State of the Game Industry 2023

Presented by GDC G Game Developer

This past year has been a time of change and opportunity. Studios and companies are working towards a new normal, while developers have their eye on how to reshape the game industry and their role within it. The metaverse has become more than a buzzword, as have the topics of unionization and the Great Resignation. This is all happening under the umbrella of increased studio conglomeration, which could change the shape of the video game industry <u>as we know it.</u>

We asked over 2,300 game developers about their work and the industry. We found developers are more engaged in sustainability efforts; many prefer remote work even as some of their studios are moving to hybrid schedules; and they widely agree that player harassment of developers is a problem, though they aren't sure what can fix it.

The 2023 State of the Game Industry survey is the eleventh in an ongoing series of annual reports that offer insight into the shape of the industry. Margin of error for this survey is +/-3% at a 99% confidence level. This year's report marks the first collaboration with Game Developer on the State of the Game Industry survey, with the two teams working together to provide more context and clarity for the survey results.

Thanks to all who participated for their thoughts and perspectives.





Majority of developers surveyed have a decade or less experience, more work for indie studios than AAA

The number of people we surveyed who have been involved with game development for 10 years or less continues to be in the majority (57%). Additionally, in our response base, there are about the same number of people in game development who have less than two years of experience (15%) compared to people with 21 years or more experience (13%)

How many years (if any) have you been involved in game development?
Under a year 4%
1–2 years 11%
3-5 years 19%
6–10 years 23%
11–15 years 15%
16-20 years 10%
21-25 years 7%
26-30 years 3%
More than 30 years 3%
N/A - Not involved in development 5%

The leading job role for respondents was game design. This was followed by programming/engineering, production and team management, visual arts, and business and finance. Newly added to the survey for 2023, quality assurance came in at 10% of respondents.

What best describes your job role? (Choose all t	that apply)		
Game Design 37%			
Programming/Engineering 35%			
Production & Team Management 31%			
Business & Finance 21%)	
Visual Arts 21%)	
Narrative/Writing 15%			
Community/Marketing/PR 14%			
Audio 12%			
Quality Assurance 10%			
Not listed (please specify) 10%			

This year, we wanted to see how many developers worked for an indie or AAA studio, or if they're an independent contractor or freelancer. According to the survey, 39% of respondents work for an indie studio while 23% work for a AAA studio. One-fifth of respondents wrote in their own company description, with responses including ecommerce, charity work, university programs, and AA studios.

What best describes your	company?
Indie Studio 39%	
AAA Studio 23%	
Independent Contractor/Fre	elance 13%
Prefer not to answer 6%	
Other (please specify) 20 °	%

As far as respondents' studio size, about two-thirds of indie game studios (66%) have 20 employees or fewer and 7% have over 100 workers—in comparison, 84% of AAA studios have over 100 employees and 1% have fewer than 20 workers.

We asked developers to share what role their studio was taking in their current project. A majority of respondents (62%) said their studio was the primary or solo developer of their project, with 9% saying they were one of multiple studios in the same company working together on a project, and 11% saying they were externally involved as either a co-developer or an outsourced developer.

What is your studio's role in your current project? Primary or solo developer of the project 62% One of multiple internal studios in the same company working on the project 9% External co-developer on the project 5% External outsourcing developer on the project 6% N/A - Not involved in development 11% Other (please specify) 7%

PC continues to lead in current and future game development

Every year, we ask game developers what platforms they've been developing games for, and which platforms they'll be developing for in the near future. PC is once again the leading platform for current (65%), and next (57%) games in development.

Which platform(s) are you developing your current project for? (Choose all that apply)

PC 65%
PlayStation 5 33%
Xbox Series X / S 30%
Android 27%
iOS 26%
Xbox One (or One X) 19%
Nintendo Switch 18%
PlayStation 4 (or 4 Pro) 18%
Mac 18%
VR Headsets 12%
Web browser 11%
Linux 9%
Xbox Cloud Gaming 6%
AR Hardware 4%
PlayStation Plus (Extra or Premium) 3%
Tabletop Games 2%
Media platforms (Netflix, TikTok, etc.) 2%
Google Stadia 1%
UGC platforms (Roblox, Minecraft, etc.) 1%
Virtual Tabletop 1%
Amazon Luna 1%
Playdate <1%
Other (please specify) 4%
N/A - Not involved in development 10%

PlayStation 5 edged out its competitors as the leading platform when it comes to game consoles—with 33% of respondents planning their next games for the console, compared to 28% for Xbox Series X/S.

When it comes to cloud services on these consoles, 7% of developers are planning their next games for Xbox Cloud Gaming and 4% for PlayStation Plus: Extra or Premium. It's important to note that most games on Xbox Game Pass are playable through Xbox Cloud Gaming, while a smaller subset of games on PlayStation Plus are automatically playable through PlayStation's cloud service.

A small number of respondents (0.5%) said their next games were planned for Google Stadia, which is now set to be shut down in January 2023.

PC 57%
PlayStation 5 33%
Xbox Series X / S 28%
Android 25%
iOS 24%
Nintendo Switch 19%
Mac 16%
Xbox One (or One X) 15%
PlayStation 4 (or 4 Pro) 13%
VR Headsets 12%
Web browser 11%
Linux 9%
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Tabletop Games 2%
Media platforms (Netflix, TikTok, etc.) 2%
Virtual Tabletop 1%
UGC platforms (Roblox, Minecraft, etc.) 1%
Amazon Luna 1%
Google Stadia <1%
Playdate <1%
Other (please specify) 7%
N/A - Not involved in development 19%

Which platform(s) will you be developing your next project for? (Choose all that apply)

PlayStation is ahead of Xbox in developer interest, though PC still dominates

The platforms that developers were most interested in making games for stayed consistent, although there has been an increase in some emerging platforms. PC stayed on top at 64% this year, followed by PlayStation 5 (46%) and Xbox Series X/S (33%). For Nintendo Switch, 35% of respondents expressed interest in the platform (while 18% are developing current projects for it).

PC 64 %
PlayStation 5 46%
Nintendo Switch 35%
Xbox Series X / S 33%
iOS 23%
VR Headsets 23%
Android 22%
Mac 14%
Xbox One (or One X) 13%
AR Hardware 12%
PlayStation 4 (or 4 Pro) 11%
Web browser 11%
Xbox Cloud Gaming 10%
Linux 9%
Tabletop Games 8%
PlayStation Plus (Extra or Premium) 7%
Media platforms (Netflix, TikTok, etc.) 6%
Virtual Tabletop 5%
Playdate 4%
UGC platforms (Roblox, Minecraft, etc.) 4%
Amazon Luna 2%
Google Stadia 1%
Other (please specify) 3%
N/A - Not involved in development 9%

Which platform(s) most interest you as a developer right now? (Choose all that apply)

Some emerging platforms saw interest from respondents—including media platforms like Netflix and TikTok hosting in-app games (6%), virtual tabletops (5%), and user-generated content (UGC) platforms (4%)—but these platforms still look to be early players.

Business models favor pay-to-download over in-game purchases, developers less concerned about subscription services

To get a better understanding of how game developers are monetizing their games, we asked respondents to share the business models for their current projects. Half of respondents said their games are pay-to-download, and one-third reported their games are free-to-download. One-fourth of respondents said their projects included paid DLC content and 23% featured paid in-game items, with 19% having paid in-game currency.

According to developers, the least-used business models for their games were premium tier subscriptions (like *Fallout 76*) and blockchain-driven monetization.

Which business model(s) are you using for the current game you're developing? (Choose all that apply)
Pay to download 50%
Free to download 36%
Paid DLC/Updates 25%
Paid in-game items 23%
Free DLC/Updates 21%
Paid in-game currency 19%
Ad supported 10%
Paid subscription as part of a monthly offering (e.g. Apple Arcade, Xbox Game Pass) 9%
Paid item crates 6%
Paid subscription for your individual game (e.g. World of Warcraft) 5%
Premium tier subscriptions (e.g. Fallout 76) 4%
Blockchain driven monetization 4%
Other (please specify) 5%
N/A 13%

About 9% of respondents reported having their games featured as part of a paid monthly subscription service like Apple Arcade, Xbox Game Pass, or PlayStation Plus. In previous State of the Game Industry surveys, game developers expressed some concern that subscription services could discourage individual game purchases and ultimately impact their success. That looks to be changing.

With the slowly growing popularity of these platforms with consumers, we asked developers whether they felt subscription services devalue games. About 21% of respondents said yes, and 43% said maybe or not sure. The number of respondents who said no increased—going from 30% in 2021 (the last time we asked this question) to 36% in 2023.

Meta Quest leads in the VR/AR space, but developers are eyeing the PSVR2

The virtual and augmented reality game spaces have had more eyes on them over the past year as developers and studios ready for the planned releases of Meta Quest Pro and the PSVR2. But the viability of the VR/AR industry is still in flux. About 38% of respondents said they were (or have been) involved in VR/AR game development—that's back down to where things were in 2021, after increasing to 42% of respondents in 2022.

Meta Quest 36%	
PlayStation VR2 18%	
HTC VIVE 15%	
iOS phone/tablet using ARKit 12%	
Valve Index 11%	
Meta "Project Cambria" 10%	
Meta Rift 10%	
Google ARCore 9%	
Windows Mixed Reality Headsets 7%	6
PlayStation VR 5%	
HP Reverb 4%	
Magic Leap One 3%	
Other (please specify) 46%	

Which VR/AR platform(s) do you anticipate your next game will be released on? (Choose all that apply)

The Meta Quest headset remained the top VR/AR platform for developers, with 35% of respondents currently making games on the platform (up from 27%) and 39% expressing the Quest was of most interest to them among VR platforms. About 10% of respondents said their next games were planned for Meta's premium headset, Meta Quest Pro (previously "Project Cambria"), with 19% saying the as-yet unreleased headset was of interest to them.

Meta Quest 39%
PlayStation VR2 35%
Valve Index 24%
Meta "Project Cambria" 19%
HTC VIVE 19%
iOS phone/tablet using ARKit 17%
Google ARCore 13%
Windows Mixed Reality Headsets 13%
Meta Rift 12%
Magic Leap One 7%
PlayStation VR 6%
HP Reverb 4%
Other (please specify) 25%

Which VR/AR platform(s) most interest you as a developer right now? (Choose all that apply)

The PSVR2's place in the market is steadily increasing ahead of its anticipated launch, with 18% of developers planning their next games for it—up from 10% in 2022—and 35% of developers saying the PSVR2 was of most interest to them.

Other platforms that respondents said they're developing their next games for include HTC VIVE (15%), iOS phone/tablet using ARKit (12%), and Windows Mixed Reality Headsets (7%).

Almost half (46%) of respondents marked "Other"—most noted they weren't working on any VR/AR games, while a handful of respondents shared they were developing games for Pico Immersive, a VR platform that was not on the survey list.

Developers favor *Fortnite* over Meta's *Horizon Worlds* as the likely metaverse winner, though some remain skeptical

The concept of the metaverse continues to pick up steam in the game industry, as new and existing companies alike make moves to secure funding, spin up projects, and develop new technology. With so many companies working toward their metaverse futures, we asked developers which they feel are best positioned to deliver on the promise of the metaverse.

Of the companies currently doing work in that space, respondents believe that Epic Games/*Fortnite* (14%) is best placed to deliver on the metaverse concept. This places Epic Games ahead of other companies like Meta/*Horizon Worlds* and Microsoft/*Minecraft* (7% each), Roblox (5%), and Google and Apple (3% each) in the eyes of developers, with Other (10%) responses mentioning companies like VRChat and Nvidia.

However, developers we surveyed remain wary. Nearly half (45%) of respondents didn't select any of the platforms, instead stating that the metaverse concept will never deliver on its promise. That's an increase from 33% in 2022.

Epic/Fortnite 14%
Meta/Horizon Worlds 7%
Microsoft/Minecraft 7%
Roblox 5%
Google 3%
Apple 3%
Linden Lab/Second Life 2%
Sony/Dreams 2%
Tencent 1%
Amazon 1%
e Alibaba <1%
• Manticore/Core < 1%
Naver/Zepeto <1%
Other (please specify) 10%

Which of these companies/platforms do you think is best placed to deliver on the promise of the metaverse concept?

None - The metaverse concept will never deliver on its promise 45%

Vox Pop: What does the metaverse need to become sustainable?

One survey taker provided this six-point response that seemed to represent the voices of a significant majority of respondents, so we chose to share in its entirety.

1) A clear definition: "The 'metaverse promise,' as it stands, is nothing. The people trying to sell it have no idea what it is, and neither do the consumers. Remember what happened, and keeps happening, with cloud gaming a decade ago?"

2) A high degree of interactivity: "For many years now, games have focused on

core gameplay, graphical fidelity, networking, etc. What they haven't focused on is creating highly interactable environments. Unfortunately for the VR industry, VR games practically require environments dense with small interactables to provide a AAA equivalent experience."

The metaverse needs to acknowledge that it is reinventing the wheel."

3) Cheaper hardware: "The price of entry for a VR headset is too high for the average consumer."

4) Better standardization: "Most VR games aren't built with a particular approach to controls in mind, and as a result there is a large amount of friction for an end user switching between similar games."

5) A monetization strategy designed by experts: "VR requires significantly more energy from the user than traditional gaming, even to play the most basic games. This means that they are particularly susceptible to exhaustion from overbearing monetization strategies (Battle Pass, lootboxes, etc.). The people trying to maintain server costs and profit off the metaverse will have to walk a much finer line than traditional games."

6) Better hardware (or better developers): "Current hardware is leaps and bounds above what we had even 20 years ago, but there are still too many issues. Long load times, blurry text, sticky polygons; the hardware needs to be better, or developers need to get better at optimizing their games for the platform."

"It needs to be viewed as an irreplaceable part of people's lives. It needs to offer a truly unique experience that you literally can't get somewhere else—and not just 'that thing we can already do, but in VR.' The promise of the metaverse is only going to come from some kind of massive hardware leap, i.e. neural interfacing, not some digital VR chat room."

"It already exists and is sustainable. It's simply being re-sold as a new concept by corporations trying to profit off it."

"First, the metaverse needs to acknowledge that it is reinventing the wheel, i.e. *Second Life*, and then identify why people lost interest in the wheel the first few times around."

"I think an obvious way for the metaverse to become sustainable is to develop it in such a way that anyone wouldn't need the latest technology in order to keep up with it."

"It shouldn't be made sustainable. Ditch it."

"The metaverse must be built by its own users in a platform that is meant for public use; a creative shared space. Any version of it that exists solely in the hands of one corporation as an ad platform, virtual work station, or virtual real estate market is doomed to fail eventually. In short: It needs to be built of things users actually care about."

"Heard about Ready Player One?"

Studio interest in blockchain technology did not grow in the past year

The last year saw several announcements from major studios planning to use blockchain technology—including cryptocurrency, non-fungible tokens (NFTs), and Web3—to support their games. Amid shifting market conditions, how do game developers feel about the use of blockchain technology for their own projects?

What is your studio's interest in blockchain technology (cryptocurrency, NFTs, Web3)?				
Very interested 7%				
Somewhat interested 16%				
Not interested 75%				
Already using it 2%				

Nearly one-fourth (23%) of developers said that their studios have expressed some level of interest in using blockchain technology, a decrease from last year's interest in cryptocurrency (27%) and NFTs (28%). About 2% of respondents said their studios are already using blockchain technology in their projects.

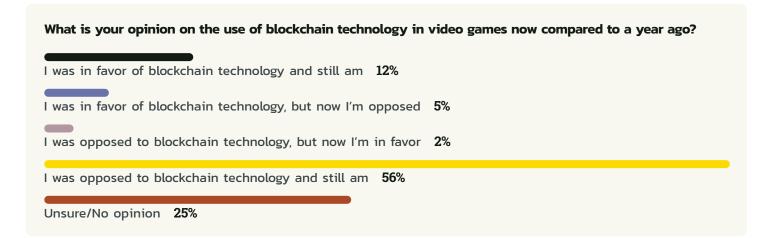
Three-fourths of respondents said their studios have no interest in using or adopting blockchain technology.

Developer opinions about blockchain technology don't seem to have changed much

Technology moves quickly, and much can change in a year. With that in mind, we asked developers to share their personal opinions about the use of blockchain technology—including cryptocurrency, non-fungible tokens (NFTs), and Web3—as well as whether the past year has shifted their perspective.

About 14% of developers said they're in favor of using blockchain technology in games, while 61% said they were opposed. One-fourth of respondents said they were unsure or had no opinion.

For the most part, these opinions appear to be consistent. About two-thirds of survey takers on both sides of the issue said they had not changed their minds on the technology over the past year.



When asked to share more about their opinions, many developers said there could be a valuable place for blockchain technology in video games in the future, while noting that some current usages are either unsustainable or predatory. Others said that the risks outweigh the benefits, and that existing technologies serve similar purposes that negate the need for the blockchain.

Vox Pop: What are your thoughts on the use of blockchain technology in video games?

"Like any tech, it has its positives and negatives. I think it became too fashionable to be openly opposed, and score points on social media, yet I know many devs who are exploring its use more quietly."

"I think blockchain technology is applicable to many different fields, video games included. The spectrum of marketplace value and overall quality is way too broad, and is complicated by general uneasiness around DLC with the gaming community."

"Blockchain is a textbook example of a solution looking for a problem. Despite being well known for over a decade, it has no practical use-cases—outside of cryptocurrency, which itself has a single use-case of enabling finance fraud. I am distrustful of any company that pursues blockchain technology, as it tells me that I don't believe something as large as blockchain is entirely without use."

they either lack a firm understanding of the technology or are acting unethically."

"It's unethical. Our AAA studio updated our internal guidelines to state we will not use this technology."

"Now that the hype has died down and the scammers have moved on I think now is a good time to seriously investigate its utility for any positive player experiences. I don't believe something as large as blockchain is entirely without use."

"The clear value of blockchain for us is in rewarding creators and potentially some general support for player trading. However, general play-to-earn as it's been done so far makes no sense to us; the economic models don't work once a game economy starts to decline."

"The recruiters that reach out to me still feel overwhelmingly cash grabby. High salaries are nice, but pitch me your game, not your profits!"

"Anything that you can do with a blockchain, you can also just do with a database, but cheaper, with less wasteful energy, and with more control. The idea that 'blockchains' or 'NFTs' somehow empower developers to do anything more than they already can with existing technologies is entirely false. We already have the technology, we don't need to be wasting more time and resources into this new one to get us no benefit."

"It's non-viable for classic AAA games. Simply put, we still don't know what we are dealing with and how blockchain can really be used—not as a gimmick but as something bringing value to the product. Maybe we will figure it out in 10 years or so."

"I've designed a game for use of blockchain, and having spent three months doing nothing but researching use-cases, I have concluded firmly that there aren't any worth pursuing."

Social media still leads discovery, but not with Instagram or TikTok

It's one thing to make a great game, it's another to get people playing it. Discoverability, or the ability for people to find your video game in today's marketplace, is a crucial part of game marketing and overall studio success. We asked survey takers what discovery methods they use to spread awareness about their game, and how effective those methods were.

Social media was the leading form of marketing for game studios this year— 30% of respondents reported a small investment into platforms like Twitter, Facebook, or LinkedIn, 29% made a moderate investment, and 13% reported a large investment. When it comes to impact, more people said social media marketing was slightly (39%) or moderately (35%) effective, with 15% calling it "very effective."

Newer social media outlets like TikTok and BeReal are being utilized, with 24% of developers reporting a small investment into photo social apps and 23% for short-form video platforms, but these platforms remained the least-used discovery methods of the year. Photo social apps were also the least-successful discovery method, in terms of developer satisfaction, with 29% of respondents saying they were not at all effective for their last completed games.

Live in-person events appear to be making a comeback. The number of people making investments in in-person events increased across the board, with moderate investment going from 14% to 20% year-on-year. Meanwhile, the number of respondents who reported no investment in live events decreased significantly, going from 58% in 2021 and 2022 to 45% in 2023, inching closer to 2019's pre-pandemic numbers (42%).

On the virtual side, 60% of respondents reported no investment in virtual-only events—making it the third least-used discovery method, behind photo and video apps.

Many respondents reported small investments of time or money across several avenues—notably pre-recorded YouTube videos, email marketing, and word of mouth (29% each); traditional press and bloggers and forums (27% each); and inperson events (25%). Developers also reported moderate investments into spaces like word-of-mouth (24%), traditional press and bloggers (22%), and real-time communications like Discord and Slack and pre-recorded YouTube videos (21% each).

"Getting the word out" still looks to be worth the effort for game developers—with 14% of respondents reporting a large investment into word-of-mouth campaigns, and 28% of respondents saying the method was "very effective." Paid advertising and promotion on digital storefronts were also leading choices, with 12% of respondents each. Digital storefront promotion was the best-received strategy of 2023, with 29% of respondents calling it "very effective."

Accessibility efforts in games maintain pace

Continuing the upward trend seen over the past few surveys, designing for accessibility is now more common than not.

We asked respondents whether their current games implement accessibility measures for those with sensory, motor, or other impairments. The number of people who said yes kept pace with previous years at around 38%, while those who said no (32%) continued to decline, down from 36% in 2022. This marks the second year in a row where affirmative responses outweighed the negative ones, suggesting that accessibility efforts are becoming more of a core design value among studios and developers.

Have you implemented any accessibility measures (for those with sensory impairment, motor impairment, or other impairments) into your current game?
Yes 38%
No 32 %
Don't Know / N/A 29%

When asked what game developers are doing to make their games more accessible, responses included: colorblind modes, rebindable controls, closed captioning and descriptive text, dyslexia-friendly fonts, customizable difficulty options, and motion sickness settings, among others.

Vox Pop: Can you provide examples of how you changed your game to make it more accessible?

"We followed design practices, like ensuring no in-game cues were conveyed exclusively through audio. As our game was already broadly accessible, we focused on options like disabling the puzzle aspects in the game to ensure it could be opened up to a greater range of cognitive levels."

"As a heavily movement-based game, trying to make it more accessible to those who struggle with motion sickness has been a priority. Allowing players to turn off motion blur, camera shake, etc."

"We implemented large text captions for the visually challenged and made sure to add visual effects simulating what you would hear for deaf players. For example, if you heard static, the screen would mildly shake. It would be highly unfair to deaf players if they couldn't tell that a sound source was nearby, especially if that sound source is key to a game event."

As our game was already broadly accessible, we focused on [a greater range of] options"

"We added a colorblind mode, then we added a color picker to diversify the colorblind mode. We also hired an epilepsy consultant to double check our game's flashing light elements, as well as in our latest trailer. We have also worked with our audio engineer to provide multiple streams of information that players can use to gauge what is happening in-game so that they are never completely reliant on just visuals or just audio cues."

"We created a mode for our multiplayer VR game that was catered towards folks susceptible to sensory overload. It has far less particles and a slower pace of play. The controls were simplified to one button as well."

"Arachnophobia mode allowed players with arachnophobia to engage with the game instead of abandoning it due to their phobia. We swapped visuals of spider enemies with less spider-like meshes to different degrees."

More studios are adopting DEI initiatives

According to developers, a sizable amount of studios are implementing diversity, equity, and inclusion (DEI) initiatives, with 59% of respondents reporting a "moderate amount" or "great deal" of focus on DEI efforts at their studios.

In the last year, to what extent has your studio focused on staff diversity, equity, and inclusion initiatives?

A great deal 29%
A moderate amount 30%
A little 19%
None at all 22%

When asked how successful these efforts were, 96% of respondents reported that they were at least slightly successful, while 4% of respondents said their company's diversity, equity, and inclusion efforts were not successful. About one-fifth reported that their studios weren't focusing on DEI at all.

Vox Pop: What specifically is your company doing (or not doing) to expand diversity, equity and inclusion (DEI) efforts?

"Our CEO is very invested, and our game content is vetted to be inclusive."

"Our parent company has a large staff investment in reviewing and making DEI recommendations to modify our job postings and to widen the funnel to increase the applicant pool among underrepresented groups. We also have a great deal of mandatory training materials around fostering DEI within our culture, including implicit bias and civil rights training."

"Our founders and contractors are Onkwehonwe and IBPOC from various suburbs, cities and reservations in North America."

"Our [studio] implemented a process for all art assets to pass through a DEI review before approval."

"All interviews are required to have a diversity specialist as part of the process. We have updated all our documents to represent our diversity goals. We have had staff training on diversity and inclusion issues. We are reaching out to underrepresented STEAM students."

"We are participating in blind CVs. And trying to hold open days for minority voices/talent to see what options the gaming industry has."

"We are not given a budget to hire a staff member whose primary focus is diversity. Instead, we are supposed to do this work by committee, on top of our full-time jobs. We manage to get some stuff done, but it's slow."

"We've shifted our hiring mentality to look for 'culture add' instead of 'culture fit."" "We've published our pay bands to the entire company for pay transparency."

Some employers changed their healthcare benefits in response to public policy

In response to political developments in the United States and beyond, we asked respondents if their employers had changed existing employee benefits to expand coverage in response to changes in legislation or public policy.

About 16% said their company facilitated changes to healthcare policies related to reproductive care, while 9% reported improvements in trans-inclusive healthcare policies. Over one-third reported no changes, while almost half (45%) of respondents said they were unsure if changes were made or that it wasn't applicable to their work situation.

When asked if respondents felt their company's benefits policies were sufficient, almost half (46%) said yes, while 18% said no. Over one-third said they were unsure (or that it wasn't applicable to their work situation), in some cases due to respondents being based outside of the United States.

Majority of studios now engaged in sustainability efforts

As concerns about climate change continue to grow, we sought more specific data to see how developers are working to address these issues within their studios.

This year, a majority of respondents (53%) reported some form of effort at environmentalism, sustainability, or carbon offsetting at their companies—one-tenth reported a great deal of effort, 17% reported a moderate amount, and 26% reported a little effort from their studios or companies. Fewer than half (47%) of respondents reported no efforts, down from a majority of respondents (55%) in 2022.

In the past year, to what degree has your studio focused on environmentalism, sustainability,
or carbon offsetting?

A great deal 10%		
A moderate amount	17%	
A little 26%		
None at all 47%		

Among companies who have made efforts at environmentalism, sustainability, or carbon offsetting, about 90% of respondents noted some kind of positive result (with the remaining 10% saying the efforts were not at all successful). The leading response was that these efforts were moderately successful (37%), followed by slightly successful (35%). About 18% of respondents said the efforts were very or extremely successful.

Continuing from 2022, we asked for examples of what sustainability measures studios had participated in. Answers varied in terms of scope, with respondents reflecting both studio-level changes and broader efforts to contribute globally.

Responses from developers frequently mentioned remote work (including reduced travel and attending fewer events), going paperless, planting trees, green energy sources, and reducing energy consumption as examples of these efforts. Some responses criticized the effectiveness of their company's efforts, particularly regarding carbon offsets and tax credits.

Vox Pop: What sustainability measures has your studio taken part in, and what (if any) changes came as a result?

"We are indigenous, it's our normal."

"Investing in land restoration and fighting climate change through regenerative land management on-site."

"With every acquisition of a new project, we take 10% of the overall revenue from that project and buy trees to be planted. We also donate to offset carbon emissions."

"We had in-game items that players could purchase that we donated for carbon offsetting."

"We took some efficiency measures, like data-storage & tech equipment, and switched largely to virtual events and low/no travel opportunities for professional networking. Avoided everything to do with blockchain, and actively advised people against investing or participating with it. Actively turned down some contract and employment jobs in it."

"We have a partner project dedicated to reducing or eliminating not only our carbon footprint, but also creating and protecting ancient forests for long-term forest protection, as well as gamifying different elements in game both to increase learning, carbon offset, and tree protection efforts."

"We have done some carbon offset credits, but I am increasingly suspicious that these are not producing tangible results for the environment."

"They have a recycling bin."

Majority of developers are working 40 hours or less per week, self-pressure continues to drive longer hours

As the game industry ebbs towards a new normal following the COVID-19 pandemic, the question of how developers can strike a healthy work-life balance remains as important as ever—with studios and industry leaders discussing the benefits and pitfalls of initiatives like the four-day workweek, remote work, and in-office development.

To see whether these conversations are impacting the day-to-day lives of developers, we asked how many hours per week on average they worked on video games over the past 12 months. About 62% of respondents reported working 40 hours or less, and the 36-40-hour workweek was once again the leading answer (29%) among developers.

0-20 hours per week	15%
21-25 hours per week	6%
26-30 hours per week	5%
31-35 hours per week	7%
36-40 hours per week	29%
41-45 hours per week	18%
46–50 hours per week	10%
51-55 hours per week	4%
56-60 hours per week	2%
More than 60 hours p	er week

What is your average amount of hours worked per week in the last 12 months on video games?

We asked game industry professionals to tell us the maximum number of hours they'd worked on a video game project in a single week over the past 12 months, to see how many developers are experiencing crunch conditions.

The leading answer was tied between 21-40 hours and 46-50 hours at 17% each. At the extreme ends of the scale, 2% of respondents reported working more than 90 hours per week during crunch while 7% said they worked 20 hours or less.

What are the maximum hours per week you worked during a single week in the last 12 months on video games?

0-20 hours per week	7%	
21-40 hours per week	17%	
41-45 hours per week	13%	
46–50 hours per week	17%	
51-55 hours per week	9%	
56-60 hours per week	11%	
61-65 hours per week	6%	
66–70 hours per week	4%	
71–75 hours per week	4%	
76-80 hours per week	5%	þ
81–85 hours per week	2%	
86-90 hours per week	3%	
More than 90 hours p	er week (p	lease specify)

About three-fourths of developers noted self-pressure as a reason they worked more than 40 hours in one week. One-third said they didn't consider the amount of time they worked to be excessive, while 14% said they felt pressured by management to work longer hours.

What were the major factors that caused you to work more than 40 hours per week? (Choose all that apply)
Self-pressure (I was personally working hard and felt I needed/wanted to) 74%
I don't consider the amount of time I worked to be excessive 36%
Management pressure (it was made clear that we needed to work those hours) 14%
Peer pressure (everyone else was working those hours) 11%
I don't know, I just did 9%
Other (please specify) 18%

Remote work looks here to stay, with hybrid schedules on the rise

The COVID-19 pandemic might be less pervasive than it was in 2020, but businesses continue to examine how the past few years have impacted employees and their needs in the workplace. Although remote work is no longer essential in many parts of the world, we sought to find out how many developers are still working from home and how many are returning to the office.

What is your studio's policy/your status regarding working remotely vs. in-person at the office?
I have always worked remotely 33%
I'm working remotely; in-office is no longer an option 8%
I'm working remotely; in-office is available but optional 25%
I'm choosing to split my time between remote and in-office 17%
I'm returning/have returned to the office; working remotely is available but optional 11%
I'm returning/have returned to the office; working remotely is no longer an option 3%
I never stopped working in-office 4%

One-fourth of survey takers said they primarily work remotely with the option to go into the office—down from 29% in 2022. The biggest increase was among those who have a hybrid schedule, splitting their time between remote and in-office (17%, up from 11%). Based on the responses from survey takers, it appears that not all hybrid schedules have been by choice.

Vox Pop: How do you feel about your studio's policy regarding in-person vs remote working?

"Remote or in-person should be optional. People work better one way or the other. Forcing in-person for optics is counter-productive. A person's output should be judged more than their appearance of working."

"Working from home has been fantastic for me and my family. I'm desperately hoping that whatever we end up with eventually that—at a minimum—we'll support a hybrid system. If I came in once a week for some in-person meetings and did the rest of the week from home that would be ideal."

"I'd like to work in-office but nobody else wants to come so it's hard."

"During the pandemic, fully remote had been available. Now there is a return-to-office for 2 days and the other 3 are optional. I wish we stayed at 5 days-a-week optional."

"It's optional for US teams. It's mandatory 60% time in office for Overseas teams. I don't care, I just like the time to come in to get into the mindset to work."

"Remote work is amazing. As a disabled developer, remote work is life changing."

"I joined my current company specifically because they allow fully remote work."

"I've found remote work to be mentally challenging and detrimental. I also found it degrades communication and overall project quality. I specifically searched out a studio that was in-office when looking for a new job. Companies that were heavily remote were at the bottom of my list."

"Should encourage more people to come to the office. Remote killed office culture."

"There is a push to get us back to the office, but it's clearly management trying to force people back to cubes. My tools and gear are more effectively located and placed at home, I save time and money on the commute, and I'm more productive than I am in the office. It's an outdated concept, especially with teams scattered across the country and globe already; those workers aren't forced to head to hub locations, so why should I?"

Majority of developers have sought new jobs or thought about switching companies

There has been a lot of chatter about the "Great Resignation" over the past year, with wide swaths of employees switching companies in hopes of better benefits like increased pay and more flexible work routines. This looks to have impacted the game industry too.

Over half of developers said that, over the past year, they've either changed the companies they work for (16%) or have thought about doing so (36%).

Have you considered changing the company you work for, or changed the company you work for, in the past year?

I've changed companies 16%

I've considered changing companies 36%

No or N/A 48%

Of those who said they've changed companies or thought about it, the leading factors for a potential switch were salary/compensation and company culture, followed by being able to work on a specific project/franchise, work/life balance, and having remote work-friendly policies.

Salary/compensation 81%
Company culture 67%
Specific project or franchise 56%
Work/life balance 56%
Remote work policies 55%
Benefits 54%
Job title 40%
Location 39%
Length of workweek/workday 34%
Change in discipline/career path 25%
Other (please specify) 8%

What factors have you considered for choosing your next job? (Choose all that apply)

Developers are split on the impact of increased studio conglomeration

Mergers and acquisitions of game studios are nothing new, but some recent moves could reshape the industry. As of January 2023, Microsoft is navigating the purchase of Activision Blizzard, Sony acquired Bungie, and companies like Embracer Group have spent millions on popular studios and franchises.

We asked respondents what kind of impact they think the recent surge of studio acquisitions will have on the industry. About 17% believe the wave of major acquisitions will be good for the industry, but almost half (44%) believe it will have a negative impact on the game industry. One-third said they were unsure, and 7% think studio acquisitions won't do much of anything.

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What kind of impact do you think the wave of major acquisitions (Microsoft, Embracer Group, Netflix, etc.) will have on the video game industry?

Positive Impact 17%			
No Impact 7 %			
Negative Impact	44%		
Unsure or N/A 32%			

Vox Pop: What are your thoughts on the wave of major acquisitions in the video game industry?

"Consolidation is going to happen and we should not be afraid of it."

"I think it will be interesting to see how things shake out. I have high hopes for the most part, but change can be tricky and perceived subjectively. I love seeing the 'little guys' do well, but I also love the picture-perfect quality you can expect from the 'big dogs' too. I'll be watching how the various companies handle their acquisitions."

"As long as they pay the bills and let people make the games they want, I'm fine with it."

"Consolidation is bad for innovation, diversity of products, addressing consumer needs, and ability for new voices to compete on an equitable playing field."

"I'm a Blizzard baby who's still traumatized by the Activision Blizzard merger. Major acquisitions will always leave a sour taste in my mouth. There is a lot of money to be made in this industry, and business interests know this. If the trends of these past two decades are any indication, these most recent acquisitions will be terrible for the industry."

"Big companies get bigger. More homogenization. Less originality. But hey, I guess Banjo-Kazooie can show up in *Guitar Hero* now."

"The budget increases seem beneficial to teams, but the concentration of IP ownership into fewer and fewer hands presents a threat."

"With acquisitions and consolidations comes contractions and layoffs. I've worked at studios acquired by much larger companies twice in my career, both were celebrated as giving the studio stability for the future and both ended with the studio being shut down without releasing a title. The increasing power and size of these mega entities will make it increasingly difficult for small and midsized studios to grow without themselves being acquired and losing autonomy."

"It's end-stage capitalism baby."

Majority of developers support unionization, one-fifth have broached the topic at work

There has been a renewed focus on unionization within the game industry over the past 12 months, with some workers at major studios filing petitions to unionize.

According to our survey, a majority of game developers (53%) are in favor of unionization, and 13% of respondents said they were opposed to unionization. Unionization was more supported by developers working in the industry for 15 years or less compared to those with 16 years or more experience—with the largest opposition among those with 30 years or more experience in the industry.

Yes 53 %		
Maybe 24%		
No 13%		
Don't Know 1	10%	

Do you think that workers in the video game industry should unionize?

About one-fifth (22%) of developers said they or their colleagues have actively discussed unionization at work.

With regards to how studios have been responding to talks of unionization, onethird of respondents said their companies are supportive, 18% said their studio gave a mixed response, and 9% said their studio was opposed. The number of studios issuing no response at all has decreased—going from 20% in 2022 to 13% in 2023.

Have you or any of your colleagues discussed unionization at your studio or company?				
Yes 22%				
No 60%				
Don't Know 19%				

Almost one-fourth (23%) of respondents said their studios don't know about their unionization talks.

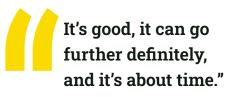
Vox Pop: What are your thoughts about ongoing unionization efforts in the video game industry?

"Unions are necessary to protect employees from abuse, burnout, and bad faith policies of employers."

"I am in a union—and if there wasn't such a poor attitude towards the idea from senior managers in much larger companies, and especially American businesses, I would encourage others to do the same. However, it may have negative effects on any future prospects I have so I stay quiet."

"Unions won't fix everything and will bring their own problems, but I have seen time and again that game devs are screwed financially by studios. It would be nice to have more workers rights and representation."

"It's mostly a US-centric issue, since things our colleagues over there are fighting for are legally mandated in most European countries already. I support unionization where it is needed, but would be more strongly in favor of bigger and more substantial systemic change to make them unnecessary."



"It's good, it can go further definitely, and it's about time. I say that as a studio owner. As long as expectations on both sides are realistic and sensible, it can be a very positive thing for all involved."

"As an owner I am always in a tricky place with regards to unions. I think in a public company a union is a necessary safeguard against shareholder metrics. I think for a private company it would be great if unions weren't a necessity. That is not always the case though."

"Unionize everyone! We have seen what happens when the bosses decide on the conditions and remunerations of our labor. It's time to take the power back!"

"Negative. While some big companies treat their workers like disposable commodities, and those companies need to change, on a whole, the industry would suffer. From my experience, hard work is vital to being successful as an individual and company in the industry, and from what I've seen, unions discourage hard work, and encourage time wasting practices and administration instead of maturely dealing with issues or standing up for yourself." "Quality assurance has historically been abused so I think it's a great idea for them to unionize. I'm not sold on it applying to other departments."

"For certain segments it makes sense, but the more creative the role the less it aligns."

"We need representation not unions."

Most survey takers think player harassment toward developers is a problem for the industry

For years, developers have spoken at the Game Developers Conference about the cost of not responding to toxic behavior from select players, including harassment and threats. This year, we asked developers how much of an issue it has become—and what could be done about it.

Of those surveyed, 91% of respondents said player harassment and toxicity toward developers and studios is an issue in the industry, with the severity ranging from "minor" to "very serious." About 4% of respondents said it was not an issue, while 5% indicated they were unsure.

Do you think player toxicity and harassment direct video game industry?	ed at developers/studios is an issue in the
Yes, it's a very serious issue 42%	
Yes, it's a serious issue 36%	
Yes, it's a minor issue 13%	
Unsure 5%	

Although a large majority of developers agree about the pervasiveness of player harassment, we wanted more context on who among them is experiencing it. Despite a near-universal agreement that harassment is a problem, only 40% said they'd experienced it themselves or seen it happen to someone on their team—while a majority of respondents said they've never experienced or witnessed harassment.

Have you experienced harassment from the player community during your time on a project?
Yes, directed at me 11%
Yes, directed at a colleague/team 19%
Yes, directed at me and a colleague/team 10%
No 54%
Unsure 7%

Survey takers working in community management, marketing, or PR reported experiencing or witnessing harassment more than developers in other job roles. This was followed by developers working in business and finance, production and team management, and game design.

Men surveyed were less likely to say they experienced or witnessed harassment than women or non-binary people, and respondents were more likely to say they experienced or witnessed harassment if they identified as part of the LGBTQ+ community.

The past year, we saw studios of all sizes making statements condemning harassment against their employees by players, so we asked our survey takers who'd experienced or witnessed harassment whether their companies had done the same. About two-thirds (68%) said their companies have addressed the harassment they experienced or witnessed—either internally (30%), externally (4%), or both (34%). One-fifth said no, while 11% were unsure.

Vox Pop: How can video game companies effectively address harassment from the player community?

"I think setting boundaries clearly and publicly, as well as calling on the community itself to help, can be effective. Large companies seem to fear that their toxic players are their fanbase without appreciating that they are impacting much larger numbers of their actual fanbase."

"Ban, isolate, and deplatform."

"The C-suite will not ban players unless banning makes money. Employee unions can demand bans for harassment."

"Game studios need to have easily accessible hotlines and other internal resources for employees facing player community harassment, and employee training for both personal strategies for dealing with online hate and training for using said internal support resources. I can't believe nobody is doing this yet."

"The companies need to take it seriously. I received death threats and they contacted my family on social media but the company ignored my concerns."

"The customer is always right. Listen to complaints, acknowledge them, find a workable solution, bottom line. That I have found will eliminate that [problem], and a little out-of-pocket in the immediate saved a lot in the long run."

"I'm a community manager, so it's a part of the job, unfortunately ... We need to recognize that behavior when it happens, call it out, and set expectations that we are not going to allow it. We also need to stop inviting the community to be part of the family. You're part of the conversation, you get to offer an opinion, but you don't get to demand everything goes your way."

"I'm not sure, we had to use law enforcement to visit a player and explain that they'll be arrested if they continue to threaten the studio devs."

"Accept it, let it go, move on. The loud minority is part of human nature."

"I do research on player harassment. Approaches could involve: adequate responses, including punishment like game suspensions and bans where possible; prosocial community management; adequate training for community managers; stronger ethical knowledge within studios and clear boundaries; tackling a fear of angering players and associated revenue loss; studio solidarity; adequate support for anyone affected; and more. It begins with the industry understanding this is serious and it is not just coming from 'passionate players.' It's abuse."

The video game industry remains primarily white and male

We asked respondents to share what race, ethnicity, or origin best describes them. About two-thirds of respondents identified as White/Caucasian, followed in response rate by Hispanic, Latino or Spanish origin (9%) and East Asian (8%).

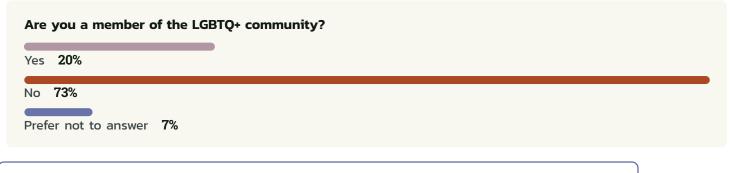
What race, ethnicity, or origin best describes you?

White / Caucasian 65%
Hispanic, Latino or Spanish origin 9%
East Asian 8%
South Asian 4%
Black / African / Caribbean 3%
Middle Eastern or North African 1%
American Indian or Alaska Native <1%
Native Hawaiian or Other Pacific Islander <1%
Multiple ethnicities/Not listed (please specify) 5%
Prefer not to answer 4%

When it comes to gender representation, almost one-fourth (23%) of people in the industry are women and 5% are non-binary. The number of men (70%) in the industry remains the majority.

What is your gender?	
Man 70%	
Woman 23%	
Non-Binary 5%	
Prefer not to answer 2%	
Not listed (please specify)	<1%

We asked respondents if they identified as members of the LGBTQ+ community, with 20% saying yes, 73% saying no, and 7% opting not to identify.



About 41% of respondents identify as white, male, and not part of the LGBTQ+ community.

Game developers by location

There was not much movement in this area between 2022 and 2023—but keep in mind that GDC is based in the United States, so answers will be largely Western-centric.

Which continent/region do you r	reside in?
North America 62%	
Europe 23%	
Asia 8%	
South America 3%	
Australia/New Zealand 2%	
Africa 1%	
Not listed (please specify) 1%	



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