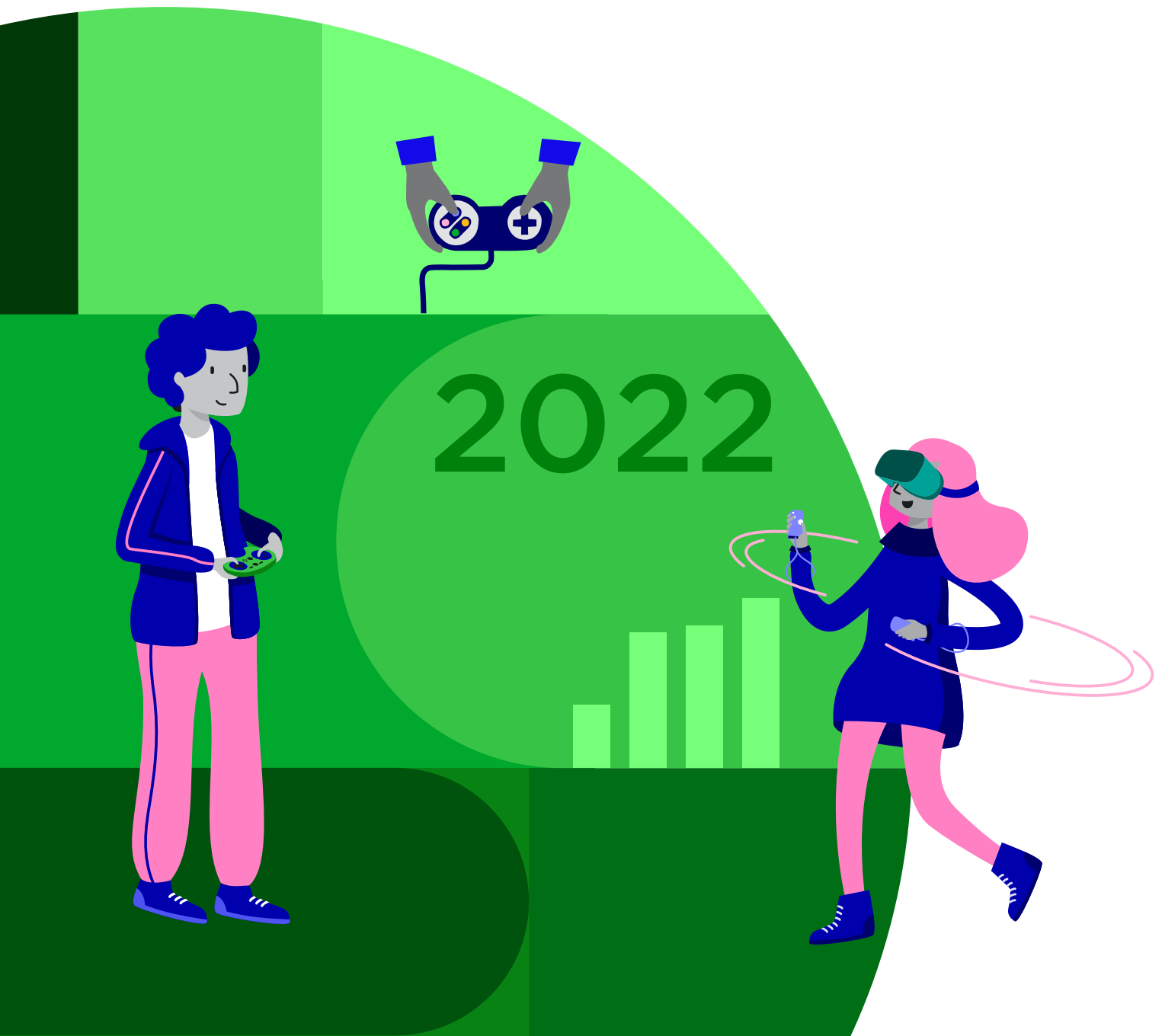




Free Version | 2022

Global Games Market Report

Key Trends | Market Sizing and Forecasts | Gaming Ecosystems
Special Focus Topics: Game Viewing, Cloud Gaming, and
Consumer Perception of Blockchain Gaming



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The background features a light green gradient on the left side, transitioning into a solid dark green area on the right. A large, rounded rectangular shape in a medium green color is positioned in the upper right quadrant. In the lower right quadrant, the word "Foreword" is written in a white, sans-serif font.

Foreword

Foreword

Welcome to the free, light version of our 2022 Global Games Market Report. In this version, we include some of the high-level takeaways of the full report. We hope you enjoy this free preview! Please feel free to [contact us](#) for access to the full [2022 Global Games Market Report](#).

At Newzoo, we've always seen gaming at the heart of the entertainment industry. That vision feels more relevant today than ever, as game worlds become places where players, viewers, and creators come together in a flurry of engagement, attention, and activity. Even outside playing, gaming content fosters communities where game enthusiasts socialize together to celebrate their fandom—both in the real world and online.

This vision is also what drove our decision to promote the Global Games Market Report to our flagship report, as we believe this material is essential for everyone interested in the markets we cover. A direct result is that this year's special focus topics revolve around [game viewing](#) and [cloud gaming](#), two topics that we cover extensively in the add-ons available to purchase on top of your subscription to this report.

The third and final special focus topic provides insight into [consumer perception and expectations around play-to-earn, blockchain games, and NFTs](#). These trendy topics get a lot of coverage—including in our recent complimentary trend report "[The Metaverse, Blockchain Gaming, and NFTs: Navigating the Internet's Uncharted Waters](#)". Discussions around all things metaverse and Web3 are rife in the B2B and journalism spaces, but the voice of potential players is too often ignored. To that end, we surveyed more than 4,000 respondents across four countries (the U.S., Germany, Vietnam, and the Philippines) to better understand gamers' opinions on P2E and the underlying technology that powers it.

Another exciting addition to this year's full report is player numbers per [gaming ecosystem](#). The boundaries between platforms are rapidly disappearing, which is something we have always said here at Newzoo. The market is racing to a future where ecosystems—not platforms—are most pivotal for game development- and marketing-based decisions. This first flagship report already features player numbers for six of today's largest gaming ecosystems, and we're excited to keep building this feature in releases to come.

After back-to-back record-breaking years, 2022 will be a corrective year for the market. Some of this stabilization was expected—after all, growth rates during the pandemic were as unprecedented as they were unsustainable. On top of that, this year's inflation rates and ongoing supply chain constraints limit people's ability to purchase gaming hardware and content. Game delays have led to a quiet AAA release schedule in 2022, and the mobile

gaming market is still reeling from Apple's removal of IDFA. All these factors are a recipe for a slow year. The short- and long-term future remains bright for PC, console, and mobile alike, and growth will quicken after 2022's period of correction.

This year, 3.2 billion players will help the global games market generate \$184.4 billion, down -4.3% year on year. Every one of those players can choose from a variety of playing and paying options; gaming is truly on its way to becoming accessible and affordable for all. Now, players can play many live-service games for free (only missing out on cosmetic items), play premium games through a subscription service, and earn in-game rewards either by purchasing currency or by watching an advertisement. More often than not, all of these options are available within the same game. Choice and convenience are at the heart of today's games market, and engagement is better for it.

Mixing monetization strategies looks to become the standard for today's largest games—whether those are [AAA games experimenting with immersive in-game advertising](#), a free-to-play game such as Riot Games' League of Legends partnering with Xbox Game Pass, a subscription service, or mobile games across the spectrum of casual to core introducing a battle pass system. Hybrid monetization isn't the future. It is already here.



Tom Wijman
Market Lead - Games



Includes access to all the granular data in the Newzoo Platform and quarterly updates.

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01.

**Methodology
& Terminology**

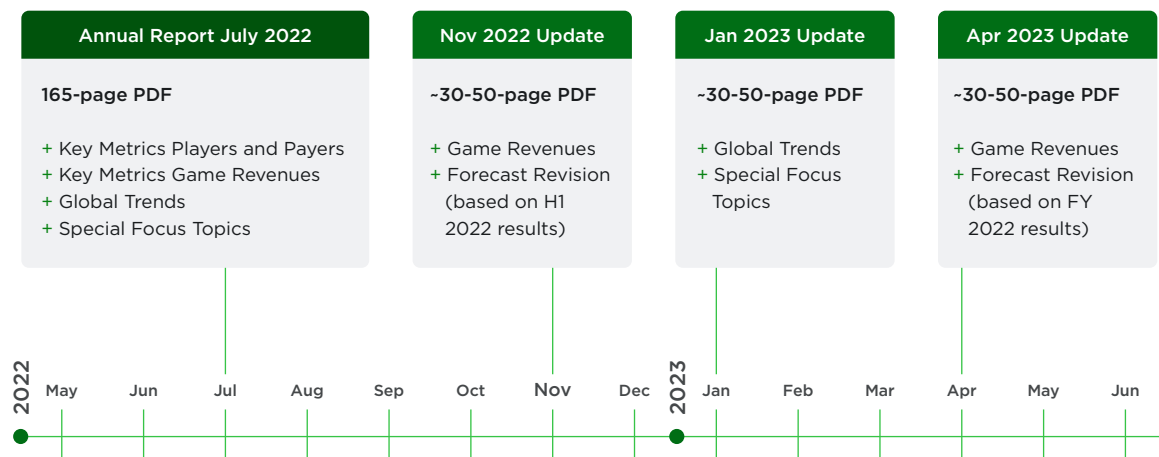
Full Report Structure

This is a free preview of the full [2022 Global Games Market Report](#). Newzoo’s global market reports offer much more to subscribers than a PDF. The full subscription includes:

- A 165-page PDF launched in July 2022.
- Three quarterly update PDFs, which will launch in November 2022, January 2023, and April 2023.
- Access to all metrics via a limited user license to the [Newzoo Platform](#), a downloadable Excel data set, and our Report Data Tools.
- A weekly Analyst Feed, reporting on the latest developments in the global market with takes from our market analyst team, including coverage for esports, live streaming, cloud gaming, metaverse, and other related trends.
- Access to many more unique insights through our platform.

The data in this report will be updated in November 2022. If you are reading this after that time, please navigate to the Newzoo Platform to download the quarterly update PDF and a new data set. If you do not have access to the Newzoo Platform, please reach out to your Newzoo point of contact.

Global Games Market Report 2022 Release Timeline



Methodology

Sizing the Market With A Variety of Data

Newzoo aims to provide its audience with the best possible assessment of the size of the overall games market, broken down into segments and regions. By developing many data points, we ensure that our numbers make sense on a segment, regional, and individual country/market level. Below, we describe our approach in more detail to help you understand what underpins our forecasts, facilitating comparisons with other data sources.

At the highest level, Newzoo focuses on three key metrics for every market: players, payers, and revenues. We define a market as a country or geographic region in combination with one or more game segment(s).

The data on players and payers is mainly based on our own primary consumer research, Consumer Insights – Games & Esports, which continues to form the basis of our detailed understanding of consumers and games. More than 75,000 invite-only respondents across 36 key countries/markets were interviewed. The respondents are between the ages of 10 and 65 for all markets except Chile, China, Colombia, Egypt, India, Indonesia, Malaysia, Philippines, Saudi Arabia, Singapore, South Africa, Taiwan, Thailand, Türkiye, United Arab Emirates, and Vietnam, for which the focus is 10 to 50. Results are nationally representative for developed countries with high internet penetration. Meanwhile, in Latin America, India, Russia, emerging Southeast Asian markets (not Singapore and Taiwan), and markets in the Middle East and Africa, the results are representative of active internet users living in residential developed areas. Furthermore, in China, the data represents active internet users in residential developed areas in tier 1 and 2 cities.

The player and payer ratios from Consumer Insights – Games & Esports are projected against the online population, using UN population and ITU internet penetration metrics. The logic behind the model is that the online population is an important driver of the number of potential gamers and an indicator of how much more structural growth a country/market can expect in its potential gamer population.

The differences between the player and payer numbers in the Global Games Market Report and Consumer Insights – Games & Esports stem from the use of age boundaries and the use of the major city (i.e., focusing on selected major cities) and residential developed (i.e., focusing on the residential developed areas) approaches for certain markets. In the Global Games Market Report, the total population is considered, while in Consumer Insights – Games & Esports, we focus on those between the ages of 10 and 50 or 65, depending on the market.

The revenue data comes from our predictive games market model, which uses a top-down approach to market sizing. We incorporate macroeconomic and census data from the IMF and UN, such as household income and GDP per capita, transactional and app store revenue data from our data partners Airnow Data and Apptopia, our primary consumer research, partner data, detailed financial information reported by more than 140 public companies, and third-party research. We also receive valuable input from clients, often leading international game companies.

Market size estimates and growth forecasts for individual segments, countries, and in aggregate for the total industry are validated against our analysis of various contextual metrics. For instance, our market model calculates the average annual spend per paying gamer, which is then compared with historic numbers, other regions, household income, and GDP per capita. Our historical revenues and growth rates reflect the year-end US\$ exchange rate. Our projected growth rates assume steady exchange rates going forward, but we take into consideration historical growth rates in the local currency rather than US\$, as this gives a better picture of underlying growth.

We define revenues as the amount the industry generates in consumer spending on games: physical and digital full-game copies, in-game spending, and subscription services like PlayStation Plus and Xbox Game Pass. Mobile revenues include paid downloads and in-game spending on all stores, including third-party stores, and from direct downloads. Genre definitions are aligned with the definitions used in our Newzoo Games Taxonomy.

Our revenue numbers exclude taxes, consumer-to-consumer second-hand trade, advertising revenues earned in and around games, (peripheral) hardware, business-to-business services, and the traditionally regulated online gambling and betting industry (e.g., BWIN and William Hill).

In terms of countries and regions, we define the market size as the amount companies generate from consumers in that specific territory, as opposed to the amount companies based in a particular territory generate worldwide.

The broader conceptual framework supporting our forecasts consists of the expected growth of the online population plus the expected development of the Key Market Indicators per region, as illustrated below. Overall, our forecasts are always the outcome of an iterative process, reviewing the implications of our assumptions on a very granular level. During this process, we rely on quantifiable metrics, such as historical growth rates, and include hard-to-quantify metrics, such as (gaming) culture, spending behavior, and other societal factors. At the minimum, player and payer forecasts are reviewed twice per year, the results of which are shared in our Q1 Quarterly Update and the Annual Report.

Revenue forecasts are reviewed after half-year and full-year financial results, the results of which are shared in our Q2 and Q4 Quarterly updates.

Global Games Market Report Methodology

Global Financial Company Analysis

Game revenues of public and non-public companies

Population & Economic Census Data

Projecting organic growth on a local and global scale

Primary Consumer Research in Key Countries

Understanding playing and spending behavior

Partner Data

Actual download, revenue, and play time data

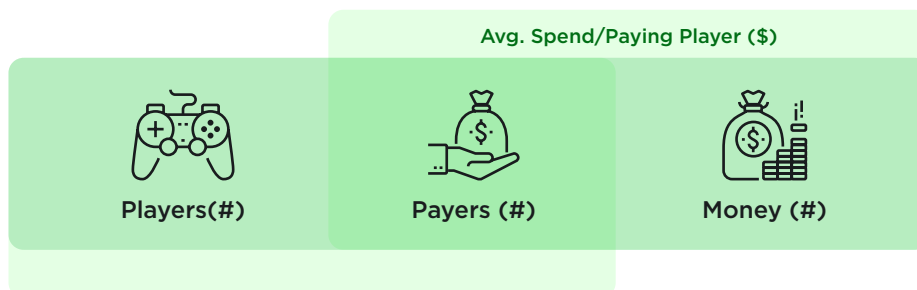
Local Data Validation

With commercial companies in specific countries

Third-Party Research

Reported on a local and global scale

Global Games Market Model



Terminology

Key Metrics

Players. All people who play (digital) games on a PC, console, mobile device, or cloud gaming service in the past six months.

Payers. All people who have spent money to play games on a PC, console, mobile device, or cloud gaming service in the past six months.

Game revenues. Consumer revenues generated by companies in the global games market, excluding hardware sales, tax, business-to-business services, and online gambling and betting revenues.

Active VR hardware install base. Consumer VR headsets capable of 6DoF positional tracking and being used at least once in the past 12 months. We exclude enterprise headsets that can also be used to play VR games and headsets that use only 3DoF tracking; for example, all smartphone-based VR headsets such as Samsung Gear VR and entry-level standalone headsets such as Oculus Go.

Android App Stores players. Those who played mobile games at least once in the past six months on an Android device.

Apple App Store players. Those who played mobile games at least once in the past six months on an iOS device.

Augmented reality (AR). A technology that supplements real-life views of users with computer-generated sensory input as images or sounds.

Big spenders. Payers that spend an average of \$25 per month or more on gaming content per platform on PC, mobile, or console.

Boxed full-game revenues. Revenues generated by the sales of games or game-related content delivered on physical storage media (i.e., discs or cartridges). Also includes physical copies ordered in online stores.

Browser PC games. Games played on casual game websites or social networks.

Cloud gaming or game streaming. The ability to play a game on any device without owning the physical hardware required to process it or needing a local copy of the game itself. Also called game streaming, the games are processed remotely on cloud or edge servers and streamed directly to a user's device.

Compound annual growth rate (CAGR). The constant growth rate over a period of years. In this report, all CAGRs are based on the years 2020-2025.

Console games. Games played on a TV screen directly or through a console, such as Xbox, PlayStation, and Nintendo, or on handheld devices, such as a Nintendo DS or PS Vita.

Degrees of freedom (DoF). The number of directions of users' positional tracking in VR, which relies on built-in or external sensors to capture movement. While 3DoF tracking only measures three types of directional rotation (rolling, pitching, and yawing), 6DoF adds three further directional movements (elevating, strafing, and surging).

Digital full-game revenues. Revenues generated by the sales of games or game-related content purchased directly from an online store and delivered through a digital download, e.g., the PlayStation Store, Microsoft Store, Nintendo eShop, Steam, and Tencent WeGame.

Downloaded/boxed PC games. PC games downloaded from websites or services (i.e., Steam or Epic Games Store) or purchased as a boxed product (CD/DVD), including client MMO and MOBA games.

Epic Games Store players. PC players who have played or downloaded games using the Epic Games launcher at least once during a given year.

Esports enthusiasts. People who watch professional esports content more than once a month.

Esports. Competitive gaming at a professional level and in an organized format (a tournament or league) with a specific goal (i.e., winning a champion title or prize money) and a clear distinction between players and teams that are competing against each other.

Free-to-play (F2P) games. Games that are (legally) free to download and play, very often offering in-game spending opportunities.

Game revenues. Consumer revenues generated by companies in the global games market, excluding hardware sales, tax, business-to-business services, and online gambling and betting revenues.

Games as a service (GaaS). Games as a service provides game content or access to games on a continuous revenue model, e.g., via a game subscription service or a season/battle pass. Also referred to as live service games.

Games live streaming audience. People who have watched live-streamed gaming content at least once in the last six months.

Highly engaged players. Players that indicate they spent a minimum of 10 hours per week playing on PC, mobile, or console.

In-game revenues. Revenues generated through the sales of in-game items, including expansion or content packs, cosmetics/skins, power-ups, time savers, loot boxes, playable characters, content passes for a one-off fee (battle/season pass), in-game currencies, content passes for a recurring fee, and reward passes.

Live service games. Games that provide game content or access to games on a continuous revenue model, e.g., via a game subscription service or a season/battle pass. Also referred to as Games as a Service (GaaS).

Metaverse. A virtual social environment where people can create and engage in shared experiences.

Mobile phone games. Games played on tablets or smartphones.

Monthly active users (MAU). Represents the number of users who launched a title at least once in a given month.

Nintendo Players. Those who played games, at least once in the past six months, on a Nintendo Switch, 3DS, or Nintendo's old-gen (handheld) console such as Wii U, Wii, and DS.

Non-fungible token (NFT). A unit of data stored on a blockchain that certifies the uniqueness of digital assets.

Online population. All people within a country/market or region who have access to the Internet, via a computer or mobile device.

Peripherals. Gaming-related hardware products that are used for gaming, such as gaming mice, keyboards, headsets, controllers, or monitors.

PlayStation Players. Those who played games, at least once in the past six months, on a PlayStation (PS) 5, PS4, PC via PS Plus cloud streaming (formerly PSNow), or PS' old-gen (handheld) console such as PS3, PS Vita, and PSPortable.

Premium games. Games that must be paid for upfront or are paid subscription-based games.

Spend/payer. Annual average revenue generated per payer (Game revenues/Payers).

Subscription revenues. Revenues generated by periodical fees paid for subscriptions to gaming content. A service a user can access by paying for a pre-determined time period. In this report, the term is used in the context of a game subscription service, which is a service that offers access to software content without providing the platform/hardware access that a cloud gaming service provides.

Virtual reality (VR). The computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way by a person using special electronic equipment, such as a headset with a screen inside or gloves fitted with sensors.

VR games revenues. VR games revenues generated through the consumer VR headsets capable of 6DoF positional tracking.

Xbox Players. Those who played games on an Xbox 360, XB One, XB Series S|X, PC via Game Pass, or Mobile via Game Pass in the past six months.

02.

The Global Games Market



Estimates in this chapter are from November 2022. We review these quarterly and update them if needed here: [newzoo.com/key-numbers](https://www.newzoo.com/key-numbers).

The Global Games Market 2022

An Overview per Region and Segment

In 2022, 3.2 billion players will help the global games market generate \$184.4 billion, down -4.3% year on year. By 2025, this will grow to 3.5 billion players helping the market generate \$211.2 billion. The following section shines a spotlight on our player and payer numbers while also highlighting how we split revenues per segment and region. We also look at the market's overall growth toward 2025, touch on our latest numbers for the VR market, and provide a breakdown of global game revenues per form of monetization.

Key Takeaways

- Globally, the number of players will grow from 2.9 billion in 2020 to 3.5 billion by 2025, a five-year CAGR of +4.2%. The past two years (2020 and 2021) saw not only record-level engagement and spending but also brought many new and lapsed players back to the pastime.
- In 2022, the global games market as a whole will generate \$184.4 billion, down year on year by -4.3%.
- 2022 will be a corrective year for the games market following two years of lockdown-fueled growth. The primary driver of this decline across the world is mobile, which will generate revenues of \$92.2 billion this year (50% of the market), representing a decline of -6.4%. PC accounts for 22% of the market and will grow +0.5% year on year to \$40.5 billion. Meanwhile, console will decline by -4.2% year on year to \$51.8 billion—or 28% of the global market.
- North America's games market will decline -5.1% year on year to \$48.4 billion in 2022, while Europe's will decline -3.5% year on year to \$32.9 billion. Modest PC growth in these regions are not enough to offset a strong decline on both mobile and console.
- The Asia-Pacific games market will decline -5.6% year on year to \$87.9 billion in 2022. The corrective factor of post-lockdown spending is especially notable in the three major Asian markets: China, Japan, and South Korea. We now forecast a decline in all three markets, and, largely because of this, the Asia-Pacific region is forecast to decline most out of all major regions.
- Meanwhile, regions populated with mobile-first growth markets will see modest growth this year, with the Middle East and Africa growing +6.6% to \$6.8 billion and Latin America growing +3.4% to \$8.4 billion in 2022. Console's downturn hardly

impacted these mobile-first markets, but the impact of IDFA's removal did limit growth on mobile.

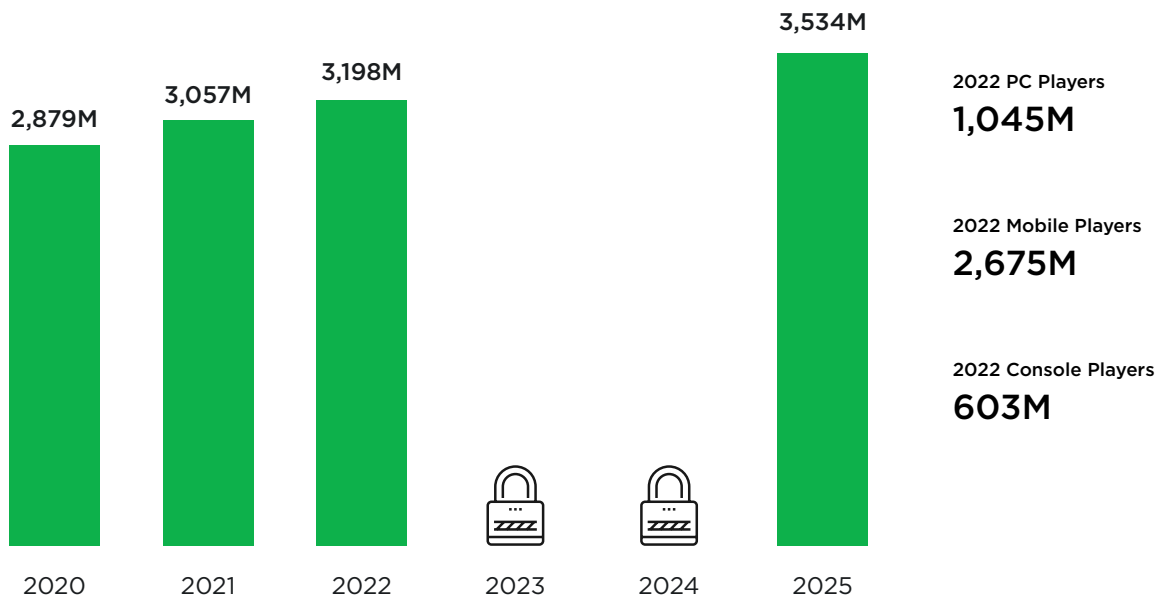
- Our long-term outlook for the games market remains positive. We now forecast the games market to grow from \$179.1 billion in 2020 to \$211.2 billion by 2025, growing at a +3.4% CAGR. This signals our belief that the games market will continue growing healthily in a post-pandemic world, albeit at a slower pace than during the pandemic.

Players

Globally, the number of players will grow from 2.9 billion in 2020 to 3.5 billion by 2025, a five-year CAGR of +4.2%. The past two years (2020 and 2021) saw not only record-level engagement and spending but also brought many new and lapsed players back to the pastime.

Global Player Forecast

2020-2025



The full six-year player forecast is included in the complete, paid version of this report: www.newzoo.com/games-report.

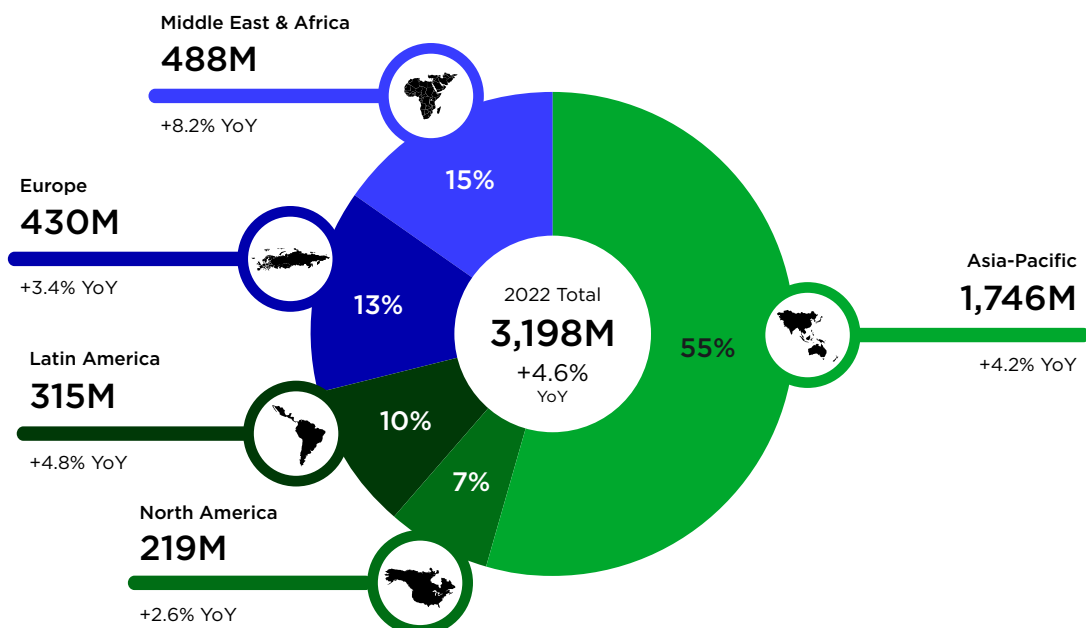
While the pandemic is not over yet, many countries have lifted their restrictions. This means that consumers are no longer confined to their homes; they can enjoy the activities that were part of their lives before COVID-19. Engagement with games is sticky, however, and many people formed bonds with gaming during their formative years. Gaming’s stickiness and less hit-driven nature mean that even when the pandemic subsides, we still expect ongoing player growth for the games market, even in mature regions such as North America and Europe.

Despite lockdown measures easing and people returning to their regular lives (and spending), the global number of players will reach new heights in 2022, growing +4.6% to reach 3.2 billion—a result of gaming’s growing popularity among younger generations as other generations also continue to age (and play games). Growth regions like Latin America and the Middle East and Africa will drive much of this growth in 2022 and the years beyond.

In these regions, player growth drivers include better (mobile) internet infrastructure, affordable access to (mobile) internet, and a growing middle class. The affordability of gaming as a pastime due to the free-to-play model, the growing number of smartphone owners, and the importance of apps in growth markets mean we expect player numbers to grow even in the face of inflation.

2022 Global Players

Per Region

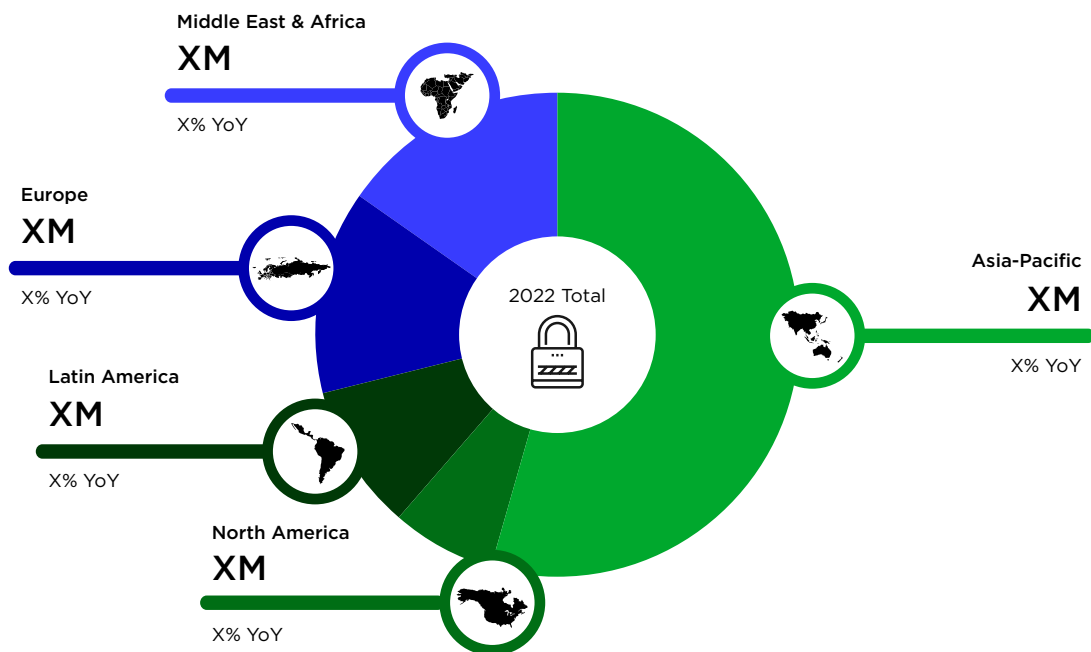


Payers



2022 Global Payers

Per Region



Curious how many players are also paying for games? Find out in the complete, paid version of this report: www.newzoo.com/games-report.

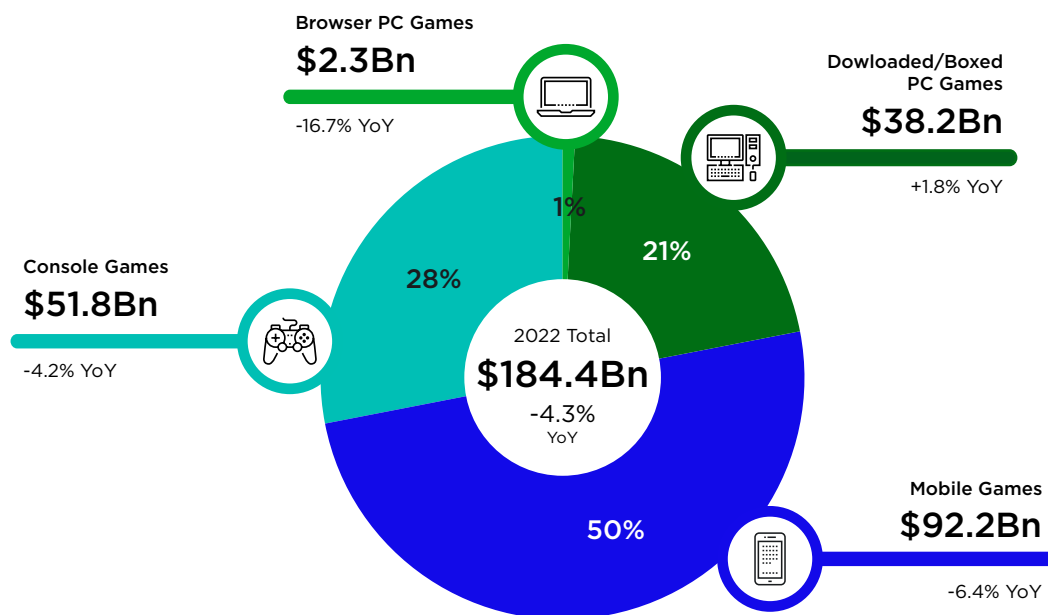
2022 Game Revenues

For the first time in Newzoo’s history of covering the global games market, we forecast the market to decline year on year. We forecast the games market will generate \$184.4 billion in 2022, down -4.3% year on year. 2022 is a corrective year following two years of lockdown-fueled growth, but our long-term outlook for the games market remains positive.

The primary driver of this decline across the world is mobile, which will generate revenues of \$92.2 billion this year (50% of the market), representing a decline of -6.4%. PC accounts for 22% of the market and will grow +0.5% year on year to \$40.5 billion. Meanwhile, console will decline by -4.2% year on year to \$51.8 billion—or 28% of the global market.

2022 Global Games Market

Per Segment



The pandemic might have had a positive impact on game-related engagement in its initial years, but it also caused many challenges for the business and game creation, especially for console—and to a lesser extent, for PC. These challenges are still impacting the industry today. Supply shortages, disrupted supply lines, and studios adjusting to work-from-home environments led to countless game delays and consumers being unable to find new-generation consoles and PC gaming components. This partly explains PC’s almost-flat growth and console’s decline. The PlayStation 5 and Xbox Series X are still in short supply almost two years after launch, and the semiconductor chip shortage is also still impacting the

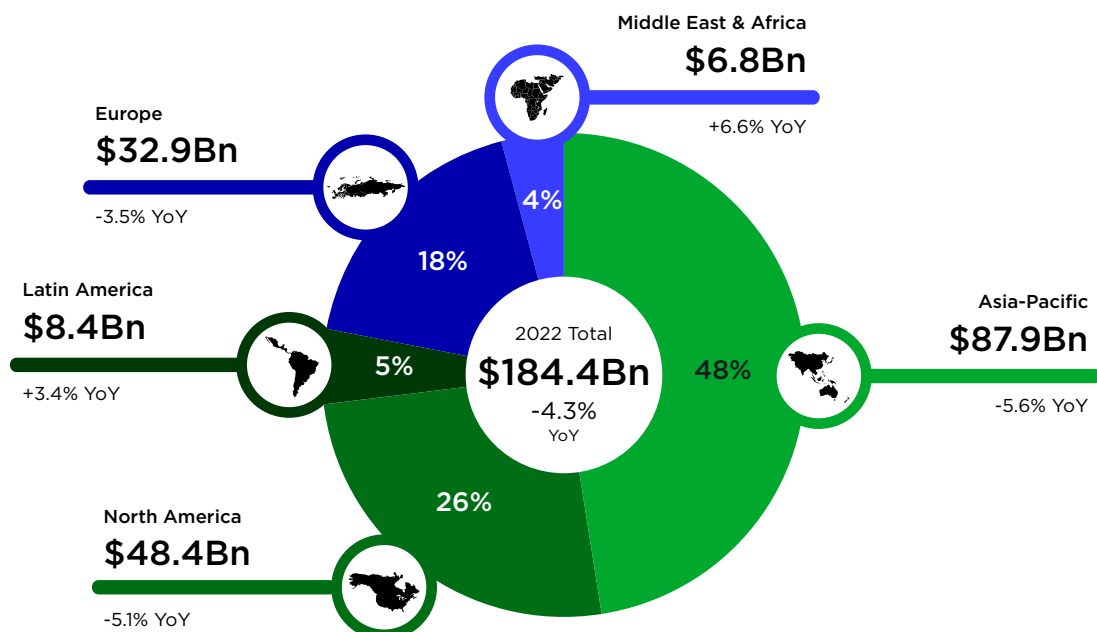
supply of GPUs and other PC components. This will likely remain the case until late 2023, at least.

AAA games are still facing delays, as big-budget titles that started development at the beginning of the pandemic are now entering the post-production stage of development. Studios are still adapting. The continued growth of subscription services and free-to-play mean that AAA gaming is no longer as hit-driven and seasonal as it once was. While many games were delayed, players continued to engage with “forever titles” like Fortnite, Call of Duty Warzone, League of Legends, and others.

North America’s games market will decline -5.1% year on year to \$48.4 billion in 2022, while Europe’s will decline -3.5% year on year to \$32.9 billion. Modest PC growth in these regions are not enough to offset a strong decline on both mobile and console. The Asia-Pacific games market will decline -5.6% year on year to \$87.9 billion in 2022. The corrective factor of post-lockdown spending is especially notable in the three major Asian markets: China, Japan, and South Korea. We now forecast a decline in all three markets, and, largely because of this, the Asia-Pacific region is forecast to decline most out of all major regions. Meanwhile, regions populated with mobile-first growth markets will see modest growth this year, with the Middle East and Africa growing +6.6% to \$6.8 billion and Latin America growing +3.4% to \$8.4 billion in 2022. Console’s downturn hardly impacted these mobile-first markets, but the impact of IDFA’s removal did limit growth on mobile.

2022 Global Games Market

Per Region



It is also worth noting that lockdown measures began easing in 2021, meaning experiential spending—going to restaurants, the movies, meeting friends at bars, traveling, and the like—returned.

To some extent, the gaming market is “recession-proof”. Even more so than in previous times of economic turbulence, gaming’s varied monetization methods and price points, as well as the role that gaming plays in many people’s lives, mean that we expect gaming engagement and consumer spending to continue even if the economy takes a downturn. However, another contributor to the market’s overall decline this year is inflation, which is limiting consumers’ disposable income (as prices are higher for essentials, commodities, and leisure). The result is that many more price-sensitive consumers will spend less on games. However, engagement with games will remain largely the same, thanks to a slew of free-to-play offerings that do not require spending across all platforms. Once the economic situation returns to normal, these players will pick up where they left off in terms of spending. The games market is strong and is often resilient during times of economic challenge, so our longer-term outlook remains positive.

Revenue Forecasts

We now forecast the games market to grow from \$179.1 billion in 2020 to \$211.2 billion by 2025, growing at a +3.4% CAGR. While this year may seem as a setback for the games market, we note that the sum of revenues generated from 2020 to 2022 is almost \$43 billion higher than we originally forecast pre-pandemic. The lockdown years may have pushed the games market to unsustainable levels of revenues, especially in the current economic climate, but the coming years look promising, particularly for console gaming.

Our positive forecast signals our belief that the games market will continue growing healthily in a post-pandemic world, albeit at a slower pace than before. While experiential spending will become an even bigger part of consumers’ lives again in the coming years, gaming’s bonds are strong and are here to stay. There is, of course, a chance that lockdown measures will return and a new variant of COVID-19 will emerge, but our current market outlook takes the more optimistic approach.

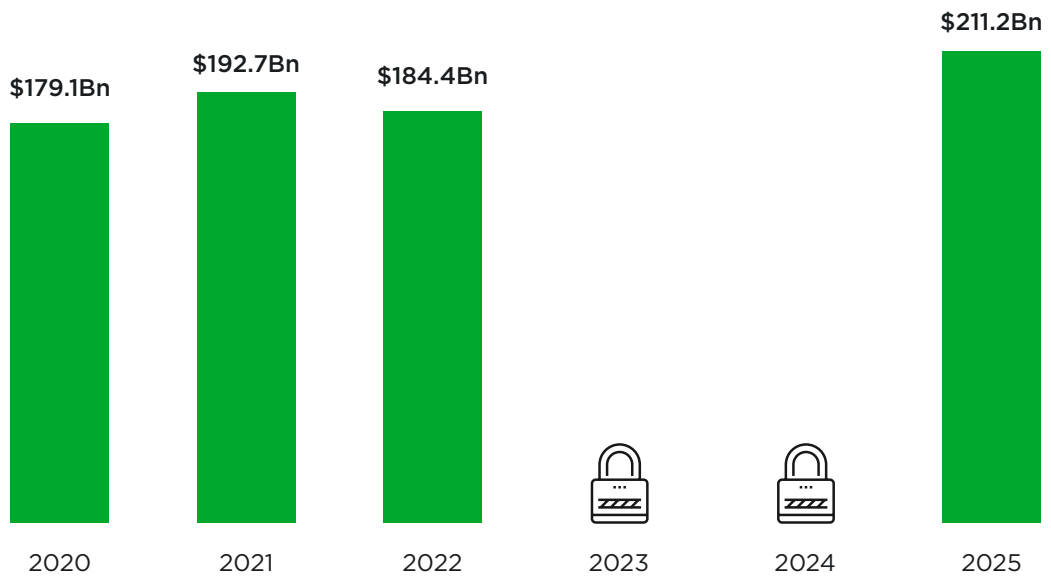


Find revenue forecasts for 5 regions and 36 countries/markets in the complete, paid version of this report: www.newzoo.com/games-report.

Gaming’s continued strong growth trajectory—even in the face of stabilization following 2020’s boom—is a testament to the market’s power, innovation, and resilience. COVID-19-related delays mean we will see many of the hit games that were supposed to launch this year instead release in 2023 and 2024, which we believe will be some of gaming’s best years ever in terms of quality content that consumers love. As you can see in the chart below, we expect to see significant console growth in 2025, marking year five of the current console generation and assuming that Nintendo will release a successor to its Switch console. The success of the Switch OLED model and the ongoing popularity of legacy Switch software underline a consumer desire for more Nintendo IP and hardware.

Global Game Revenue Forecast





























2020, 2021, 2022, and 2025




The full six-year forecast per segment is included in the complete, paid version of this report: www.newzoo.com/games-report.

Top Public Companies by Game Revenues

Every year, Newzoo ranks the Top Public Companies by Game Revenues based on an analysis of annual and quarterly financial reports published by a number of relevant publicly listed game companies.

	Company	Revenues	Change
1.	 Tencent	\$8,121M	
2.	 Sony	\$3,515M	
3.	 Apple	\$3,137M	
4.	 Microsoft	\$2,826M	
5.	 NetEase	\$2,649M	
6.	 Google	\$2,531M	
7.	 Electronic Arts	\$1,767M	
8.	 Nintendo	\$1,465M	
9.	 Activision Blizzard	\$1,539M	
10.	 Sea Group	\$900M	
11.	 Bandai Namco Entertainment	\$779M	
12.	 Take-Two Interactive	\$1,019M	
13.	 Nexon	\$731M	
14.	 Playtika	\$641M	



 Unlock the top 100 companies and their evolution going back to 2017 with the complete, paid version of this report: www.newzoo.com/games-report.

Genre Revenues

Every year, Newzoo ranks the top game genres by revenues across PC, console, and mobile. We use a variety of data sources modeled by our financial analysts to size the market and forecast data.

#	Genre	Revenue			Total
		PC	Console	Mobile	
1	Role Playing				
2	Adventure				
3	Strategy				
4	Battle Royale				
5	Shooter				
6	Puzzle				
7	Sports				
8	Simulation				
9	Arcade				
10	Card Battle				
11	Fighting				
12	Battle Arena				
13	Idle				
14	Sandbox				
15	Racing				
16	Casino				
17	Platformer				
18	Tabletop				



Unlock 2022 genre revenue estimates across each region and country/market with the complete, paid version of this report: www.newzoo.com/games-report.

VR Hardware Adoption and VR Game Revenues

With the 2022 Global Games Market Report release, we update our active VR hardware and VR install base numbers, as well as our VR game revenue estimates and forecasts. Our active VR hardware install base is defined as consumer VR headsets capable of 6DoF positional tracking and used at least once in the past 12 months. We exclude enterprise headsets that can also be used to play VR games and headsets that use only 3DoF tracking; for example, all smartphone-based VR headsets such as Samsung Gear VR and entry-level standalone headsets such as Oculus Go.

The screenshot shows the 'Report Data Tools' interface with a search bar at the top. Below the search bar are navigation tabs: 'Top Markets', 'Trending', 'Compare', 'Table', 'Public Company Revenues', 'Genre Revenues', and 'Virtual Reality'. A 'Regions' dropdown menu is on the left. The main content area displays a table for 'Virtual Reality' with columns for years 2016 through 2024. The table lists five metrics: PlayStation VR - Active VR hardware install base, PC VR - Active VR hardware install base, Standalone VR - Active VR hardware install base, Total - Active VR hardware install base, and Total - VR games revenues.

Metric	2016	2017	2018	2019	2020	2021	2022	2023	2024
PlayStation VR - Active VR hardware install base									
PC VR - Active VR hardware install base									
Standalone VR - Active VR hardware install base									
Total - Active VR hardware install base									
Total - VR games revenues									



Access the active VR hardware install base and 2016-2024 revenue estimates with the complete, paid version of this report: www.newzoo.com/games-report.



03.

Key Global
Trends

Trend 1

Gaming the Ecosystem: Ecosystems Are Overlapping and Expanding Thanks to Live Services and Subscriptions

Even as recently as 2017, game ecosystems from the likes of PlayStation and Xbox were relatively closed. Xbox, recovering from the early failings of the Xbox One, used Fortnite as a trojan horse to pressure PlayStation to enable crossplay. It also used Minecraft—more specifically, its \$2.5 billion Mojang acquisition—to enter other platform holders' ecosystems. Now, live services and the advent of game subscriptions are opening these once-closed ecosystems even further.

Explore the entire trend in the complete, paid version of this report, covering:



Taking Cues from Partners: Xbox and PlayStation Have Noted Third-Party Live-Service Success



Game Subscriptions Can Ensure More Consistent and Secure Revenues, but Content Is a Necessity



Ecosystems Are Combining, and the Competitive Landscape Is Changing



This full trend is included in the complete, paid version of this report:
www.newzoo.com/games-report.

Trend 2

Mobile Privacy: The Sunsetting of Real-Time User Tracking Marks the Dawn of a Privacy-First Mobile Economy

Apple disrupted the entire mobile ecosystem in April 2021 when it rolled out its Apple Tracking Transparency (ATT) and SKAdNetwork 2.0. Google followed suit with similar (but less extreme) features of its own. Apple's new framework made it much more difficult for app publishers to track users across apps, having a knock-on effect on user acquisition (UA) and other metrics-based strategies. Advertisers faced challenges in measuring and iterating ad campaigns. The impact has been huge.

While the changes led to improved privacy for app users, they also catalyzed or aggravated struggles for countless companies across the world. Meta estimates that ATT will slice \$10 billion off the company's ad revenue in 2022. Meanwhile, many mobile game companies, including Zynga, have publicly expressed their ATT-related challenges around UA and monetization.

Explore the entire trend in the complete, paid version of this report, covering:



Damage Control: Apple Announced Updated SKAdNetwork Changes That Ease Some Developers' Challenges



Google's Changes Are Also Disruptive but Are More Lenient and With More Transition Time



This full trend is included in the complete, paid version of this report: www.newzoo.com/games-report.

Trend 3

In-Game Advertising in AAA Console and PC Games Is Emerging as a New Revenue Stream

Key Takeaways

- Publishers tried to introduce in-game advertisements (IGA) in AAA games in the early 2000s, but the monetization model failed to find its footing.
- Now IGA is more viable. Advertising is more automated, practically everyone is online, marketers have been sold on gaming, and other traditional ad revenue has run dry.
- What's more, mobile's popularization of the free-to-play model—and the hybrid monetization within it—is now a mainstay of AAA console and PC games.
- In 2022, roughly 299 million people on console and 458 million on PC play but do not spend money. Advertising is a way for game makers to monetize this group.
- Two of the biggest public games companies in the world, Microsoft and Sony, are eyeing advertising in their AAA titles.
- At the same time, the emergence of subscription services on console might make room for more traditional interstitial video ads on console.
- Hybrid monetization that includes rewarded ads is already a successful revenue stream in titles like Call of Duty Mobile and PUBG Mobile. Therefore, we might see such monetization reaching competitive games on console and PC as well.
- The opportunity for advertisers is clear. More than three billion people play games, including practically every demographic and advertisers' target audience, making it a viable advertising vehicle.
- In the end, advertising in AAA games underlines opportunities for game makers (via new revenue streams), brands (via access to boundless demographics and hard-to-reach audience), and some consumers (via rewards).

In-game advertisements (IGA) in AAA console and PC games are no new phenomenon. Titles like Crazy Taxi in the early 2000s and Burnout Paradise later that decade featured product placements, banners, and other forms of in-game advertising. Ultimately,

the trend failed to take off among marketers and game developers. Twenty years later, however, ads in AAA console and PC games are poised to become a reality. The situation has changed, as consumers, advertisers, and brands alike are more receptive to advertising in what has become the world's most popular form of entertainment: gaming.

Meanwhile, AAA publishers on console and PC—taking cues from their mobile counterparts—are increasingly becoming free-to-play and are looking to hybrid monetization to strengthen growth in their live-service offerings. The emergence of game subscriptions is another notable factor in the mix. All signs point to advertising becoming a major revenue stream for some AAA console and PC game makers, particularly the platform holders.

There are many forms of advertising, but for this trend, we consider these relevant types:

1. **Rewarded ads**, which allow players to watch a video or engage with a playable ad in exchange for a reward within the app.
2. **Pop-ups and interstitial ads**, which pop onto the screen during a loading screen or gameplay moment.
3. **Blended ads**, which are seamlessly integrated into the game world to keep the gameplay interruption-free.

Why In-Game Advertising Is Now Viable for AAA Console and PC Games

There are many reasons why advertising has become viable in AAA console and PC games vs. 20 years ago, including that:

- **Advertising is now more automated:** The emergence of programmatic advertising—the process of automatically buying and optimizing digital campaigns—means advertising in games can now be automated, scalable, and recurring. In the past, the process was manual, bespoke, and—therefore—costly and time-consuming.
- **Everyone is online:** Infrastructure advancements mean that billions of consumers now have access to reliable and secure internet connections, allowing marketers to serve new or modified ads if and when they are needed. In the past, advertisements were hard-coded in games and difficult to modify. Online connectivity, and the always-online nature of games today, mean this is no longer the case.
- **Marketers are now sold on gaming:** In the past, traditional advertisers and marketers were wary of the games market. Now gaming's reach and marketing potential are unmistakable, so even the staunchest of naysaying marketers are coming around to

gaming's opportunities and the growing metaverse trend. Newzoo's 2022 Consumer Insights show that a remarkable 79% of the online population engages with games in one way or another—whether that be playing, viewing, or engaging with game communities. This engagement, while sizable across all generations, is particularly apparent for Gen Alpha and Gen Z, which are especially interesting targets for marketers.

- **Advertisers need something new:** Linked to the previous point, traditional advertisers are slowly losing their tried-and-true activation platforms. The emergence of live-streaming platforms has undercut TV advertising, while privacy concerns are causing challenges for target ads on the web (cookies are becoming less relevant, and consumers use ad blockers) and on mobile (Apple's removal of IDFA). At the same time, consumers are showing "ad blindness" and have trained themselves to ignore—or turn a blind eye to—traditional banner advertising. Gaming and the metaverse, with their blended ads and captive rewarded ads, offer a viable alternative.
- **New monetization models on PC and console:** Mobile's popularization of the free-to-play model—and the hybrid monetization within it—is now a mainstay of AAA console and PC games. (Mid)core and high-fidelity mobile games like Call of Duty Mobile are already generating revenues via advertising, so console and PC developers—looking to maximize growth and revenue per user—are looking to follow suit.

In light of the last point, it is no surprise that two of the biggest public games companies in the world, Microsoft and Sony, are eyeing advertising in their AAA titles.

Microsoft and Sony Are Getting Involved with Advertising

In 2022, there will be roughly 299 million people on console and 458 million on PC who play but do not spend money. Just like on mobile, advertising is a way for game makers to monetize this group. To that end, both Sony and Microsoft are working on blended ads—such as in-game billboards—in their titles, according to an [Insider report](#). PlayStation, which is also reported to be working on rewarded ads, has been vocal about its move into live-service games, claiming to release 12 more first-party live-service titles by the end of 2025. Sony has also invested in programmatic game advertiser Anzu, which also works with Xbox, perhaps further signposting both companies' intentions. PlayStation reportedly hopes that in-game advertisements will inspire publishers to create in-game live-service games to gain a new revenue stream. Such titles are incredibly lucrative for Sony, which takes a 30% cut of purchases made on its PlayStation platform.

Our 2022 Consumer Insights show 31% of mobile players are highly motivated by immersion vs. 41% on console and 39% on PC. Big-screen AAA console and PC experiences tend to be more immersive than their mobile counterparts, so it may be in developers' and marketers' best interests to keep advertisements and engagements less intrusive on certain genres for console and PC via blended ads. If advertisements are not frictionless, the game experience and engagement might suffer. While pop-ups and interstitial ads are viable for select mobile titles and multiplayer titles with downtime between matches, they block the immersion in immersive and reality-based games, making blended ads a more viable ad revenue stream for many AAA console and PC titles—as well as metaverse platforms.

At the same time, the emergence of subscription services on console might make room for more traditional interstitial video ads on console. The de-facto success story for subscriptions is Netflix, which is seeing dwindling subscriber numbers for the first time and reaching a point of saturation for monetizing current subscribers. As a result, Netflix is now experimenting with a free option, monetized via ads to boost subscriber growth and secure another revenue stream. Xbox Game Pass and PlayStation Plus are still in the early growth and user-acquisition stages of their subscriptions. Longer-term, it is not difficult to imagine a world in which these subscriptions have a base free tier monetized via advertisements. Such an option would massively increase the reach of these platforms. Both Xbox and PlayStation—especially the former—are looking to bring their content and subscriptions to as many screens as possible, and a free tier is a viable way to achieve this.

Rewarded Ads Might Be Viable for Competitive Games With In-Game Currencies

Rewarded ads give players a chance to watch a video or engage with a playable ad in exchange for a reward within the app. Because users want these rewards to unlock new things in games, they will often engage with the funnel thoroughly and multiple times in hypercasual titles on mobile. Rewarded ads are also becoming more prominent in more (mid)core competitive mobile games like shooters and battle royale. There is an opportunity here for free-to-play competitive games on console and PC as well. Such titles are played in loops, where there is downtime between matches, so developers can serve ads in a way that does not disrupt the game experience. Some players might even choose to watch such ads if it means they are rewarded with in-game currencies to allocate toward a cosmetic or other in-game purchase. Naturally, developers must aim to carefully balance the ad frequency in a way that retains the userbase and preserves the session length. Hybrid monetization that includes rewarded ads is already a successful revenue stream in titles

like Call of Duty Mobile and PUBG Mobile. Therefore, we might see such monetization reaching competitive games on console and PC, as well.

Further Opportunities and Challenges for Marketers Advertising in AAA Games

The opportunity for advertisers is clear. More than three billion people play games, including practically every demographic and advertisers' target audience, making it a viable advertising vehicle. Additionally, Newzoo's Consumer Insights show that players show more positive attitudes toward brands than non-players across multiple brand types, including sports brands, luxury fashion, automotive, and beverage. Paired with the growing ways in which brands and games can collaborate (in and outside of gaming worlds), these attitudes present a meaningful opportunity for brands to engage with gamers.

While many of the usual advertising challenges are present in gaming, the two following are perhaps the most crucial:

- **Partnering with a game that fits the marketer's audience:** Certain games are more popular in different countries, and one game's audience could be drastically different from another's. What's more, many games are violent and intended for mature audiences, so partnering with such games does not make sense for a family-friendly brand.
- **Building an authentic narrative that resonates with gamers:** The core gamers who play AAA console and PC titles are often digital native and savvy to advertising. Therefore, brands have better chances for success if they tell a story that feels organic and demonstrates the brand's value.

In the end, advertising in AAA games underlines opportunities for game makers (via new revenue streams), brands (via access to boundless demographics and hard-to-reach audience), and some consumers (via rewards). However, as put by Itamar Benedy, Anzu's CEO: "It's all about finding the balance of [ad] content that gamers will accept—content that brings is valuable, personalized, non-intrusive, and relevant. It's all about looking at everyone in the ecosystem to make sure players, game companies, and ad companies are comfortable. IGA is a balance between all the different stakeholders."

In-game advertising in AAA console and PC games seems almost inevitable, but there will be trials and tribulations to overcome before it hits mainstream adoption and acceptance—just as there was in microtransactions and free-to-play in the past.

Stakeholder Spotlight



Anzu is an in-game ad solution for mobile, PC, console, Roblox, and VR. Its in-game ads help advertisers reach audiences programmatically in a non-disruptive and engaging way. Anzu is the sole officially licensed in-game ad provider for Xbox—as well as the first ad platform to become Unity verified. Its patented 3D ad-tracking engine partnerships with trusted AdTech vendors have led to investment from the likes of WPP, Sony Innovation Fund, NBCUniversal, and HTC. We interviewed Itamar Benedy, Anzu's CEO, about the company's growing role in in-game advertising, why blended in-game ads have become viable in today's games market, balancing the needs of developers, advertisers, and players, where companies like Anzu fit into the metaverse, and more.

Please note: When Benedy mentions in-game advertising (IGA), he is referring to blended and non-intrusive in-game ads—not the entire in-game ad ecosystem.

Q. Could you tell us a little about Anzu and its role within in-game advertising?

Anzu is the leading in-game advertising (IGA) platform. The best way to describe IGA is to think about the digital ad format applied in the gaming world. It could be a poster on a wall, a billboard, or branded content on a game object. The main concept behind IGA is to let the gamers play while respecting the game environment and gameplay, to bring advertising that makes games more realistic, authentic, and closer to the physical world.

For me, intrusive advertising is exactly the reason why people use ad blockers in the open internet. It's also why a lot of business models have changed to a subscription or paid model. People don't hate ads, they hate bad ads. This is where we saw an opportunity for Anzu.

Q. Do you get more interest in blended advertising from PC and console developers vs. mobile developers? Or is it equal across the platforms?

It's a global cross-platform opportunity. We look at the gaming and advertising side. On the ad side, there are two interesting principles. The first is cross-platform. Historically, programmatic advertising was only available in mobile games. It's now possible on console, PC, VR, AR, Roblox, and other platforms, which is why there's a lot of excitement from marketers, brands, and agencies. We can also help developers and publishers across these platforms. Secondly, it's about the ad format. For the first time ever, AAA, premium-quality games accept advertising because the advertising is not intrusive and doesn't impact the gameplay experience for players.

When the branded content is part of the game content, there is significantly better attention, brand value, and media impact. Imagine you're playing a game and there's no second screen—your attention is on the content. We have done research with third-party partners to audit and verify that. In contrast, when you watch TV and there's a second screen such as a smartphone, or when there's a full-screen ad in a mobile game, you can do something else during the ad. That's the difference. That's the core value that marketers see from our ad format and the cross-platform play.

From the gaming side, it's very simple. Mobile games have been monetizing with ads for years, but there are two problems with that. Firstly, mobile ads are performance-based, where the ads take you out of the game. There's a trade-off between ad revenue and user engagement & retention. You're almost buying out your gamers. Blended ads don't take you out of the game, so it's significantly better for games.

Secondly, it's about monetizing more parts of the session. With our blended ad format, you can monetize every screen in the game. In every moment or session, there's an opportunity for an ad. For mobile games, we can increase the ad revenue on top of the existing ad revenues. The blended ads do not cannibalize the existing ad revenue and do not churn the users. This is where mobile games see a lot of interest and success with us. Mobile games are experts in ad revenue. There are big-data science teams working for +0.1% increases. Blended ads can offer a +10% increase for total ad revenue on top of what they are doing.

For the other platforms, we're bringing an advertising solution for the first time. An advertising solution as a business model was not really scalable for console

and PC in the past, because up until now, the only way was to manually code in bespoke ad opportunities, one by one, and resulting in non-recurring revenues. Now, there's a bigger, better opportunity for these developers and publishers. A lot of those big-screen developers were actually putting fake ads in their games to make them more realistic, because they didn't have the brand relationships. That signals a huge opening here for console, PC, mobile, and marketers.

Q. What makes cross-platform such a big opportunity compared to how things were in the past?

We have an SDK for game developers, which can support ads across multiple platforms and across multiple engines. It's very efficient because most of the code would be the same.

We are the first company in the world to bring programmatic advertising to console, and we're the only in-game middleware provider for Xbox. Sony Innovation Fund (with Sony owning PlayStation) also invested in us—as did HTC, one of the biggest VR platforms. We solve the technical challenge of bringing programmatic advertising to console, VR, and cross-platform.

Q. Are some platforms easier than others for ad integrations?

Mobile is more straightforward because they know advertising well, it's a less complicated graphics environment, and it's mostly on Unity. When we start the conversation with mobile publishers and developers, it goes much faster. However, there is a lot of noise in the mobile advertising space. It's the opposite on console and PC; the industry is desperate for a solution like ours, so the conversation starts quickly. However, it's then a longer process of educating console and PC developers about using advertising for the first time, giving the game producers confidence, and speaking about privacy and security. Over time, it gets much easier as we gain more credibility and showcase more success stories.

Q. Where does Anzu's biggest opportunity lie?

The biggest opportunities are in AAA games. There are more AAA games on console and PC, but there are more coming to mobile too. Big console game developers are building a mobile presence—and vice versa. Historically, AAA games were

less receptive to advertising due to the immersion aspect. These games are high-fidelity and marketers recognize them because of their huge player communities. These AAA games tick all the boxes.

Some brands perhaps don't see how big the advertising opportunity is on Xbox, PlayStation, and console, because the userbases are still significantly smaller than on mobile. But on console, people play the game for longer sessions, so there are more ad opportunities. It's also a bigger screen and—in many cases—a more premium environment. People who play AAA games are often in hard-to-reach audiences with incremental reach. If you combine the demand for AAA content and the higher payout, longer sessions, and hard-to-reach audiences, there is a massive opportunity

The two main business models on console were pre-paid games, and now free-to-play is becoming more prominent. There are also in-app purchases, although there is a lot of pressure and regulations around loot boxes. The two main business models are being challenged, and advertising can solve some of these challenges. We see this across other sectors. Netflix is introducing advertising because there's a limit to how many people will pay for the content. In general, consumers can pay for a product, they can have ads in the product, or they can steal and use an illegal version. We can see from companies like Meta and Google that a free product with advertising that is non-intrusive will be a bigger business than a paid solution. Most people would prefer to use Google with ads than to pay for it.

Q. Do you have a solution for games with themes and art styles that aren't necessarily trying to reflect reality?

When we think about game developers and where we are relevant, we need to think about it in two perspectives: experience and audience.

The experience of branded content in a sports game is very natural and obvious. With many brands, we can take the branded content and make it more authentic to the game environment. If the brand and agency are creative about what the branded content should look like, and the developers are creative about ad placements, there are some amazing collaborations happening that we would never have dreamed of.

From an audience perspective, the same gamer can play different types of games, so you can reach them in different ways. Marketers ask themselves, "which types of game experiences, platforms, and genres would be a good fit for my brand? And

which audiences do I want to reach and where can I reach them?” When we work with marketers, we build a media plan maximizing the effectiveness for these activities.

Q. How are brands reacting to advertising in games?

Almost every brand in the world has an overlap with the gaming audience. It's a matter of which brands get it and which brands will get it. There's a lot of education going on around that. For instance, COVID-19 was a catalyst for that kind of education and introduced a lot of people to games.

Digital natives are knowledgeable about gaming, so it's easier to explain why gaming is a viable advertising channel. But older generations and non-digital natives (many of whom work in advertising) often have a different perception of gaming. One of the most effective ways to get them on board is via their children, who are playing Roblox, Fortnite, and Minecraft. For those younger audiences, gaming is a social platform. For some groups of people, the chat functionality in games is more popular than WhatsApp or iMessage. Gaming to these groups goes beyond just playing—it's a key social forum for players—making the opportunity for advertising in games far more attractive.

Engagement with games will continue to change in the next five, 10, 15 years. There are a lot of emerging trends and a lot of conversations around the metaverse. Snapchat believed the metaverse would happen via AR, Meta believes it will happen via VR, and Epic believes it will happen via digital gaming worlds. For us at Anzu, it doesn't matter because we are supporting all of the above. We're supporting game engines, which aren't only for games. There's more AR and Hollywood content made via game engines. Game engines are becoming reality engines. Gaming is where the metaverse sits.

We at Anzu made our platform very accessible and affordable. We also integrate into all the advertising platforms—the same platforms brands buy media for social and search. It can take some time to get the first activation live with some brands, but after that, the data and media value is fixed, so we can compare—apples to apples—the advertising value of gaming to other digital mediums. This is a very effective way of getting marketers and advertisers to double down on gaming. I believe that eventually, gaming will become an important piece of the communication strategy for CMOs of Fortune 500 brands next to social, search, and Out-Of-Home advertising.

Q. Has the hype for and anticipation around the metaverse affected Anzu?

Hype for the metaverse has definitely created more interest in what we're doing. There is buzz around the metaverse, and brands want to do things within the metaverse. The fact is: today, gaming is the only place where there is scale in the metaverse. There are some crypto Web 3.0 platforms like The Sandbox, but that only has about 0.01% of the userbase of something like Roblox. If we look at the metaverse as the digital twin of the physical world, the ad format that we introduce is very aligned.

In mobile games, people accept full-screen ads. Now imagine a full-screen ad in the physical world: You're walking and suddenly, an ad blocks everything you see! The metaverse brings principles like user experience to the forefront. It wasn't always at the forefront for advertising, but the metaverse is about connectivity and accessibility. While paid applications are a barrier to accessibility, we suggest that free-to-play with unintrusive ad monetization is the way to go, rather than a \$70 game that is only relevant to a smaller audience. That's not to say that we don't work with paid games and subscription-based games—it's just that accessibility, user experience, and gaming are where the scale of the metaverse lies. This has helped us to grow significantly faster than previous years.

Q. Could you tell us a little about your working relationship with developers?

We give game developers full control. They choose the game object they want to monetize, whether they want a static display or video, which types of brand categories they want to feature, and the frequency of ads. For instance, maybe they want to show a different ad frequency for paying and non-paying users, or for different demographics.

It's also a one-time integration, after which the developers have a self-serve dashboard so they can change everything on the fly. Our tech can now dynamically change the content of the game, and it's all personalized on the device level. They can also apply different advertising standards to maximize media value.

For less ad-confident developers, we take a more active role in these kinds of decisions, recommending ideas for ad placements and which branded content is relevant. We can even do the integrations for the developers. For one client, our engineers even flew to the studio to do the integrations in-house!

Q. Have the ads ever had backlash among the gaming community?

No—we're very cautious about that. We do a lot of A/B testing among small audiences and learn from that. The game developers also know their communities, and are cautious of change to keep their playerbase happy. There's been no crisis so far, and we do everything we can to offset that. Our relationship isn't only with the game developers and the brands—it's with the gamers. We're a B2B company, but the B2C side decides how big we will be as a business.

Q. AAA console and PC games have tried to integrate ads into their games in the past, but the monetization model never really took off. What is different now?

Companies have been trying it for 25 years. There are many millions of dollars in VCs that went bankrupt over in-game advertising. Microsoft acquired an IGA company called Massive for \$300 million and shut it down.

But things have changed. We started Anzu in 2016, and we were looking at IGA for a few years and waiting for the stars to align. Firstly, there was the adoption of programmatic advertising. Before this, advertising was very manual, bespoke, non-scalable, and non-recurring. There wasn't a chance to make a big IGA business without programmatic. Secondly, there was no connectivity between devices back in the day, so nothing was real-time from the gaming side, which meant we had to build the ads into the gaming code. Thirdly was the adoption of in-game engines like Unreal and Unity. Today, we have plugins and fast integrations for ads rather than manually integrating ads one by one. In the past, more studios had their own custom engines with their own source code, which were often confidential. Mobile gaming also didn't exist, so the scale of gaming wasn't where it is today. Now, everyone has a gaming platform in their pocket. The metaverse, game streaming, and esports weren't around back then, and gaming's reach was significantly smaller.

Those are all reasons why IGA is more viable today—but the main reason is a broad shift in gaming and in advertising. On the gaming side, there wasn't a reason for games to include ads in the past, because full-priced games were selling well. Now, there's free-to-play and more incentives for companies to have more business models. Historically, marketers saw gaming as a 'bunch of geeks in their basements. Now, however, gaming is a pop-culture topic, which makes things more appealing from an ad perspective. Also, privacy takes the main seat in advertising now. Cable linear TV is also shrinking, so advertisers are looking for a new home. Simply put,

there's a desperate need for a new communication platform among advertisers.

Q. Could you give us an example of how things have changed?

Fifteen years ago, Mercedes had a business model in which game developers paid them to use Mercedes content to make the game more realistic and popular. Today, game publishers tell Mercedes that they have to pay to be in the game, instead of the other way around. That's a huge shift. On top of that, it's also about getting the right teams and partners to make this happen. Previously, I've seen strong advertising teams and strong gaming teams, but I never saw a team that had both components. Our team balances both gaming and advertising expertise; we have found the middle ground.

In the past, we saw resistance from advertisers who saw gamers as “geeks”. We also saw resistance from game producers who thought IGA would ruin their art. It's all about finding the balance of ad content that gamers will accept—content that is valuable, personalized, non-intrusive, and relevant. Developers will be happy because we tick boxes for significant ad revenues, strong UX, and giving them more confidence around privacy, security, and their tech stack. For marketers, we provide brand & media value, easy access, hard-to-reach audiences, brand safety, and scale. It's all about holistically addressing everyone in the ecosystem to make sure players, game companies, and ad companies are comfortable. IGA is a balance between all the different stakeholders.

Trend 4

User-Generated Content Inside Games and Out: A Strategy for Boosting User Engagement, Retention, and Content

User-generated content (UGC) has seen many forms over the years. In-game mods have been a mainstay of PC gaming since its inception. Modders remain a pivotal part of the games market, often innovating without the pressures of upper management and acting as a talent pool for developers. The rise of free-to-play, social gaming, and the metaverse have only expanded the UGC ecosystem. Video and music have already gone through their UGC revolutions; now, gaming is following a similar trajectory.

Explore the entire trend in the complete, paid version of this report, covering:



Japan's Success Stories as a UGC Trailblazer



The Advantages and Outlook of Integrating UGC Into Live-Service Games



This full trend is included in the complete, paid version of this report:
www.newzoo.com/games-report.

Trend 5

Diversity, Equity, and Inclusion Are Becoming a Bigger Part of Gaming, but There's More to Be Done

Every single demographic—in terms of gender identity, sexual orientation, ethnicity, and people with disabilities—engages with games in some way, shape, or form. While game enthusiasts have been diverse for quite some time now, many have been left alienated and even excluded from the pastime as the industry continued to cater to men. Now, companies are beginning to embrace diversity, equity, and inclusion with open arms—for their content, policies, and workforces alike. In many ways, however, underrepresented groups like women, ethnic minorities, the LGBTQIA+ community, and people with disabilities remain underserved and unseen. Many of the world's largest game companies are also facing discrimination lawsuits and are paying reparations for past offenses. We have come a long way, but there's an even longer way to go.

Explore the entire trend in the complete, paid version of this report, covering:



Gamers Are a Diverse Group, and the Games Business Recognizes It Needs to Catch Up



Events and Promotions: Shining the Spotlight on Diversity, Equity, and Inclusion in Games



Curbing Toxicity to Create More Inclusive Game Communities



Empowering New Players: Accessibility Features Unlocks Gaming for Many People



This full trend is included in the complete, paid version of this report:
www.newzoo.com/games-report.

Trend 6

Globalization in the Games Market Has Continued With a New Trajectory

Toward the end of 2017, it seemed that the games market was globalizing in a huge way, with China at the center. The Chinese games market seemed more receptive to consoles and Western and Japanese developers, while developers across the East increasingly eyed the West. Gaming's borders were blurring, so to speak. It seemed that gamers across East and West alike would be playing many of the same top titles by now. However, due to regulatory changes in the Chinese market, the prospect for Western games to make a splash in China was gated off. Therefore, the game market's globalization hit an undeniable roadblock. These regulatory changes, however, had a second-order effect of incentivizing Chinese developers to globalize into other markets. At the same time, several growth markets have seen their games markets begin to flourish, and game content from across the world has begun to globalize—albeit in slightly different ways than we first expected.

Explore the entire trend in the complete, paid version of this report, covering:



The Globalization of Chinese Publishers and Challenges for Western Companies Entering China



The Globalization of Japanese Content in the West and Western Brands in Japan



This full trend is included in the complete, paid version of this report: www.newzoo.com/games-report.



04.

**Special Focus
Topics**

Special Focus 1

The Importance of Viewership in the Gaming Marketing Mix

One of the biggest challenges for game developers and publishers is to effectively capture the attention of their target audience in an increasingly crowded market—all while maximizing sales, boosting user acquisition, and keeping existing players engaged. Over the years, game marketers have leveraged many different channels to advertise to their audiences: social media platforms, blog posts, traditional media like billboards and linear-TV ads—the list goes on. Live-streaming platforms have also become a fundamental and unavoidable part of gaming’s marketing mix, and across multiple genres.

See the impact of viewership on the gaming marketing mix with two deep-dive case studies in the complete, paid version of this report:



Twitch Drops: A Successful Activation Case Study With Visible ROI



Esports: A Worthwhile Marketing Expense for Top Competitive Games



This full special focus topic is included in the complete, paid version of this report: www.newzoo.com/games-report.

Special Focus 2

Cloud Gaming: From Dream to Reality

Music and video have already had their streaming revolution, and now gaming is beginning to follow suit. Cloud gaming allows players to access games instantly, unrestricted by their hardware. The only requirements are a fast and stable internet connection, some kind of input device, and a screen. Despite some companies' best efforts, the concept of streaming games from remote servers directly to the player's device was something of a pipedream just 10 years ago. Now, technological and infrastructural advancements have led to giant leaps, turning cloud gaming into a reality. Since 2019, cloud gaming has found its footing in the games market. We believe it is on track for remarkable growth in the coming years.



This full special focus topic is included in the complete, paid version of this report: www.newzoo.com/games-report.

Special Focus 3

Understanding Gamers' Attitudes Toward Play-to-Earn & NFTs: Opportunities for Game Developers to Make Play-to-Earn Mainstream

Play-to-earn (P2E) monetization is a growing trend in the games market. The strategy sees publishers offering cryptocurrency in return for in-game achievements, items, and other transactions. Earning is the main reason many people play blockchain games; however, many core gamers play games for fun. Therefore, whether or not earning aspects appeal to general gamers has been a topic of contention in the industry.

To better understand gamers' opinions on P2E and the underlying technology that powers it (the blockchain and NFTs), Newzoo conducted online surveys with 1,000 players aged 18-50 in each of the four selected markets: the U.S., Germany, the Philippines, and Vietnam. We selected the latter two growth markets due to their high uptake of P2E vs. more traditional games markets like the U.S. and Germany.

We asked respondents about their knowledge and usage of P2E, what users and non-users think of the monetization model, and what they think developers can do—if anything—to help P2E hit the mainstream.



This full special focus topic is included in the complete, paid version of this report: www.newzoo.com/games-report.



05.

Gaming
Ecosystems

Gaming Ecosystems

Why Size by Ecosystem

In this year's edition of the Global Games Market Report, we are proud to present our first-ever market sizing data per gaming ecosystem. In this report, we share player number estimates for the years 2020 to 2022 for six of today's largest gaming ecosystems: PlayStation, Xbox, Nintendo, Epic Games Store, Apple App Store, and Android App Stores.

In last year's report, we noted that the lines between each respective gaming platform—console, PC, and mobile—were obscuring. Thanks to continuous innovations in cross-platform play, cross-progression, subscriptions, and franchises intersecting all platforms, what platform players play on matters less and less, and what ecosystem they play within more and more.

At the same time, consolidation within the gaming industry accelerated in the past years, and today's gaming giants are creating gaming ecosystems that transcend boundaries set by platforms.

Here, we introduce a new way of looking at market sizes: by ecosystem. Game developers and publishers today aren't just faced with the choice of what platform to develop for—in fact, modern game engines have made porting games easier than ever. Perhaps even more importantly, the choice is about what store to launch on or what ecosystem to launch in.

Explore the entire chapter on gaming ecosystems in the complete, paid version of the report, including:



A full page for each ecosystem, including 2020-2022 players numbers per region for all six ecosystems.



Market sizing per ecosystem is included in the complete, paid version of this report: www.newzoo.com/games-report.



06.

The Games
Market per
Region &
Country

Five Regions and 36 Countries/Markets

The region and country section of the full report covers the games market in five different regions (North America, Latin America, Europe, the Middle East and Africa, and Asia-Pacific) and 36 individual markets. The regional summary pages include key facts like revenues, player numbers, and average spend per paying gamer across all segments. It also includes a table with revenue forecasts per segment toward 2025. Following each regional summary page, there is a detailed breakdown of the countries/markets we survey in our annual syndicated Consumer Insights – Games & Esports study. Each country/market page contains population of the overall market and the player base, a revenue split per segment, and forecasts towards 2025. The map below illustrates the 36 countries/markets.

With the full report subscription, you have access the Newzoo Platform where you can build your own charts and visualizations and explore player, payer, and revenue numbers across different markets/countries.



Get access to market-level data in the complete, paid version of this report: www.newzoo.com/games-report.

The background is a solid green color. It features several abstract geometric shapes: a bright green square in the top-left corner, a dark green vertical bar on the left side, a light green rounded rectangle in the upper-middle section, and a dark green rounded circle in the bottom-left corner.

07.

About Newzoo



Newzoo: The Global Standard for Games Data

Our Services



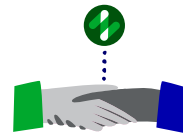
Data Platform

The single destination for anyone with an interest in games. Broad and market-specific solutions, including our landmark reports.



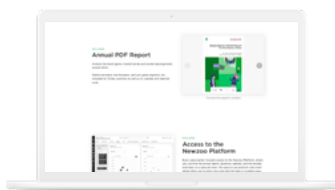
Consumer Insights

The best way to understand consumer engagement and profile your target group, including our gamer segmentation.



Consulting

Custom projects that put our experience and expertise to work on strategic and financial challenges.



Newzoo Global Reports

With this comprehensive report and subscription, you can understand the latest trends in gaming, size your market, prioritize your game's global rollout, and set realistic growth targets.



Newzoo Platform

Every report subscription includes access to our easy-to-use platform so you can slice and dice the data in multiple ways.



Questions?

Email us at:
questions@newzoo.com



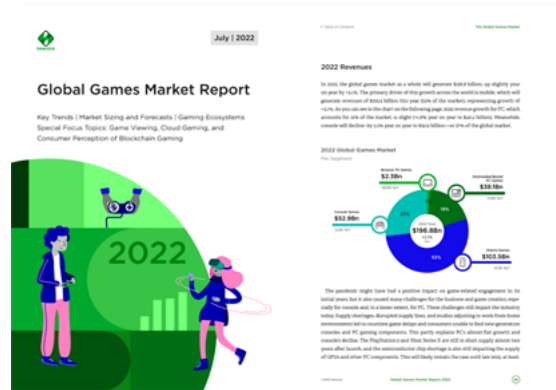
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Upgrade to
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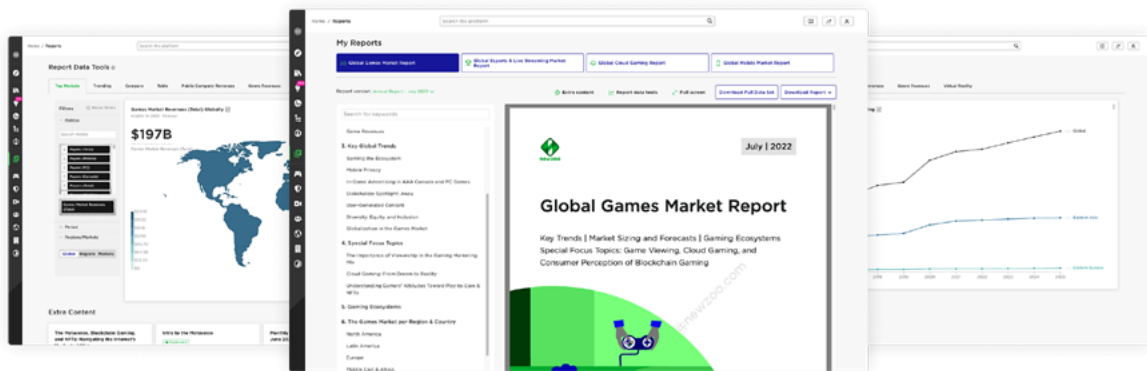
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The full, 165-page PDF



Access to all metrics via the Newzoo Platform

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Join 100+ Top Game Developers, Brands, and Finance Companies Who Subscribe to Our Global Games Market Report

"Newzoo's analysis provides a greater understanding of key trends within the industry and how best we can apply that insight for a competitive advantage within our product portfolio."

Solomon Foshko

Director of Strategic Intelligence and New Product Analytics at Wargaming



Comparison Table: Upgrade to the Full Report

	Free Report	Full Report
Report length	61 pages	165 pages
Quarterly Updates		✓
Access to all metrics via the Newzoo Platform		✓
Games market sizing and forecasts per 5 regions & 36 countries/markets		✓
Downloadable Excel Dataset		✓
Build your own graphs and views		✓
Full access to the 6 global trends:		✓
• Ecosystems, Live Services, and Subscriptions	Preview	Full 6-page trend
• Mobile Privacy	Preview	Full 5-page trend
• In-Game Advertising in AAA	Full 6-page trend + Stakeholder Spotlight Interview with Anzu	Full 6-page trend + Stakeholder Spotlight Interview with Anzu
• User-Generated Content Inside Games and Out	Preview	Full 4-page trend
• Diversity, Equity, and Inclusion	Preview	Full 5-page trend
• Globalization in the Games Market on a New Trajectory	Preview	Full 4-page trend
Full access to the 3 special focus topics:		✓
• The Importance of Viewership in the Gaming Marketing Mix	Preview	5 pages + 4 charts correlating esports hours watched with MAU for 4 key games
• Cloud Gaming: From Dream to Reality	Preview	4 pages + 2 charts: Global Cloud Marketing Funnel & Global Cloud Gaming Market Cap Forecast
• Understanding Gamers' Attitudes Toward Play-to-Earn & NFTs: Opportunities for Game Developers to Make Play-to-Earn Mainstream	Preview	7 pages + 5 charts including Who's Playing Play-to-Earn Games & Attitudes Toward Blockchain Games
Top 100 Public Games Company Revenues 2017-2022		✓
Game genre revenues across different regions and markets/countries		✓
VR hardware adoption and VR game revenues		✓
A weekly Analyst Feed on the latest developments in the global games market including esports, live streaming, cloud gaming, metaverse, and others.		✓
Access to many more unique insights through our platform.		✓

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