing from the certifiers' own lists ^[15, 350, 333]. They do not show that buyers cannot fit gaming into their measurement systems, nor that these gaps, rather than audience, hold spend back. In IAB's March 2024 survey of 300 US buyers already investing in games, sponsored by Admazing and Venatus, 86% agreed games advertising is brand safe and 85% said they were confident measuring it ^[107, 108] ♦ ♦ ♦. Those who fold games into other channels list "not yet enough scale" first among four unnumbered reasons, a phrase that the report's one illustrative quote for that group ties to the respondent's own spend rather than to audience ^[107] ♦.

The GAP model's three names appeared in IAB Australia's July 2023 report with different contents ^[34, 91] ♦. Its lines overlap, because the away-from-the-game line includes app installs, an objective ^[36, 8] ♦. This paper keeps placement and objective as separate fields for that reason.

For buyers

Treat the category as three buying tasks. Networks selling placements inside other companies' games (cohort A) sell mostly on their own documentation. Platforms and publishers selling their own games (cohort B1) control the inventory and the rules, and in Roblox's case the reporting that settles the invoice: its managed-campaign terms make its own reporting the controlling measurement ^[1] ♦. Much game-adjacent media (cohort B2) is bought like the rest of digital media: Twitch and Overwolf, for example, name DSP buying routes and document suitability controls ^[2, 266, 44, 294], while Discord sold its ads only through its sales team during the scoring period and announced an auction-based Ads Manager in managed access on 29 September 2026 ^[48, 280, 248].

Within those tasks, four buys are common. The table sets out what the record shows about each; the second column is this review's reading of what each is usually bought for, not a

finding.

WHAT IS BOUGHT	USUALLY BOUGHT FOR	BUYING ROUTE DOCUMENTED	REPORTING DOCUMENTED	ASK FOR
Intrinsic placements in other companies' games (cohort A)	Repeated exposure inside play, without interrupting it	Direct, private-marketplace and curated deals; few DSPs confirm a network integration on their own sites [118, 176, 119]	The network's own impressions and viewability; MRC's record shows no accreditation for intrinsic measurement [17, 15]	Titles with live dates, each matched to the publisher's app-ads.txt; counting aligned to the IIG guidelines; the verifier's own record for the environment sold
Rewarded video and other ad formats in game apps (for example Roblox Rewarded Video)	A completed view the player opted into	On Roblox, sold direct, with programmatic routes documented only in announcements; shown only to users 13 and over [187, 188, 20] ♦	The general mobile in-app standards apply; verifier coverage differs by format [17, 351] ♦	Which verifier measures the unit and in which environment; completion counts; the age limits that apply
A branded world or integration on a user-generated platform (Roblox)	Participation in the brand's own space	Portal ads that lead users into an advertiser's experience, and creator integrations registered in Roblox's Ads Manager [208, 210] ♦	In managed campaigns, Roblox's own reporting is the controlling measurement [1]	The age mix of those who took part; how each reported metric is defined; which revenue-share terms apply [43, 57, 190]
Streams, communities and creators (Twitch, Discord Quests)	Association with the community around a game	Twitch through Amazon DSP; Discord through its sales team, with Ads Manager announced in managed access [2, 48, 248]	Twitch documents several measurement functions; Discord's Quests terms make impression and reach figures non-binding estimates [264, 280] ♦	The suitability settings and the content labels behind them; what a flat fee guarantees [266]

When two networks claim the same titles, ask each for the titles it will deliver in and its seller ID in each, and check that ID in the publisher's app-ads.txt, where it is marked DIRECT or RESELLER [53, 76]. Many publisher domains appear in more than one network's sellers.json, so reach that two networks claim over the same titles has to be compared title by title, not added [9, 10, 11, 12, 13, 14] ♦.

Ask for what can be checked. Named titles with live dates, matched against publishers' app-ads.txt files, say more than a count of seller accounts, which shows authorised connections, not active supply [53, 14] ♦. MRC's own lists say more than a compliance badge. A verifier's own documentation, scoped by format and environment, says more than a partnership release; DoubleVerify's Roblox coverage, for one, differs by format [351] ♦. For outcomes, ask for a randomised or holdout test with a published method and a named funder; this review found none for an in-game or game-adjacent brand campaign funded by a party without a financial interest, in the sources screened [26, 27, 28] ♦.

Children can be a large share of a game audience: of Roblox users who had age-checked, 35% were under 13 globally in the seven days to 30 June 2026, and Roblox cautions that data drawn from age-checked users may not represent its whole user base [43, 246] ♦. Under the amended COPPA Rule, a covered operator needs separate verifiable parental consent before disclosing a child's personal information to third parties, unless the disclosure is integral to the service [23, 421] ♦. Platform rules add limits of their own. None of this is settled by a seller's statement that its product is compliant.

Measurement decision tool

Pick the question a buyer is actually asking. The panel shows the test that answers it, the assumptions that inference needs, where it fails and what it still cannot tell you.

BUYER QUESTION	TEST THAT FITS	WHAT THE INFERENCE NEEDS	WHERE IT FAILS	WHAT IT CANNOT TELL YOU
Is this brand buy or user acquisition?	Ask who buys the product and to what end. Game publishers buying installs, plays or discovery of their own games are user acquisition or paid discovery, whatever the format.	The seller states its buyer mix, or the product's terms name the objective (for example Roblox Sponsored Experiences or Medal Quests).	Published market totals mix both objectives; EMARKETER's US series does not split them.	Split a market-wide total into brand and user-acquisition dollars.
Is the supply live, and is it ours to buy?	Ask for named titles with placements live in the last 12 months, then check each publisher's app-ads.txt for a DIRECT line that matches the seller's sellers.json, and for US selling rights.	The files are current when read; a matched line means the publisher authorises that seller.	Seller-account counts, installed SDK counts and audience claims without a metric and period; networks that resell each other's supply.	Show which titles, placements or geographies are actively sold, or deduplicate reach across sellers.
Are the impressions counted to a standard, and who checked?	Ask which guideline governs counting (the IIG Guidelines 2.0 for intrinsic placements), then read MRC's own accredited and under-review lists and the verifier's own documentation, scoped by product, format and environment.	The accreditor's and verifier's records are current; an audit counts only when MRC confirms it.	Vendor claims of IIG compliance, certification logos missing from the certifier's list, and verification announced in the future tense.	Show that counts are accurate where no one has audited them.
Can the campaign reach players under 18, and on what terms?	Read the platform's own advertising rules and the product's documented age controls; under the amended COPPA Rule, check whether targeting or third-party disclosure of children's data needs parental consent.	The platform's age data and rules apply to the placement bought; documentation describes practice.	Assuming contextual equals compliant, or inferring a user's age.	Establish legal compliance; documentation is not compliance.
Did it work?	Ask for a randomised or holdout brand-lift test with a published method, sample, comparator and funding; treat seller-run or seller-funded results as vendor evidence.	The test isolates the placement from other media and the comparator is not the seller's own benchmark.	Benchmarks built mostly from the seller's own campaigns; attention scores offered as outcomes.	Generalise from one title, brand or format to the channel.
Is a console placement inside gameplay?	Ask where the ad renders (in the game, the dashboard, the store, a TV app or before a session), the stage (test, beta, launch) with dates, and the named titles.	The platform or publisher documents the placement and its status.	Treating a console device as in-game inventory, or a patent or reported plan as a product.	Show scale where no titles or buying route are named.

For sellers

The matrix rewards documentation that can be checked, and the gaps are in the same places for most sellers. Publishing specifications, a counting approach and creative guidelines for each format would move format execution, one of the two weakest dimensions in cohort A along with coverage. Verification documented by the verifier, in the environments sold, and a filing or registry record of US coverage would move Standing and Reach. Naming DSP integrations with deal types, confirmed on the DSP's side, would move programmatic access.

What would change the thesis

The brief named four developments that would change this paper's reading. In the sources read by 29 September 2026, none had happened.

MRC-accredited intrinsic measurement at scale: MRC's record shows one gaming service with an audit in process, Trivver, which this review lists rather than scores because it found no named live title or campaign for it in the period ^[16, 114] ♦ ♦. Console in-game ad products live and bought programmatically: EA sold its in-game ad units directly at its June 2026 launch, and by 15 September 2026 Digiday reported programmatic buying across EA's mobile games while saying only that more dynamic capabilities were being extended to console and PC, with no DSP or deal type named ^[25, 86, 193] ♦; Microsoft's cloud ad test runs ads before play ^[202]. Independent outcome studies for in-game formats: none found for a live brand campaign that meets the test above, and the only study with documented independent funding is a laboratory experiment ^[26, 27, 28] ♦. A gaming line in a holding company's published media mix: WPP Media forecasts gaming as an ad-revenue line, which is not a planning mix ^[89, 90] ♦.

Dated signals to watch after the cutoff: the outcome of Trivver's MRC audit; whether Xbox's ad-supported cloud streaming moves beyond test; whether EA or Roblox names programmatic deal types and DSPs on the buyer's side; whether Roblox applies the developer revenue share from 30 September 2026, as its Terms say, or from 1 January 2027, as its Creator Hub says, and on 1 October 2026 the two documents still conflicted and no source showed which date applies ^[57, 190]; whether Zynga Ads+ goes live; and whether a public registration statement from Discord, reported in January 2026 to have filed confidentially for an initial public offering, puts a platform's game-adjacent ad revenue on the record ^[542, 543] ♦.

Method, limits and interests

Artificial intelligence (AI) research agents gathered this paper's evidence, separate AI verifiers told to refute it checked 807 of its 807 claims, three outside reviews by another AI model challenged the design, the evidence and the draft, and three internal AI review rounds checked the draft. Hypotheses and scoring rules were fixed before scoring; one full pass scored the products, and separate AI scorers then re-scored 10 rows blind, which tests reproducibility, not independent human judgement. The paper is not peer reviewed, externally audited or independently validated.

IN SHORT

Verifier agents checked 807 of the 807 ledger claims: 545 held as stated, 258 held with a qualification, 3 were contradicted and restated, and 1 could not be settled. H2 (standards and assurance) is supported: the Media Rating Council (MRC) record, read on 29 September 2026, shows no accredited intrinsic in-game metric for any scored network or platform product ^[15, 16]. H4 (children's and platform rules) is supported: Roblox, Microsoft and Discord restrict targeting or personalisation in their own ad products by age or age signal ^[20, 21, 22]. H1 (buyer constraints), H3 (console) and H5 (market structure) are unresolved ^[33, 24, 198]. No source screened by 28 September 2026 sizes the author's GAP categories (in-game, around-the-game and away-from-the-game) as mutually exclusive lines ^[37, 41]. The evidence is public, weighted toward vendor material and frozen on 1 October 2026.

How the evidence was produced

Parallel research agents worked from one brief, and every output went to a second agent whose job was to refute it. The brief and the shared research rules (version 3, 28 September 2026) fixed the definitions, cohorts, source authority by claim type and evidence classes. The agents covered 11 workstreams, from market size to outcome evidence and agentic buying. Two were added during the research: row evidence for the scored products without a deep profile, and a targeted sweep of buyer surveys, run before writing because the first pass found only one survey that could test H1. A universe sweep classified vendors and market events and proposed additions to the product register.

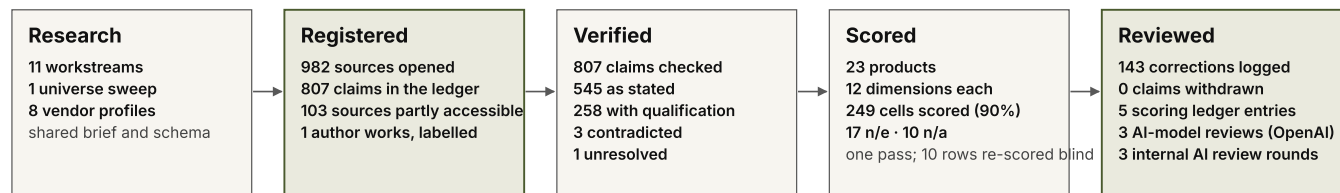
Deep profiles cover 8 products: Anzu, Frameplay, Gadsme, Roblox's brand ads, XBOX Media Solutions, Twitch, Super League and DoubleVerify's gaming product, which is described without a score. Each profile carries a SWOT (strengths, weaknesses, opportunities and threats) in which every line has a source and a basis; opportunities and threats are the

author's reading of dated facts. Other scored products received row evidence, gathered dimension by dimension against the anchors.

Every evidence file records each source's dates, funding and access limits and each finding's passage, evidence class and counterevidence; absence claims rest on logged searches. The register holds 982 sources, each opened or, where blocked, read by another route.

No verifier had seen the research before checking it. It opened the cited source, checked denominator, unit, date, entity and wording, and returned a verdict: supported as stated, supported with qualification, contradicted or unresolved. A restating correction becomes the claim's final wording, which the chapters use. Verifiers of profiles and row evidence also checked every proposed score against its anchor, cap and sources. Streams A to F were verified twice, a day apart, after a workflow re-run; the more severe verdict applies, and on a tie the newer pass. The 32 verifier files record 987 checks. A claim a verifier could not settle stays unresolved and never counts as supported; the ledger records 1 as unresolved.

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 scoring pass with a blind AI re-score of the rows nearest a band line is not an independent human rating.

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

Research cutoff 2026-10-01. 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. Every claim in the ledger was checked by an AI verifier instructed to refute it; a claim the verifier could not settle stays unresolved and is never counted as supported. Corrections include score changes and the findings of the three AI-model reviews the author ran and the three internal AI review rounds.

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.

Rules fixed before scoring

The hypotheses and the scoring rules were registered on 28 September 2026, before any research agent ran, and neither file changed afterwards. The dates are self-recorded in the files and the project's version history; no third party timestamped them. The hypothesis register holds 14 hypotheses and research questions, each with its population, comparator, outcome and coding rules. Absence of accessible evidence codes as unresolved.

The product register was written the same day and amended as research found products, with the changes logged in the corrections ledger. One product, Medal's game-adjacent advertising, came from the second outside review and was scored after the main pass under the same rules. The register holds 59 products, 28 of them listed and 8 historical. User-

acquisition and paid-discovery products are never scored. Other services were classified by what the buyer purchases and where the ad renders, and evidence is never inherited between rows.

The 3 scored cohorts are in-game ad networks across independent titles (cohort A), brand ad products on in-game inventory a platform or publisher controls (B1), and game-adjacent media such as gaming sites, streams and esports (B2). Each cohort has an applicability mask, and n/a (not applicable) comes only from the mask. Cohorts A and B1 apply all 12 dimensions. For game-adjacent media, coverage (the count of evidenced device, distribution and game-environment combinations) is n/a.

Of the 12 dimensions, Depth covers format execution, targeting and context, measurement functionality, optimisation and outcomes, and creative and insertion tools. Reach covers supply, coverage, programmatic access and US availability, which counts documented US availability only. Standing covers independent assurance, transparency, and suitability, age and data controls. Every dimension has written anchors for scores 0 to 5, with numeric thresholds, and some anchors differ by cohort. A 0 needs a source documenting absence or failure; a cell with no basis to score is n/e (no evidence), which never counts as zero.

Each cell carries an evidence grade, from A (filing, regulator or standards-body record) through B (independent), C (vendor technical documentation) and D (vendor marketing) to E (none). The anchor is applied first and the cap second: grade C caps a cell at 4 and grade D at 3, so a 5 needs an official document, filing or independent observation. The caps fold the type of evidence into the score, so a cell's number mixes what is documented with how it is documented: a capability described only in marketing cannot score above 3, however complete the description. The supply anchors treat 20 million monthly and 5 million daily users as equivalent; that is an assumption of the rules, not a measured ratio. Only verified or qualified cells count.

Scoring was one pass on 29 September 2026, after the verifier records were read; score and grade changes that verifiers and the internal review rounds prompted are in the corrections ledger. Of 276 cells, 249 carry a score, 17 are n/e and 10 are n/a. On 1 October 2026, on the frozen evidence, separate AI scorers re-scored blind the 10 banded rows nearest a band line. Exact agreement was 85% of 115 cells, agreement within one point covered 106 of the 106 cells both passes scored, and the quadratic-weighted kappa, a measure of how far two scorers agree, was 0.9. The 5 material disagreements were adjudicated against the sources and changed no score; the two rows whose band would move are marked scorer-sensitive (chapter 11). No human scored any cell, and both passes are AI scorers reading the same rules, so this tests reproducibility, not independent judgement.

How the Play Quotient is built and tested

The Play Quotient (PQ) summarises documented capability, not performance, within one cohort at a time. A product needs at least four counted numeric cells to enter the matrix.

Each group score is the mean of the row's numeric cells in that group; n/e and n/a are skipped. $Raw = 0.45 \times Depth + 0.25 \times Reach + 0.30 \times Standing$, renormalised over the groups present. The field mean F is the arithmetic mean of the Raw scores of the cohort's admitted rows. $Shrunk = (k \times Raw + K \times F) / (k + K)$, where k is the row's number of numeric cells and

K, the prior strength, is 4. $PQ = 100 \times \text{Shrunk} / 5$; only the displayed value is rounded. Bands come from the unrounded offset $20 \times (\text{Shrunk} - F)$: Most documented at +12 or more, Well documented at +1 or more, Partly documented at -8 or more, Least documented below. The names describe how much is documented; the author's earlier papers call the same thresholds Front rank, Strong, Mid and Narrow. A row needs at least 6 numeric cells and one in every group for a band, and a cohort shows bands only with at least 6 band-eligible rows.

The field mean is the cohort's mean Raw score, the weighted group score before shrinkage. The Contextual and Native Quotients in the author's earlier papers pooled group scores instead; the first outside review showed a pooled mean could place six identical rows above the field mean. PQ values are therefore not comparable with those quotients. The prior strength is the author's heuristic, and no statistical model estimates it.

The deletion test turns each numeric cell into n/e in turn and reports quotient, admission and eligibility changes separately. Missing-evidence scenarios fill a row's applicable n/e cells with 1, then 4, with F and other rows frozen, and flag any band that moves; fills of 0 and 5 form a separate hypothetical envelope. Prior strength is rerun at $K = 0$ (Raw), 2 and 8. Reweightings of Depth, Reach and Standing at equal thirds, 60/20/20, 30/45/25 and 30/20/50 recompute Raw and F. Coverage is published for each row. The capability matrix and the Play Quotient reports every result.

Outside and internal reviews

The author ran three reviews with another company's AI model (OpenAI's), and every factual finding was tested against the primary source before anything changed.

The first round reviewed the briefs and rules before research began; its dispositions are dated 28 September 2026. It produced the product and hypothesis registers, explicit masks, the mean-Raw field mean, the $K = 0$ test, US-only geography and the evidence freeze. A proposed 75% coverage floor was not adopted; coverage is published instead. Its fact checks moved Bidstack to the historical rows after Bidstack Ltd and its parent entered creditors' voluntary liquidation on 18 June 2026 ^[32, 64] ♦.

The second round, on 29 September 2026, spot-checked the evidence. Every finding was upheld in full or in part and applied, tagged R2 in the corrections ledger. The findings restated the console coding as unresolved, fixed a stale H2 denominator, replaced a model-written summary quoted as a source passage, and added Medal.

Three internal review rounds followed, run with AI agents that read the draft chapter by chapter and across chapters for facts, rules, consistency, scoring and disclosure, with rechecks of status-sensitive facts on 30 September and, at the freeze, on 1 October 2026. Each finding was checked against the ledger and, for facts, against the primary source before any change, and each change is logged with its round (IR1 to IR3). The third round aligned this paper with the series' audio paper: band names that describe documentation, flags for provisional bands and the blind second scoring pass. They corrected scores that held some rows to a looser standard than others, a Louisiana law that never took effect and several summaries stronger than their chapters.

The third outside review read the draft. It asked for accreditation to be stated by format, for a buyer rationale for the anchors, for one rule on evidence age, for provisional bands to be marked, for one record per study, for buyer guidance by type of buy and for a shorter abstract; each point was checked against the data and sources, and the changes are tagged R3 in the ledger. The corrections ledger holds 143 entries; 9 carry a contradicted verdict, scoring entries number 5 and withdrawn claims 0.

How the hypotheses were coded

H2 and H4 are supported and H1, H3 and H5 unresolved under their registered rules, and the GAP question cannot be answered from public sources.

H1 is unresolved ^[33, 34, 35] ♦. Its survey leg is met only on point estimates: Advertiser Perceptions (200 respondents, July 2024) and IAB Australia (100 respondents, June and July 2023) each put brand safety first, but neither sample is established as US, the first lead is inside sampling error, the second is not established as larger than it, and counting the second rests on the inference that a reach option was offered ^[33, 34] ♦. No US survey with a base, a period and constraint shares was found in the sources screened ^[109, 110, 111] ♦. Without that inference only one usable survey remains, which the registered rule codes as unresolved; the inventory leg holds, but the rule needs both legs ^[33, 34, 35] ♦. How big it is, and by whose definition has the detail.

H2 is supported. The Intrinsic In-Game (IIG) Measurement Guidelines 2.0 of the Interactive Advertising Bureau (IAB), IAB Tech Lab and MRC are a final release dated August 2022 ^[17, 52]. MRC's record, read on 29 September 2026, shows no accredited intrinsic in-game metric and no MRC-confirmed audit for any product scored in cohorts A and B1; the one gaming audit in MRC's process is Trivver's, a listed product ^[15, 16] ♦. Third-party verification rests mostly on partnership announcements dated 2022 to 2025 ^[350, 368, 369, 351]. The rule needs six scored products; 9 network and 4 platform products are scored. Measurement has the detail.

H3 is unresolved under its registered rule ^[24, 25] ♦. Microsoft's XBOX Media Solutions markets console brand integrations without naming a title, and its documents do not show whether they render inside gameplay ^[24]. Electronic Arts (EA) names brand integrations in two console titles and in its Madden NFL franchise, a fan database dates one in Madden NFL 26, and EA documents none as an ad placement buyable in the US, so at most three qualifying titles were found; that count is a floor, since other publishers' console titles were not screened ^[25, 238]. Console, PC and cloud has the detail.

H4 is supported ^[20, 21, 22] ♦. The conflict between Roblox's two revenue-share documents, which the registered rule names as an unresolved condition, concerns developer fees rather than any restriction counted here, so it does not block the verdict ^[57, 190] ♦. Roblox bars personalised ads for users under 18 and Microsoft for accounts under 18, and Discord does not use its age-assurance signals for targeting ^[20, 21, 22]. The amended Children's Online Privacy Protection Act (COPPA) Rule took effect on 23 June 2025, with compliance due by 22 April 2026 for most entities ^[23, 421] ♦. On 25 February 2026 the Federal Trade Commission (FTC) said it will not bring COPPA actions against mixed-audience or general-audience operators over data collected solely to determine age if six conditions hold, the first limiting that data to age verification ^[422, 423] ♦. Utah's app-store law restricts

developers' use and sharing of age-category data, with its duties beginning on 6 May 2027 [432, 433] ♦. Documentation is not compliance. Suitability, user-generated worlds and children's rules has the detail.

H5 is unresolved overall. Part (a) holds on the registered wording: since 1 January 2021, primary records show three specialist companies sold or put into insolvency (Bloxbiz in October 2021, Bidstack from March 2024 and Let's Bounce in January 2026), ; Super League's purchase of the Misfits Ads business line in May 2026 is recorded and not counted, because it was a business line of an esports company [29, 31, 32, 30, 506] ♦. Admix's merger with LandVault, announced in June 2022, is recorded and not counted, because the rule does not list mergers [507]. None of these records says the in-game format caused an exit, although Bidstack's administrators record that a 242-party sale process drew no third-party offer [31, 507] ♦. Part (b) cannot be tested, because comparable platform and specialist revenue series are not disclosed; Roblox calls its ad revenue insignificant without a figure, and Microsoft and Amazon report it only inside broader lines [197, 198, 199] ♦. Exits, platform growth and the agentic question has the detail.

The GAP question tests the author's model of in-game, around-the-game and away-from-the-game advertising [36]. No source screened by 28 September 2026 sizes the three as mutually exclusive, reconcilable categories, so GAP totals stay unresolved and are never added [37, 4, 38] ♦.

Limits

The evidence is public, frozen on 1 October 2026 and weighted toward what vendors say about themselves. The registered scoring period runs to 2 October 2026; the paper was published at the freeze, so its last day is not covered. This review held no interviews and saw no private contract, so a vendor may hold privately what this paper marks n/e. Every absence is bounded to the sources screened by the cutoff. The rules require status-sensitive facts such as ownership and accreditation to be rechecked at the freeze, and later changes to be logged separately.

Access was limited: 103 of the 982 sources could be read only in part, and nothing is quoted from unread parts. EMARKETER's forecast values are for subscribers only [37, 87, 88] ♦. Newzoo's site blocked the research tools, so the author confirmed its forecast of 3.7 billion players worldwide in 2026 and the article date of 25 August 2026 in a browser on 28 September 2026 [105] ♦. In the universe sweep the web-search budget ran out before two broad acquisition queries ran, so the census of exits may be incomplete.

Vendor material dominates. The register holds 503 vendor sources, and the ledger codes 398 of its 807 claims as vendor assertions, against 155 direct records, 20 independent measurements and 19 commissioned measurements. The grade caps stop a vendor page from earning a 5; they add no independent evidence. This review found no public randomised, holdout or matched-market test of an in-game or game-adjacent brand campaign with documented funding from a party without a financial interest, in the sources screened by 29 September 2026 [26, 27, 28] ♦.

Supply files are snapshots. A sellers.json file is where an ad seller declares the accounts it sells for. Advertly's file listed 121 publisher accounts in one version and 119 in the version

regenerated at 12:00 Greenwich Mean Time on 28 September 2026 ^[13] ♦. IION's file, last modified that day, still listed Bidstack as an intermediary seller after Bidstack Ltd had entered liquidation ^[11] ♦. A declared account shows a supply connection, and nothing about titles, audience or active integrations ^[9, 10].

This is AI-assisted research. A model checking another model is no external audit: "verified" here means a second agent opened the source and read the passage. The paper is not peer reviewed, not externally audited and not independently validated. Attention metric definitions belong to the companion attention paper, in-game audio to the companion audio paper, and user-acquisition economics to the published mobile app growth paper.

Interests

The author has worked at Samba (formerly Samba TV) since May 2025. At Verve Group he ran a P&L (profit-and-loss account) spanning mobile-gaming inventory. He co-leads the Signals & Measurement working group for AdCP (the Ad Context Protocol) at AgenticAdvertising.org. No vendor funded, reviewed or saw the paper before publication. Every vendor is scored under the same published rules.

Appendix: instruments, data and rebuilding the paper

The vendor universe, the full claim ledger, the corrections ledger and every data file behind the paper, in one place. The numbered source list follows as its own section.

Vendor universe

This is every product the review found and classified, scored or not. Each row gives the owner, where the ad renders, how it is bought, its status at the cutoff and why it sits where it does. Scored rows link to the capability matrix in chapter 11. A name that surfaced without an opened source is listed, not researched. User-acquisition and paid-discovery products, SSPs (supply-side platforms), DSPs (demand-side platforms), verification vendors and in-game audio are listed by rule, not by judgment of their quality.

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
Anzu in-game ad network	Anzu Virtual Reality Ltd. (private; shareholders not established)	Tel Aviv, Israel	network	intrinsic display and video in third-party games	direct and programmatic; 59 intermediary or both-type sellers in its sellers.json; NBCU US/UK resale reported in 2022	global; US resale reported 2022 (not rechecked)	active (registry active; sellers.json served)	[510] [641] [9] [164]
Frameplay intrinsic in-game network (Frameplay Exchange)	not established	Oakland, California, US (sellers.json contact)	network	intrinsic in-game	direct and exchange; intermediaries AdInMo, Adverty, iion	US	active (sellers.json served)	[10] [628]
IION in-game brand network	lion Pty Ltd / lion Digital Pty Ltd (shareholders not established)	Sydney, Australia	network	in-game brand placements	sellers.json with 320 entries, 52 of seller_type INTERMEDIARY or BOTH (including Anzu, AdInMo, Adverty, Bidstack, Venatus)	APAC; US via Frameplay announced in future tense (brief)	active (ABN active)	[558] [525] [11]
Gadsme Managed Ad Network	Gadsme SAS (shareholders not established)	Paris, France	network	intrinsic display and video; audio to the audio paper	managed and programmatic; intermediaries Digital Turbine, LoopMe, Unity	France/EU; US office reported (headline only)	active (register etat A)	[524] [12] [467]
AdInMo in-game ad network (InGamePlay)	AdInMo Ltd (SC648449)	Edinburgh registered office, UK	historical	in-game brand ads in mobile games	listed as intermediary in Frameplay and IION sellers.json	UK/global; US not established	not live at the cutoff (strike-off applied 6 Sep 2026, suspended 17 Sep 2026)	[150] [642] [113] [10]
Adverty in-game ad network	Adverty AB (publ) (listed Swedish company)	Stockholm, Sweden	network	in-play ads in third-party games	US test route via Frameplay exchange (Q4 2024)	EU; US via Frameplay	active (issuer releases continue)	[628] [13]
Gameloft for brands (COMBO!)	Gameloft SE; Vivendi lists Gameloft among its assets	Paris, France	network	in-app brand ad units in Gameloft and third-party mobile games	direct; DV360 and The Trade Desk named as buying routes by Gameloft for brands	global; US not documented in sources opened	active	[524] [643] [183]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Super League in-game advertising	Super League Enterprise, Inc. (Nasdaq: SLE)	Santa Monica, California, US	network	brand placements inside Roblox, Minecraft and Fortnite experiences; Misfits game-portfolio brand rights	direct and managed	US	active; Super Biz platform being deprecated	[506] [511]
Zynga Ads+ (third-party publisher network)	Zynga (Take-Two-owned per AdExchanger)	not established	listed	mobile app ad inventory; in-game rendering not documented	DoubleVerify measurement partner; admission rule App Store rating 4.5+	announced in New York	announced 17 Sep 2026; not shown live	[183] [526]
Kidoz kid-safe mobile ad platform	Kidoz Ltd (Israel 514191527); parent not established	Netanya, Israel (registry)	network	mobile ads in kid-safe games (vendor: 40,000+ games)	not screened	global; US not established	active (registry)	[68] [510] [526]
Admazing mobile gaming ads for brands	Admazing Co.	not established	network	brand ads in gaming apps	not screened	not established	active (site live)	[644] [526]
Roblox brand ads (Immersive Ads and Rewarded Video)	Roblox Corporation	US	platform	Immersive Ads, Rewarded Video	direct; DV360 and other programmatic platforms (per Roblox at PlayFronts); resellers Venatus (UK/FR/DE) and SuperAwesome (under-13, reported)	US and other markets	active	[630] [183] [204] [645]
XBOX Media Solutions in-game ads	Microsoft Corporation	US	platform	in-game video and interactive ads, custom integrations in Microsoft-owned games	direct (routes not re-read)	global; US not re-read	active (page live)	[191] [522]
Zynga Ads (Zynga's own games)	Zynga (Take-Two-owned per AdExchanger)	not established	platform	in-game ads across Zynga titles (vendor: 150+ games)	not screened	global	active (site live)	[646] [183]
Discord Quests	Discord Inc. (private)	San Francisco, California, US	adjacent	sponsored quests (per stream F)	per stream F	US and global	active	[647]
Twitch advertising	Amazon.com, Inc.	US	adjacent	stream ads (per stream F)	Amazon DSP (per stream F)	US and global	active	[2]
YouTube gaming inventory	Alphabet Inc.	US	listed	gaming-specific YouTube inventory (named product unestablished)	Google Ads / DV360 reservation (per stream F); third-party layer Precisify Gaming	global	no named gaming-specific product confirmed live at the cutoff (YouTube Select Shorts gaming lineup announced 17 Apr 2024)	[255]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Overwolf ads (companion apps and gaming websites)	Overwolf, Ltd. (Israel 514330331)	Ramat Gan, Israel	adjacent	display and video in desktop companion apps; Nitro websites; In-Game Audience Map planning tool (Sept 2026)	Deal ID/PMP (per stream F)	global; vendor says top-10 US game publisher (2024)	active	[648] [510] [293] [183]
Venatus gaming media	Media Scale Capital Limited (via Project Venus holding chain, from 19 Jun 2026)	London, UK	adjacent	gaming-website takeovers, video and display	direct and programmatic (per stream F)	global; US not established	active; change of control June 2026	[302] [303] [649] [305]
Playwire gaming media	Playwire, LLC (owners not established)	Boca Raton, Florida, US	adjacent	ads on gaming publishers' sites and apps	PMP, programmatic guaranteed, direct (per stream F)	US	active	[650]
Enthusiast Gaming media (retained websites)	Enthusiast Gaming Holdings Inc. (TSX: EGLX)	Toronto, Canada	adjacent	gaming websites and tools after the 2025 divestment	web programmatic (per stream F)	US/Canada	active; direct-sales line sold 30 Aug 2025	[317] [520]
ESL FACEIT Group esports media	Savvy Games Group (ESL sale closed 21 Apr 2022)	Cologne, Germany (website operator); ESL Gaming America Inc., New York	adjacent	esports broadcasts and owned channels; event sponsorship descriptive	direct	global; US entity exists	active	[331] [322]
IGN advertising (IMAGINE)	not established	US	adjacent	display ads with AI interactive units; audience intelligence platform IMAGINE	not screened	US	active	[183] [526]
LIVAD livestream video ads	LIVAD Technologies Inc.	not established	adjacent	video ads in live streams	not screened	not established	active (site live)	[273] [526]
Precisify Gaming	Precisify (owner not established)	not established	listed	contextual YouTube campaigns; gaming product named in menu	YouTube	not established	active (site live)	[651] [526] [652]
Dexerto	not established	not established	listed	gaming and esports news site (name only)	not screened	not established	sponsor logo only	[526]
APEX Gaming Network	not established	not established	listed	not established (name only)	not screened	not established	sponsor logo only	[526]
Publisher Collective (Network N)	not established	not established	listed	gaming websites (name only)	seller_type BOTH in IION sellers.json	not established	listed in sellers.json	[11]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Arkadium	not established	not established	listed	web games (name only)	seller_type BOTH in IION sellers.json	not established	listed in sellers.json	[11]
SuperAwesome (AwesomeAds; Roblox under-13 route)	SuperAwesome management (after Sept 2023 spin-off from Epic, as reported)	not established	listed	kid-safe ad marketplace; Roblox Immersive Ads partner	not screened	not established	active (reported 2024)	[645]
Aditude (including CPMStar)	Aditude	US	listed	SSP and direct sales for web games and gaming publishers	SSP	US	active (reported 2024)	[653]
GEEIQ	GEEIQ	not established	listed	planning and measurement data for brands in gaming (not a media seller)	n/a	not established	active (site live)	[654] [526]
DV360 and The Trade Desk (DSP routes to game inventory)	Alphabet; The Trade Desk, Inc.	US	listed	DSPs	named as buying routes by Gameloft for brands and Roblox	US/global	active	[183]
DoubleVerify gaming verification	DoubleVerify Holdings, Inc.	US	listed	verification	measurement partner of Zynga Ads+	US/global	active	[183]
IAS gaming verification	Novacap (per brief)	US	listed	verification	headline 'IAS expands media quality solutions for in-game media buys' on Gadsme newsroom	US/global	active	[467]
Gadsme SSP	Gadsme SAS	Paris, France	listed	SSP	SSP	global	active	[524] [12]
Gadsme Cross Promo	Gadsme SAS	Paris, France	listed	cross-promotion (user acquisition)	n/a	global	active (per register)	[524]
Gadsme in-game audio ads	Gadsme SAS	Paris, France	listed	in-game audio	headline 'Targetspot and Gadsme join forces to launch in-game audio ads'	global	active (per register)	[524] [467]
IION gaming-website supply	Iion Pty Ltd / Iion Digital Pty Ltd	Sydney, Australia	listed	gaming-website display and video	Prebid and Amazon TAM (per brief)	global	active	[558] [11]
Audiomob and Odeeo in-game audio	not established by U	not established	listed	in-game audio	both appear as intermediaries in IION's sellers.json; Audiomob also in Anzu's	global	active (listed in sellers.json)	[11] [9]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Venatus Roblox Rewarded Video resale	Media Scale Capital Limited	London, UK	listed	Roblox Rewarded Video	reseller	UK, France, Germany only	active (announced May 2026)	[204]
Admix (admixplay.com)	operator named on site: W Media Ltd / W Media International Ltd (15434064); link to Admix unestablished	London, UK	listed	mobile gaming ads for non-endemic brands (site copy)	embedded seller list of 24 publishers; /sellers.json 404	not stated	site live	[516] [517]
Roblox Sponsored Experiences	Roblox Corporation	US	listed	paid discovery	n/a	not re-read	per register	[630]
Fortnite Sponsored Row	Epic Games	US	listed	paid discovery bought by island owners	n/a	not re-read	live 21 Nov 2025 (brief)	
Xbox dashboard and store placements; Xbox cloud-streaming ad test; Live TV on PS5	Microsoft; Sony	US/Japan	listed	console placements outside gameplay; pre-session ads in test; TV inventory	n/a	per stream G	per brief	
App-install networks (AppLovin, Unity and others)	various	various	listed	user acquisition	n/a	global	active	[9] [12]
Bidstack	Virtual Sport Technology Limited (from 22 Mar 2024); formerly Bidstack Group Plc	London, UK	historical	former in-game ad network	still listed as intermediary in IION sellers.json	n/a	in creditors' voluntary liquidation since 18 Jun 2026; plc dissolved 26 Jun 2025	[32] [519] [64] [509] [512] [31]
Sayollo	Sayollo Media Ltd (Israel 514656453)	Rehovot, Israel	historical	former in-game ad company	n/a	n/a	in liquidation by court; order to open proceedings (undated)	[510]
Super Biz (formerly Bloxbiz)	Super League Enterprise, Inc.	Santa Monica, California, US	historical	former Roblox in-game ad platform	n/a	n/a	being deprecated (undated notice)	[29] [511]
Misfits Ads	assets bought by Super League Enterprise, Inc. from Esports Now, LLC	US	historical	former Roblox in-game ad business	n/a	n/a	assets sold 1 May 2026	[506]
LandVault (formerly Admix)	Infinite Reality announced acquisition 9 Jul 2024	London, UK / Dubai (not established)	historical	former in-play placements; later metaverse building	n/a	n/a	merged and rebranded June 2022; acquisition announced July 2024	[507] [515]

COMPANY / PRODUCT	LEGAL ENTITY / OWNER	HQ	SCOPE GROUP	FORMATS	BUYING ROUTES	MAIN GEOGRAPHIES	STATUS AT CUTOFF	SRC
Oracle Moat	Oracle Corporation	US	historical	former measurement and verification	n/a	n/a	end of life 30 Sep 2024	[339]
EA Advertising	PIF, Silver Lake and Affinity Partners (Electronic Arts private since August 2026)	US	platform	dynamic ad boards, scoreboards and broadcast-style overlays in select EA SPORTS games; custom brand integrations	direct; mobile programmatic reported September 2026	US and other	live (launched 15 Jun 2026)	[25] [241]
Trivver in-game ads	Not established	US (Newport Beach, per California registration)	listed	intrinsic in-game placements (SDK)	not documented	unconfirmed	no live brand-selling network documented in the period; MRC audit in process	[16]
Medal advertising (ad units and sponsored placements)	Not established (Medal B.V.)	Netherlands	adjacent	IAB display and video units, homepage roadblock, sponsored stories, sponsored top 10, branded watermarks, clip contests	direct; programmatic sellers in ads.txt	global; 45% US users (vendor)	live	[252] [290]
Medal Quests	Medal B.V.	Netherlands	listed	reward quests with game developers	direct	global	live	[58]
ESL FACEIT Group custom brand integrations	Savvy Games Group	Germany	listed	custom in-game placements, Fortnite worlds and maps, event activations	direct	global	offered	[331]
Let's Bounce	Super League Enterprise, Inc.	US	historical	brand engagement in gaming and UGC environments		US	asset acquisition by Super League, January 2026	[128]

Claim ledger

Every claim the paper rests on, with its sources, its evidence class, the verifier's verdict and its final wording after verification and review. Filter by verdict or evidence class. A claim no verifier checked would show as unresolved; the ledger holds 807 claims, of which 807 were checked by a separate verifier.

The claim ledger lists the 333 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 claim's evidence class, review outcome and confidence.

Corrections ledger

Every substantive change logged during and after the verification passes, including the findings of the three AI-model reviews the author ran and of the internal AI review rounds, register changes, restated claims and the scoring adjustments. Each entry records what was challenged, what was checked, the verdict, the change and how it was verified.

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Data downloads

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	gaming-advertising-2026.pdf — the print edition: A4, with page numbers and chapter bookmarks
2	gaming-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/pq.csv — Play Quotient per vendor: group means, coverage, band, the reweightings and every dimension score
9	data/pq-method.csv — PQ groups, weights, shrinkage, field mean, band thresholds, and the reweighting, shrinkage and missing-evidence tests
10	data/pq-missing-evidence.csv — every scored cell turned into n/e one at a time, with the PQ 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/decision-tool.csv — the decision tool rows
21	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
22	data/hypotheses.csv — the hypotheses registered before extraction, with the rules for supported, contradicted and unresolved
23	data/figure-data.json — the canonical dataset behind every data figure
24	data/derived-checks.json — every derived number with its formula and inputs
25	data/stats.json — every count the prose and figures quote about the research itself, computed from the ledgers
26	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
27	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
28	data/scoring-rules.json — dimension definitions, anchors, cell rules and the PQ definition, fixed before scoring

Rebuilding the paper

The package holds everything needed to rebuild the paper. `paper.md` lists the chapters; every citation and claim marker must resolve in `data/`, or the build fails. The research records are in `evidence/`; the hypotheses, scoring rules, product register and scores are in `data/`. `scripts/check.mjs` checks references, cells and counts; `README.md` is the full guide.

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Numbered sources

The 753 sources cited in this paper, numbered in order of first citation. The full register of 982 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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Built from 11 research workstreams, a vendor-universe sweep and 8 deep profiles, each checked by a separate AI verifier instructed to refute it, three reviews the author ran with another company's AI model, and three internal review rounds run with AI agents, all of whose factual findings were checked against primary sources. AI-assisted research: one published scoring pass, with a blind AI second pass on the rows nearest a band line; not externally audited or peer reviewed.