



PC & Console Gaming Report

2023

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The PC and console market in 2023

What's happening in the games market now and what's to come

Last year we saw the games market face its first downturn in over a decade. As most of the world stepped outside after several years of being shuttered, with offices and schools welcoming people back and more live entertainment returning, PC and console playtime decreased. Compared to 2021, overall playtime dropped by almost 15%, and there was a decrease in spending year-on-year.

As market analysts, we view the market holistically and see that these trends constitute a correction towards pre-COVID engagement. While there was a drop in 2022, we're confident we'll see an upward trend in the number of players and how much they spend, especially given that we're above pre-COVID engagement levels.

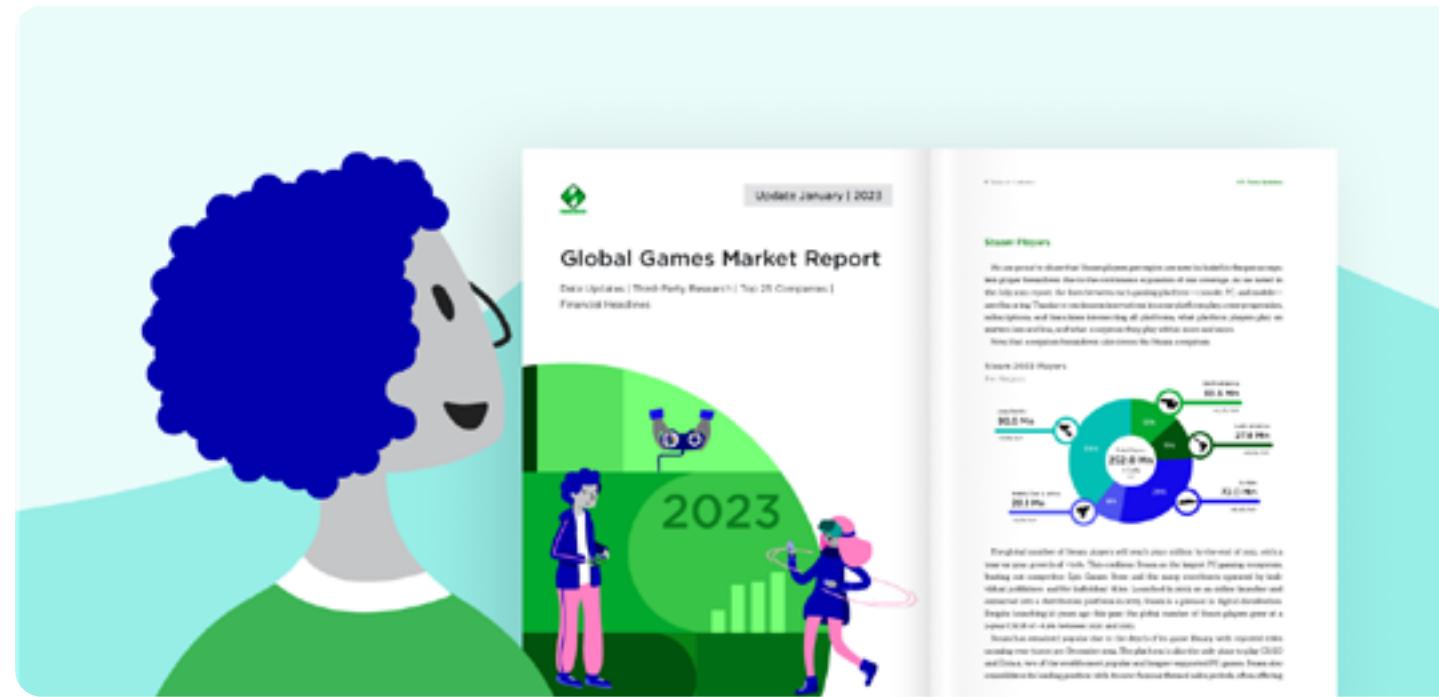
The battle for attention is heating up, elevating ambitions to expand the definition of engagement. We now have the metaverse, transmedia, cross-platform, remasters, and more, all of which ensure players stay connected to an IP, company, and/or platform. Also, the struggle to build and remain profitable amidst rising development costs and higher risk has helped grow unique models. Subscription services, remasters and remakes, IP licensing, and microtransactions boost profits and mitigate risks.

More than ever, Newzoo's unique ability to track the PC and console gaming landscape and provide critical data, insights, and trends is becoming essential for industry players looking to navigate these tumultuous times. Our product portfolio gives us a 360-degree view of games, gamers, and the games market so we can see what's happening now and what to expect in an industry that never stops evolving.



Highlights from the 2023 report

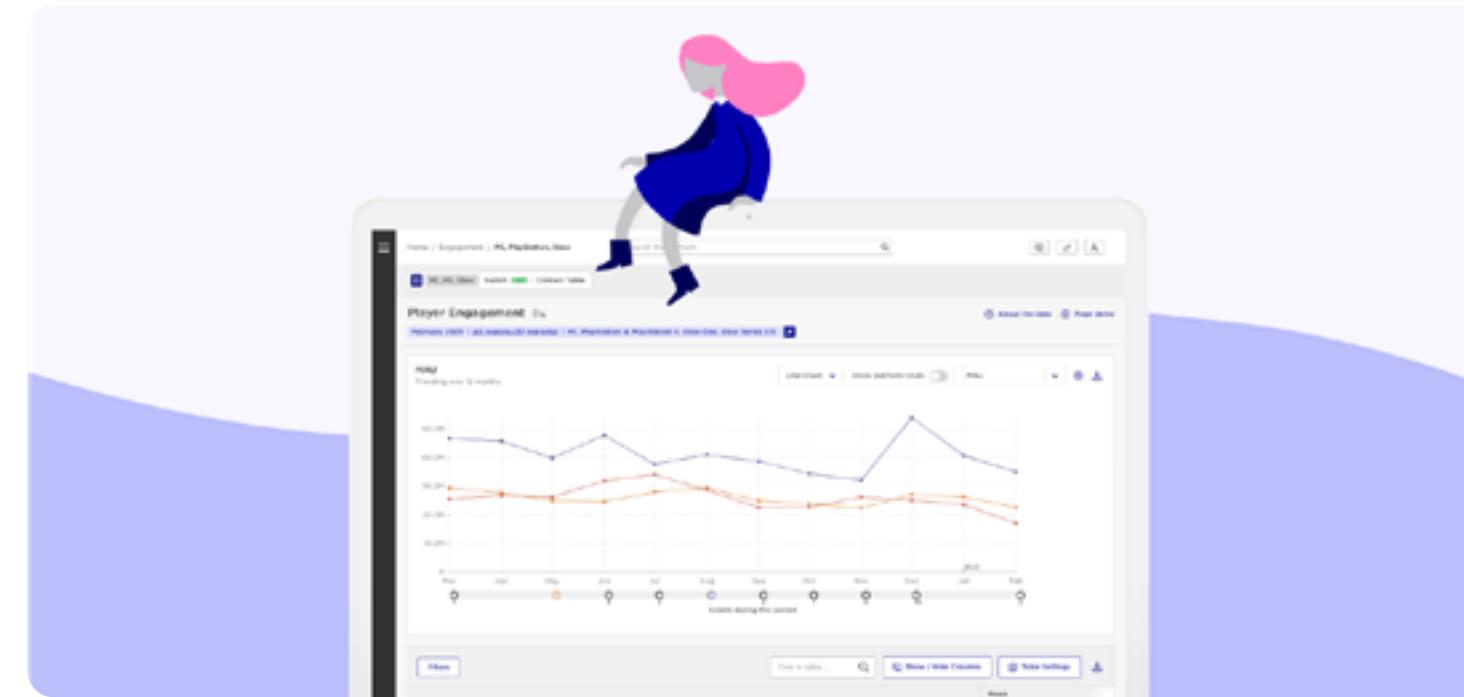
New and updated business models, a packed release schedule, and a more diverse player base will stabilize the PC and console market and create growth opportunities



From the Games Market Reports & Forecasts

PC and console markets generated \$92.3 billion in 2022, a decline of -2.2% year on year.

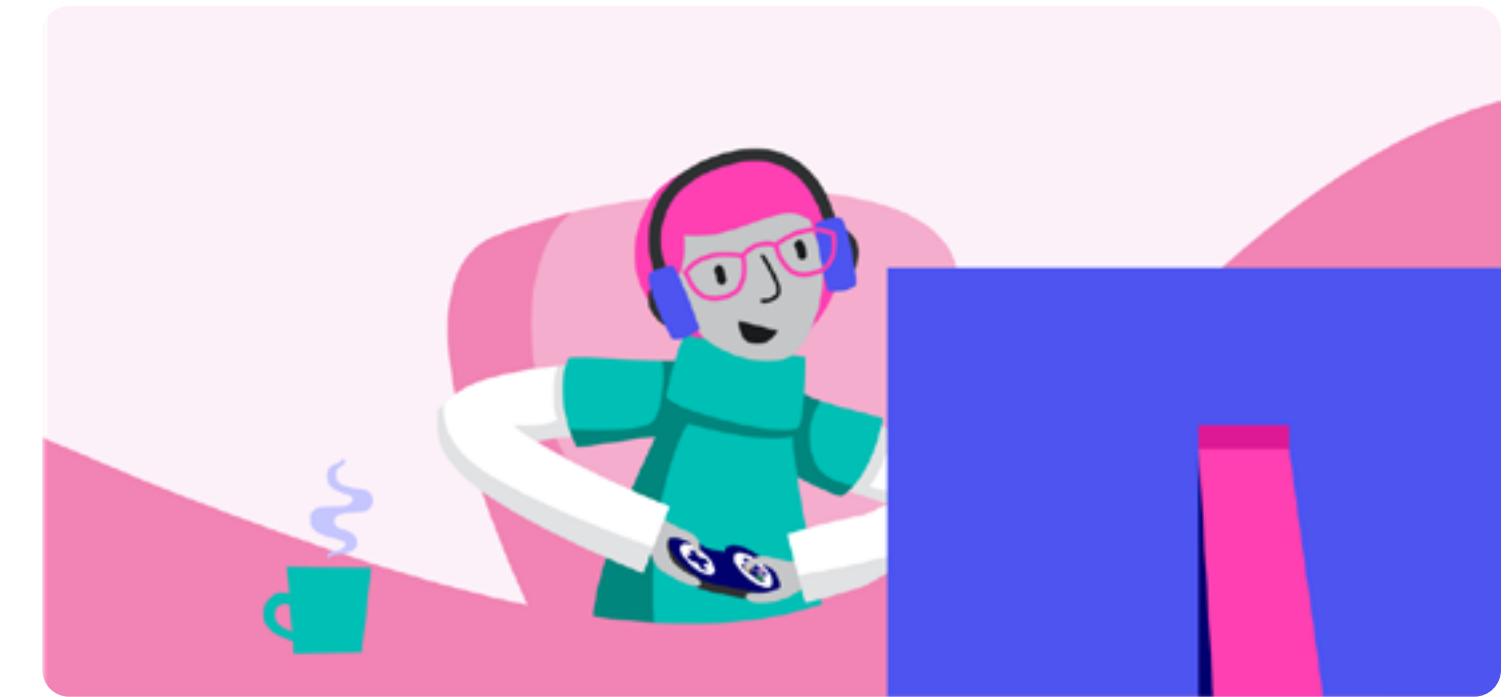
The markets may be cooling down after the pandemic, but overall performance still outshines our previous forecasts. Developing solely for PC or console will still be viable in the years to come, driven by live services, better access to hardware, and hybrid monetization.



From the Game Performance Monitor

Average playtime dropped by 23% across Steam, Xbox, and PlayStation from 2021 to 2022.

This isn't a new low, though, it's a re-correction to similar numbers to what we saw pre-pandemic. On the development side, many companies delayed their launches from 2022 to at least 2023, contributing to last year's playtime dip, but a new cohort of anticipated titles may level out playtime engagement across major platforms.



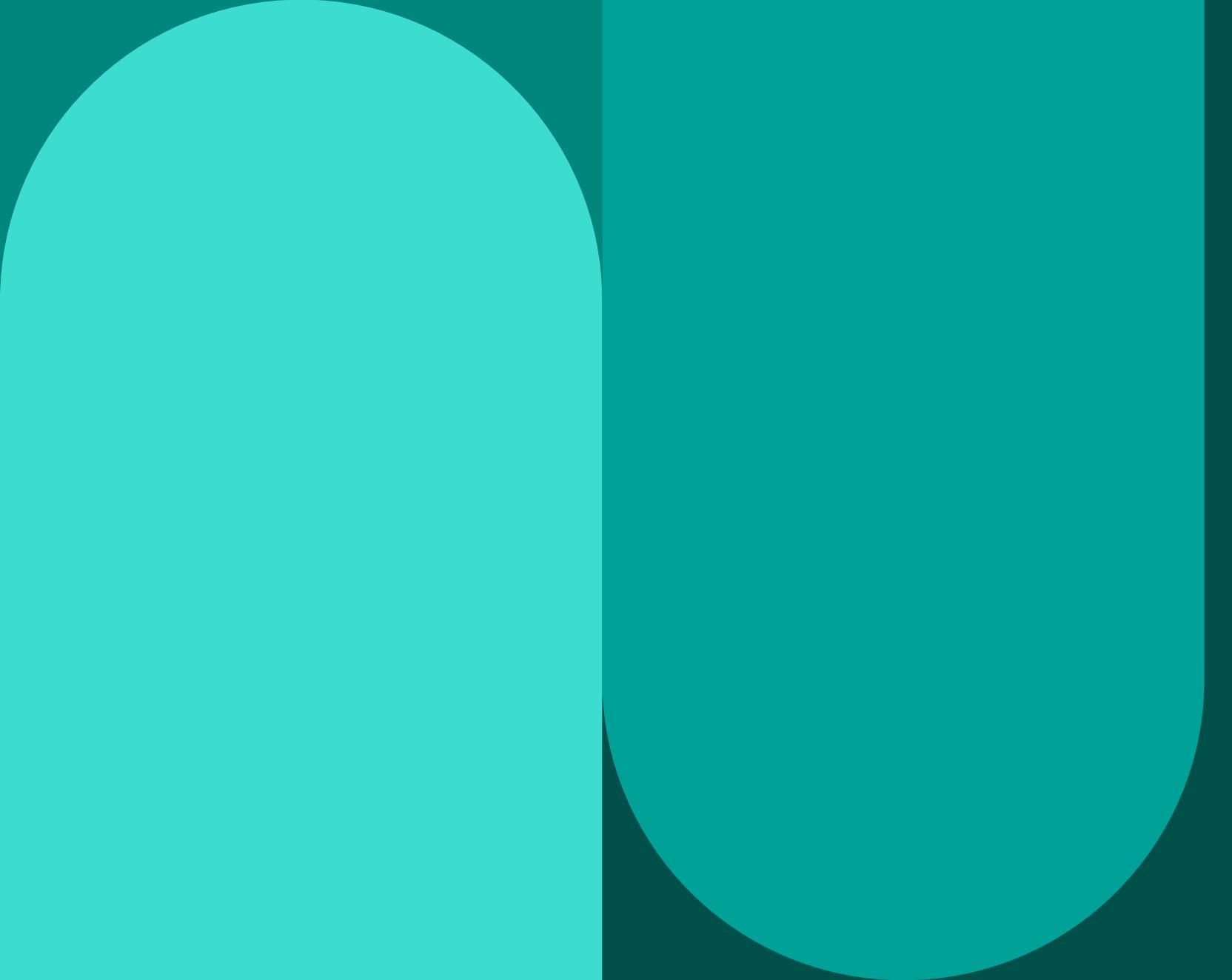
From the Global Gamer Study

2/3 of gamers played on a PC or console in the last six months.

The market has become more equitable, with women gamers now representing 40% of the total PC & console player base. Motivations to play PC and console games have also diversified significantly, as players give more varying reasons to play across our gamer segmentations.

Know the Games Market

Understand the market with Newzoo's
key data, forecasts, and insights

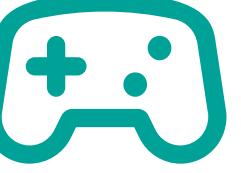


The market for PC and console games was enormous in 2022



1.1 Bn

PC players in 2022



611 M

Console players in 2022



\$92.3 Bn

PC and console game revenues in 2022

The games market is stable and growing

Predictions for the market in 2023 after a tumultuous year in gaming

1

PC and console markets are readjusting after the pandemic, but overall performance still outshines our previous forecasts. Developing solely for PC or console will still be viable in the years to come, though cross-platform strategies will be key to succeeding at scale here.

2

More AAA and AA publishers are pivoting their main franchises to a service-based model. Expect fewer new releases and more investment into proven franchises from larger publishers. Games looking to debut now should start as a subscription service to grow an initial audience.

3

The supply chain for semiconductors will bounce back, which will boost the availability of consoles. The install base for PlayStation 5 and Xbox Series X|S will grow rapidly, meaning it will be possible to develop high-end titles for current consoles without losing too much of the total addressable market (TAM).

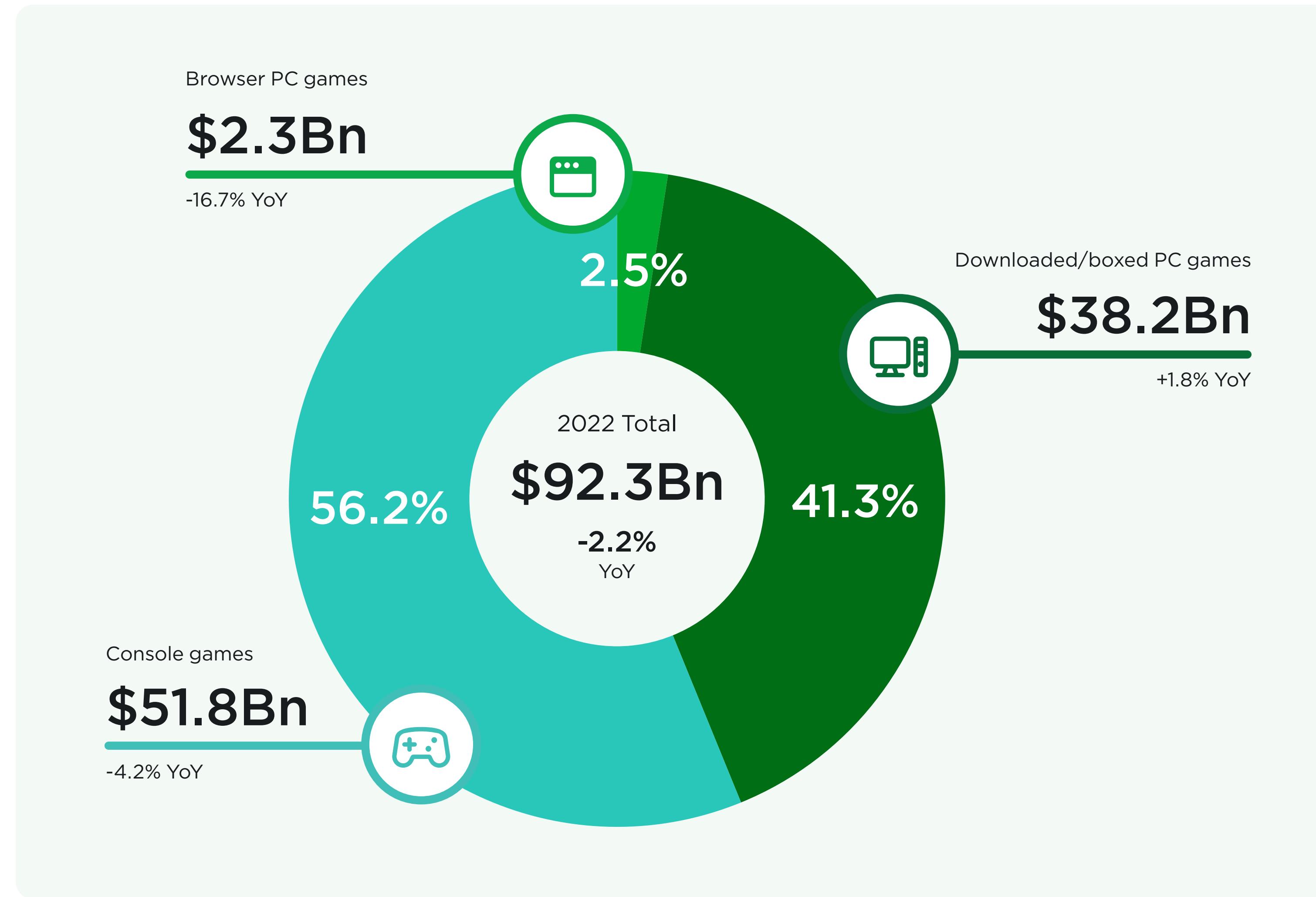
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PC and console games companies will embrace hybrid monetization strategies, including advertising and marketing. In-game advertising will be a viable alternative for generating revenue, though it will be key to not disrupt immersion for a game's dedicated player base.



The PC and console games market hit \$92.3 billion in revenue in 2022

Here's how different segments performed, including year-on-year growth rates

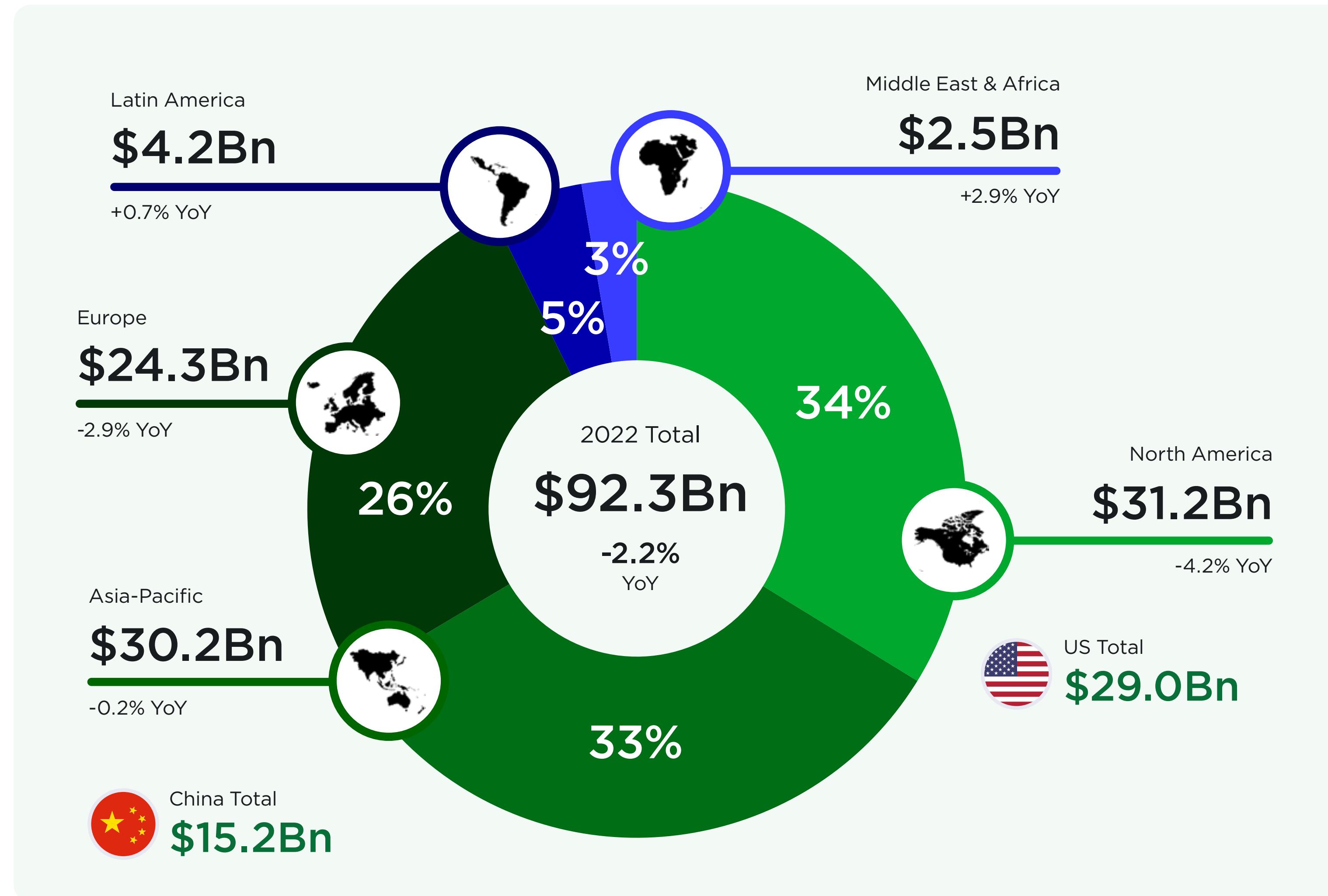


In 2022, people spent over \$92 billion on PC and console game software worldwide. This total represented a -2.2% decrease from the previous year's COVID-fuelled performance, and as a consequence of fewer console releases. The PC market is less hit-driven, so the lack of big titles didn't have as drastic an effect. Despite the dip, the market is in a healthy state and is on track to grow over the next several years.

Our revenues encompass consumer spending on games: physical and digital full-game copies, in-game spending, and subscription services like Xbox Game Pass. Our estimates exclude taxes, second-hand trade or secondary markets, advertising revenues earned in and around games, console and peripheral hardware, B2B services, and the online gambling and betting industry.

The US and China accounted for 48% of PC and console spending in 2022

Here's how different regions performed, including year-on-year growth rates



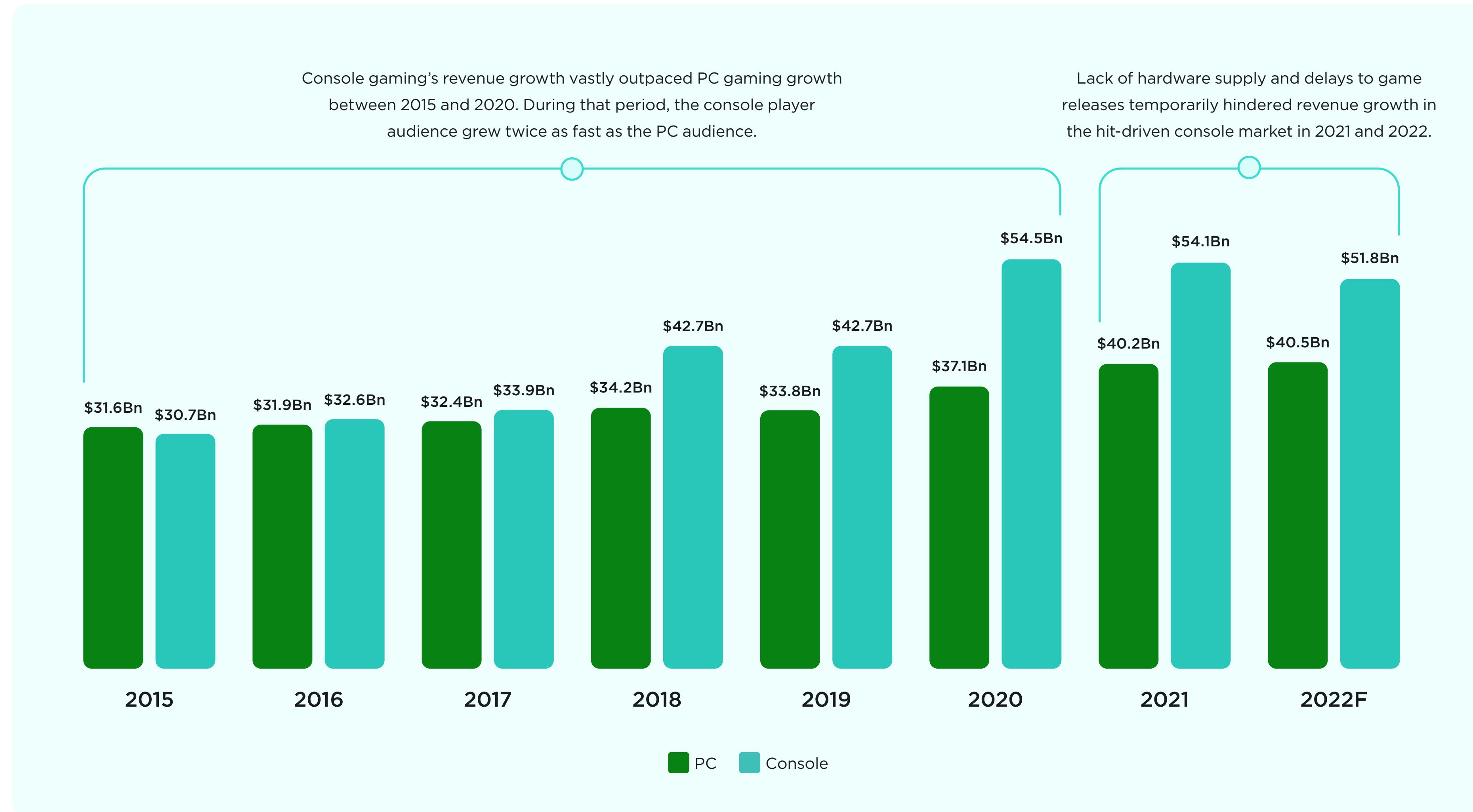
PC and console gaming is generally more popular in established markets like Europe, North America, Japan, South Korea, and China. Emerging markets, like Middle East & Africa and Latin America, are mobile-first, though we did see small growth this year in PC and console.

Growth in gaming comes from access to hardware, local payment methods, online population growth, and more middle-class players. The continuing growth we see in these emerging markets comes from more people being able to play PC and console games, not necessarily from new title releases.

Our revenues encompass consumer spending on games: physical and digital full-game copies, in-game spending, and subscription services like Xbox Game Pass. Our estimates exclude taxes, second-hand trade or secondary markets, advertising revenues earned in and around games, console and peripheral hardware, B2B services, and the online gambling and betting industry.

The PC and console market grew by +5.8% CAGR between 2015 and 2022

2022 was a corrective year for the games market, following an intense growth period during the global pandemic



PC Gaming
+3.6%

2015 – 2022F CAGR

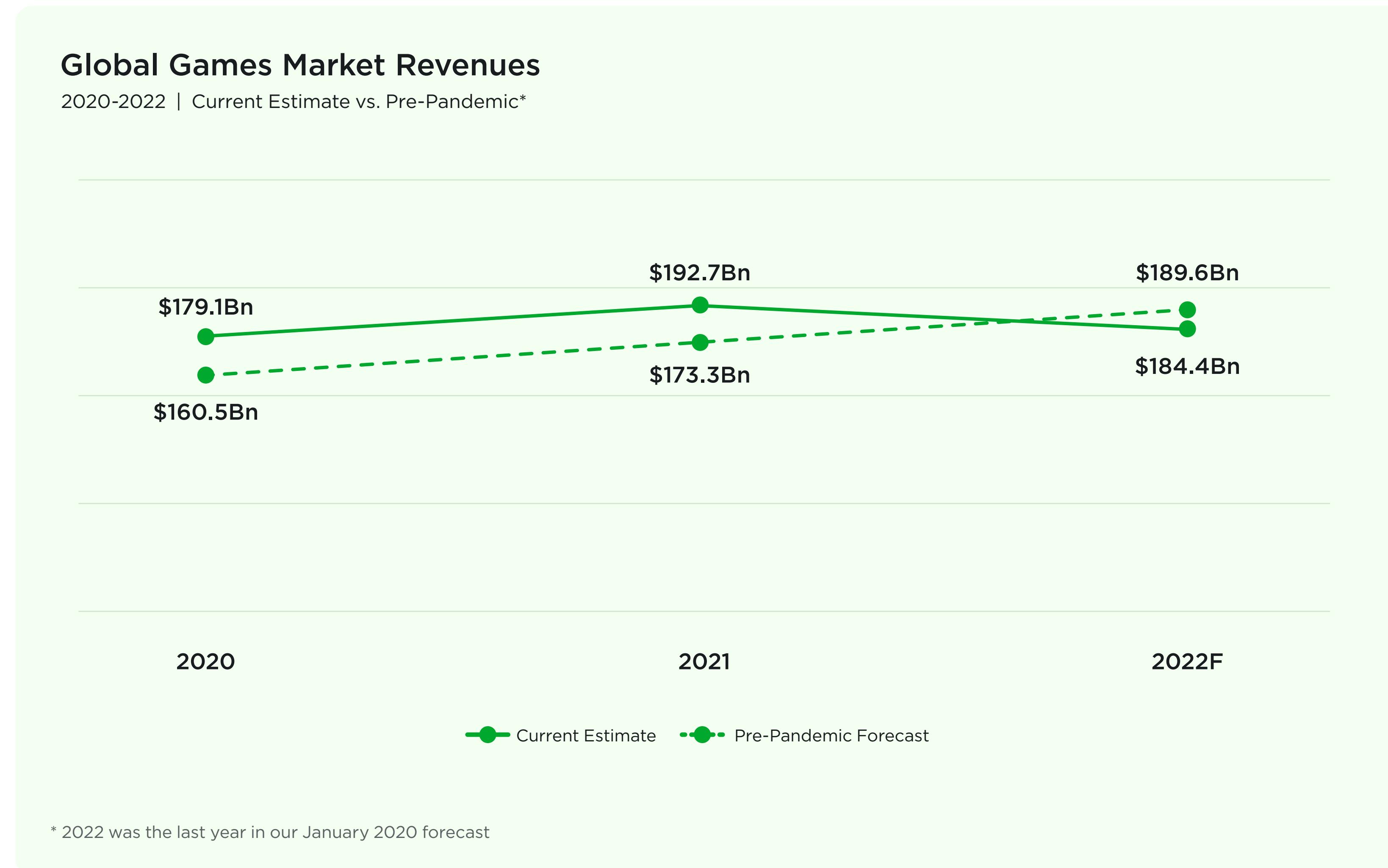


Console Gaming
+7.8%

2015 – 2022F CAGR

The market significantly outperformed our expectations from 2020 to 2022

The games market outperformed pre-COVID expectations by over \$32 billion over a 3-year period



In January 2020, we predicted that looming privacy regulations, China's market lockdown, and other factors would make for a slow year. Looking back, 2020 and 2021 saw higher revenues than anticipated, though the market experienced a dip in 2022.

While this may seem like a setback for the games market, the total revenue in 2022 was \$32.8 billion higher than we had originally forecast. Global lockdowns may have pushed the games market to unsustainable revenue levels, especially given the current economic climate, but this year and the ones to come look promising, particularly for console.

Our revenues encompass consumer spending on games: physical and digital full-game copies, in-game spending, and subscription services like Xbox Game Pass. Mobile revenues exclude advertising. Our estimates exclude taxes, secondhand trade or secondary markets, advertising revenues earned in and around games, console and peripheral hardware, B2B services, and the online gambling and betting industry.

More AAA and AA publishers will pivot their main franchises to service-based models

Expect fewer new, big releases in favor of companies extending the lifespan of existing franchises

Live-service games dominate the games market. Ranked by average MAU in 2022, eight out of the top 10 games were released before 2022, including Fortnite, Minecraft, and ROBLOX.

With demands for fidelity, depth of gameplay, and available content, the bar for single-player, narrative-driven games has been raised to near-impossible standards. The live-service model allows developers to finetune games after launch but comes with an expectation for constant support and content additions.

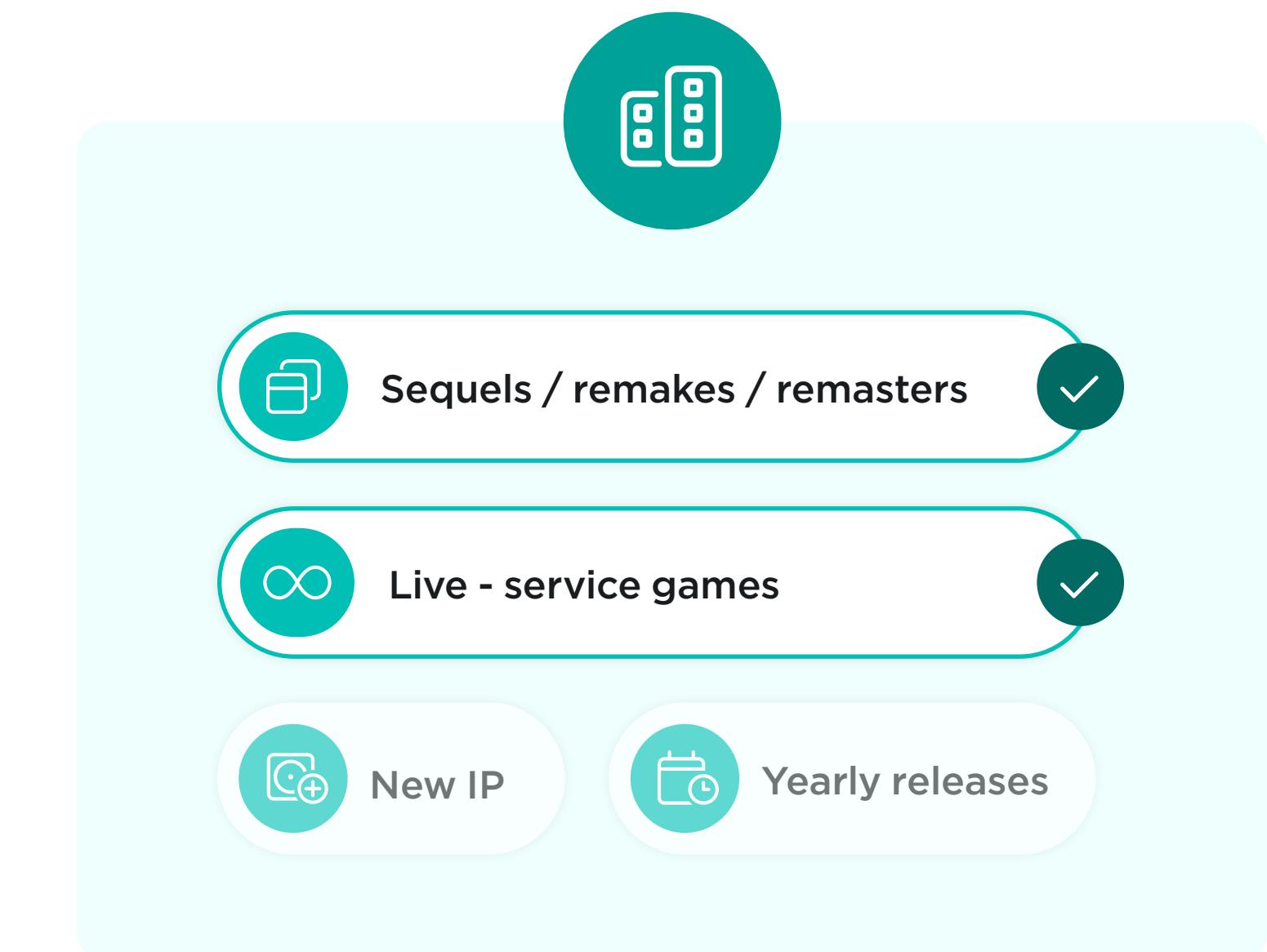


The increased expectations for high-quality and continuous content put more pressure on game development.

Over the past decade, development time, teams, and costs have grown significantly. Publishers have little financial wiggle room to risk a flop and often focus on a few titles.



Typically, these sure bets are well-known and beloved. Many sequels, remakes, remasters, and more games based on established entertainment franchises tend to follow. Developers and publishers are taking this one step further and pivoting to a live-service strategy, adding content to existing titles instead of creating totally new IP.

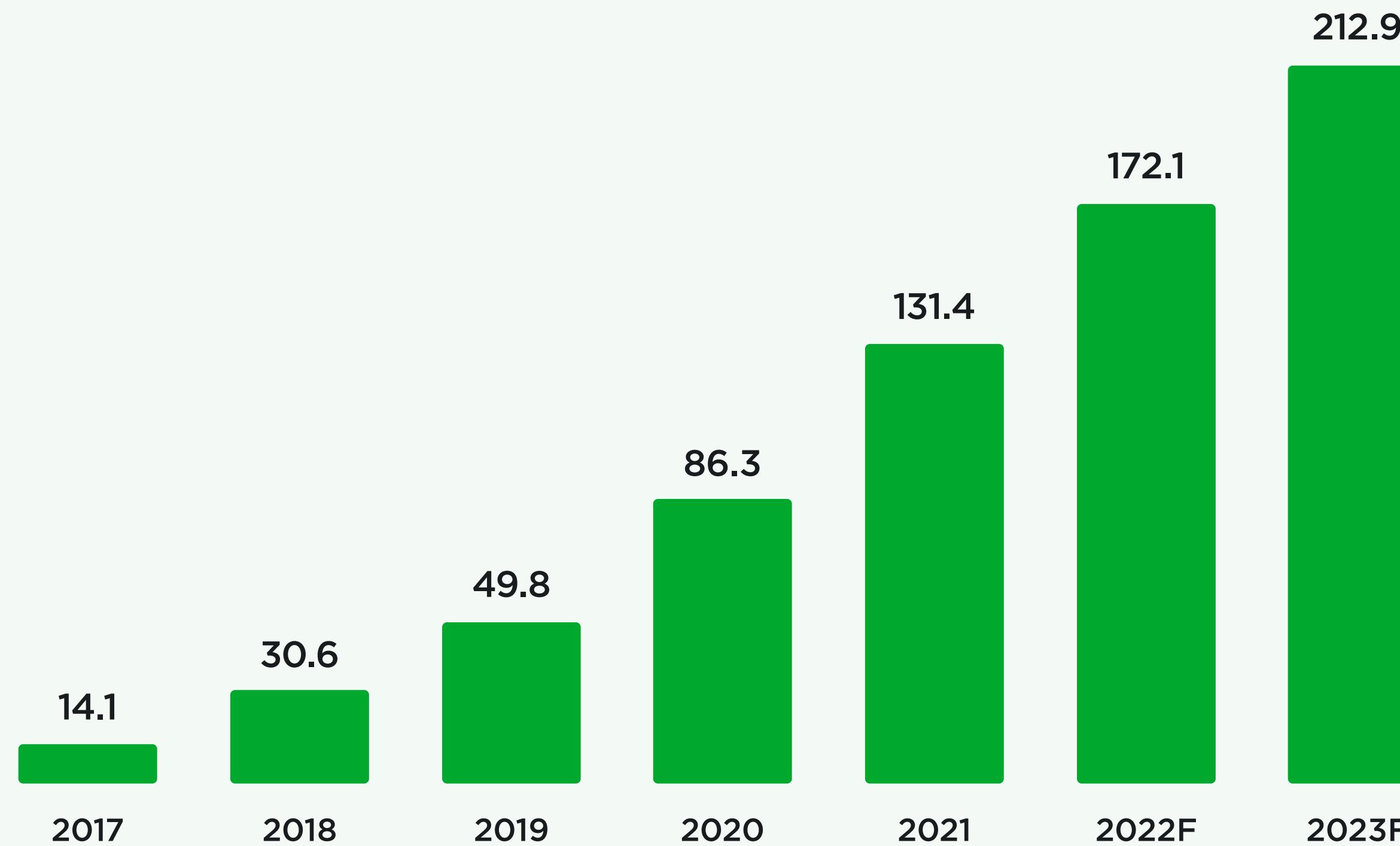


Consoles will be more available as semiconductors become more plentiful

Bolstered supply chains for semiconductors will let console makers increase console production, with new gaming content sustaining ongoing demand

Cumulative units sold*

Nintendo Switch, PlayStation 5, Xbox Series S|X



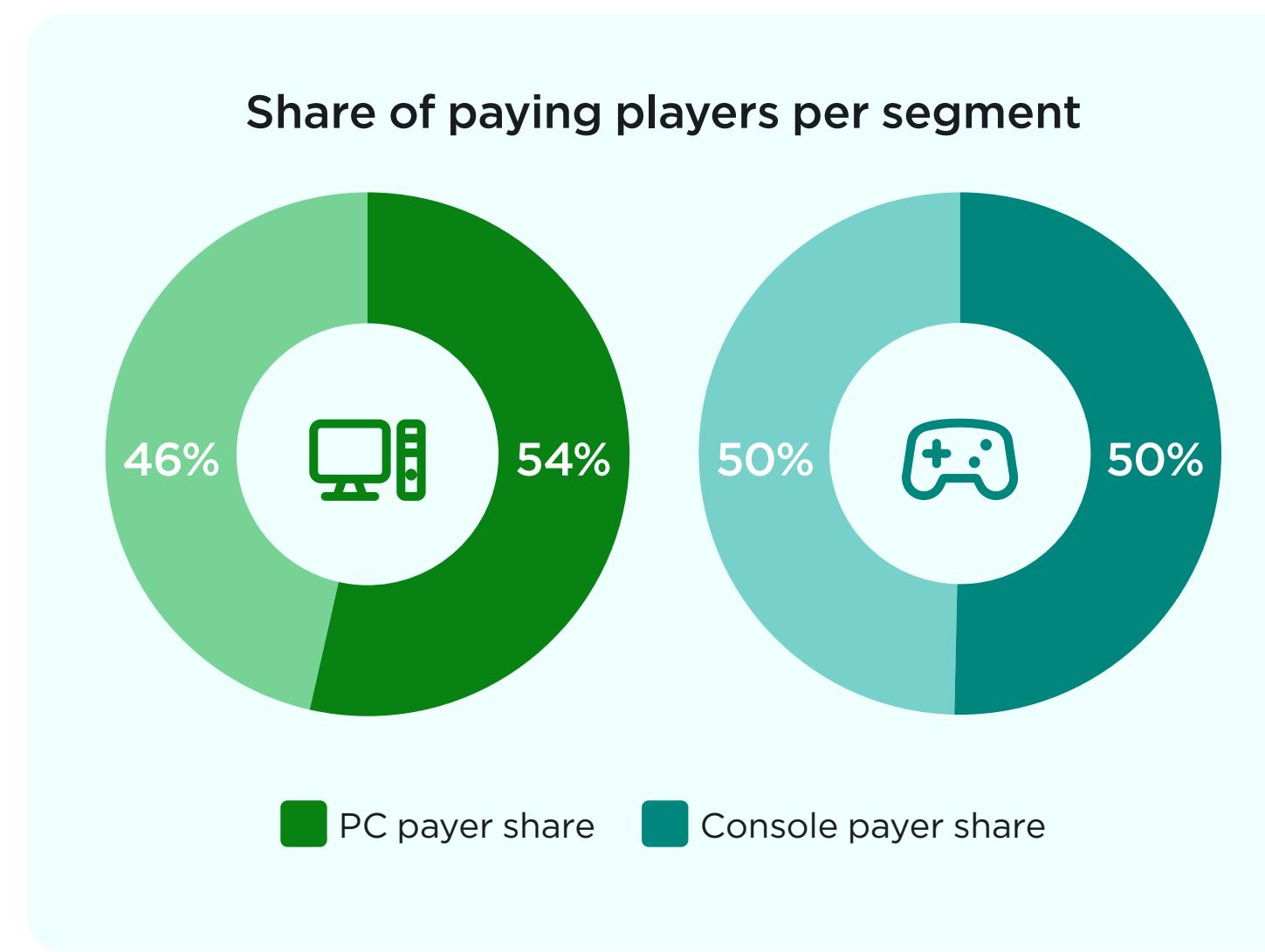
* Based on a combination of Newzoo estimates and official shipment figures from company financials

- Global supply chain challenges, specifically a shortage of semi-conductors, led to the unavailability in current-gen consoles (PS5 and Xbox Series X|S) for gamers.
- Many of the supply chain issues in the games market have been resolved or are en route to resolution. Devices like the PS5 will be more available to consumers going into 2023.
- The supply is catching up with demand, and even increasing hardware prices, communicated due to inflation, do not stop gamers from buying the popular devices. An economic downturn might dampen the effect.
- The cumulative units sold for the aggregate of Nintendo Switch, PlayStation 5, and Xbox Series X|S will grow to an estimated 208 million at the end of 2023.
- After two years with sparse content due to delays across many studios, the supply of content is set to be much larger in 2023.

The PC and console games market will embrace hybrid monetization strategies

In-game advertising is becoming a viable alternative for AAA titles to generate revenue

There's an entire audience of players who could be converted into spenders



The PC and console market is filled with players, but not all of them are spending on games themselves. 54% of players spend on PC, while 50% spend on console. These are low figures for companies that historically charge once for games.

Why in-game advertising is now viable for AAA PC and console games

Previous experiments for in-game advertising in AAA games failed to achieve success. The market is shifting, though, so now might be a better time to play with hybrid strategies.

Here are some reasons why:

- Advertising exchanges are automated, saving time on both sides
- Almost every player and every game is online
- Brand marketers are sold on the power of gaming to reach people
- Advertisers need a new channel to reach (young) audiences
- Free-to-play games on PC and console are a mainstay, but F2P monetization might be challenged in times of economic uncertainty

In-game advertising strategies come with their share of challenges

One of the challenges to unlocking advertising revenue in AAA PC & console games is that players will be less receptive to watching ads in exchange for rewards than in mobile gaming. Mobile players expect this type of monetization and understand the underlying value exchange.

When introducing advertisements in AAA games, it's important that it doesn't break the game's immersion and that the value exchange is clear immediately. Options that fit these requirements best are:

- Ad-based subscription tiers that offer cheaper monthly costs but come with the occasional ad. At the end of 2022, Microsoft conducted a survey that suggested that the company could introduce a \$3 tier with some exclusive content in exchange for having ads pop up
- Blended ads that, if designed properly, integrate seamlessly into the gaming experience
- Rewarded ads that give users extra incentives (in-game rewards) for clicking on or watching an ad within a game or app

Newzoo's Games Market Reports and Forecasts

Access the most trusted and quoted games market sizing data, forecasts, and trends on a global, regional, and local level.



Understand
Market Movements



Prioritize
International Roll-Out



Set
Realistic Growth Targets

Includes:

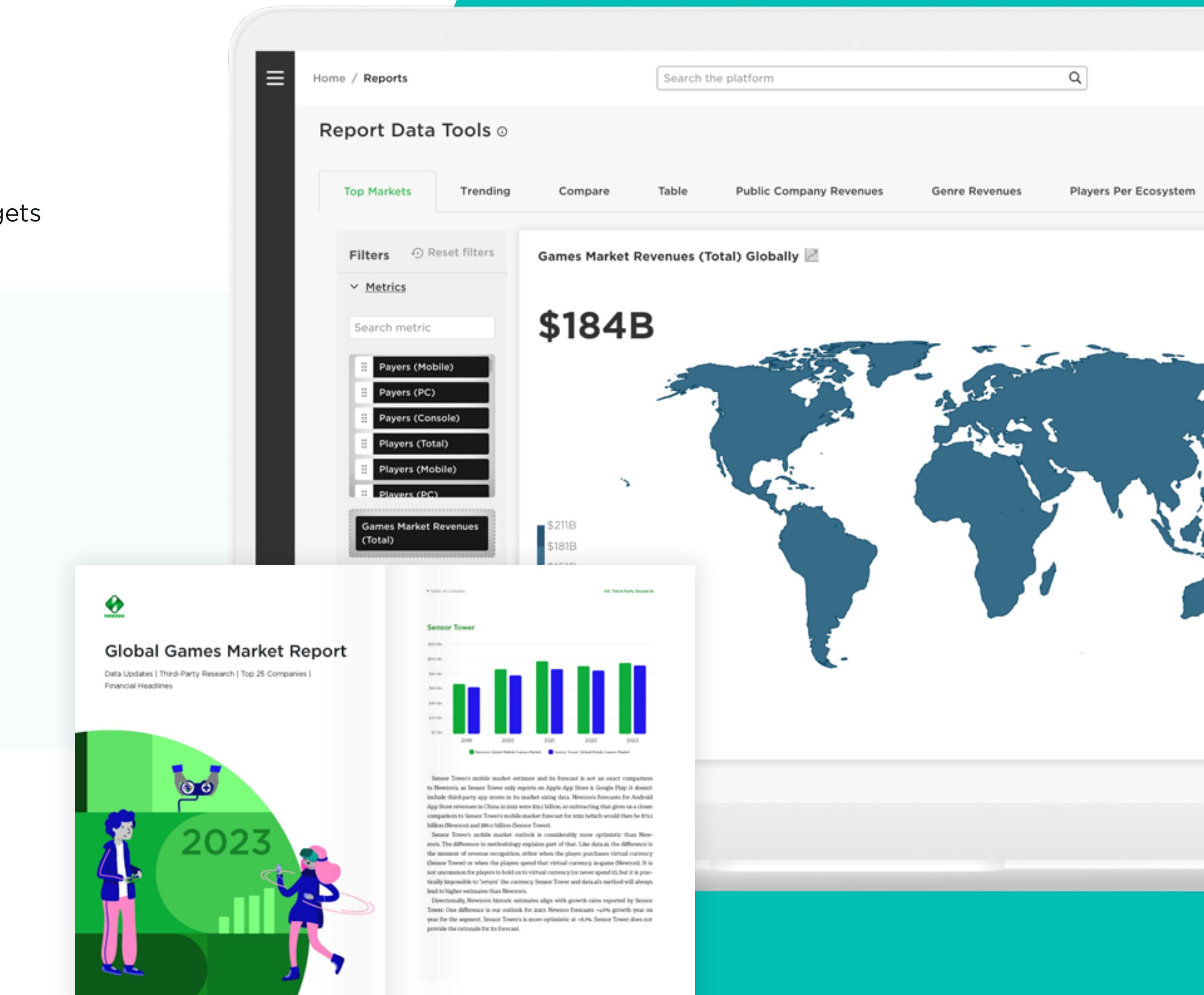
- ✓ The Global Games Market Report, a 165-page PDF that analyzes the latest trends, developments, and games market forecasts.
- ✓ Access the report, quarterly updates, key metrics, and many more unique insights through our Newzoo Platform.

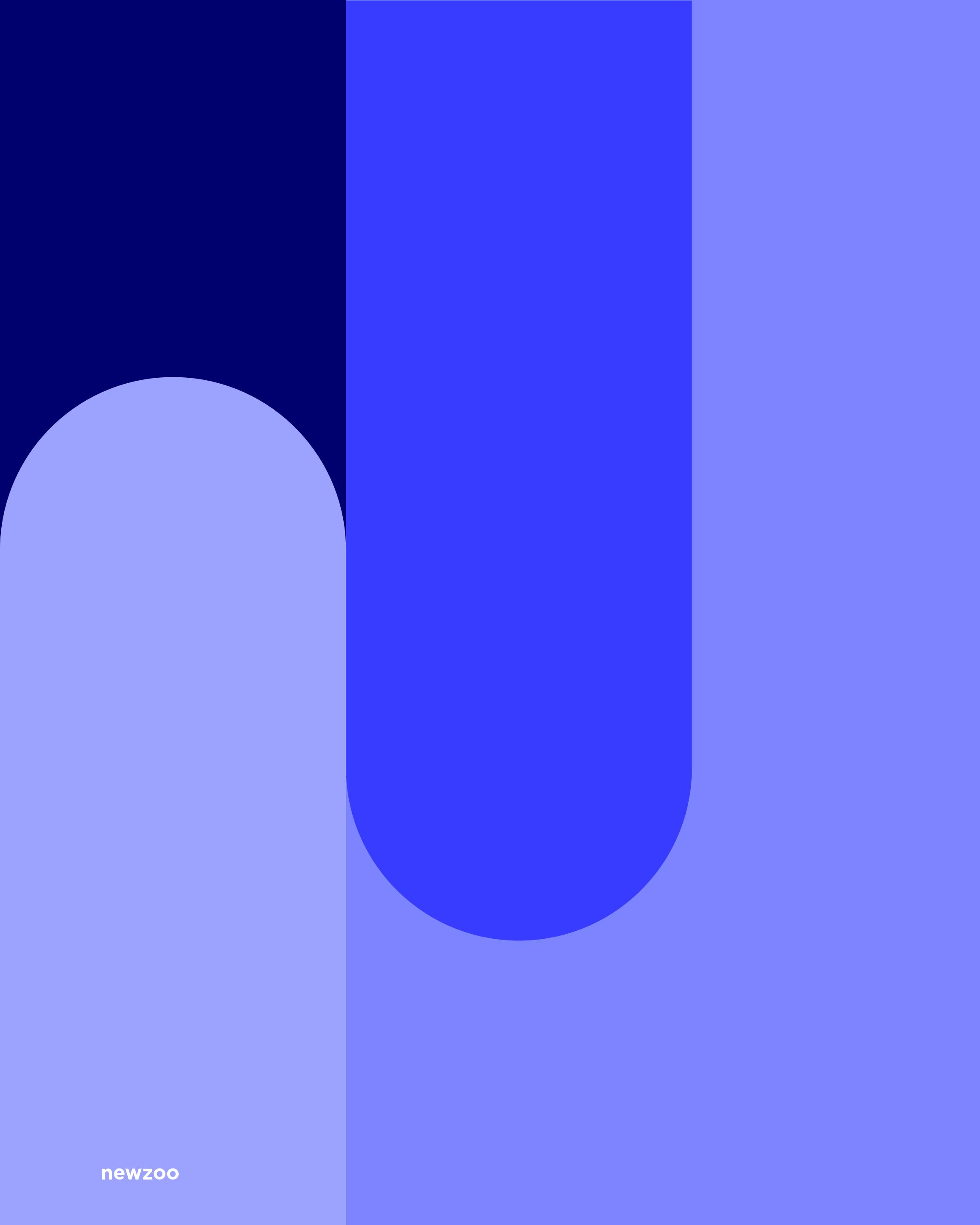
[Learn more](#)

✓ **Personal User Licenses**

Personal access to your subscription in one place

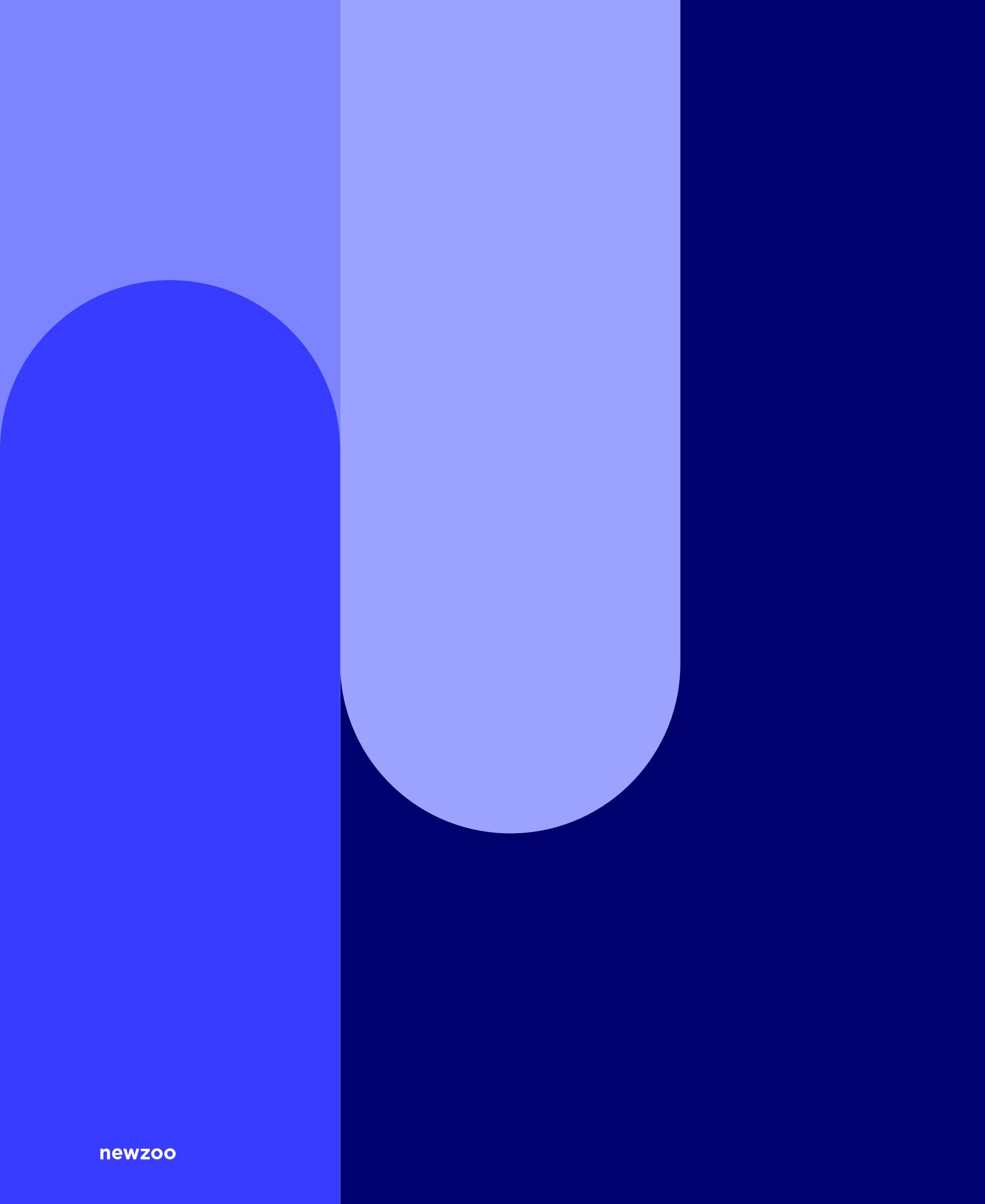
- Accompanying Excel dataset with granular data breakdown



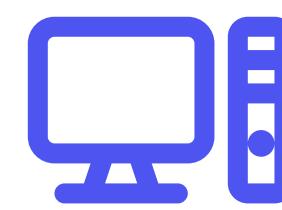


Know the Games

Diving deeper into game-level performance and trends

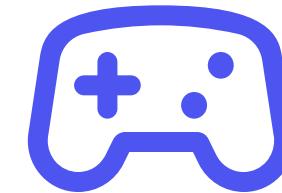


**Evolving business models brought
in new players and reinvigorated
existing audiences in 2022**



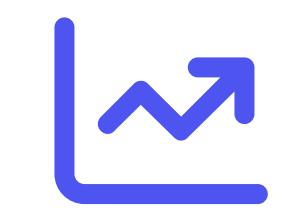
100+ Bn

Hours spent playing
PC and console games



15+

Average titles played per
player on each platform



\$200+

Average payer spend in
US market per platform

Playtime and spending were down in 2022 but top games are finding unique growth opportunities

Predictions for PC and console games and related media after a tumultuous year for developers and publishers

1

Overall playtime and spending were down in 2022 as COVID-19 restrictions eased in many places and high-profile titles had their releases delayed. A stellar launch lineup and continued improvement to live services in top games will stabilize playtime and increase spending in 2023.

2

Landing a top position in the highest MAU rankings is becoming more challenging than ever. The top games will continue to improve their live services to provide continual content and player experiences to keep players engaged.

3

Top titles are adapting to the times by adopting a wider range of improved monetization models, including hybridization of pay-to-play (P2P or premium) and free-to-play (F2P or freemium) models to boost revenue.

Microtransactions, DLC, and subscription revenue streams have increased in share of the overall market spend and will continue to grow and diversify as publishers experiment with new techniques.

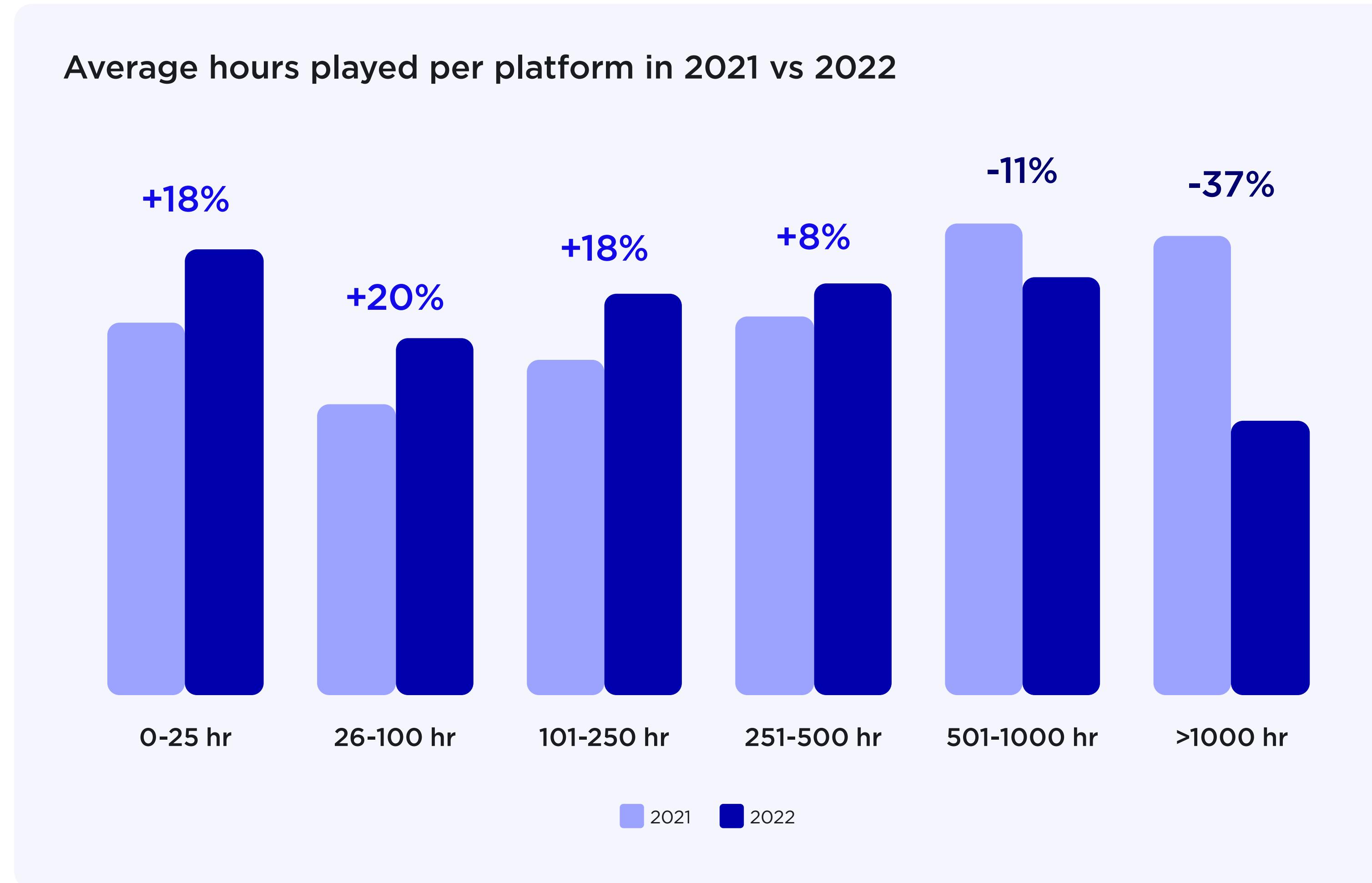
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With more successful examples popping up in the market, PC and console publishers will continue to leverage unique business models and opportunities to keep players engaged with IPs even with longer launch cycles. These will include remakes and remasters, transmedia strategies, and subscription services.



Playtime is leveling out for PC and console platforms as lockdowns end

Post-COVID playtime numbers are dropping, returning to a familiar level as gamers play fewer titles and game less overall



The average playtime of players dropped around 20% across Steam, Xbox, and PlayStation platforms from 2021 to 2022. However, this is not a new low, but instead, a re-correction to similar numbers to what we saw in the years prior to the pandemic.

Looking at playtime distribution, the largest change is the shift of the top bracket of hardcore players who previously broke 1,000 hours in 2021 (on a single platform) decreasing by 37% year-over-year in 2022. More extreme playing engagement has mellowed to pre-pandemic levels.

In 2023, we expect to see similar levels of playtime engagement across the major platforms.

The pandemic didn't just affect playtime—on the development side of the industry, many title launches have been delayed from 2022 to at least 2023. These delays also contributed to 2022's decrease in playtime and spending, especially for anticipated titles like The Legend of Zelda: Tears of the Kingdom and Bethesda's IP Starfield.

The silver lining is 2023 should be packed with top games across many genres and on every platform.

Fortnite topped the MAU charts for nearly every platform in 2022

Top performers on PC and console included Fortnite and Minecraft



Last year, the top titles across PC, Xbox, and PlayStation were quite similar, with the Switch being an outlier thanks to its many platform-exclusive titles. Fortnite made it into the top three across every platform in terms of monthly active users (MAU), while Call of Duty featured two titles in the top 10 for three platforms. Six of the top performers on the Switch were Nintendo first-party titles.

Top 10 games by average MAU in 2022 per platform

PC		Xbox		PlayStation		Nintendo Switch	
1	ROBLOX	1	Fortnite	1	Fortnite	1	Pokémon Scarlet/Violet
2	Call of Duty Modern Warfare II/ Warzone 2.0	2	Call of Duty Modern Warfare II/ Warzone 2.0	2	Call of Duty Modern Warfare II/ Warzone 2.0	2	Fortnite
3	Fortnite	3	Grand Theft Auto V	3	Grand Theft Auto V	3	Fall Guys
4	Minecraft	4	Minecraft	4	Call of Duty Modern Warfare/Warzone	4	Mario Kart 8
5	Apex Legends	5	Call of Duty Modern Warfare/Warzone	5	Apex Legends	5	Minecraft
6	Call of Duty Modern Warfare/Warzone	6	High on Life	6	NBA 2K23	6	Pokémon Legends: Arceus
7	The Sims 4	7	ROBLOX	7	NBA 2K22	7	Rocket League
8	Overwatch 1 & 2	8	Apex Legends	8	God of War: Ragnarok	8	Animal Crossing: New Horizons
9	Valorant	9	Fall Guys	9	Minecraft	9	Nintendo Switch Sports
10	Counter-Strike: Global Offensive	10	NBA 2K22	10	Call of Duty: Black Ops Cold War	10	Splatoon 3

Classic PC games outperformed newer titles in 2022

Older, free-to-play (F2P) PC titles like ROBLOX and Minecraft outclassed recent releases in terms of MAU

Average MAU in 2022 - PC only

Rank	Game	Platforms	Release Date
1	ROBLOX	ROBLOX	2006
2	Minecraft	Minecraft	2011
3	Fortnite	EGS	2017
4	The Sims 4	Origin, Steam, EGS	2014
5	Call of Duty: Modern Warfare II/Warzone 2.0	Steam, Battlenet	2022
6	League of Legends	Riot	2009
7	Counter-Strike: Global Offensive	Steam	2012
8	Valorant	Riot	2020
9	Grand Theft Auto V	Steam, EGS, Rockstar	2013
10	Call of Duty: Modern Warfare/Warzone	Battlenet	2019
11	Overwatch 1 & 2	Battlenet	2016
12	Apex Legends	Steam, Origin	2019
13	Rocket League	EGS	2015
14	Fall Guys	EGS	2020
15	Destiny 2	Steam, EGS	2017
16	Tom Clancy's Rainbow Six: Siege	Steam, EGS, Uplay	2015
17	Cyberpunk 2077	Steam, EGS	2020
18	Genshin Impact	EGS, Hoyoverse	2020
19	Dota 2	Steam	2013
20	World of Warcraft	Battlenet	2004

The PC games market is complex. It has a mix of diverse indies and AAA juggernauts, as well as platforms like ROBLOX pushing the boundaries of what constitutes a platform versus a game.

The top rankings show that unique, older titles dominate the PC market, maintaining their audiences after many years.

→ Only one title launched in 2022, Call of Duty: Modern Warfare II, reached a top spot in terms of average MAU

→ Half of the titles on the top MAU list launched in 2015 or earlier

→ Three of these titles came out before 2010

PC is also a uniquely open market compared to how it works in the console space. For instance, although Steam is the dominant platform, only half of the top 20 games are available on it. The Epic Game Store now has three of the top 20 exclusive titles, and many other proprietary platforms command a fair share of titles and players.

Apex Legends is the top game in Japan by yearly active users (YAU)

Comparing rankings across various markets

Top games per market by YAU - PC (Steam), PlayStation, Xbox

US	Germany	Japan
Fortnite	Fortnite	Apex Legends
Call of Duty: Modern Warfare II/Warzone 2.0	Grand Theft Auto V	Fall Guys
Grand Theft Auto V	FIFA 22	Overwatch 1 & 2
Call of Duty: Modern Warfare/Warzone	Call of Duty: Modern Warfare II/Warzone 2.0	Fortnite
Minecraft	Fall Guys	Minecraft
Fall Guys	Call of Duty: Modern Warfare/Warzone	Elden Ring
Apex Legends	Rocket League	Monster Hunter World
NBA 2K22	Minecraft	Grand Theft Auto V
MultiVersus	FIFA 23	Genshin Impact
Rocket League	Tom Clancy's Rainbow Six: Siege	Tom Clancy's Rainbow Six: Siege

Audiences in the Western market demonstrated relatively similar tastes, with similar games sharing the top spots by YAU. Sports titles were the notable key divergence points between these different markets. In Germany, FIFA 22 and FIFA 23 made it into the top 10, while the US showed a stronger preference for NBA 2K22.

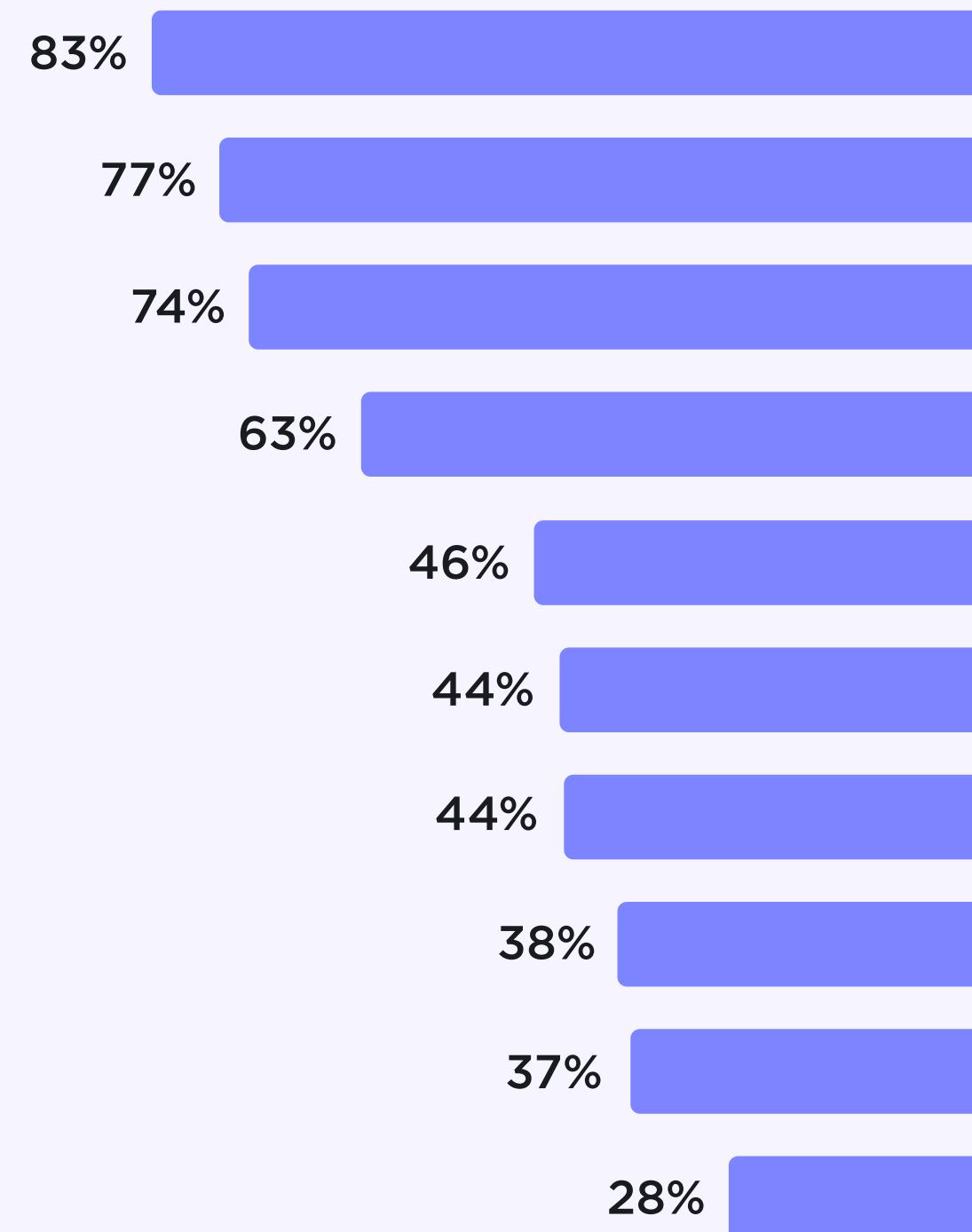
In Japan's games market, the top five games by YAU were all developed by Western companies, which is significant, given that this market is traditionally seen as a difficult one to succeed in for Western-developed titles. Genshin Impact, made by Chinese company miHoYo, also made the top ten in Japan. Across the board, companies in China are developing games with mechanics that appeal to audiences worldwide, but especially in Japan's high-spending market.

Shooter, Adventure, and Battle Royale games took the highest player shares

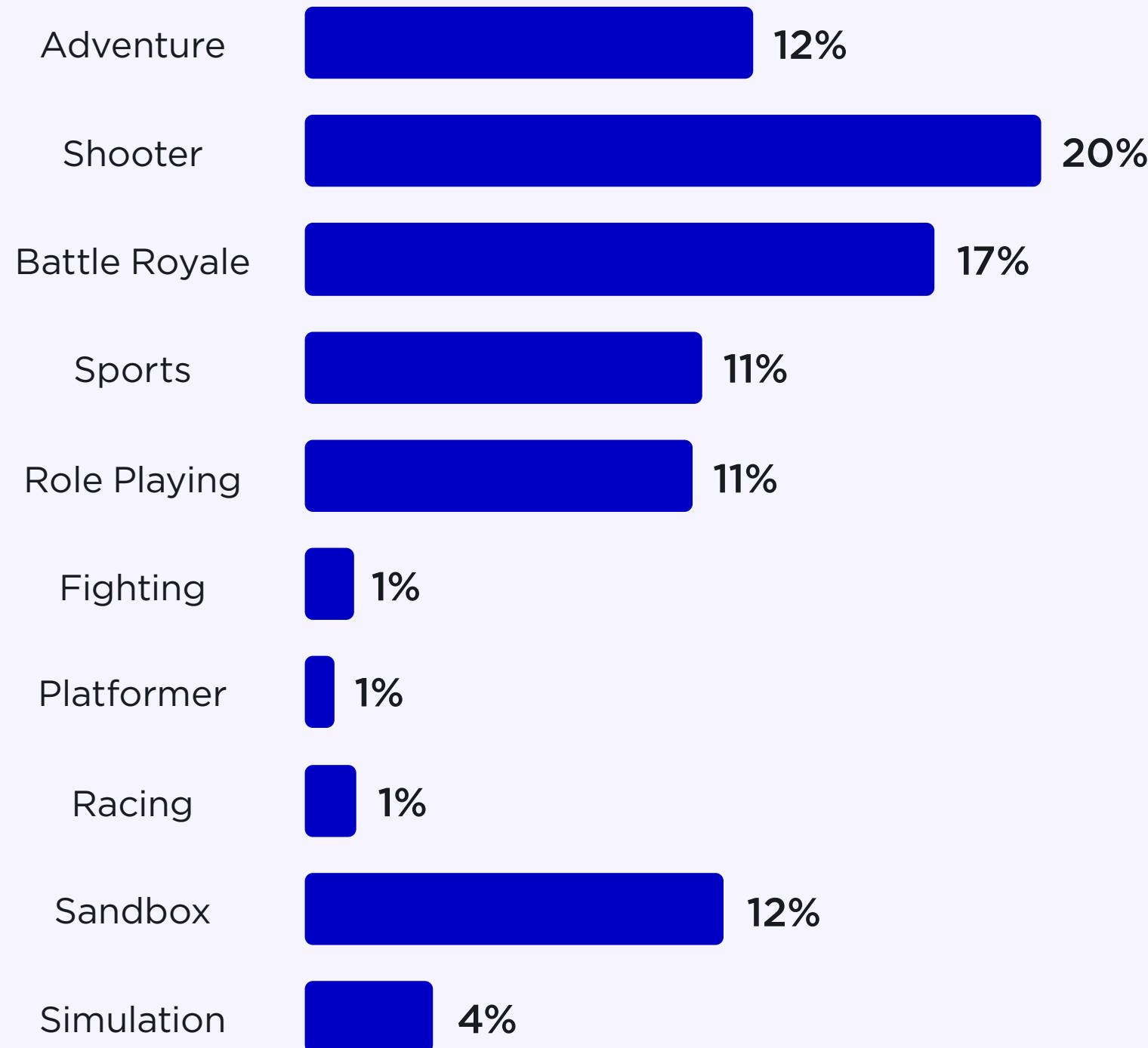
Adventure titles accounted for 83% of player share and 12% of playtime – How did other genres fare in 2022?

Top 10 genres by player share

Player share - 2022



Playtime share - 2022



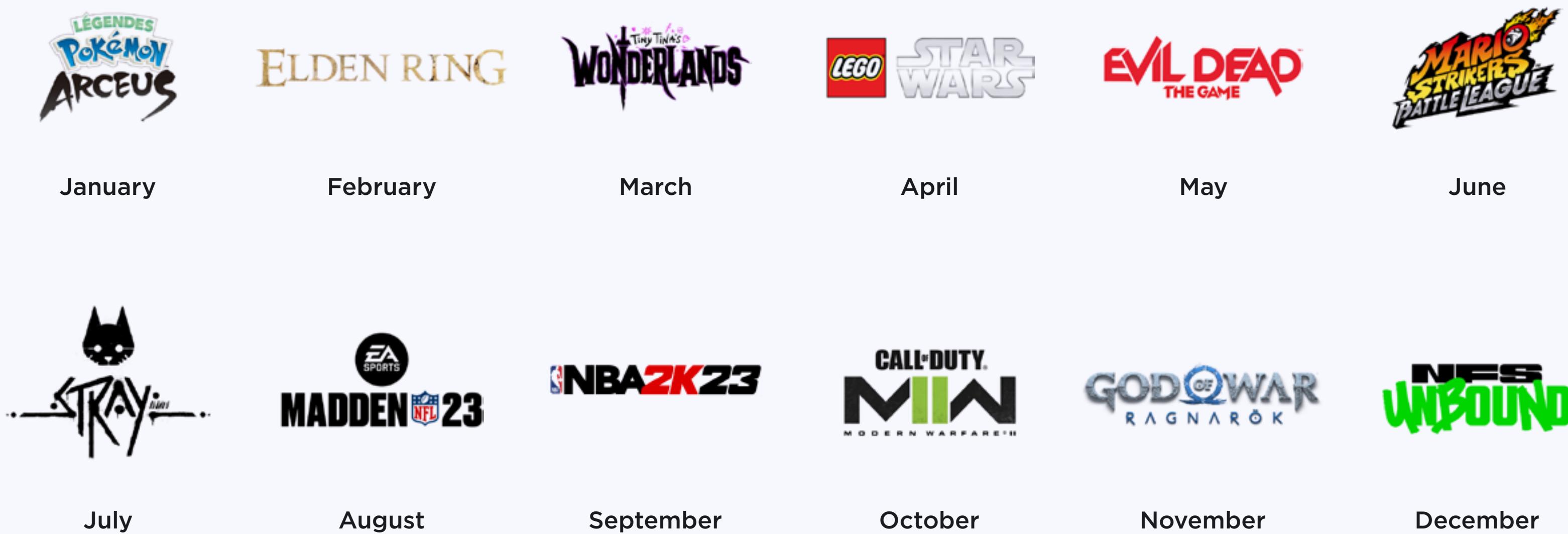
Last year, the top three genres in terms of player share were Shooter, Adventure, and Battle Royale, with Shooter taking a 20% share of total playtime. More than 80% of players partook in an Adventure title, and almost 37% of all playtime went to Shooters and Battle Royale games. Interestingly, Adventure and Sandbox games had the same amount of playtime, despite the former taking a much higher player share than the latter.

This demonstrates that Sandbox players are devoted to their titles and engage deeply with games in this genre. Additionally, nearly half of all players played Fighting, Platformer, or Racing games, but each genre accounts for only 1% of playtime. These genres included large F2P titles from 2022 that attracted new players but didn't retain them.

Games with mixed revenue models were the top releases throughout 2022

These were the top released games in the US based on their first month total revenues

Top 2022 releases in the US based on the first three months of revenue



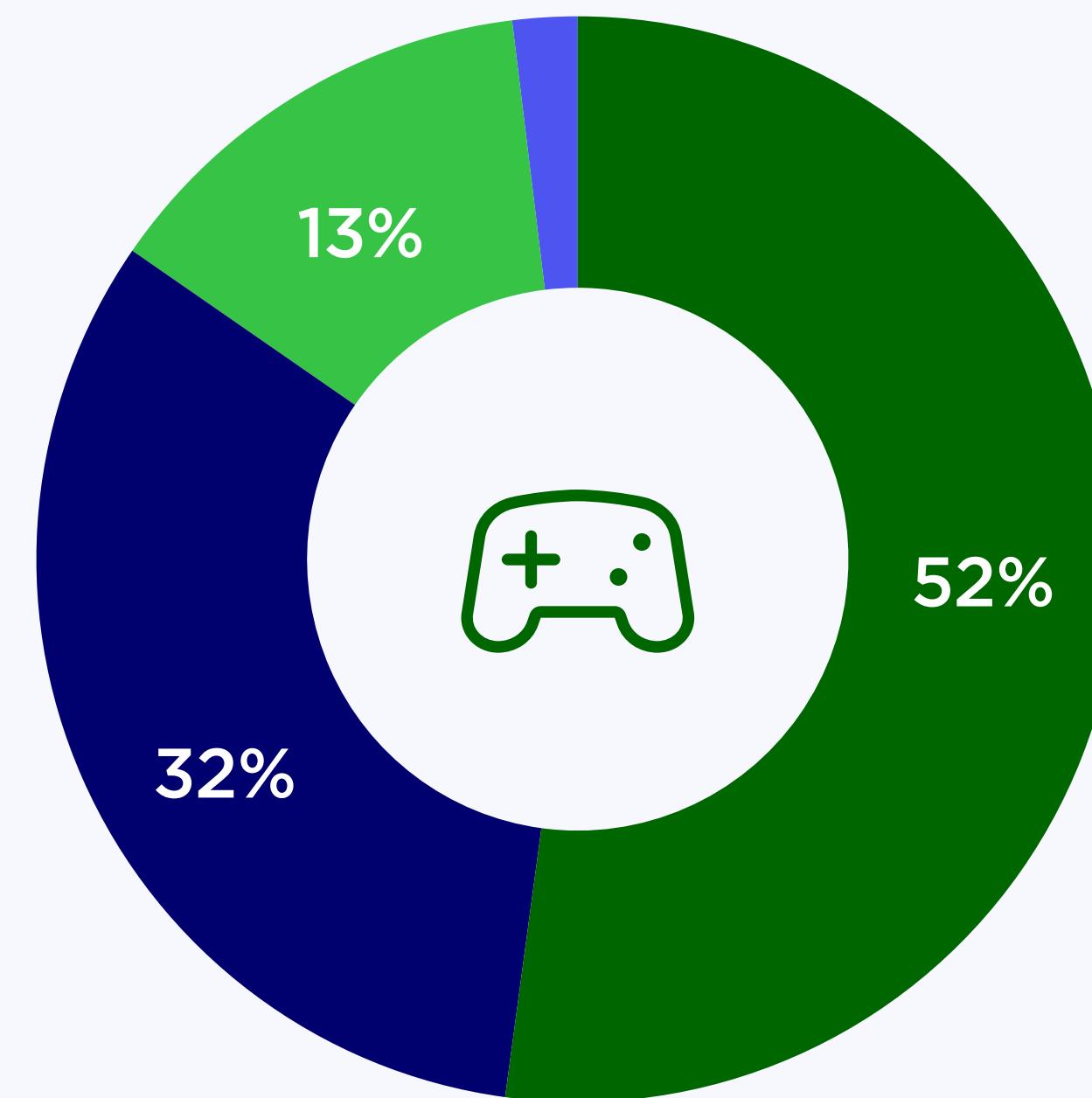
The top releases of 2022 comprised an interesting mix of AAA and indie titles. However, the largest winners in terms of initial launch month revenue were the games that mixed premium pricing and microtransactions, such as NBA 2K23 and Call of Duty: Modern Warfare II (Warzone 2.0).

The lowest performing launches took place from May to July, but included games that instantly became fan favorites, including Stray. Elden Ring performed admirably at the start of the year, though it's essential to note that mostly smaller launches preceded and followed its launch in February. God of War, Pokémon Legends: Arceus, and Mario Strikers: Battle League were all able to make this list, even though they're all exclusive to their platforms.

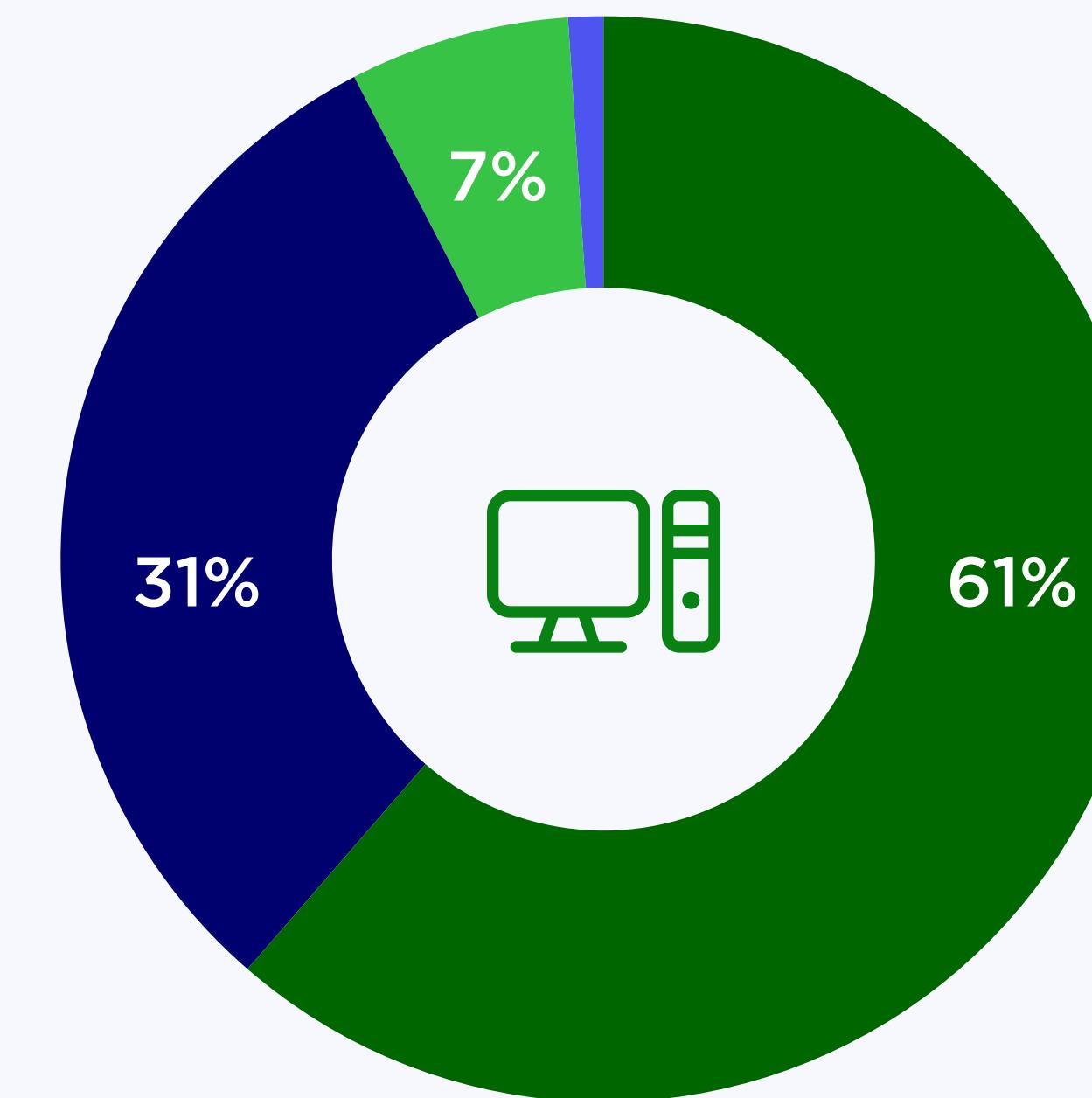
In-game spending accounted for nearly 50% of PC and console revenue in the US

2022 saw an even split between premium and in-game revenue for PC and console

Share of yearly console revenue by category - US 2022



Share of yearly PC revenue by category - US 2022



Revenue from premium transactions constituted just over 50% of spending on PC games and over 60% on console titles. Microtransactions made up over 30% of the revenue share for both PC and console platforms. Spending on DLC represented the key difference between PC and console revenues. PC payers spent nearly twice as much on DLC in 2022 compared to console content.

As the top-performing titles continue to double down on new ways to monetize and leverage the games-as-a-service model, we expect non-premium revenue to grow for both PC and console.

■ Full Game Download ■ Downloadable Content ■ Microtransaction ■ Subscription

Sports titles topped the charts for in-game revenue

The top grossing titles in the US showed how different types of games are leveraging premium and microtransactional business models

Premium Revenue – US Top 10

1	Call of Duty: Modern Warfare II/Warzone 2.0
2	NBA 2K23
3	Elden Ring
4	God of War: Ragnarok
5	Pokémon Scarlet/Violet
6	Dying Light 2
7	Madden NFL 23
8	LEGO Star Wars: The Skywalker Saga
9	Tiny Tina's Wonderlands
10	Pokémon Legends: Arceus

In-Game Revenue – US Top 10

1	Fortnite
2	NBA 2K22
3	Apex Legends
4	ROBLOX
5	Valorant
6	Destiny 2
7	NBA 2K23
8	Grand Theft Auto V
9	League of Legends
10	Call of Duty: Modern Warfare/Warzone

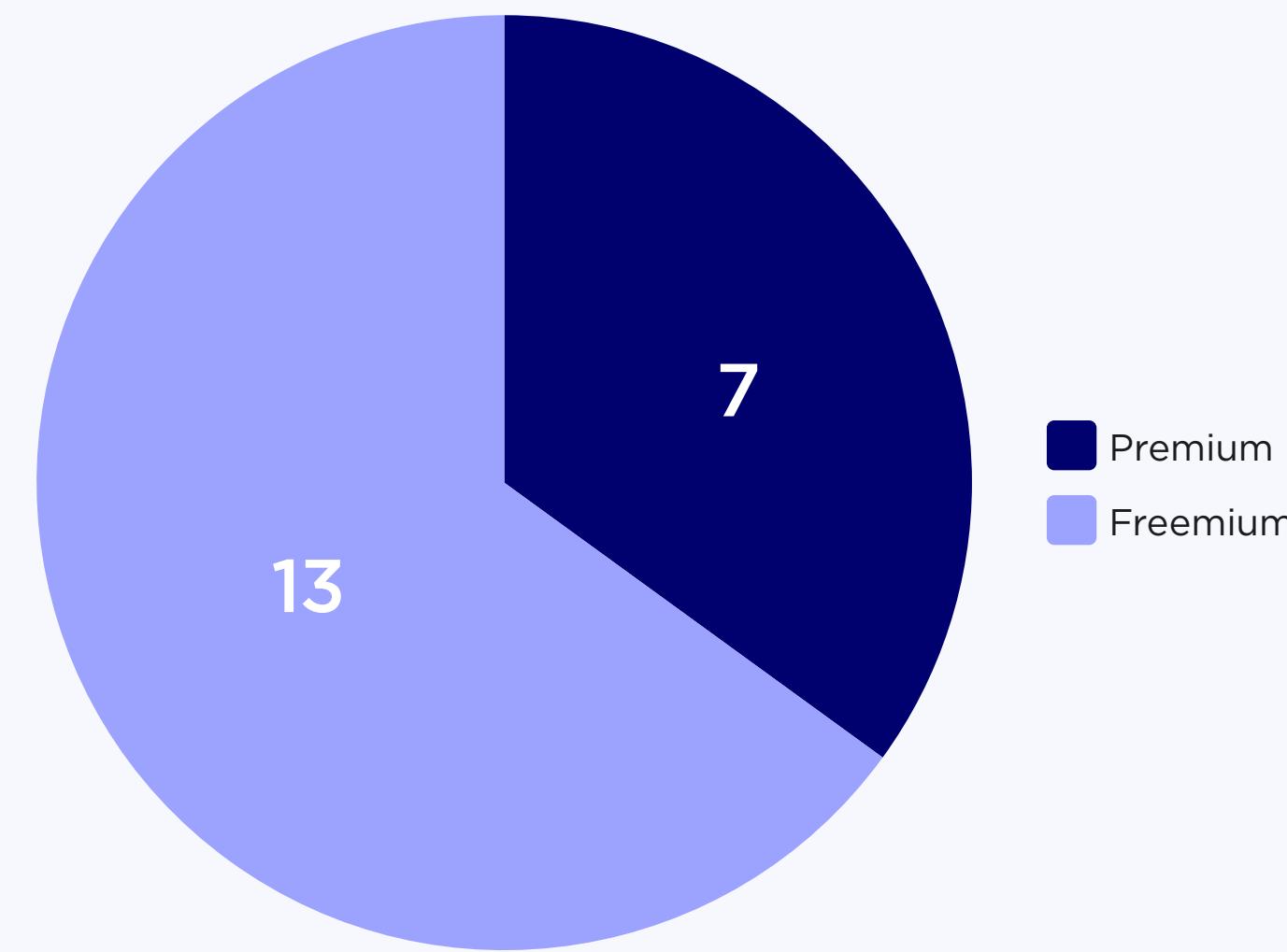
Elden Ring was one of the most lauded and well-reviewed launches of 2022. It was the third-highest-grossing premium title of the year and arguably, yet notably, the only title in the premium top ten that wasn't part of an ongoing franchise.

However, in terms of overall revenue, the most powerful long-standing franchises and IPs, including sports titles like NBA 2K23 muscled their way to the top of the lists. What's unique to these types of titles is how they maintain a regular cadence of new iterations sold per year, but also their ongoing microtransaction strategies that help these games reach the top of both premium and in-game revenue charts.

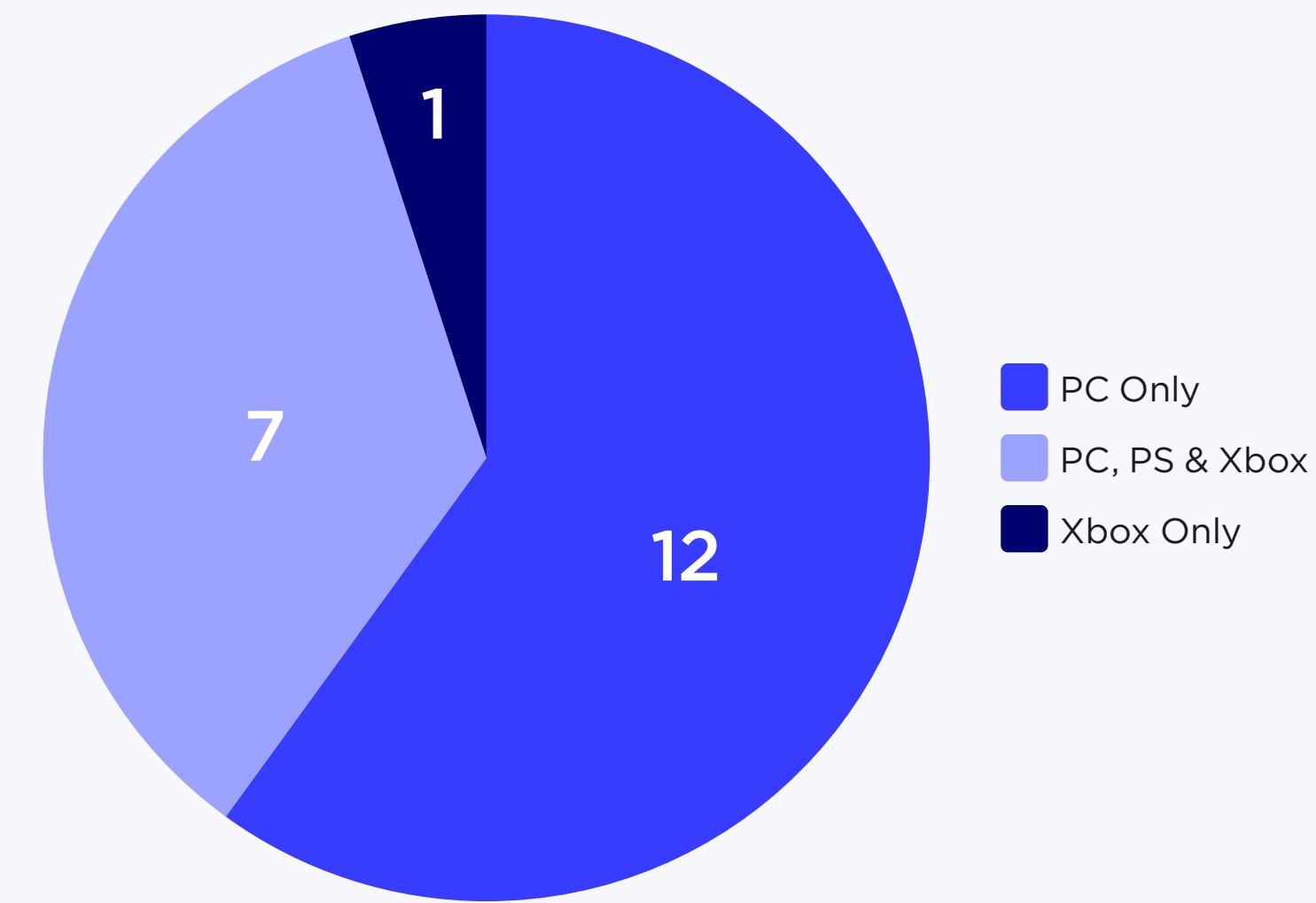
The free-to-play (F2P) model has become more popular for developers and publishers

More than half of the top PC and console titles of 2022 used F2P business models

13 of the 20 top PC & console titles of 2022 were F2P



12 of top 20 new F2P games were only released on PC



As F2P becomes more established in the market, we see a steady growth of these titles dominating the top 20 charts by average MAU – one more in 2022 compared to 2021.

PC is still a significant proving ground for new F2P games, with 12 of 20 top F2P games in 2022 released for PC only. A lot of popular F2P games started on PC only and then moved to consoles later, showing the efficacy of the model in terms of its scalability beyond single platforms.

Three of the top 20 games by average MAU adopted a F2P model in 2022

More games are shifting from P2P to F2P business models—and it's driving up revenues and sparking a larger trend

In 2022, we saw an increasing number of PC and console games transition from P2P (premium) to F2P (freemium) business models. This transition has opened games up to wider audiences and different monetization strategies, but it's not been without challenges.

On average, games that pivoted to F2P saw a 327% increase in average MAU in the first month. However, on average only 40% of players in the F2P launch month were new players. Returning players are essential in revitalizing a game when it becomes free-to-play.

Moving to F2P models also boosted retention for many games. The average D1 retention rate in the first month following an F2P launch hit 38%, while it was 29% three months before the launch.



Overwatch 2 successfully relaunched the Overwatch franchise with huge player growth in its first few months. This is a great example of a publisher resetting and changing their overall business model to maximize revenue potential as a live-service title.



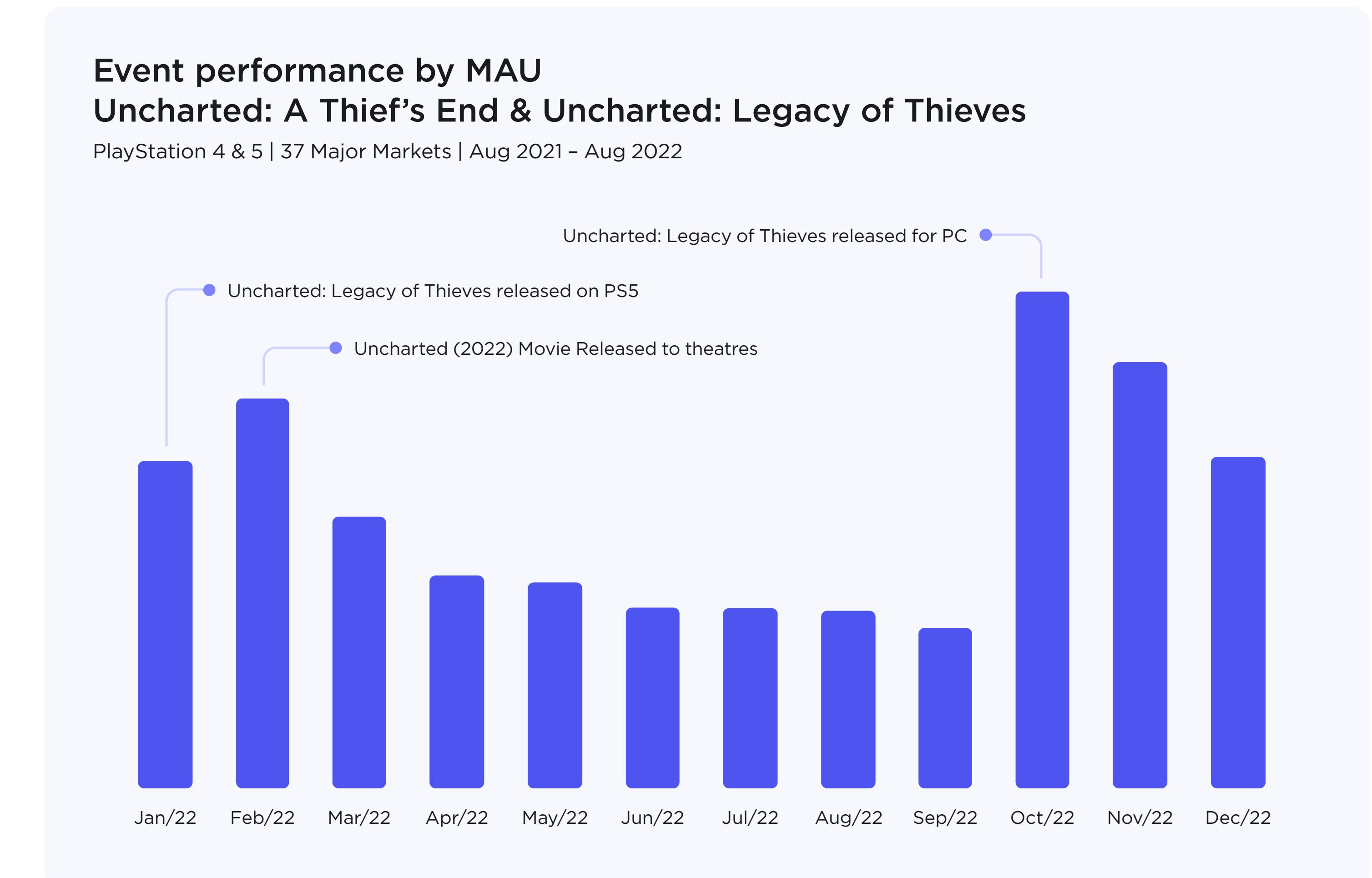
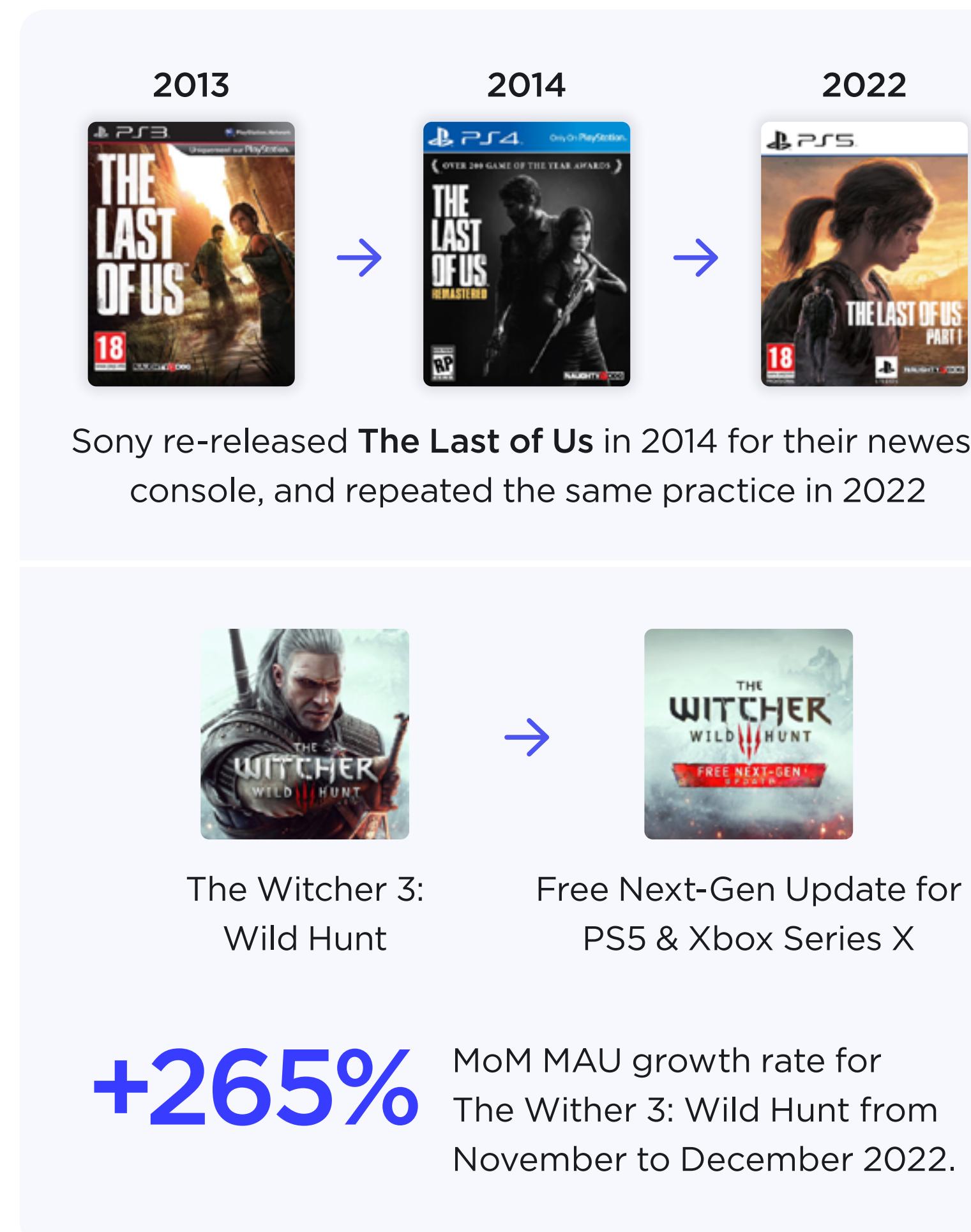
Following the example of other Epic-owned exclusives like Fortnite and Rocket League, Fall Guys also went F2P. Epic appears to be leveraging these giant player-driver titles as pillars to the Epic Game Store's growth and retention strategy.



Unlike Overwatch 2, which revamped its business model, The Sims 4 seems to have doubled down on its DLC-driven business model. The game removed barriers-to-entry in October, going completely free-to-play on the base game.

Remakes and remasters drove engagement for older IP

Creating updated versions of Uncharted, The Last of Us, The Witcher III, and other games re-engaged player bases and monetized untapped audiences



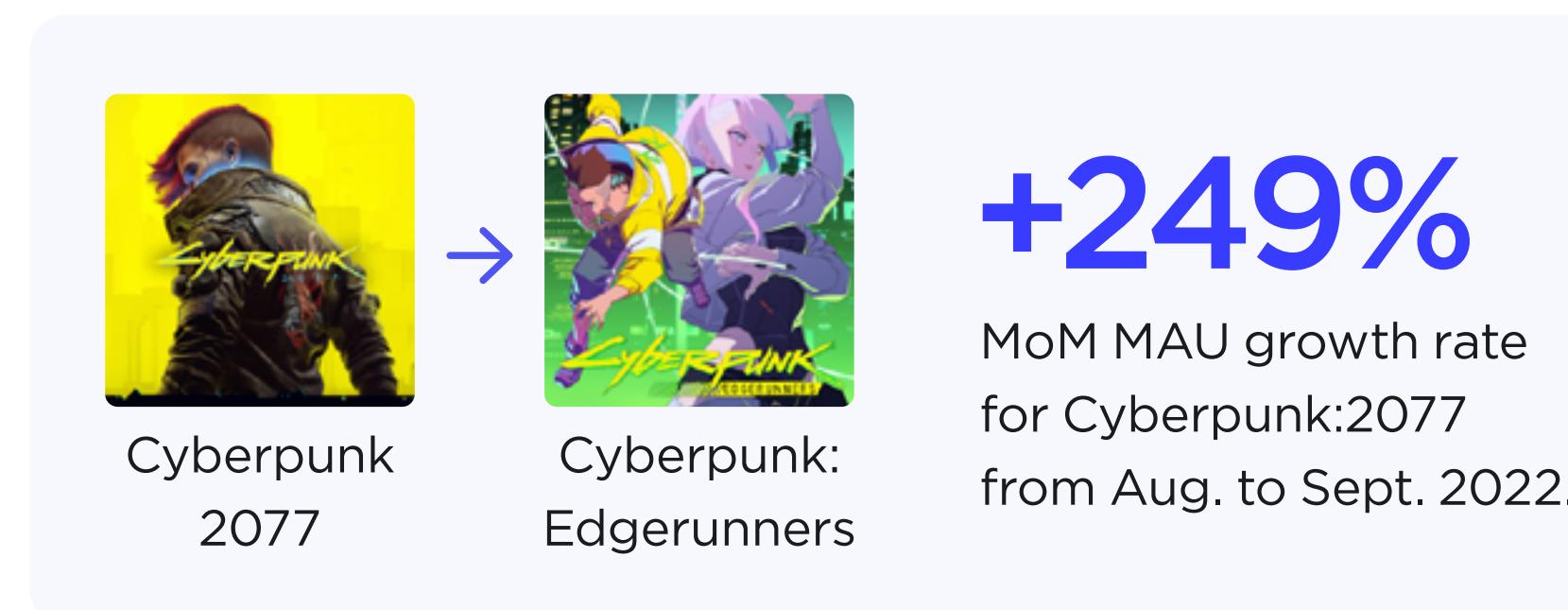
Robust transmedia strategies paid off for many games

Releasing the anime Cyberpunk: Edgerunners renewed interest in the franchise significantly

Cyberpunk 2077 was one of the most controversial titles in recent years, primarily because of its unstable game experience and bugs. However, the anime based on the franchise, Cyberpunk: Edgerunners, achieved massive success, reinvigorating interest in the game.

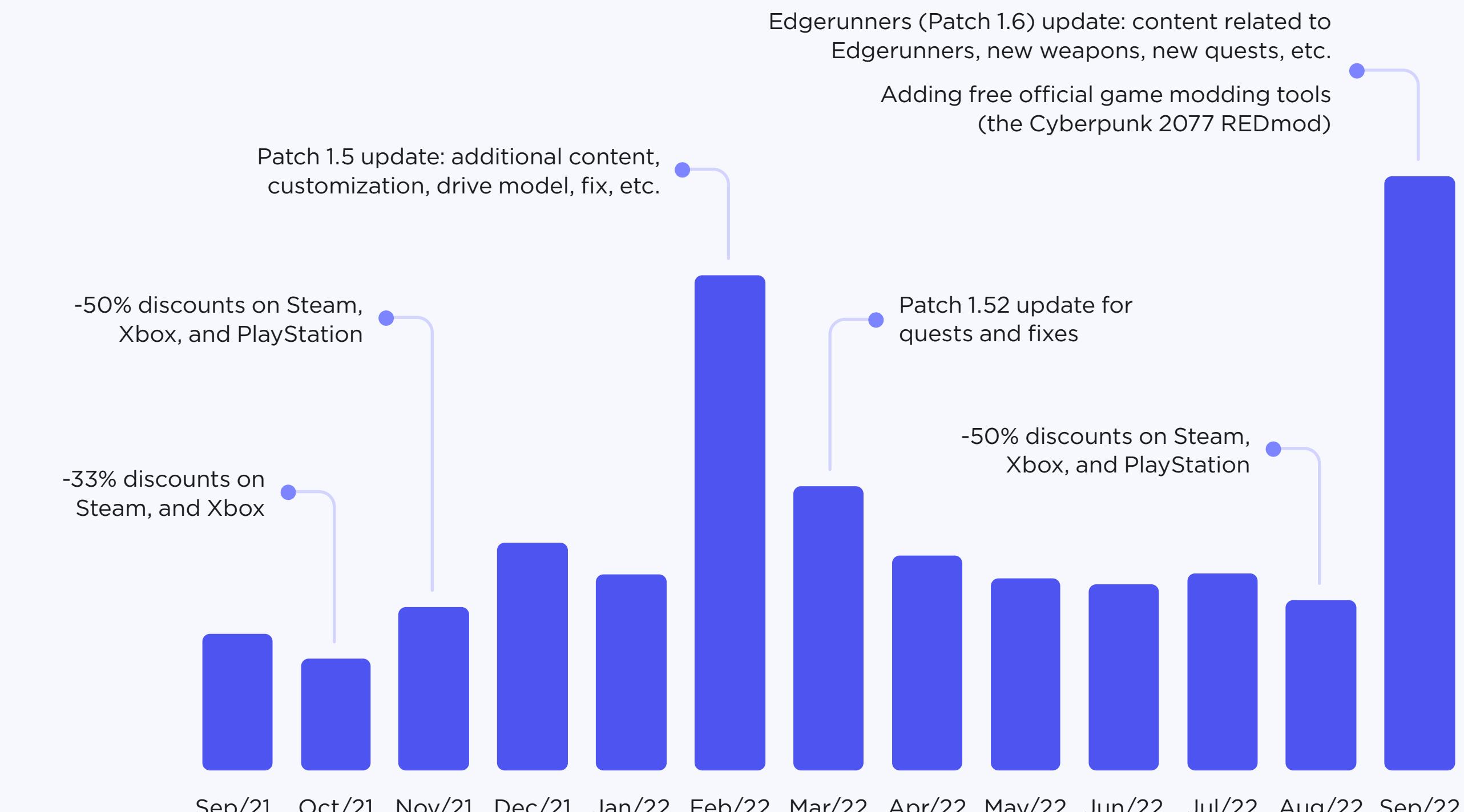
The anime replicated the game's cyberpunk setting, taking place a year before the storyline begins in the game. Released on Netflix in September 2022, the anime ended where the game begins (in full nostalgic fashion), which got players to purchase or redownload the game to renew engagement with the franchise. Engraining more anime content within the game continues to boost the popularity of the entire franchise.

Transmedia strategies have become effective ways to boost player engagement and Cyberpunk 2077 is just one example. The second season of The Witcher, released in 2021, led to MAU growth of 134%, for instance. The hope is that engaged viewers become dedicated, long-term customers and stable revenue sources for games and their franchises.



Event performance by MAU - Cyberpunk 2077

PS 4 & 5 | 37 Major Markets | Sep 2021 – Sep 2022



Note: We do not include all events here. Please check the **Game Performance Monitor** for all event performance in games.

There was a correlation between live viewership hours and DAU rankings

High viewership for top performing games can drive MAU performance and increase engagement and sales

While certain top games saw a boost in sales and engagement, as well as DAU, thanks to strong live viewership performance, we didn't see this performance mirrored across the entire market. Some games underperformed in terms of DAU even as viewership rose. Titles like Cult of the Lamb, and The Quarry have cinematic qualities, which may have led to high viewership. These same qualities didn't entice quite as few people to play, though. Multiversus, on the other hand, saw its DAU rank skyrocket in its first month, but drew in far fewer viewers compared to other top games.

Top viewed games on Twitch in 2022

1	Grand Theft Auto V	6	Fortnite
2	League of Legends	7	Counter-Strike: Global Offensive
3	Valorant	8	Dota 2
4	Minecraft	9	Call of Duty: Modern Warfare/Warzone
5	Apex Legends	10	Mobile Legends: Bang bang

→ Viewership is still focused on PC gaming, with 4 out of the top 10 games viewed in 2022 being PC-only

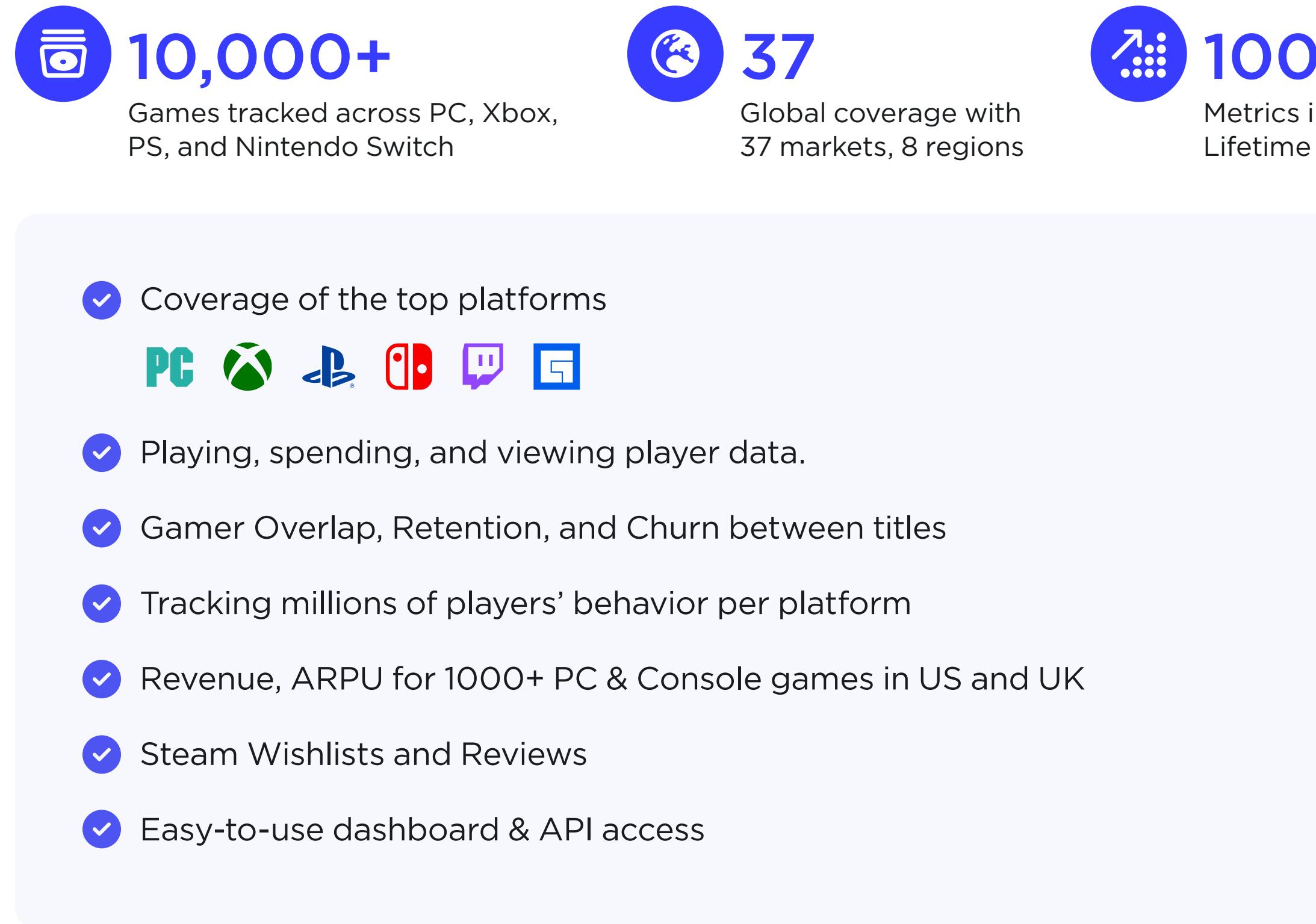
→ Viewership still very much driven by esports/competitiveness-focused games such as League of Legends, Valorant and Mobile Legends

Top 10 viewed 2022 titles in the first 28 days after launch

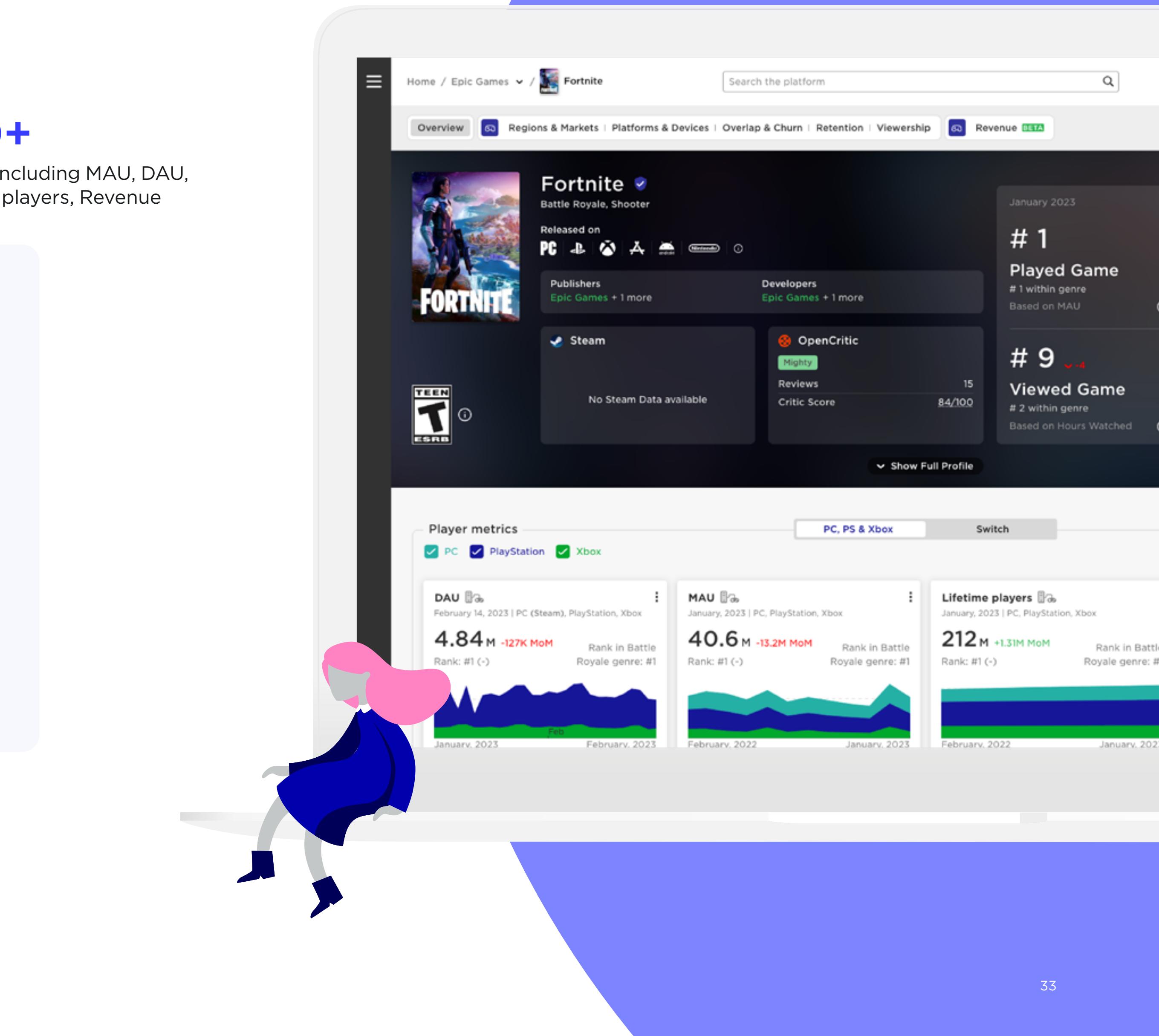
2022 Game	Hours Watched (Live Streaming) Rank	DAU Rank	Publisher
Elden Ring	1	2	Bandai Namco
Call of Duty: Modern Warfare 2	2	1	Activision Publishing
FIFA 23	3	3	EA
God of War: Ragnarök	4	6	SIE
Dying Light 2	5	7	Techland
The Cycle: Frontier	6	31	YAGER
Cult of the Lamb	7	32	Devolver Digital
Multiversus	8	4	Warner Bros.
The Quarry	9	50	2K
NBA 2K23	10	5	Warner Bros.

Newzoo's Game Performance Monitor

Unlock the leading platform for tracking the engagement and revenue KPIs of PC and console games



[Learn more](#)



Know the Gamers

Digging into gamer demographics, personas, and how players are playing and spending

Two thirds of players play on PC and/or console



40%

of PC and/or console* players identify as female



47%

of PC and/or console* players play, view, and engage with gaming in other ways (e.g., content creation, socializing, podcasts etc.**)



72%

of PC and/or console* players played on at least two platforms



66%

of PC and/or console* players spent money on video games in the past 6 months

*'PC and/or console' means players can use either or both devices and may or may not play on mobile as well.

**Other gaming engagement includes those that claim to have "often" followed video gaming channels or esports broadcasters, socialized through/visited online gaming communities, discussed video games with family and friends, listened to gaming podcasts, and/or attended large in-person gaming conventions in the past 12 months.

Source: [Newzoo Global Gamer Study](#) 2022 (Global weighted average across 36 markets)

Base: Total players (n=60,020), PC and/or Console players (n=42,514)

The PC and console gaming audience is expanding and diversifying

What's happening with the world of PC and console gamers after a tumultuous year

1 The PC and console player base is becoming more diverse

PC and console gaming is attracting a more balanced audience in terms of gender and age. Overall, players are becoming more varied in what drives them to engage with games. While unpacking demographic data is still valuable, it's becoming essential to look deeper into player attitudes and motivations.

2 Cross-platform play is becoming more prevalent

Nearly seven in 10 PC and console players have played on more than one platform in the past 6 months, with a quarter playing on all three platforms. Cross-platform players are an attractive cohort since they tend to lead the way in time and money spent on playing video games.

3 PC and console gaming becoming more gender-equal

PC and console players account for two thirds of the total player base. While historically more male dominated, PC and console gaming has become more gender equal, with women and non-binary players accounting now for over 40% of the total player base.

4 Players are reacting to new more diverse monetization models

Two in three PC and/or console players have made video-game related purchases in the past six months. With monetization models becoming more diverse and free-to-play models more common, understanding players' motivations to spend, especially in-game, is becoming essential.

5 Social play motivations are increasing

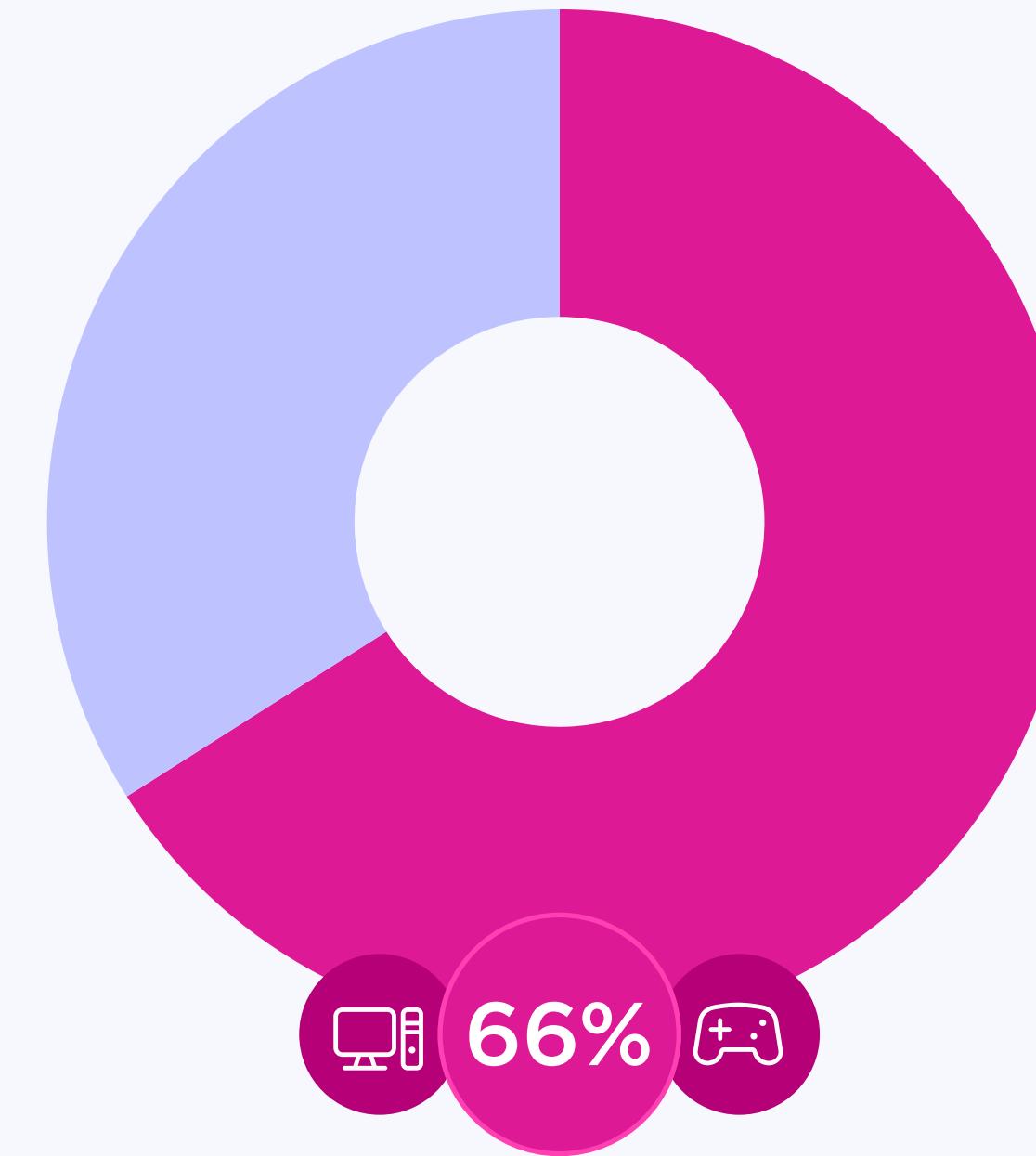
Motivations to play shift continuously and different games fulfill different motivational needs for different players. Approximately six in ten PC and/or console players consider various social features (socializing, competing, cooperating) to be important game features. This suggests that game designers should provide features that create additional and unique engagement opportunities for their players.

2/3 of gamers played on a PC and/or console over the past six months

Female players make up 40% of all PC and/or console players

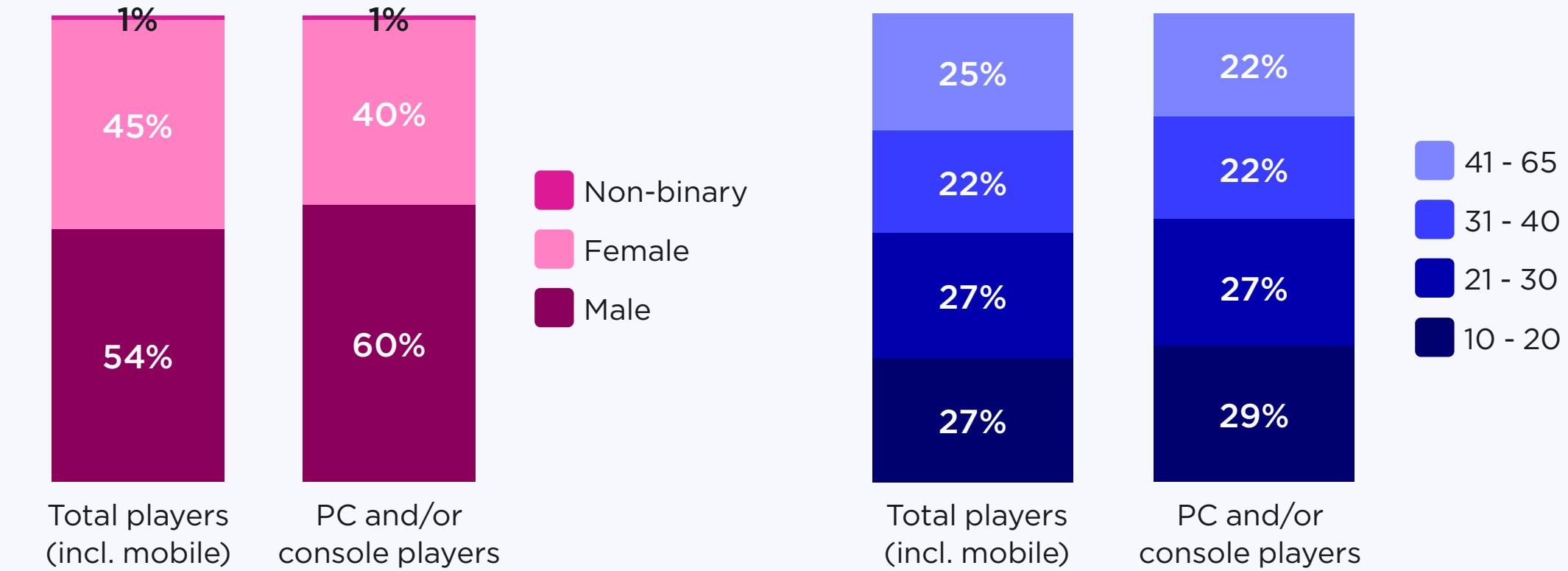
Share of PC and/or console players (past 6 months)

Base: Total players



Demographics

Base: Total players; Total PC and/or console players



PC and/or console players account for a significant share of the total audience we survey in the Global Gamer Study. Two-thirds of players reported having played on a PC and/or console in the past six months. While PC & console historically has skewed toward a more male-identifying audience, the market has become more equal in terms of gender representation. Women gamers now represent 40% of the total PC and/or console player base. There are many factors contributing to this more equitable landscape—overall, gaming has become more accepted as a pastime and vocation, while publishers and developers are improving how female characters are represented. For instance, NBA 2K22 featured Candace Parker on the game's cover, marking the first time the title had a female cover athlete. Additionally, the age breakdown of PC and/or console players is nearly identical to how the total player base looks overall.

4 in 10 PC and/or console gamers are core gamers

Core gamers invest more time and money into games, making them attractive to game developers and publishers

Level of identifying as a gamer*

Base: Total PC and/or console players

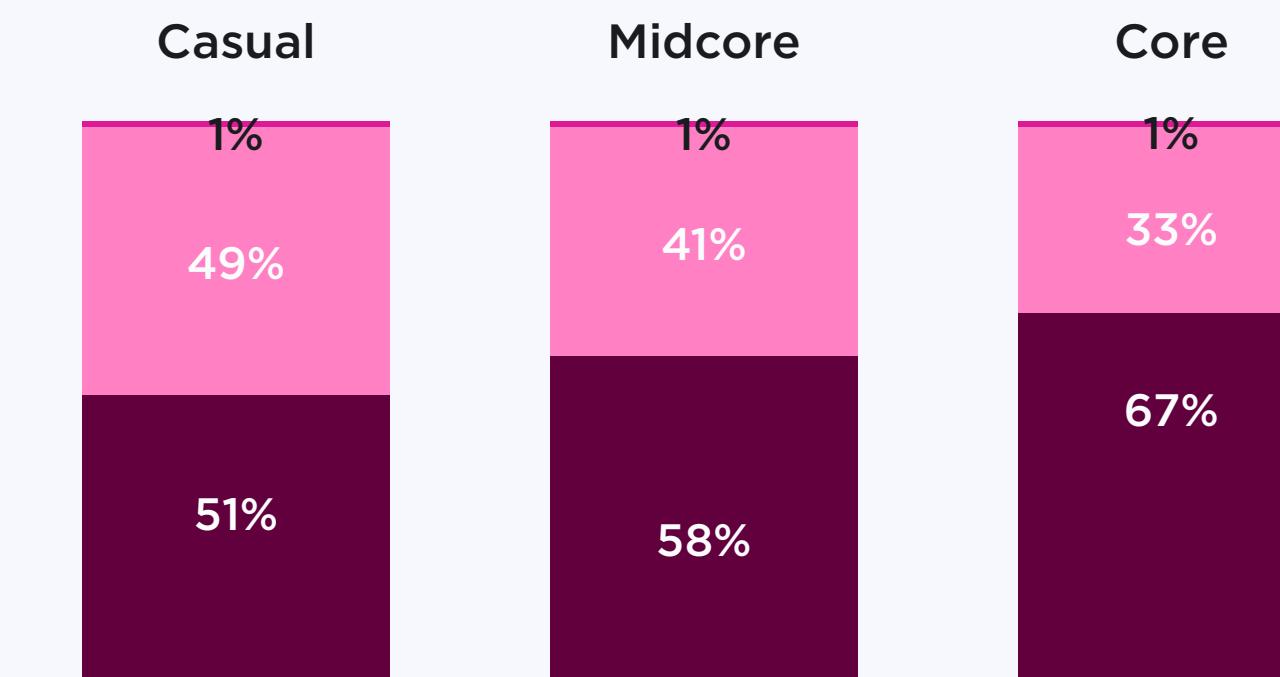


There are many ways to define a gamer. Behavioral indicators alone, like time and money spent, no longer sufficiently describe this large and diverse group. So, we zoomed in on the attitudinal and motivational differences surrounding gaming. We derived the casual, midcore, and core gamer groups from three gamer identification statements that have the highest correlation with gamer identity and engagement.

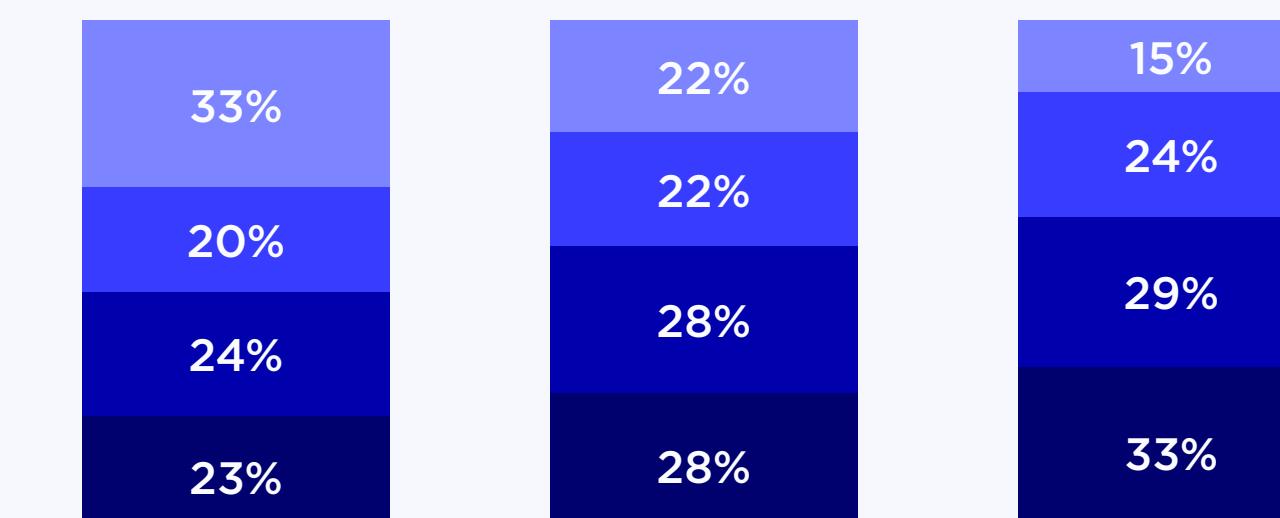
When we look at these groups among PC and/or console players, we find that the largest share (40%) falls into the core group. As you would expect, this core group plays and spends more on average, also skewing younger and more male.

Demographics

Base: Total PC and/or console players



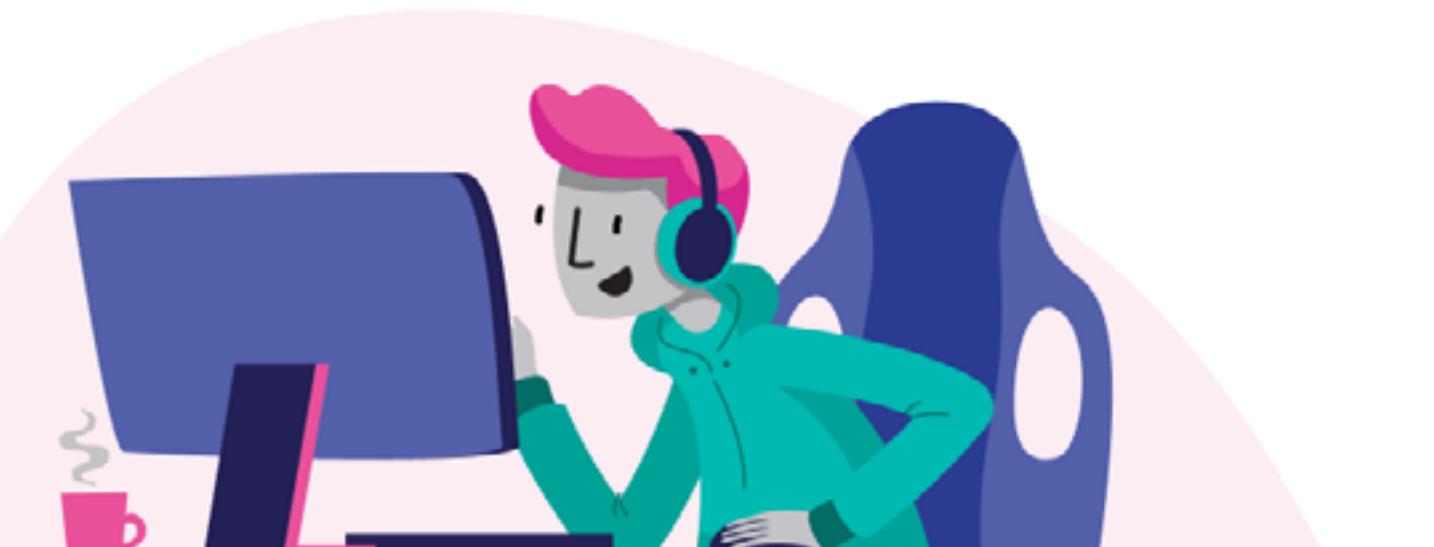
Non-binary
Female
Male



41 - 65
31 - 40
21 - 30
10 - 20

Every player segment had distinct reasons to play, demonstrating a diversity of players

Using tactics and strategic thinking to overcome challenges was the most consistent top reason across Casual, Midcore, and Core players



		Casual		Midcore		Core
Top 3 reasons to play games Base: Total PC and/or console players	#1	Reaching the highest level/score	50%	Completing as many of the game's tasks/goals	67%	Spending time exploring and finding secrets in a detailed game world
	#2	Using tactics and strategic thinking to overcome challenges	50%	Using tactics and strategic thinking to overcome challenges	67%	Using tactics and strategic thinking to overcome challenges
	#3	Completing as many of the game's tasks/goals	49%	Spending time exploring and finding secrets in a detailed game world	66%	Appreciating games with an interesting design
Top 3 appealing features Base: Total PC and/or console players	#1	Puzzle solving aspects	32%	Exploration and open worlds	31%	Exploration and open worlds
	#2	Game theme or setting	29%	Strong narrative or story	30%	Multiplayer and social aspects
	#3	Exploration and open worlds	27%	Game theme or setting	29%	Strong narrative or story
Top 3 appealing setting/themes Base: Total PC and/or console players	#1	Fantasy	31%	Fantasy	38%	Fantasy
	#2	Survival	29%	Survival	36%	Survival
	#3	Mystery	28%	Science fiction	34%	Science fiction

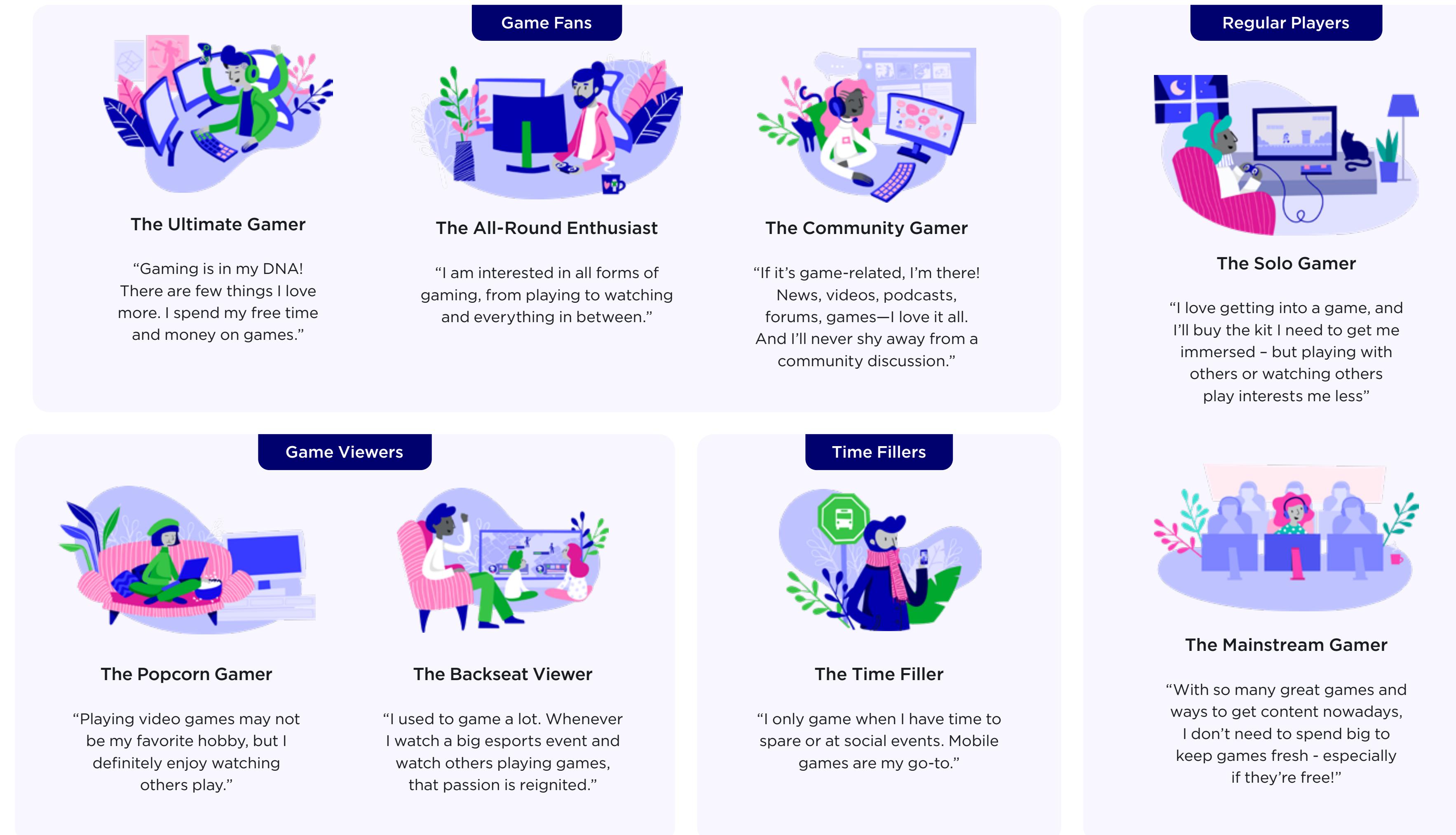
Source: Newzoo Global Gamer Study 2022 (Global weighted average across 36 markets)

Q. Reasons for playing video games; Appealing features of games; Appealing themes or settings of games

Base: PC and/or Console players (n=42,514), Casual (n=10,260), Midcore (n=14,781), Core (n=17,473)

There's more than one way to understand and define gamers

Going beyond Casual, Midcore, and Core definitions to understand your ideal gaming audience



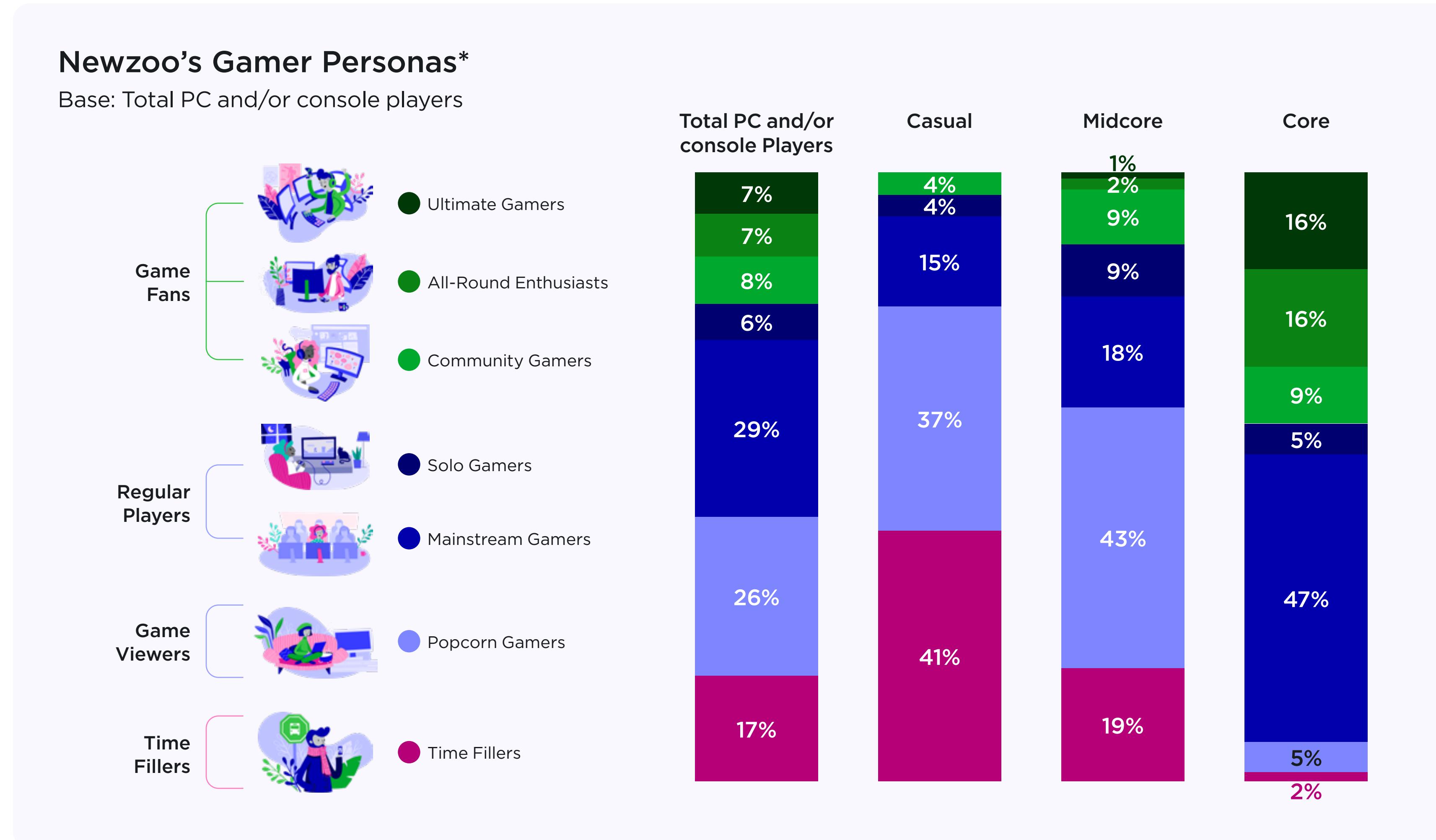
Being a “gamer” now means engaging in a wider (and increasingly more mainstream) culture of gaming, including following streamers, socializing in communities, making specific hardware choices, and more.

Since behaviors alone don’t provide enough detail to define gamer personas accurately, we developed the Newzoo Gamer Segmentation™ model, which uses behaviors, attitudes and motivations across several dimensions to create distinct Personas for players.

Personas reflect the identities and behaviors of players, giving gamers of all types a unique voice for understanding what they play and how much of their time and financial power they dedicate to gaming.

Mainstream and Popcorn Gamers are the most common gamer Personas

Core PC and/or console players are over-indexing in “Game Fans” segments



Mainstream Gamers and Popcorn Gamers are the most common personas among PC and/or console players.

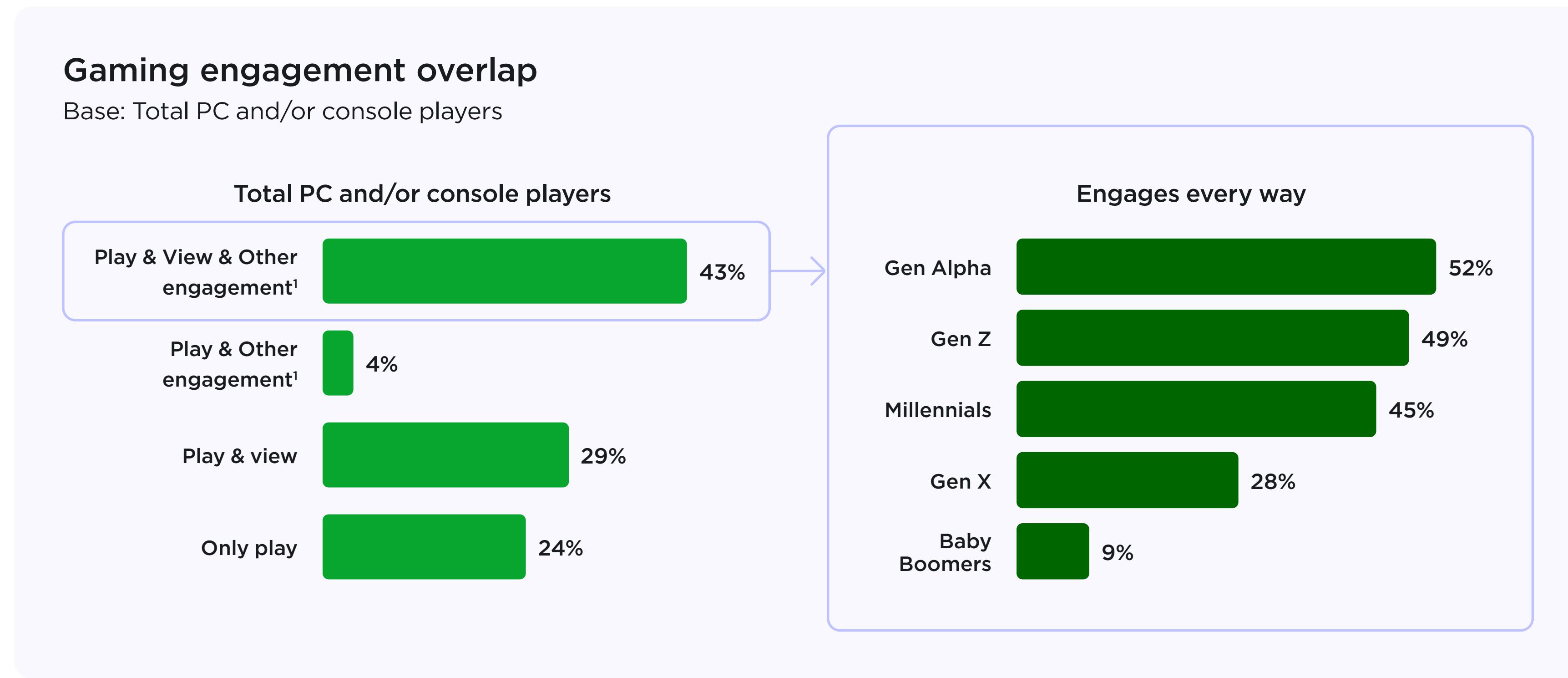
While Mainstream Gamers are passionate about playing games, they don't spend a lot of money on the pastime. This group mostly plays F2P games and discounted titles, which is increasingly enabled by the industry itself.

Popcorn Gamers don't devote much time to playing games, but that doesn't stop them from watching lots of game video content, live streams, or esports.

The more players veer toward Core, the more likely they are to fall into the Game Fans category. This grouping includes Ultimate Gamers, who live and breathe games across all platforms and genres and want to own the latest and greatest gaming hardware and equipment.

Approximately 75% of PC and console players are engaging in ways beyond playing

Every new generation engages with games in more varied ways



While “playing” remains a core activity of the gaming experience, the ways in which players are engaging with games, game worlds, and game IP continue to expand.

This is particularly true among younger generations. For example, 52% of Gen Alpha PC and/or console players engage with games across all dimensions, including playing, viewing, and other forms such as socialization, podcasts, in-person events.

This level and breadth of engagement among younger cohorts of players signals that gaming is expanding beyond just gameplay and viewing, with the metaverse and immersive worlds like Fortnite and ROBLOX captivating players in a way that transcends a simple pastime.

Source: [Newzoo Global Gamer Study](#) (Global weighted average across 36 markets)

Q. Total players, Total gaming video content viewers, Those who engage with gaming beyond playing/viewing in the past 12 months (% often)

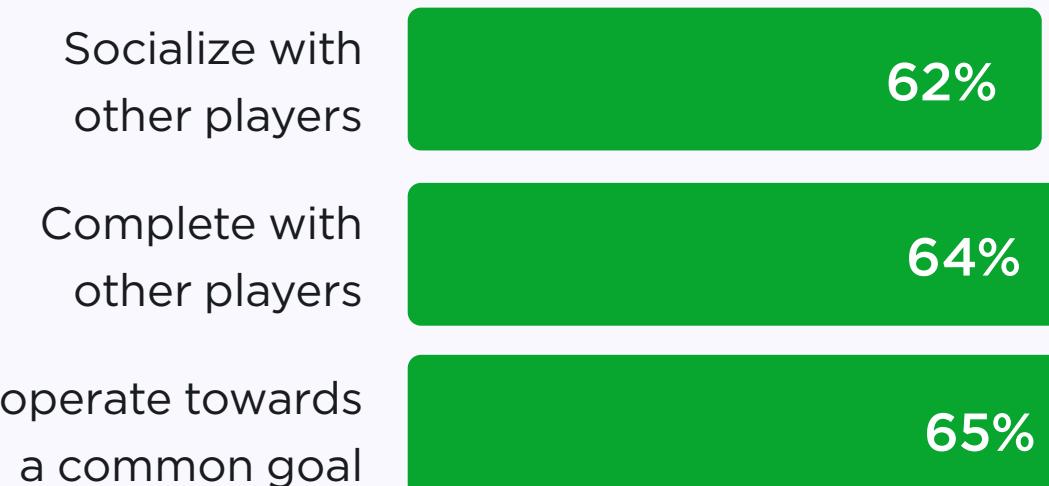
Base: PC and/or Console players (n=42,514), Gen Alpha (born 2010 or later / 10 - 12 y.o.) (n=2,692), Gen Z (born 1995 - 2009 / 13 - 27 y.o.) (n=17,248), Millennials(born 1981 - 1994 / 28 - 41 y.o.) (n=14,186), Gen X (born 1965 - 1980 / 42 - 53 y.o.) (n=6,106), Baby Boomers (born 1946 - 1965 / 54 - 65 y.o.) (n=2,282)

Gaming is increasingly becoming a platform for connection and socializing

Social game features play an important role for PC and/or console players

Importance of social features in games (% top 3 box out of 7)

Base: Total PC and/or console players



In the past 12 months, **1/2 of PC and/or console players** often or sometimes socialized through or visited online gaming communities / social media groups

Current involvement and future interest in socializing within games

Source: Newzoo's Metaverse Sentiment Study | April 2021

Base: Total PC and/or console players 14-50 years old



Currently gets together in game worlds, not while playing the main game*

*Includes occasionally and often

**Includes Yes, definitely and Yes, probably

Source: Newzoo Global Gamer Study 2022 (Global weighted average across 36 markets); Newzoo's Metaverse Sentiment Study | April 2021 (Aggregate of 4 markets: U.S, UK, CN, JP)

Q. Importance of social features, Frequency socialized through / visited online gaming communities or social media groups (past 12 months); Socializing method - Getting together in game worlds, but not while playing the main game, Socializing in game worlds in future

Base: Total PC and/or Console players (n=42,514) ; Total PC and/or console players aged 14-50 (n= 2,418)



Socializing is fast becoming an important part of the gaming experience. Aside from competing with other players or cooperating towards a common goal, PC and/or console players look for other types of connection and socializing engagement.

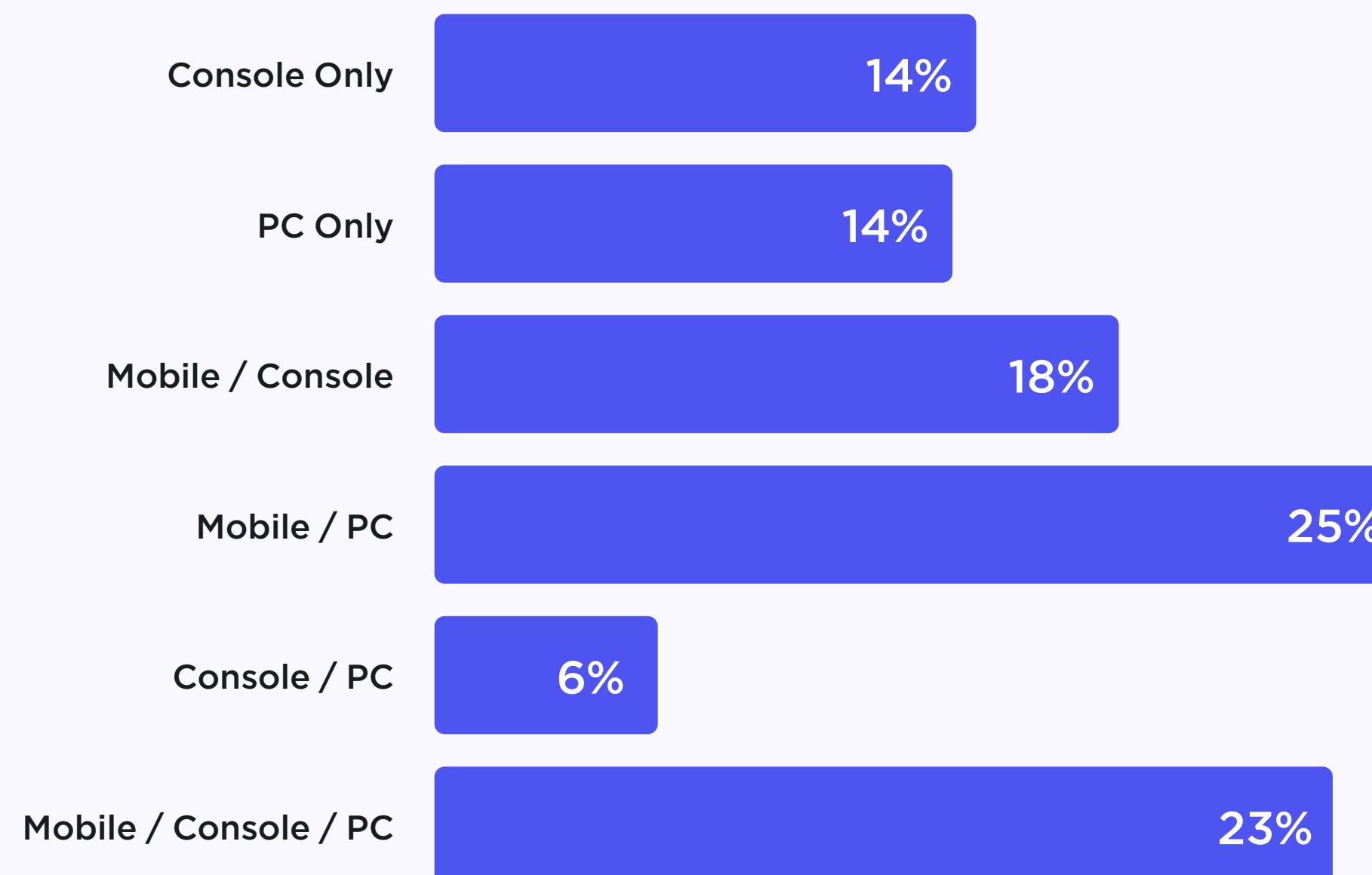
Players are flocking to gaming communities or congregating in virtual game worlds, with younger generations valuing the ability to socialize and cooperate in games more than preceding generations. Game designers can create additional and unique engagement opportunities by adding social features into their games.

Cross-platform play becoming more common among PC and/or console players

Nearly a quarter of PC and/or console players engage with all platforms (PC, console, mobile)

PC and/or console platform player overlap*

Base: Total PC and/or console players



Roughly 7-in-10 PC and/or console players have played on more than one platform in the past six months.

Playing on both PC and mobile is most prevalent, and nearly one in four players play on all three platforms.

With more AAA PC and console titles coming to mobile, enabling cross-platform progression, and cloud gaming expanding and becoming more established, cross-platform play will likely gain more momentum in the future.

Publishers with cross-platform and cross-progression titles give players the chance to keep engaging with their IP across more devices. Engagement leads to revenues and strengthens IP, evidenced by success stories like Fortnite and ROBLOX.

Source: Newzoo Global Gamer Study 2022 (Global weighted average across 36 markets) | Q. Platforms played on in the past 6 months

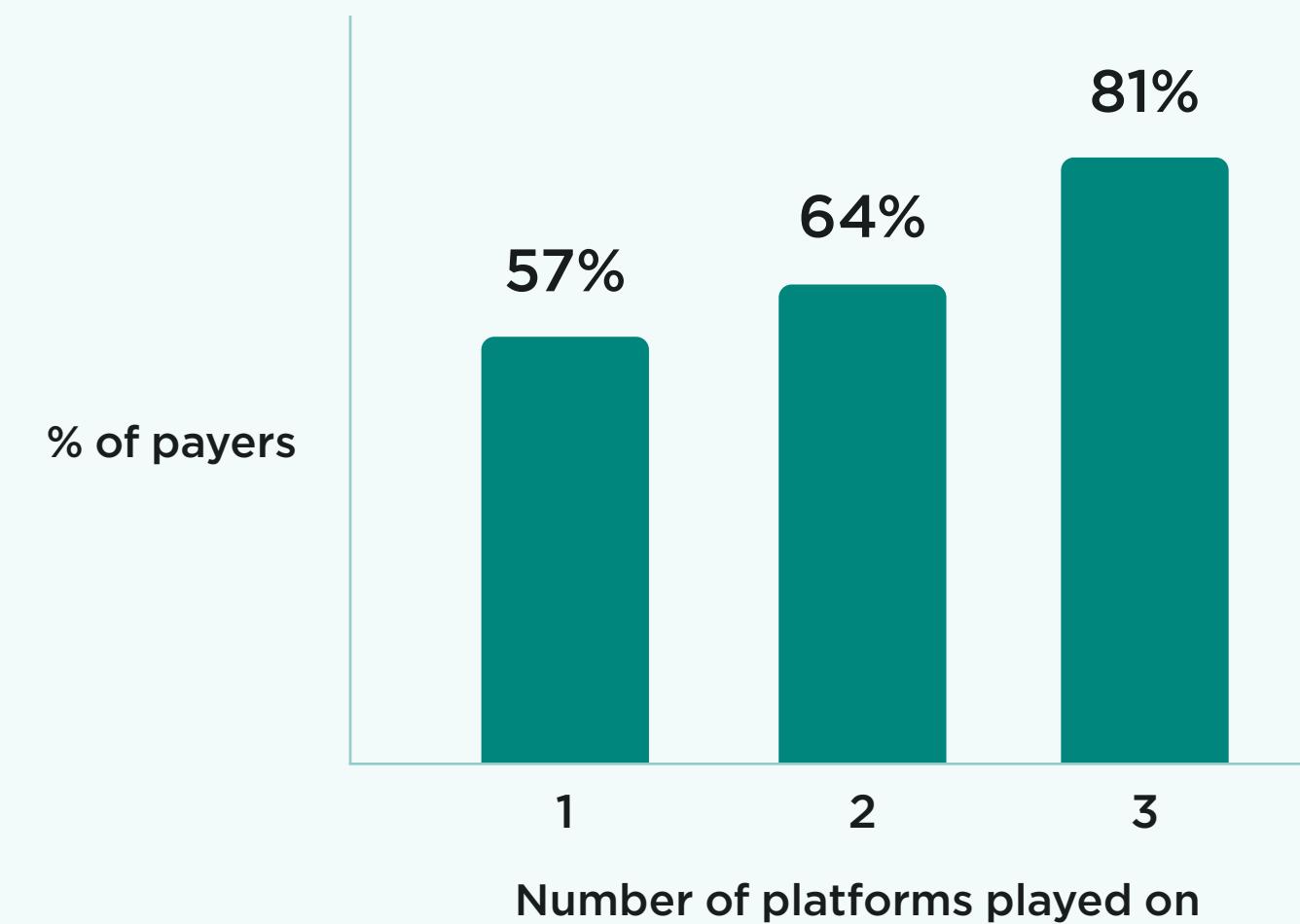
Base: PC and/or Console players (n=42,514) | *Please note, this excludes mobile-only players.

Cross-play signaled an increase in playtime and spend

The proportion of payers nearly doubled from single- to triple-platform among PC and/or console players

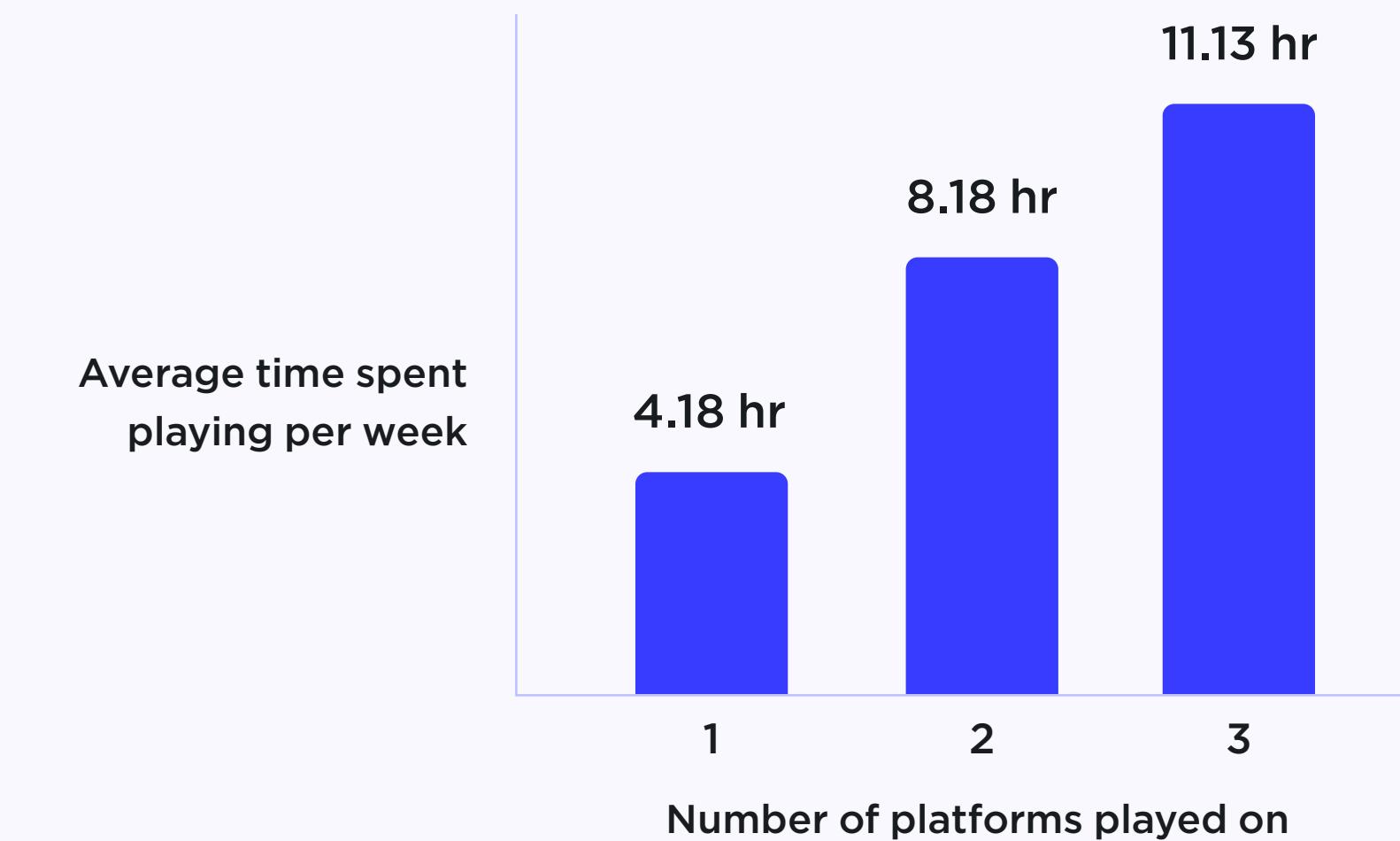
Share of payers by number of platforms

Base: Total PC and/or console players



Time spent playing by number of platforms

Base: Total PC and/or console players



81% of PC and/or console players who played on all three platforms in the past 6 months spent money on video-game related purchases

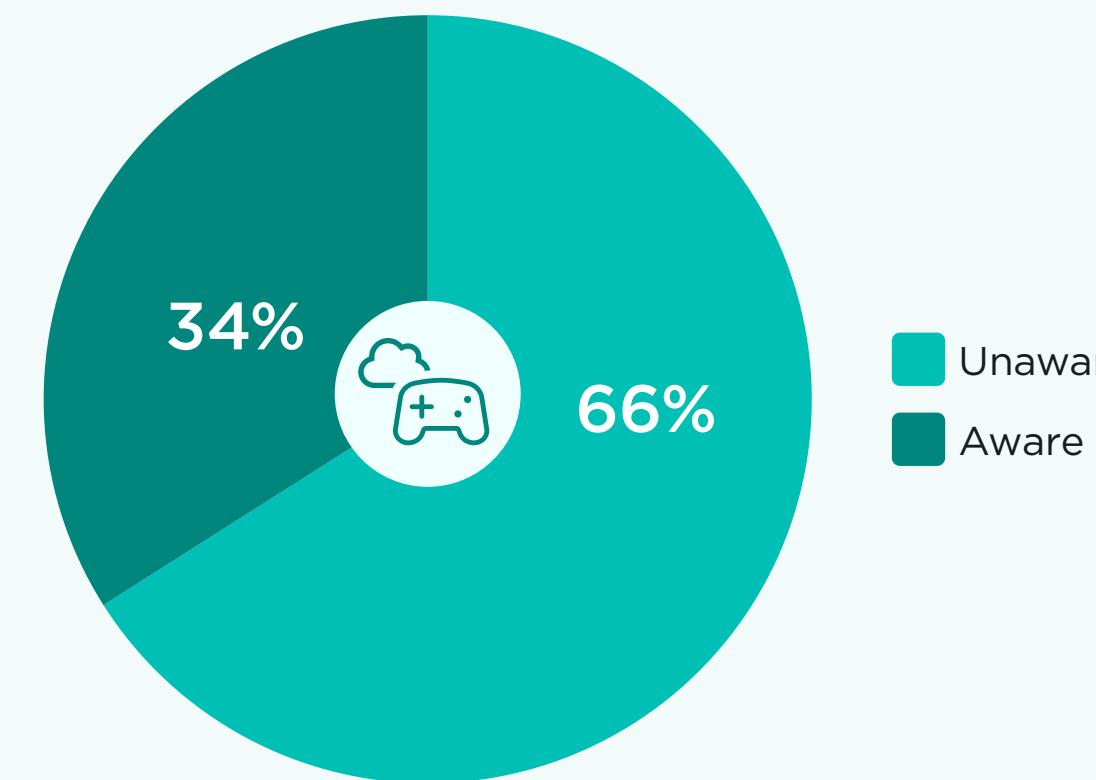
PC and/or console players who played on all three platforms spent on average **more than 11 hours per week** playing games

Cloud gaming may accelerate cross-platform play

PC and/or console players who tried cloud gaming services are significantly more likely to play on multiple platforms

Awareness of cloud gaming

Base: Total PC and/or console players



Among those aware:

58%

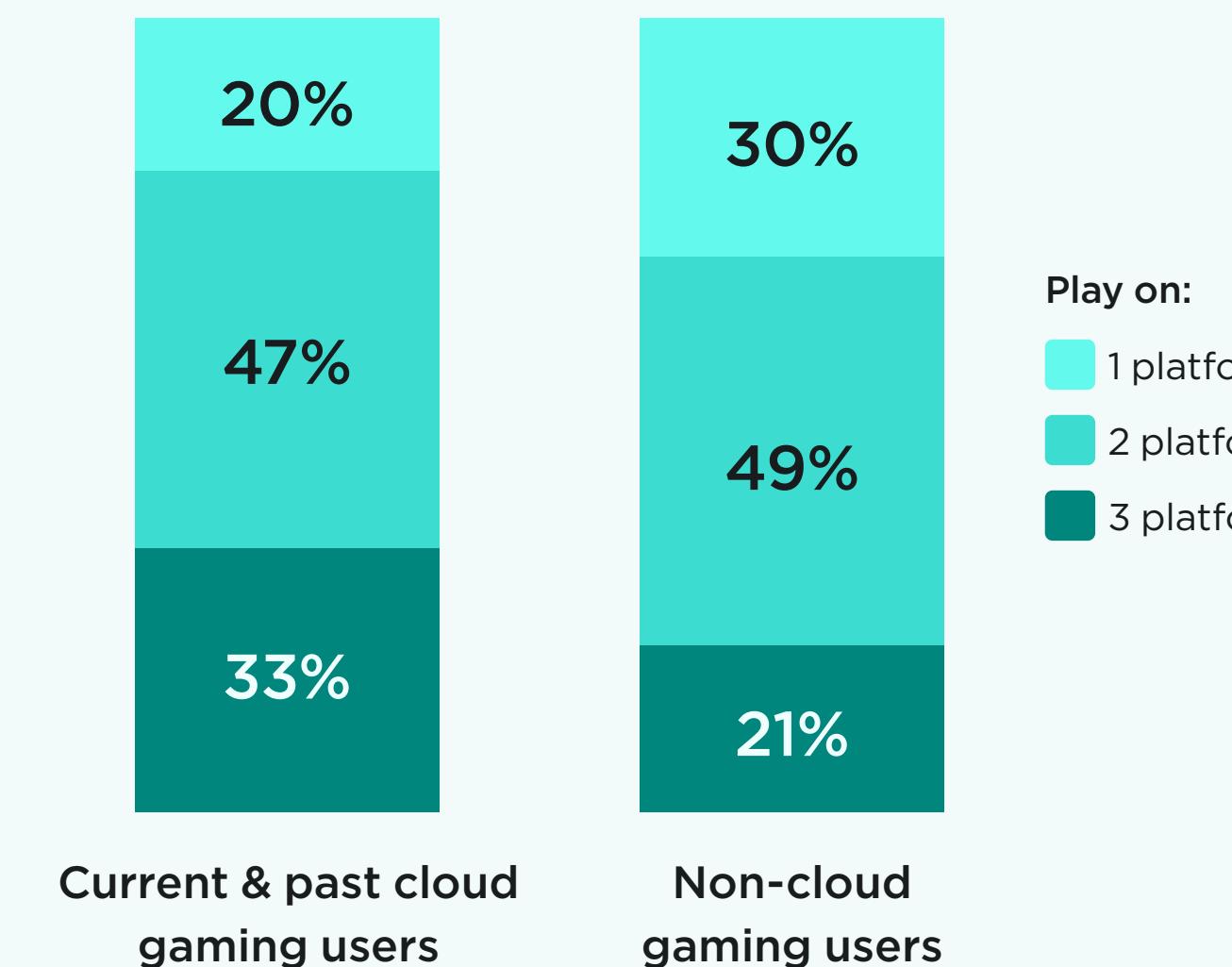
Currently play or have played games via cloud gaming services before

42%

Have not played games via cloud gaming services before

Number of platforms played on

Base: Total PC and/or console players



We expect that cloud gaming will enter a new growth stage in 2023.

Cloud gaming reduces barriers to play for many would be gamers, including hardware-related costs, opening cross-platform play to a wider demographic.

We can already see this trend in full swing. PC and/or console players who have tried or are currently using cloud gaming services are more likely to play on multiple platforms, as opposed to those who haven't tried cloud gaming.

Yet, one of the first obstacles to this growth will be awareness of cloud gaming and the benefits it provides to gamers.

Two thirds of PC and/or console players spend money on video games

Sales and exclusive playable content are the top motivators for video game spending

Share of payers

Base: Total PC and/or console players



66%
of PC and/or console
players are payers

Top reasons to spend money on video games

Base: Total PC and/or console payers | Top 5 out of 13



Top 5 in-game items/virtual goods spent money on (P6M)



Payers: Past 6 months players who, on average, spend money on a monthly basis on games on a PC, console, or mobile device.

Spending money includes gifts, downloadable content, subscriptions, and other micro-transactions.

There are many reasons why players spend money on game-related purchases beyond the actual game itself. Unlocking extra and exclusive content and receiving special offers are reportedly the most common.

A notable 86% of PC and/or console players have purchased in-game items/virtual goods in the past six months. In-game currencies, gear, and expansion or content packs are the top three items that players spent money on.

One in five PC and/or console players are big spenders

The top motivators for big spenders remain sales, special offers, and good pricing

Share of big spenders

Base: Total PC and/or console players

17%

of PC and/or console players are big spenders* on either PC, console, or both platforms.

While motivations to spend and types of in-game items purchased don't differ in terms of priority, big spenders are motivated by a wider number of reasons and are more likely to spend on in-game items.

Top reasons to spend money on video games

Base: PC and/or console payers | Top 5 out of 13

	Non-big spenders*	Big spenders*
For a sale / special offer / good price	33%	36%
Unlock extra / exclusive playable content	32%	35%
Play with friends or family	26%	33%
Personalize characters or things built in-game	27%	30%
Advance quicker / easier in the game	25%	29%

Top 5 in-game items/virtual goods spent money on (P6M)

Base: PC and/or console payers | Top 5 out of 13

	Non-big spenders*	Big spenders*
Expansion or content packs	23%	32%
In-game currencies	26%	31%
In-game subscriptions	22%	30%
Gear	24%	30%
Power-ups	23%	28%

Big spenders vs Non-big spenders @95% confidence interval

Significantly lower

Significantly higher

*Big spenders spend €/£/\$ 25 or more a month

Source: Newzoo Global Gamer Study 2022 (Global weighted average across 36 markets)

Newzoo's Global Gamer Study

Access the most comprehensive global consumer research covering the gaming landscape and gaming audiences.

 **75,000+**
Consumers surveyed
yearly

 **36**
Global coverage
with 36 markets

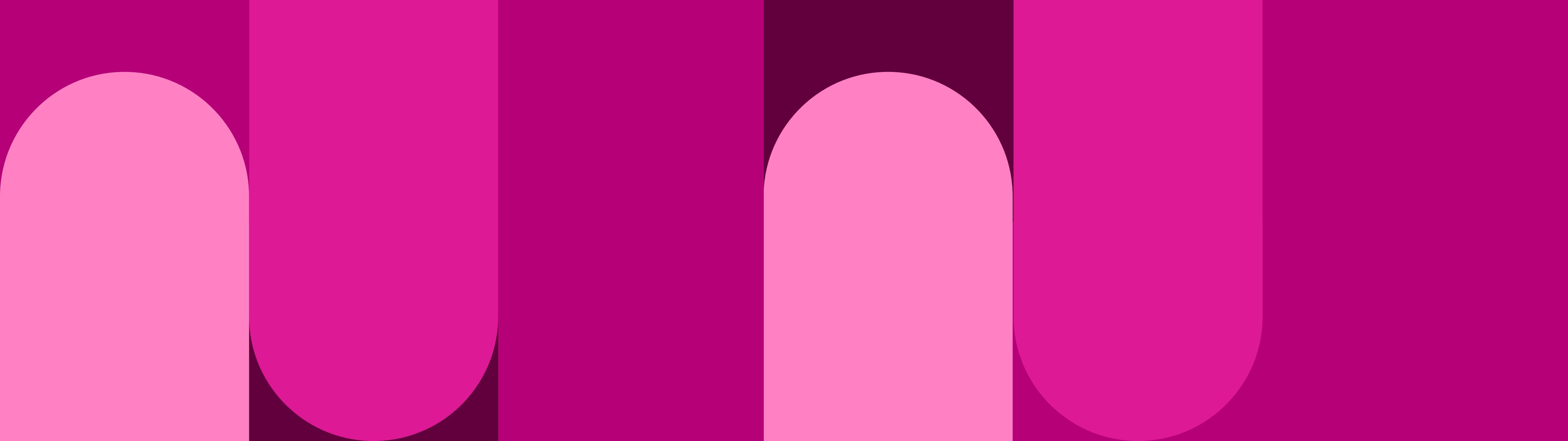
 **200+**
Variables
Tracked

Includes:

- ✓ Gaming behavior across all platforms / dimensions
- ✓ Playing and viewing motivations & attitudes
- ✓ Spending behavior and motivations
- ✓ Media, lifestyle, and consumer brands consumption
- ✓ Easy-to-use consumer insights dashboard access

[Learn more](#)





Looking forward to 2023 and beyond

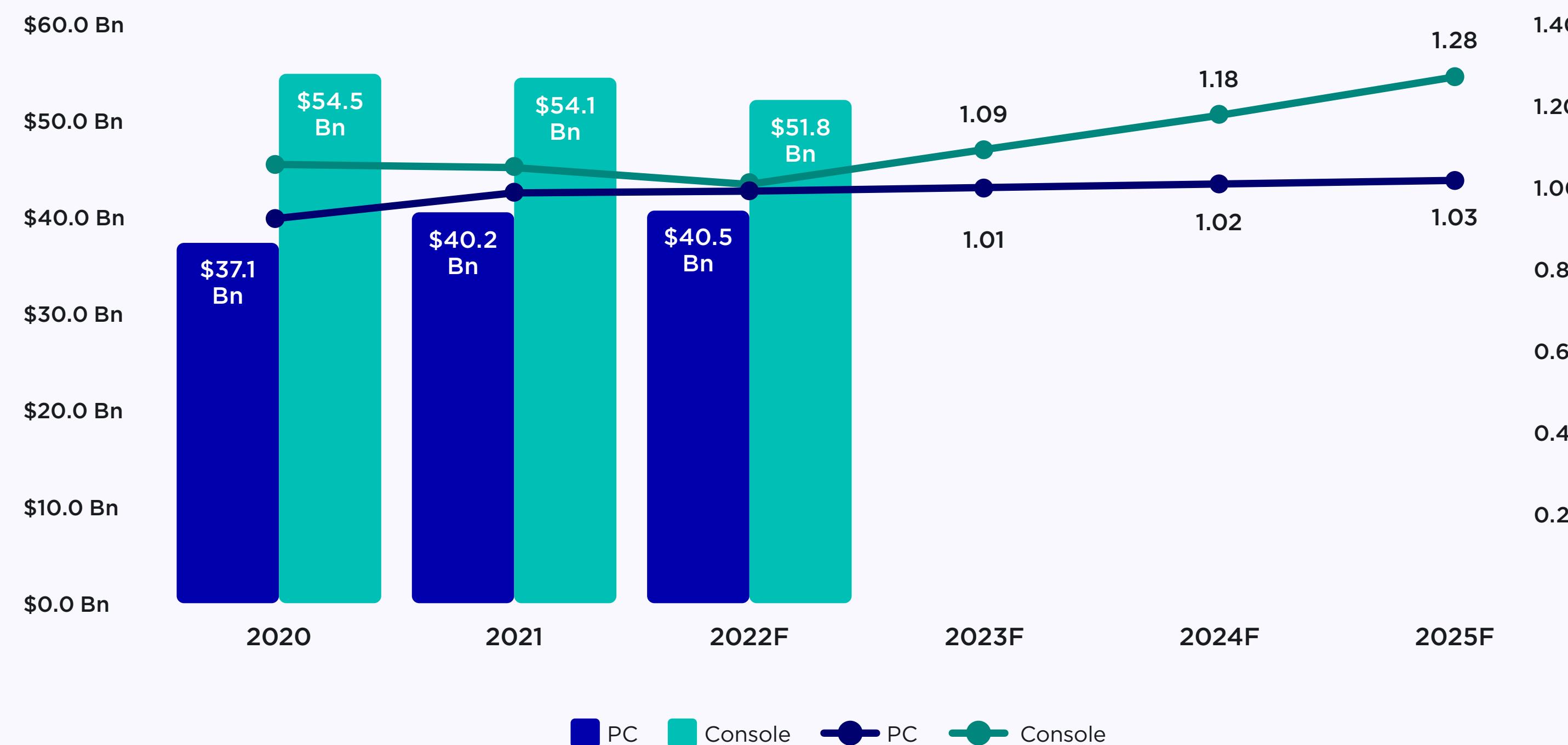
Newzoo's outlook for this year in games, gamers, and the games market

2023 will be a strong growth year for the PC and console market

Console gaming will be an especially powerful force in the market

Global PC and console gaming revenue | 2020 - 2025F

2023F - 2025F values indexed using 2022F as base number



As we said before, 2022 was a corrective year following two years of lockdown-fueled growth, but our long-term outlook for the games market remains positive.

We forecast strong growth for the combined PC & console market, particularly driven by console gaming.

2023 should bring a lot of new owners for current generation PlayStation and Xbox consoles, and upcoming content launches will give them plenty of opportunities to spend on games.

The growing install base and extra content will also help console revenues grow in the coming three years. PC revenue will also grow in this period, albeit at a slower pace.

Games delayed in 2022 will make an impact in 2023

Many companies delayed their highly-anticipated titles from 2022 to this year and beyond

Awareness of upcoming PC/console releases

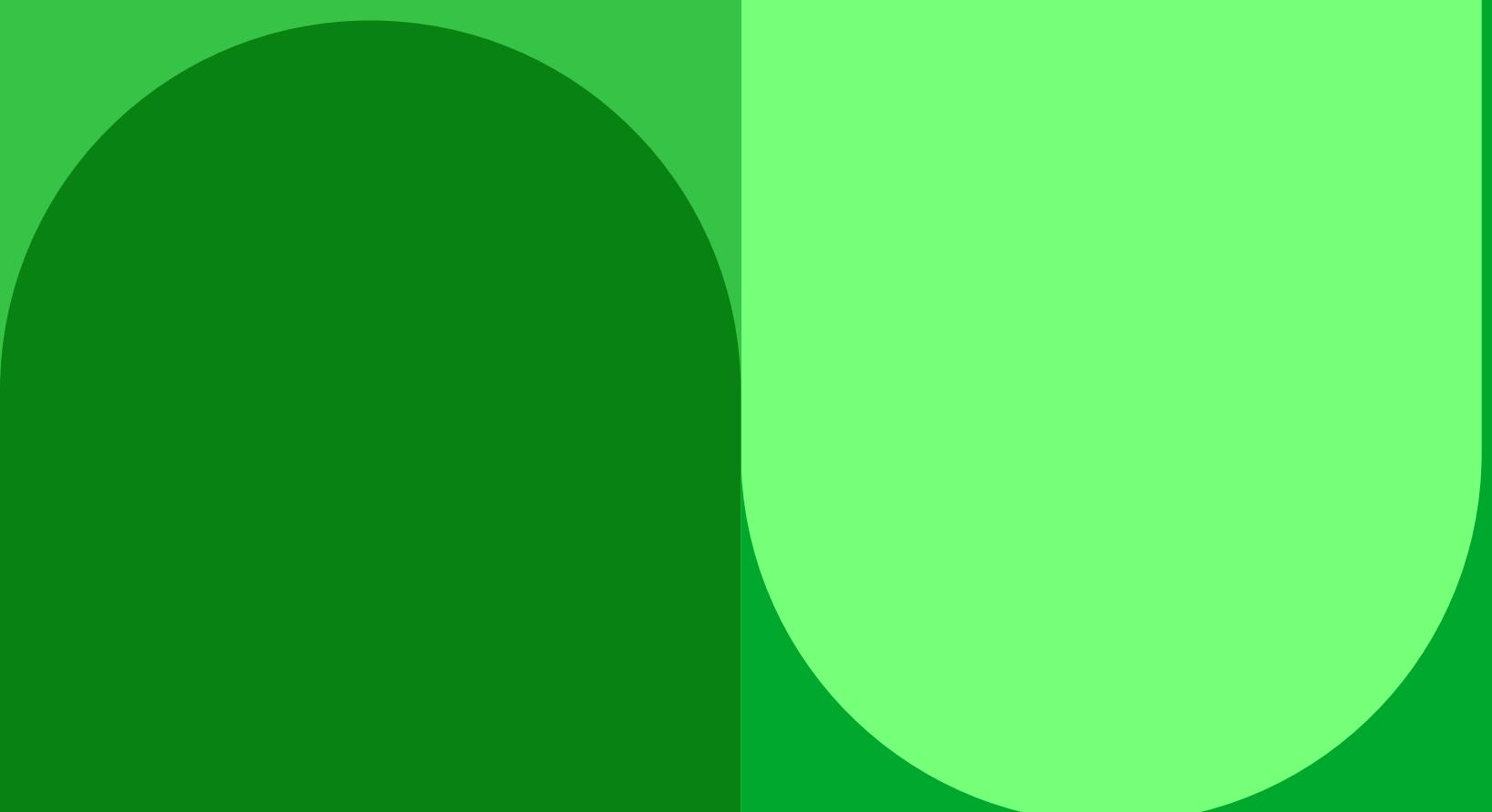
Base: PC and/or console players aged 10-50, U.S.

	Awareness	Purchase intent		Awareness	Purchase intent
Resident Evil 4 (2023)	50%	20%	Tekken 8	33%	12%
Marvel's Spider-Man 2	47%	18%	Dead Space (2023)	32%	12%
The Legend of Zelda: Tears of the Kingdom	43%	17%	Avatar: Frontiers of Pandora	32%	10%
Street Fighter 6	42%	15%	Kirby's Return to Dream Land Deluxe	31%	11%
Final Fantasy XVI	41%	14%	ARK 2	26%	9%
Hogwarts Legacy	40%	15%	Vampire: The Masquerade - Bloodlines 2	26%	9%
Star Wars Jedi: Survivor	39%	14%	Starfield	26%	9%
Diablo IV	37%	13%	Horizon Call of the Mountain	23%	9%
Final Fantasy VII Rebirth	36%	13%	Redfall	23%	8%
Suicide Squad: Kill The Justice League	35%	13%	Fire Emblem Engage	22%	9%
Dead Island 2	33%	12%	Baldur's Gate 3	22%	12%

Throughout last year, PC and console gamers were disappointed to see many much-awaited launches get delayed to 2023 and even later. This was a contributing factor to the market's slowdown (and re-correction), reducing playtime and revenues.

However, many of the releases that would have made an impact in 2022 may make even bigger waves this year. Thanks to many delays, the launch lineup for 2023 is now incredibly strong and includes promising titles such as Resident Evil 4 and Star Wars Jedi: Survivor.

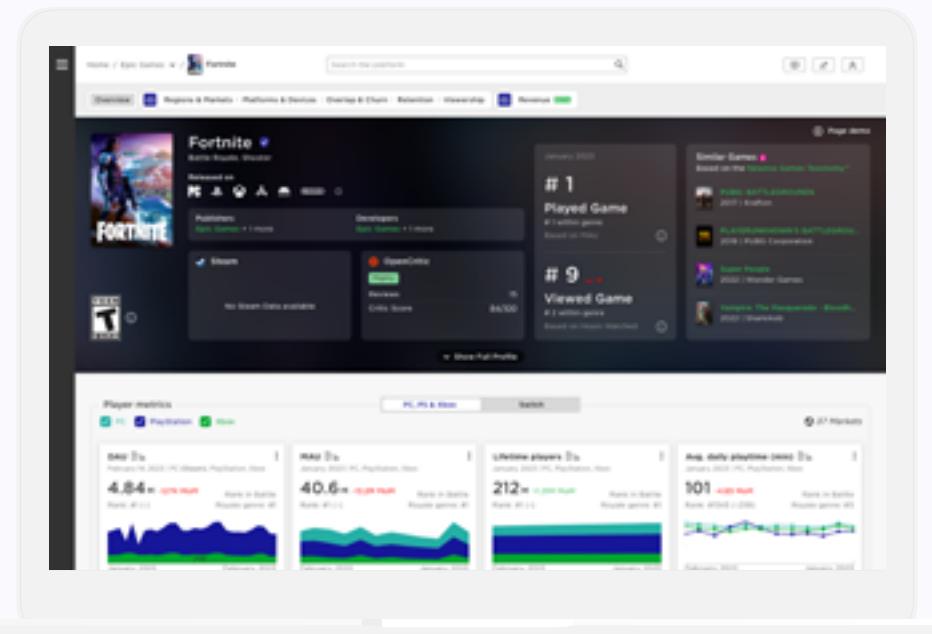
Add to this stacked release schedule a heightened interest in finding innovative ways to engage with players and generate revenue, as well as a growing desire to expand IP into successful transmedia outings, and we have an exciting year for the PC & console market.



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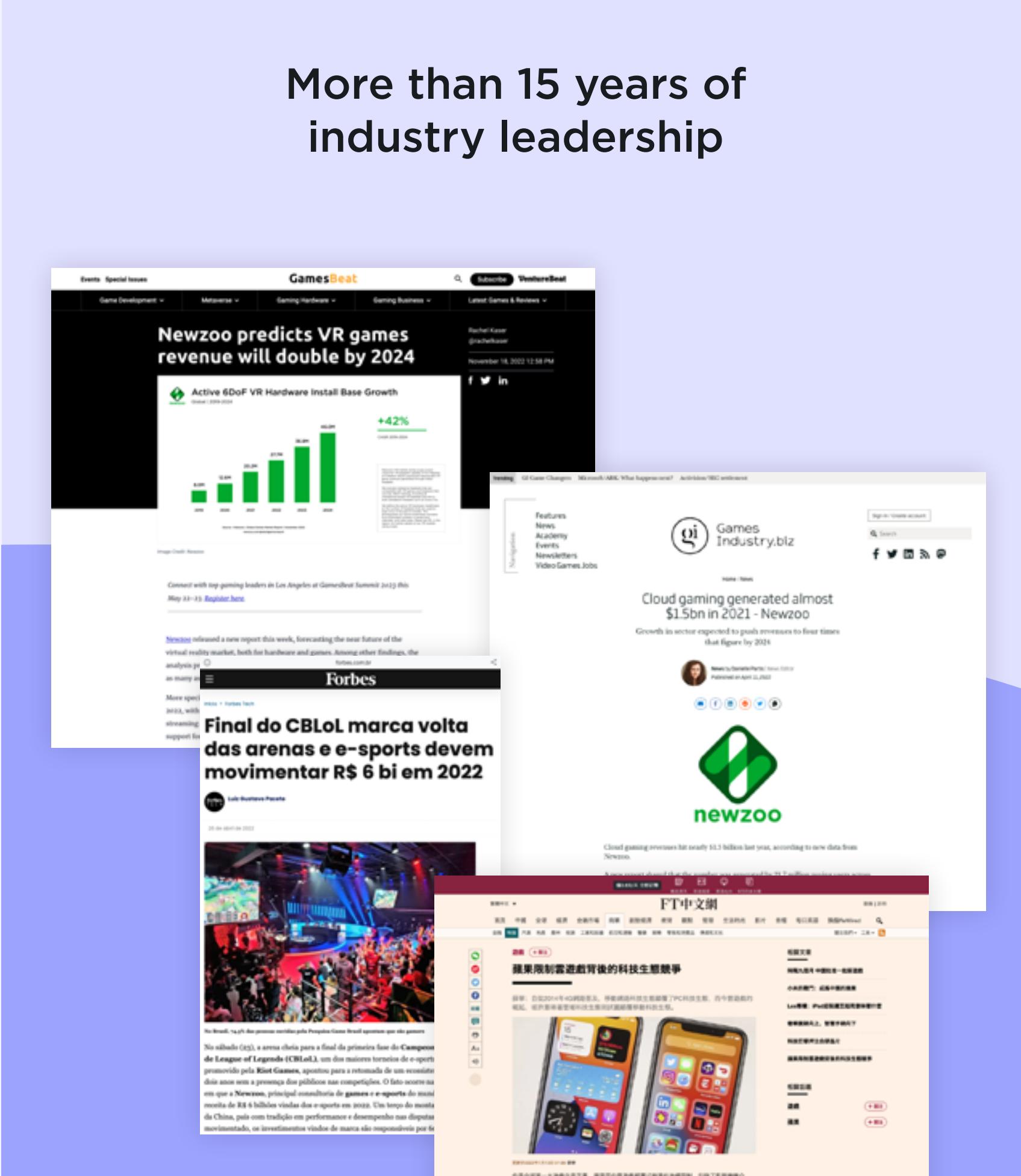
Newzoo has a mind for data, a heart for gaming, and a global footprint

We are the global leader in games, gamers, and games market data and consulting

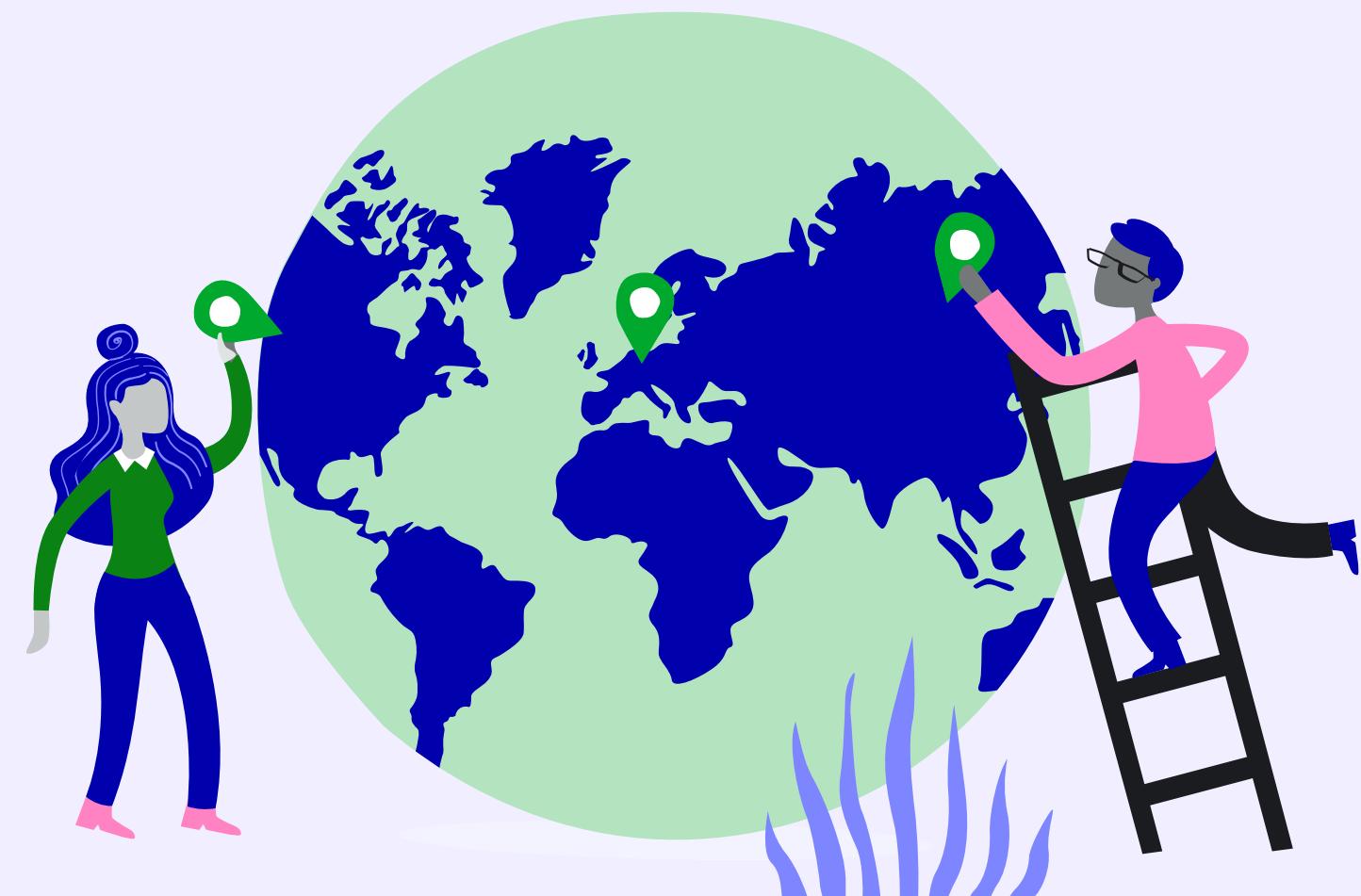
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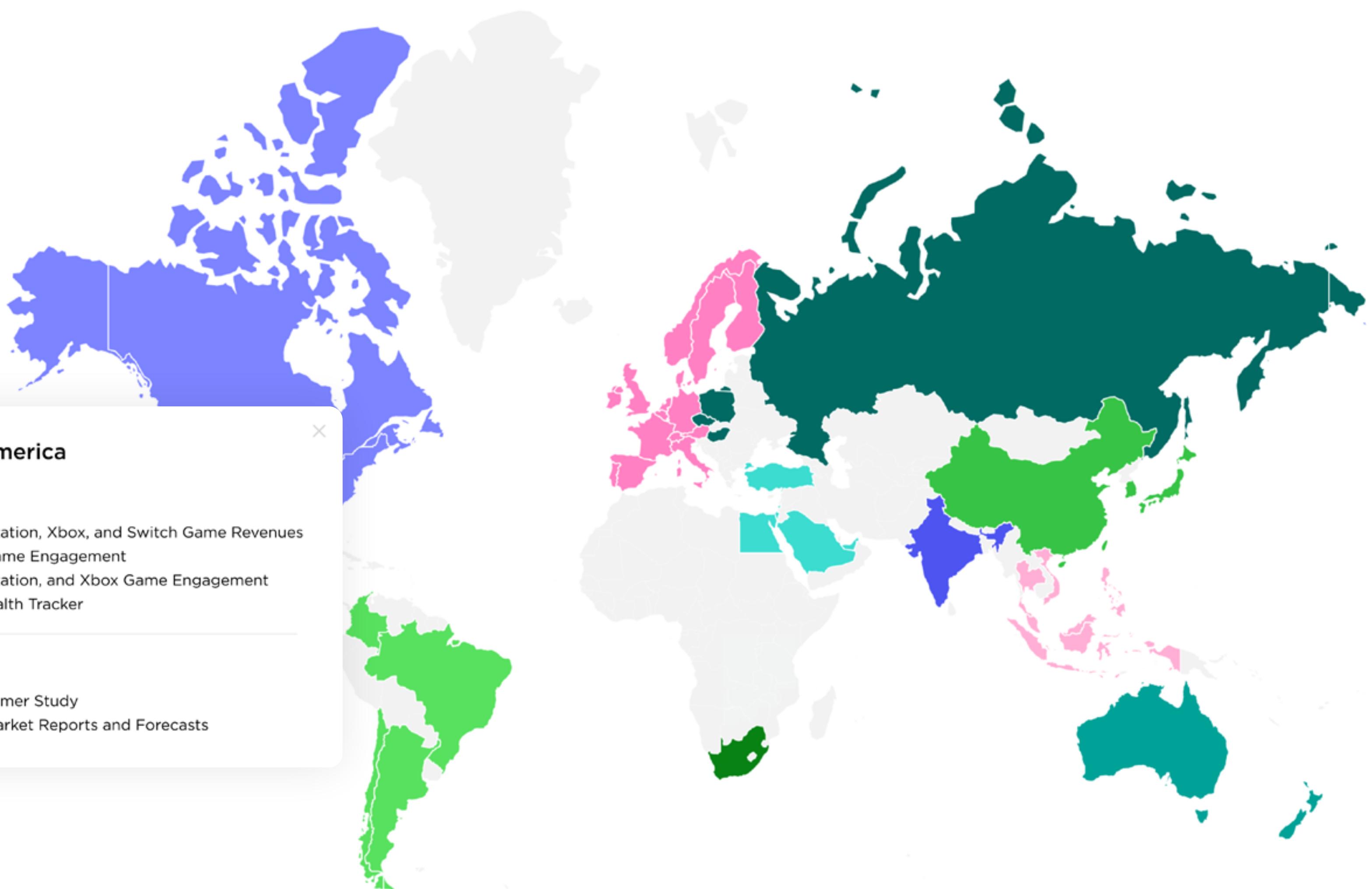
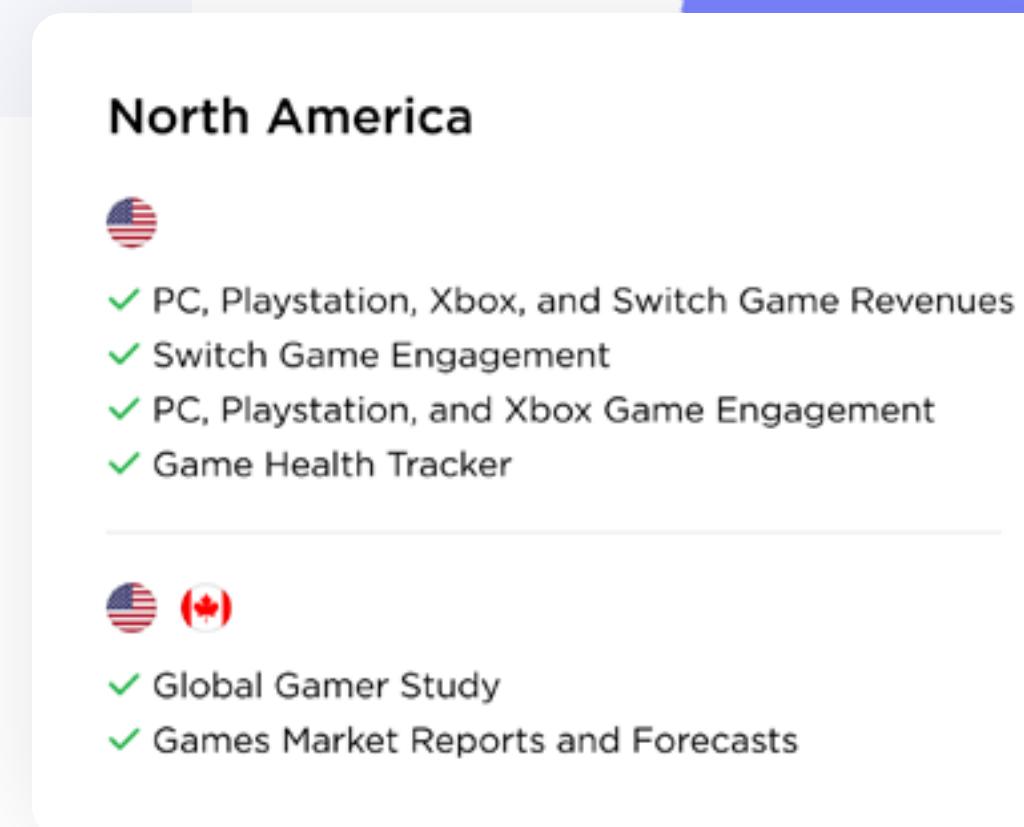
Nicholas Sweeney

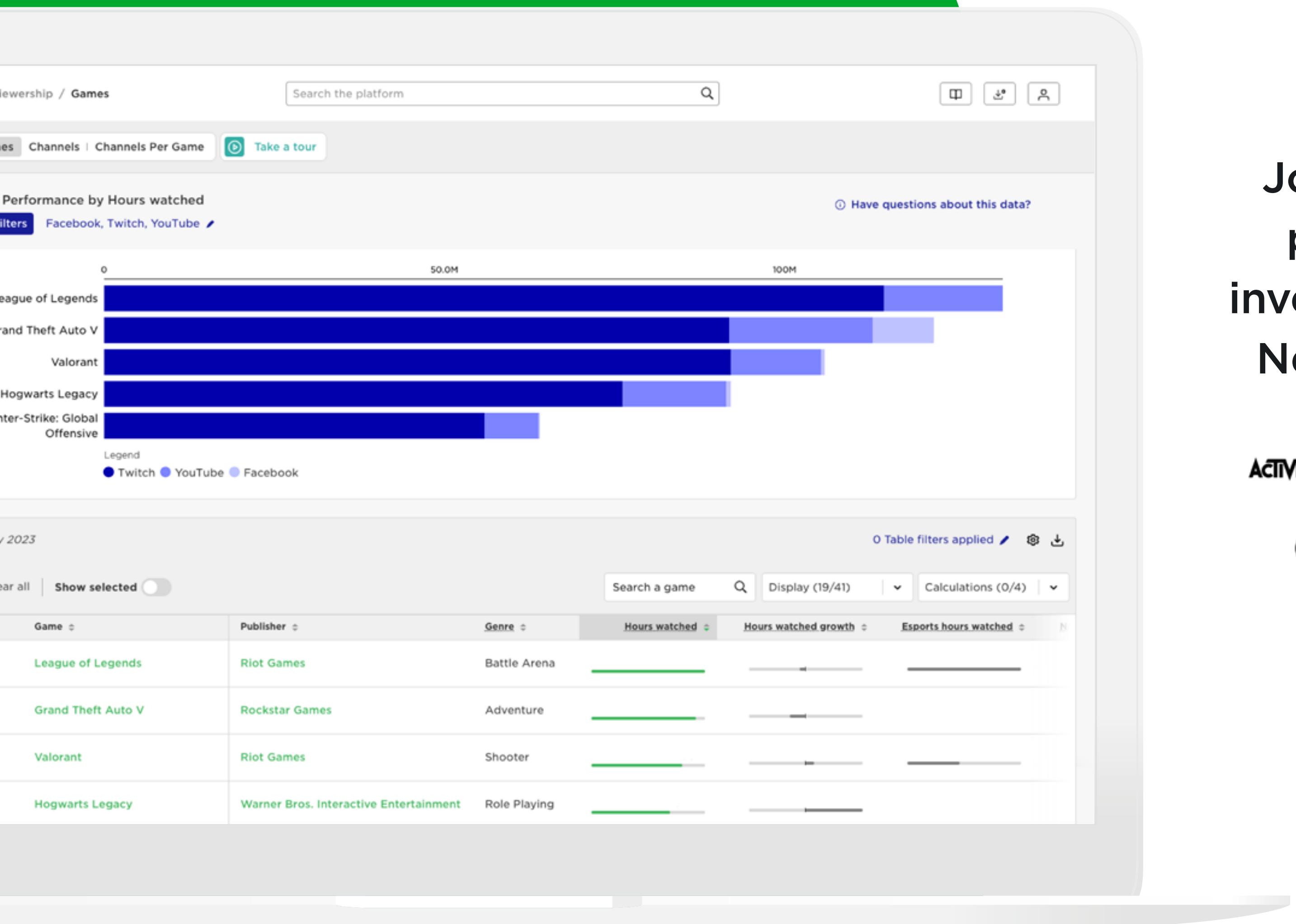
Head of Insights at Behaviour Interactive

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1 market
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