THE ULTIMATE GUIDE TO MEASURING INTRINSIC IN-GAME ADS

With over 3.2 billion gamers globally, the potential for advertisers to leverage this dynamic channel to connect with diverse audiences has never been greater. The gaming landscape offers a unique opportunity to engage consumers in immersive environments where traditional advertising methods often fall short.

Intrinsic in-game advertising (IIGA) has emerged as a powerful solution that allows advertisers to integrate their messages seamlessly into gaming experiences. By positioning ads within virtual worlds—such as on billboards around sports stadiums, alongside racetracks, and on buildings — IIGA replicates the natural ad placements found in real-world environments, ensuring that the gaming experience remains uninterrupted and meaningful.

However, alongside this opportunity comes the critical need for robust and accurate measurement. As the industry continues to evolve, understanding and optimizing the impact of in-game ads is essential not only for demonstrating return on investment (ROI) but also for building trust with advertisers and enhancing the gaming experience for players. The non-clickable nature of intrinsic in-game ads adds an extra layer of complexity, making it crucial to adopt innovative metrics that reflect the true value of these engagements.

In this guide, we will delve into the intricacies of measuring success within the in-game advertising space. **We'll explore current measurement capabilities, supported by data and real-world examples, and outline the technology, tools, and partners that can help you accurately assess the impact of your in-game campaigns.**

WHAT'S COVERED?

UNDERSTANDING MEASUREMENT IN-GAME

Measuring the success of IIGA campaigns is similar to measuring success across other digital advertising channels and is most similar to CTV. With intrinsic in-game ads. you're looking at similar metrics like viewability and attention and brand lift metrics like purchase intent, brand favorability, and ad recall to understand how the ad performed.

The main difference is that this measurement is done in 3D rather than the 2D world in which most traditional ad channels exist. This means you have to consider other aspects, like in-game objects moving around and obscuring the ads, the angle at which the player sees the ad, and whether they encounter it as they navigate the sprawling gaming world that often offers numerous routes and paths players can take.

As previously mentioned, intrinsic in-game ads are also not clickable. This means that rather than using clicks as a success metric, you must look at a combination of the following metrics.

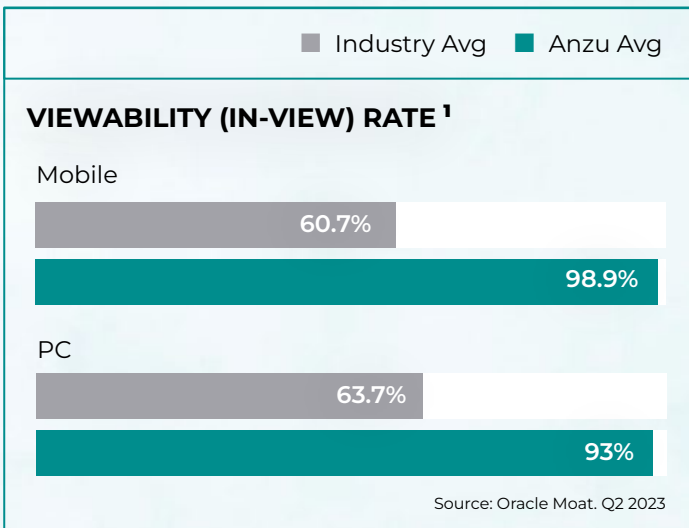| Viewability	Attention	Brand Lift	Attribution
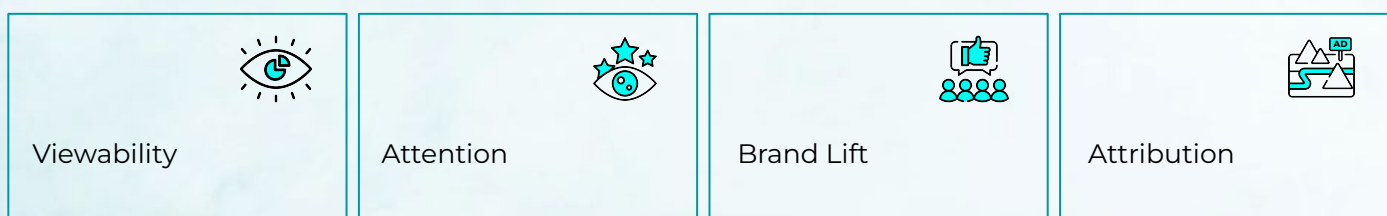
UNDERSTANDING HOW VIEWABILITY WORKS IN-GAME

In-game viewability combines elements of traditional advertising metrics with the unique aspects of interactive environments and aims to ensure that ads are not only seen but also have a meaningful impact on players.

Real-time analytics and reporting allow advertisers to monitor ad performance and viewability metrics in real time and make necessary adjustments. Adaptive aspect ratio matching and compliance with industry standards, such as those from the Media Rating Council (MRC) and the Interactive Advertising Bureau (IAB), which we'll cover in more detail later, further ensure that ads fit seamlessly into the game and meet reliable benchmarks for visibility.

WHAT VIEWABILITY BENCHMARKS SHOULD I BE AIMING FOR IN-GAME?

■ Industry Avg ■ Anzu Avg

VIEWABILITY (IN-VIEW) RATE [1]

Mobile

Industry Avg	60.7%
Anzu Avg	98.9%

PC

Industry Avg	63.7%
Anzu Avg	93%

Source: Oracle Moat. Q2 2023

← According to Oracle Moat, the intrinsic in-game viewability benchmarks for mobile display ads are 98.9% vs. the industry benchmark of 60.7% and 93% for PC display ads vs. the industry benchmark of 63.7%.

↓ According to Lumen, the intrinsic in-game viewability benchmarks for desktop and mobile video ads are 95% vs. an industry average of 82% for mobile video and 79% for desktop video.

VIDEO VIEWABILITY COMPARISON

FORMATS / METRICS	LUMEN DESKTOP VIDEO	ANZU DESKTOP VIDEO	LUMEN MOBILE VIDEO	ANZU MOBILE VIDEO
VIEWABLE	79%	**95%**	82%	**95%**
VIEWED	65%	**85%**	74%	**75%**

Anzu x Lumen, How Gaming Sets a Higher Bar for Advertising Engagement, 2023

According to Anzu's data, the VCR benchmarks for intrinsic in-game ads are as follows:

VIDEO COMPLETION RATE

Anzu's VCR data, Q2, 2023

75%	65%	55%
Up to 6 secs	7-15 secs	Longer than 15 secs
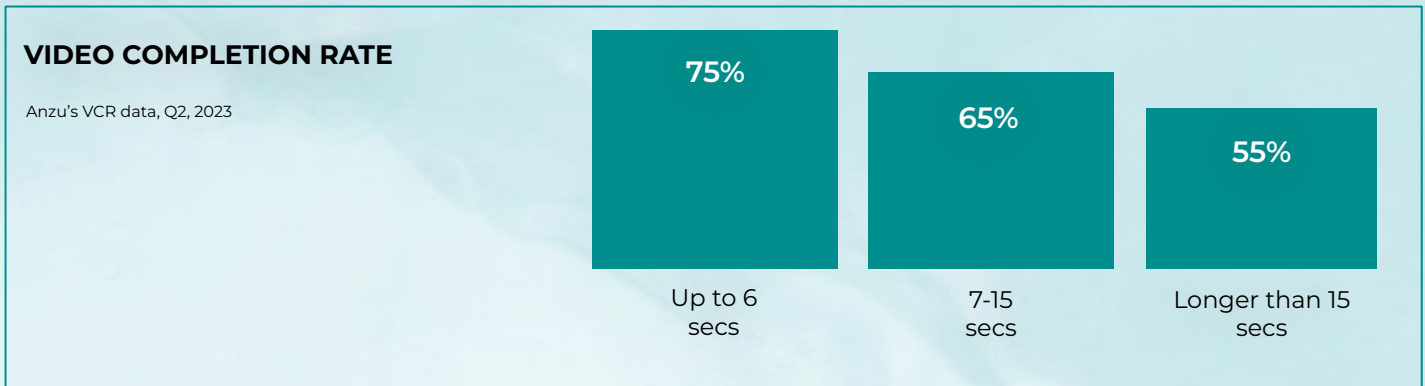
REGULATORY COMPLIANCE

Different in-game solutions offer different technologies to measure viewability, and it's important that you, as an advertiser, understand what they offer and how this technology works to ensure you're getting the most out of your campaigns.

Anzu, for example, has built a **patented 3D ad tracking engine** that measures intrinsic ads in dynamic gaming environments across all major platforms and devices multiple times per second using a combination of mathematical and geometrical calculations and physics.

The engine also collects unique data points about intrinsic in-game ad placements and their lifecycle, including average screen coverage, occlusions, virtual world position, and orientation in relation to user view. This data is combined with conversion and session data to create robust data models, which are used to help optimize campaign delivery and provide media value to advertisers.

You will also want to ensure that you work with a third-party viewability measurement vendor who can verify the accuracy of the campaign data and that the in-game solution you're working with is integrated with them. Some recommended vendors that can currently verify in-game viewability data include **IAS** and **DoubleVerify**.
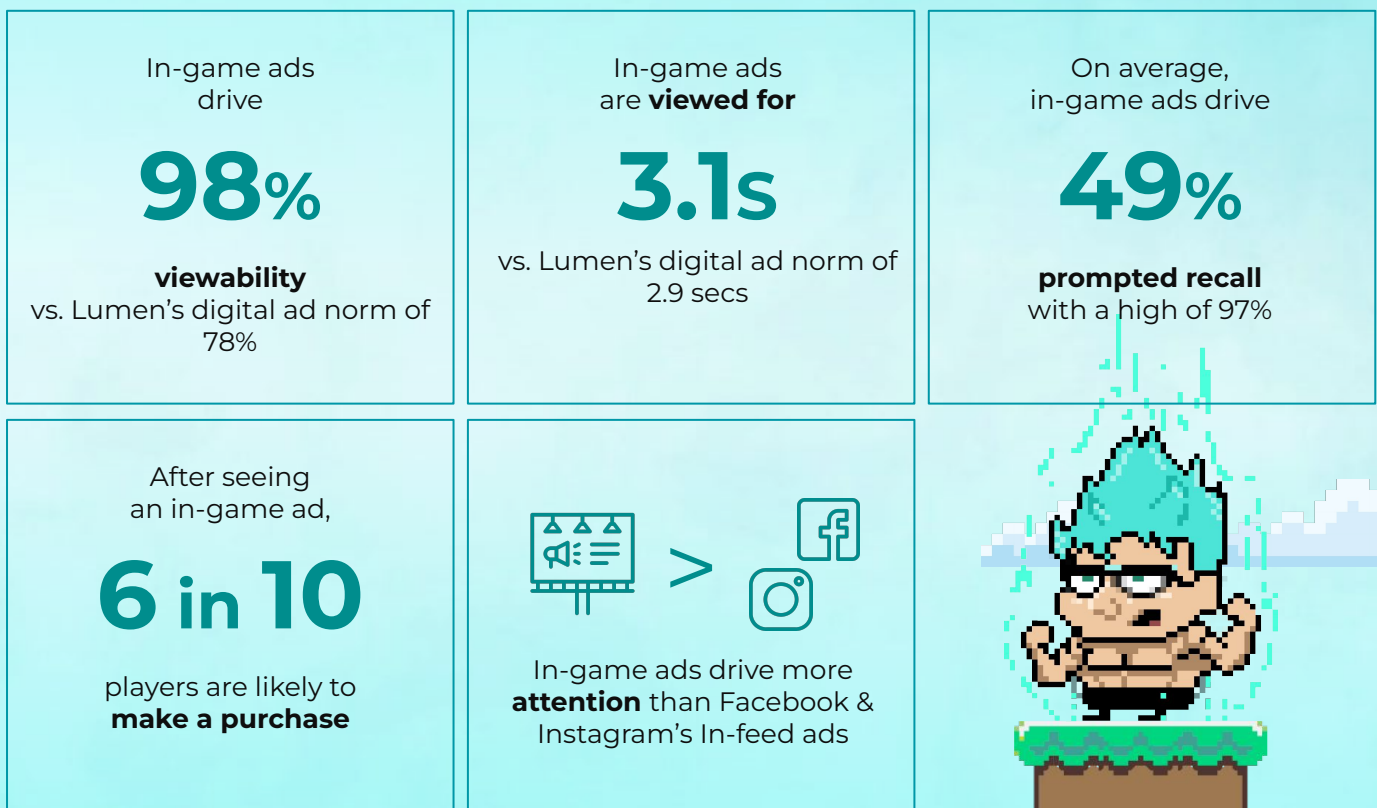
UNDERSTANDING HOW ATTENTION WORKS IN-GAME

We live in an attention economy, and content is constantly at our fingertips. However, popular pastimes are all subject to ad distraction. Gaming has emerged as a channel that is helping to drive substantial attention rates thanks to its lean-in nature and lack of second screening.

With advertising, there's a finite amount of time to capture attention and translate a message into someone's memory. Research experts Lumen advise that two seconds of viewing is a critical threshold for ensuring that scarce attention is translated into accessible memory.

Levi's IIGA campaign in Ubisoft's Trackmania

An extensive **two-year study** into the impact of attention on digital advertising and gaming carried out by Lumen and Anzu found:

In-game ads drive

98%

viewability
vs. Lumen's digital ad norm of 78%

In-game ads are **viewed for**

3.1s

vs. Lumen's digital ad norm of 2.9 secs

On average, in-game ads drive

49%

prompted recall
with a high of 97%

After seeing an in-game ad,

6 in 10

players are likely to **make a purchase**

In-game ads drive more **attention** than Facebook & Instagram's In-feed ads

A follow-up **in-person test** by dentsu, which built upon the above research, found that Anzu's intrinsic in-game ads evoked double the amount of attention compared to traditional online display ads at 3.4 seconds vs. 1.4 seconds.

PRIVACY SIGNALS

From a gaming perspective, attention is proving to be a great way to measure success in the 3D world, especially when it comes to in-game ads. Anzu's research with Lumen found that in-game ad campaigns drive extremely high levels of attention, with players viewing in-game ads for 2.9 seconds vs. Lumen's 1.5-second benchmark. With 83% of in-game ads viewed compared to Lumen's benchmark of 62%, the findings also showed that gamers are 34% more likely to view an in-game ad than those placed on other digital channels like social media and websites.

METRICS / FORMATS	LUMEN DESKTOP	ANZU DESKTOP	LUMEN MOBILE	ANZU MOBILE
VIEWABLE	75%	**95%**	81%	**95%**
VIEWED	59%	**87%**	70%	**78%**
AVERAGE VIEW TIME (SECONDS)	2.87	**3.88**	2.88	**2.34**
ATTENTION SECONDS PER 1000 IMPRESSIONS	2,270	**3,553**	2,316	**1,973**

WHAT TOOLS AND TECHNOLOGIES CAN HELP ME MEASURE ATTENTION IN-GAME?

Attention has emerged as a way to measure success across digital platforms. It allows advertisers to see how their campaign results translate into tangible business metrics like purchase consideration and brand recall, which helps tie the results back to the campaign's goal. There are many different methodologies for measuring attention, including visual/audio tracking, physiological/neurological observation, data signals, and survey-based methods; as attention continues to become a more important way to measure advertising success, these will develop and evolve.

Some of the current leading in-game attention measurement vendors include **Lumen**, **Adelaide**, **Amplified Intelligence**, and **RealEyes**.

UNDERSTANDING HOW BRAND LIFT WORKS IN-GAME

Like other digital advertising channels, brand lift studies are essential for measuring the effectiveness of advertising campaigns, particularly in terms of their impact on brand awareness and perception. This involves evaluating metrics like brand awareness, ad recall, brand favorability, and purchase consideration before and after the campaign.

THERE ARE TWO KEY REASONS TO CARRY OUT A BRAND LIFT STUDY:

1. Evaluate Ad Campaign Effectiveness: A brand lift study helps you understand how your campaigns are influencing players. By measuring changes in brand awareness, consideration, preference, and intent to purchase, you can assess whether your ads are effective in achieving their desired objectives.

2. Optimize Marketing Strategies: Insights gained from a brand lift study provide valuable information on which aspects of a campaign are working and which are not. This data enables you to make informed decisions and adjustments to your strategies, optimizing future campaigns for better performance and higher ROI.

Gillette IIGA campaign in Slapshot: Rebound

MEASURING BRAND LIFT IN-GAME

Before launching an in-game campaign, a survey is conducted to establish baseline metrics for the key performance indicators (KPIs). This helps understand the brand's initial awareness and perception levels among the target audience. After the campaign, a follow-up survey is conducted. The same KPIs are measured again to identify any changes in brand perception and awareness.

DATA COLLECTION AND ANALYSIS

Audience Segmentation:

The target audience is divided into exposed and control groups. The exposed group has seen the ads, while the control group has not. This helps isolate the campaign's effect from other factors. There are multiple methods for building an exposed audience, including pixeled formats, where data is collected during the campaign to create an audience that has seen the ad while playing the game, and forced exposure formats, where respondents are shown the live gameplay to see how the campaign looked without actually playing the game itself.

Survey Distribution:

Surveys are distributed to both groups to collect data on ad recall, brand awareness, brand favorability, purchase intent, and other campaign-specific metrics.
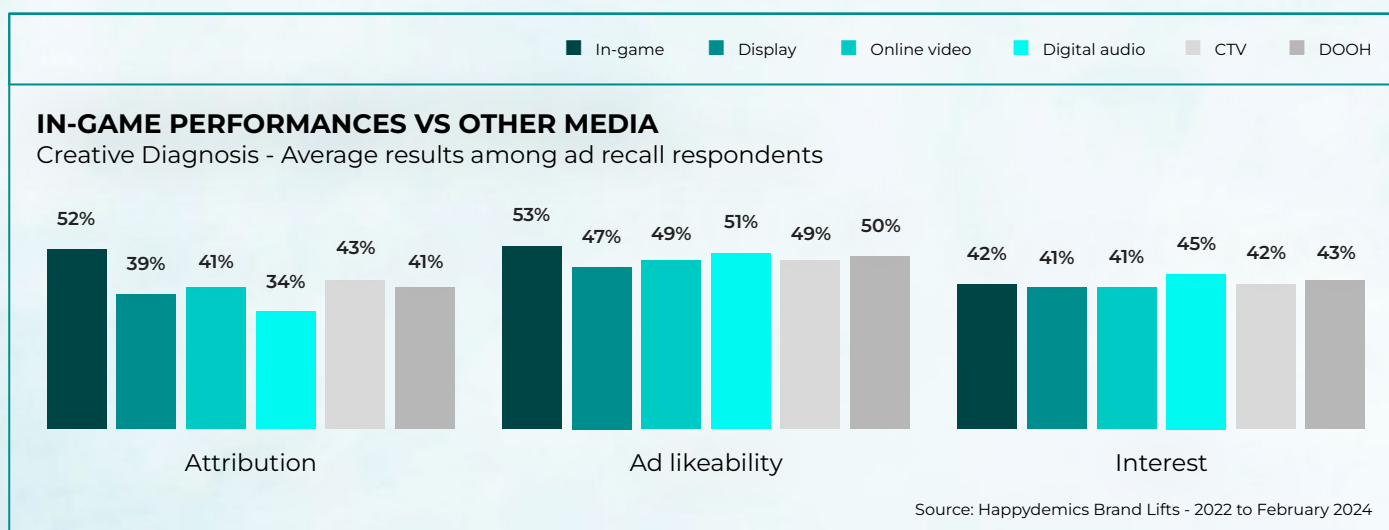
Statistical Analysis:

The data is analyzed to compare the exposed and control audiences. Statistical techniques ensure that the results are significant and not due to random variations.

Once the data is collected, the findings are then compiled into a report that outlines the impact of the in-game campaign on the brand's KPIs. There are three main advantages of carrying out a brand lift study. It can:

1. Provide measurable data on how an in-game campaign has affected brand perception.
2. Help advertisers understand what works and what doesn't in gaming environments, leading to more effective future campaigns.
3. Validate the investment in in-game by demonstrating its impact on brand metrics.

WHAT BRAND LIFT STUDY BENCHMARKS SHOULD I BE AIMING FOR?

In the below graphs, you can see in-game performance benchmarks across the funnel from measurement experts Happydemics, along with how they compare against other digital advertising formats.

Legend: ■ In-game ■ Display ■ Online video ■ Digital audio ▢ CTV ▢ DOOH

IN-GAME PERFORMANCES VS OTHER MEDIA
Creative Diagnosis - Average results among ad recall respondents

Attribution
- In-game: 52%
- Display: 39%
- Online video: 41%
- Digital audio: 34%
- CTV: 43%
- DOOH: 41%

Ad likeability
- In-game: 53%
- Display: 47%
- Online video: 49%
- Digital audio: 51%
- CTV: 49%
- DOOH: 50%

Interest
- In-game: 42%
- Display: 41%
- Online video: 41%
- Digital audio: 45%
- CTV: 42%
- DOOH: 43%

Source: Happydemics Brand Lifts - 2022 to February 2024

IN-GAME PERFORMANCES VS OTHER MEDIA
Ad recall impacts - Average uplifts

	Brand Image	Specific Brand Image	Consideration	Specific Intentions	Preference
In-game	+25	+33	+22	+31	+12
Display	+24	+34	+20	+31	+10
Online video	+23	+32	+17	+27	+9
Digital audio	+25	+30	+18	+28	+8
CTV	+25	+24	+19	+28	+10
DOOH	+24	+42	+21	+34	+11
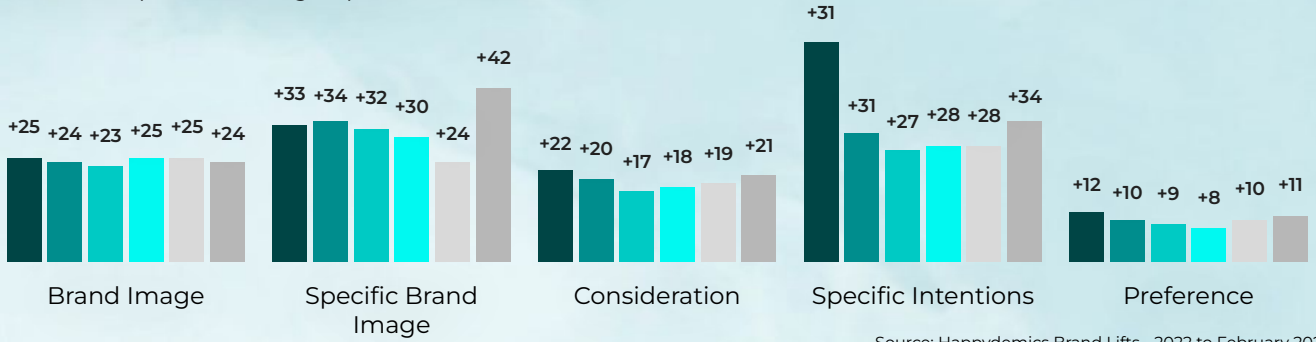
Source: Happydemics Brand Lifts - 2022 to February 2024

WHAT BRAND LIFT STUDY TOOLS AND TECHNOLOGIES ARE AVAILABLE IN-GAME?

Brand lift studies are a powerful tool for advertisers to assess the effectiveness of their campaigns and refine their strategies to achieve better results and with in-game being a relatively new channel, these studies can provide invaluable data for brands. Some recommended vendors for running in-game brand lift studies include Nielsen, Kantar, Comscore, Happydemics, Disqo, and Cint.

MEASURING IIGA'S IMPACT ACROSS THE FUNNEL WITH BRAND LIFT METRICS

Due to their non-clickable nature, intrinsic in-game ads have traditionally been considered only suitable for driving upper-funnel awareness. To better understand how IIGA performs across the entire brand marketing funnel, outside of just awareness, Anzu & Happydemics **analyzed 110 intrinsic in-game brand campaigns** across multiple locations, verticals, and industries to understand where in-game ads were able to drive impact.

Anzu has also published several case studies from real-world campaigns at various levels of the marketing funnel, some of which are outlined below, to help showcase what can be measured and what success you can expect from this medium.

IIGA DRIVES PURCHASES

Firstly, the study results highlighted that intrinsic in-game ads are great at driving purchase consideration, outperforming video by five percentage points, display by three percentage points, and CTV by two percentage points. This dispels the myth that these non-disruptive ads are only good at driving top-of-funnel metrics and demonstrates the true value of intrinsic in-game advertising.

DRIVING PURCHASES FOR TOMMY HILFIGER AND EMPIRE

A great example of a brand that pulled this off is fashion house Tommy Hilfiger, which launched an in-game campaign to drive awareness of its Classics Reborn Spring Campaign with a new, untapped audience of players. Targeting males and females aged 30 to 35 in Berlin, Milan, London, and Paris (where its stores were located), the premium lifestyle brand integrated display and video creatives across a series of premium mobile and PC titles, achieving a **23-point lift in purchase intent**.

TOMMY ⊞ HILFIGER

23-POINT LIFT IN PURCHASE INTENT

◉ EMPIRE

10% LIFT IN PURCHASE INTENT

Another example from record label EMPIRE saw the brand turn to in-game to promote hip hop artist Babyface Ray's album 'Face' to a broad demographic audience that played a range of popular titles. It launched impactful in-game creative across premium mobile and PC games, including Ubisoft's Trackmania, Axis Football, and Ultimate Car Driving Simulator. The campaign achieved a **10% lift in purchase intent** and a 90% viewability rate, outperforming digital display advertising norms.
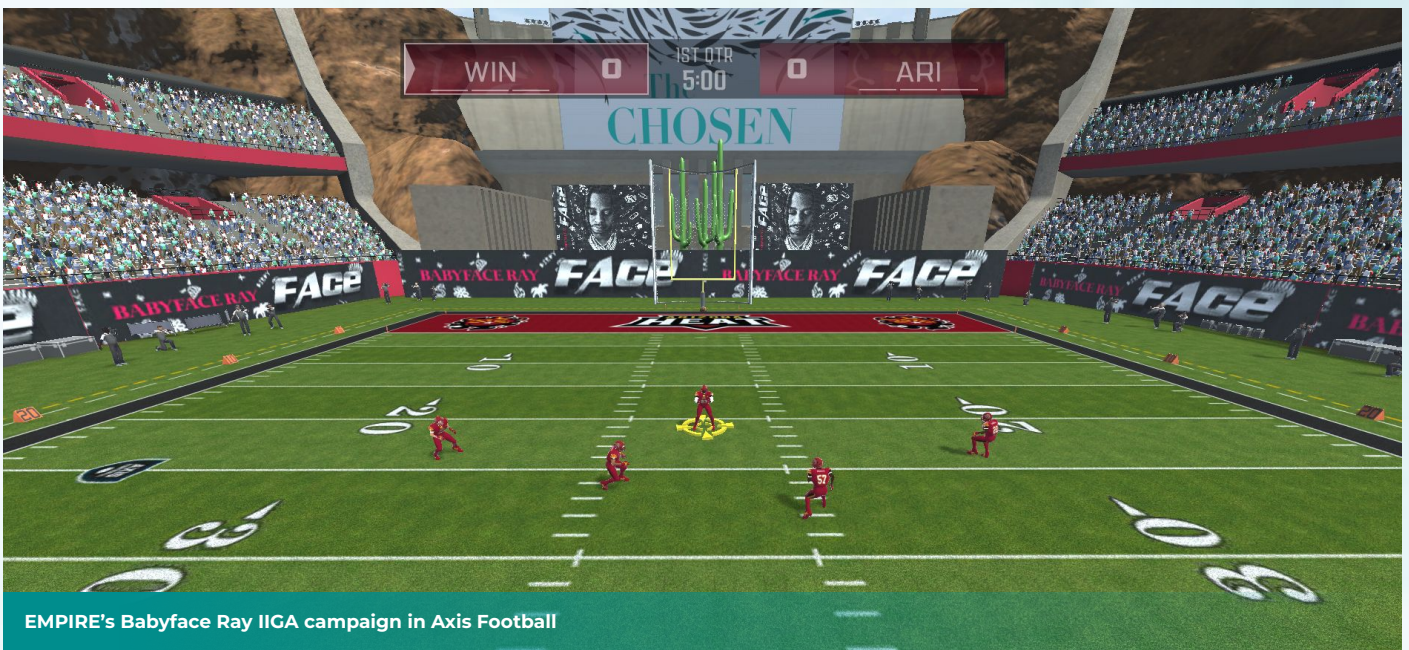
EMPIRE's Babyface Ray IIGA campaign in Axis Football

IIGA IS REMEMBERED

Secondly, the research showed a correlation between attention and ad recall, with IIGA scoring an average of 13 percentage points higher recall than other digital media channels. This is in part thanks to the ads becoming part of the action at the point where the player is most engaged, grabbing their attention and helping them remember the message behind the ad.

LAUNCHING MEMORABLE CAMPAIGNS FOR SAMSUNG AND 7-ELEVEN

A great example of this comes from Samsung, which launched an in-game campaign to promote the latest addition to its Galaxy smartphone lineup. The technology brand used in-game ads to reach Gen-Z audiences in Spain, where 90% of this audience use their mobile devices to play games daily, to drive excitement and awareness of their brand and new product. The ads were shown across 27 popular games, **boosting brand recognition by 21%** and **brand memorability by 3%**.

SAMSUNG

BOOSTING BRAND RECOGNITION BY 21% AND BRAND MEMORABILITY BY 3%

7-ELEVEN.

86% INCREASE IN TOP-OF-MIND AND TOTAL SPONTANEOUS AWARENESS

Another great example came from the convenience store chain 7-Eleven, which launched a nationwide campaign to get customers back into stores post-lockdown and to position itself as the go-to destination for frozen drinks. As part of the campaign, they ran in-game video and display ads across some of the US's most popular gaming titles, resulting in an **86% increase in top-of-mind and total spontaneous awareness of the 7-Eleven Slurpee**, elevating the chain in consumer's minds as a place that sells frozen drinks to the same level as its toughest contender, McDonald's.

Samsung IIGA campaign in Gravity Rider
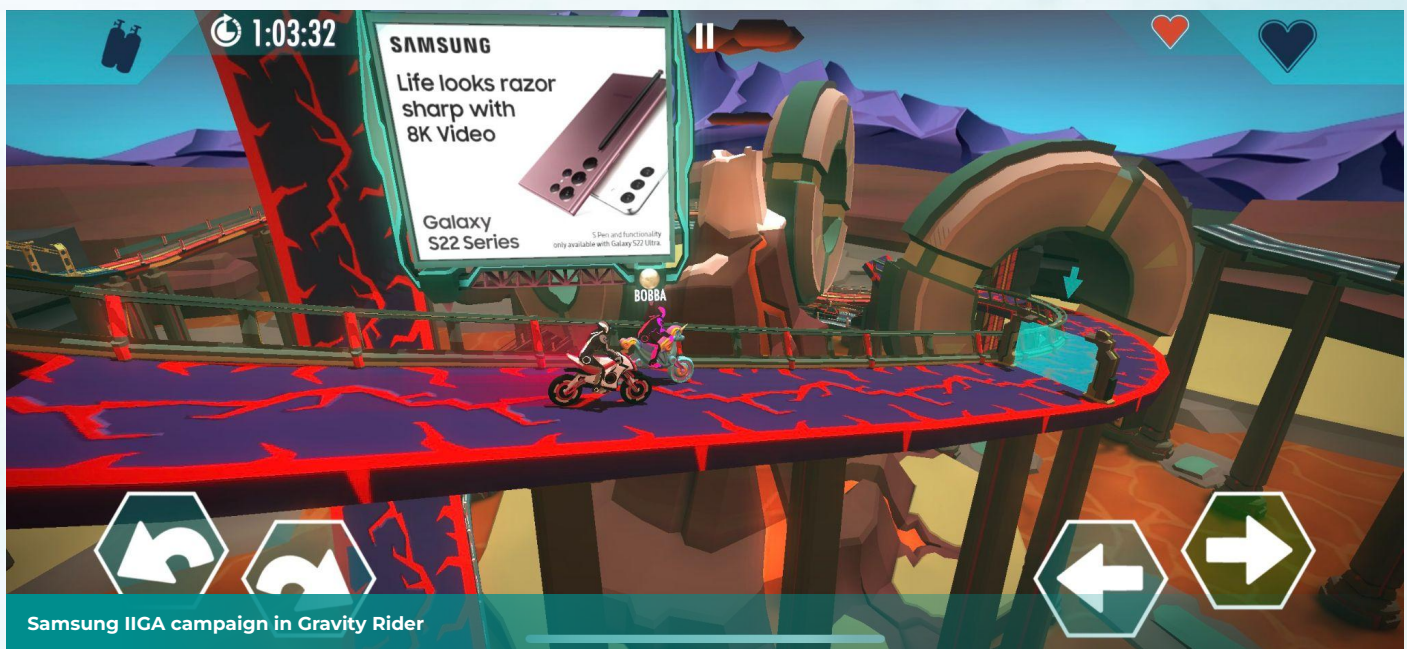
IIGA BOOSTS BRAND REPUTATION

Finally, when ad placements are carefully integrated into places within game environments that make sense to players and then optimized over time, they look and feel like part of the gaming experience rather than something separate. The report's findings showed that this leads to people remembering the ads and correctly identifying the brands behind them more effectively than any other digital advertising format.

BOOSTING BRAND REPUTATION FOR SONY AND VODAFONE

An excellent example of this came from Sony, which launched a campaign to promote its INZONE Buds, a set of noise-canceling earbuds designed for gamers, to people in the Kingdom of Saudi Arabia. The technology brand ran in-game display and video ads across a range of premium simulation, racing, and action games, which achieved **a 42-point lift in brand image** and **a 35-point lift in brand consideration**.

SONY

42-POINT LIFT IN BRAND IMAGE AND A 35-POINT LIFT IN BRAND CONSIDERATION
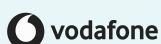
vodafone

20% LIFT IN BRAND CONSIDERATION AND 176% LIFT IN CAMPAIGN AWARENESS

Another example came from Telecom giant Vodafone which launched a programmatic in-game campaign to reach German players to let them know that Vodafone is the service to choose if you want to access high connection speeds. The in-game display ads ran across PC games targeting players who favor high internet speeds, resulting in a **20% lift in brand consideration** vs. a 4% industry average and a huge **176% lift in campaign awareness** vs. a 27% industry average.

Sony IIGA campaign in Nitro Nation

The data and examples illustrate that regardless of your brand or the stage of the funnel you're targeting, in-game advertising can be a powerful tool for engaging with a highly attentive audience and accurately measuring campaign impact. Additionally, depending on your budget and campaign scope, in-game advertising can be used both as a standalone strategy or integrated into a broader omnichannel campaign.

UNDERSTANDING HOW ATTRIBUTION WORKS IN-GAME

Measuring attribution in-game involves tracking and analyzing players' interactions with in-game ads and connecting those interactions to actions that they take when they've finished playing, such as website visits, purchases, or app downloads.

WHAT TOOLS AND TECHNOLOGIES CAN HELP ME MEASURE ATTRIBUTION IN-GAME?

The question we are always asked about IIGA is how do I connect an in-game engagement to an in-store purchase? This is possible thanks to in-game's integration with view-through attribution providers which connect in-game impressions viewed directly with purchases made in e-commerce stores or brick-and-mortar stores.

There are different types of view-through attribution:

1. **Mobile attribution** - connecting mobile ad views to mobile purchases.
2. **DSP attribution** - attribution using your DSPs tracking pixel.
3. **Cross-platform attribution** - connecting, for example, an ad view on a console with a conversion on another digital channel.
4. **Location-based attribution** - attributing store footfall increases to in-game ad views.

Several companies can currently help connect your in-game interactions to real-world actions. Some recommended ones include **AppsFlyer**, **Adjust**, **Kochava**, **The Trade Desk**, and **Foursquare**.

MEASURING INVALID TRAFFIC IN-GAME

Like other digital ads, ad fraud in IIGA involves tricks that fake or manipulate ad metrics, causing advertisers to pay for fake or ineffective ad impressions. Fortunately, IIGA has much lower fraud rates than other digital ads due to the complexity of 3D gaming environments. Several third-party viewability vendors, such as IAS, HUMAN, and Pixalate, can now accurately track IVT in-game, ensuring more reliable ad metrics.

THERE ARE TWO MAIN WAYS IN WHICH THEY DO THIS:

Pre-Bid IVT Measurement:

- Conducted before the in-game ad is served.
- Real-time filtering to prevent fraudulent impressions.
- Enhances cost efficiency and campaign performance.

Post-Bid IVT Measurement:

- Conducted after the in-game ad is served.
- Retrospective analysis to identify and report fraudulent impressions.
- Provides comprehensive insights and continuous improvement.

In general, IIGA has much lower fraud rates than other digital ads, thanks to the complex 3D gaming environments. For example, cybersecurity company HUMAN found that Anzu's IVT averaged 0.16% on mobile and 0.47% on PC, and Comscore found Anzu's overall IVT score for video is 0.39% and for display is 0.44% vs. a 6% mobile average for video and display.

Check out **this guide** for a more in-depth look at how brand safety works in-game.

UNDERSTANDING HOW MEASUREMENT WORKS IN-GAME

In August 2022, the IAB and MRC set out to standardize the in-game space with help from the wider industry. They published the updated **intrinsic in-game advertising measurement guidelines**, which address ad viewability, measurement, and fraud.

To comply with them, many businesses have had to change how they work and build out or update their solutions. These changes have helped improve the space and bring confidence to those working in it. This was a significant milestone for in-game measurement because, before these guidelines, there was no unified way to measure in-game ads. It was done differently depending on who you worked with.

The guidelines are extensive and cover many areas; however, with regard to measurement, the four most important updates are as follows:

1 Separating impressions & viewable impressions

One of the most significant changes has been how viewable impressions are counted. According to the updated guidelines, the ad must be at least 1.5% of the screen size, showing at least 50% of its pixels, the angle must be less than 55 degrees, and it must be viewed consecutively for at least one second to be considered an impression. Simply having the ad load no longer counts because there is no guarantee that the player has seen it. — As a rule of thumb, you should ensure the intrinsic in-game solution you're working with only counts impressions if they are viewable.

2 Re-examining exposure time

Secondly, the 10-second cumulative exposure duration was re-examined and eliminated. Previously, you had a 10-second window where data was stitched together to make a viewable impression. This means if a player saw an ad for 0.2 seconds five times during that 10-second gap, it would count as a viewable impression as technically the ad had been viewed for 1 second.

However, it's doubtful that the player would have seen the ad, let alone taken any information in during such short busts. Viewable impressions are now counted in consecutive one-second windows, meaning they are much more accurate as an impression is only counted if the player has seen the ad for a full second, all in one go.

3 Adding new formats

Thirdly, the guidelines were updated to incorporate new advertising formats beyond 2D and video regarding viewability within in-game environments. This brings viewability standards to gaming environments like VR and AR, where the ads are not as straightforward as in other non-3D environments.

4 Defining measurement terms

Finally, and arguably one of the most significant changes, was the update of in-game measurement terms to align with broader cross-channel measurement efforts. This was crucial to creating standard terminology across the industry from both sides so that the terms remain the same no matter which partner, platform, or game you are advertising in. The list, which can be found in full within the guidelines report, includes terms and clear definitions for several words used for measuring digital ads, including ad impressions, reach, frequency, and engagement. These were universally agreed upon by all parties involved and are now standard across the industry.

THE FUTURE OF
IN-GAME MEASUREMENT

Intrinsic in-game advertising presents a transformative opportunity for brands to engage with an attentive and diverse audience in innovative ways. As gaming continues to grow in popularity, advertisers must prioritize understanding and measuring the effectiveness of their IIGA campaigns to maximize impact and return on investment. By leveraging robust measurement tools and adhering to industry standards, advertisers can ensure their in-game campaigns resonate with players and deliver meaningful results.

As we look to the future, integrating insights from real-world examples and adopting advanced measurement techniques will be crucial for optimizing campaign performance and demonstrating the true value of this medium. Embracing these strategies will not only enhance your advertising efforts but also provide a competitive edge in the rapidly evolving gaming landscape.

Whether used as a standalone strategy or as part of a broader omnichannel campaign, in-game advertising offers a unique platform for brands to reach consumers in an immersive and engaging environment. By understanding the unique metrics and tools available, advertisers can confidently navigate the gaming world, driving better outcomes and capitalizing on the unique opportunities this advertising channel offers.

If you have any questions or would like to learn more about how to measure and optimize your in-game campaigns, contact our team here.

We are committed to helping you unlock the full potential of intrinsic in-game advertising.

CONTACT US