

**BGA**

**BLOCKCHAIN  
GAME  
ALLIANCE**

**2023  
STATE  
OF THE  
INDUSTRY  
REPORT**





# TABLE OF CONTENTS

- 4 Report Summary**
- 6 Letter from the BGA President**
- 8 BGA Board Members**
- 11 Survey Overview**
- 16 Why Blockchain for Gaming?**
- 20 BGA in Action**
- 22 Addressing the Gender Imbalance**
- 24 Challenges in the Industry**
- 28 Web2 Franchises and Studios Transitioning to Web3**
- 31 Driving the Industry Forward**
- 34 Web3 Growth: UA, Distribution & Scaling**
- 37 Careers in Blockchain Gaming**
- 40 2024 Predictions**
- 42 How to Get Involved**
- 43 Glossary**
- 45 BGA Members Overview**

# REPORT SUMMARY

Now in its third year, the BGA State of the Industry Report presents data collected via an online survey designed to assess the perspectives of blockchain gaming professionals on the current state of the industry. The purpose of this report is to identify challenges and opportunities heading into 2024.

The report reflects the industry's collective outlook, two years into the current Crypto Winter. While activity across all web3 games has declined significantly from the dizzying heights of the 2021 bull market, projects have shifted their focus to improve onboarding and player retention, while blockchains have been developing their infrastructure for security, scaling and smoother transactions. Respondents to this year's survey believe that one of the biggest industry drivers will come from traditional web2 gaming studios and franchises implementing blockchain technology into their games. Some big names such as Square Enix and Ubisoft have already moved into web3, while others wait to see the results of their experiments.

Apart from that, data also shows there is increased concern for gender diversity in blockchain gaming. Despite higher participation numbers and interest in the BGA State of the Industry Survey and Report, the percentage of females among respondents is the lowest it has been since the report started in 2021.

As always, the BGA has made efforts to improve diversity and has also provided opportunities for startups and established companies alike that are navigating these tough times. Despite the challenging environment, the confidence of industry professionals remains high, with the majority of respondents in agreement that they will continue working in blockchain gaming for the next year. This, along with continued improvements in blockchain technology and web3 games, bodes well for the future.

# KEY TAKEAWAYS

## SURVEY RESPONDENTS



**79.7%**

believe they will continue working in the industry over the next year.



**44.3%**

received crypto or stablecoins as pay in 2023.



**16.9%**

marks an all-time low in female participation.

## INDUSTRY DRIVERS



**76.2%**

recognize asset ownership as the top benefit.



**37.8%**

foresee web2 game studios driving the industry forward.



**52.1%**

expect at least 20% of the gaming industry to adopt blockchain within 12 months.

## CHALLENGES



**55.1%**

see onboarding as the primary issue for the industry.



**70.0%**

battle the misconception of blockchain gaming as a scam.



**35.4%**

indicate user acquisition as a pressing challenge.

# LETTER FROM THE BGA PRESIDENT

The blockchain gaming ecosystem has largely focused on development while the crypto landscape experienced controversy. Games still hold the potential to attract millions of users to new experiences where they enjoy true digital ownership.

Even amid the Crypto Winter, according to DappRadar, blockchain gaming has seen an average of 786,766 Unique Active Wallets (UAW) in Q3 2023 alone. This year, web3 gaming projects had secured over US\$2.3 billion in investments by the end of September. It's clear this vertical continues to lead as one of the core use cases for blockchain.

The BGA currently comprises over 390 corporate members and over 110 individual members, together bringing their knowledge and experience, collectively working to advance the blockchain gaming industry.

This year, we welcomed our newly appointed board members elected by the community, Yasmina Kazitani, CMO at Interverse, Christina Macedo, co-founder and CEO of READYgg, Hideaki Uehara, General Manager of the Investment and Business Development Department of Square Enix, Mariano Rubinstein, co-founder and CEO of Sura Gaming, Alex Kosloff, Head of Sales at Altura, and Leah Callon-Butler, Director at Emfarsis. This is a truly representative board of diverse professionals who will guide and support the BGA.

We would like to thank our honorary board who have been instrumental in helping the BGA grow and evolve into the global network it is today: Nicolas Pouard, VP Strategic Innovation at Ubisoft,



**“Games still hold the potential to attract millions of users to new experiences where they enjoy true digital ownership.”**

Marc Coupal from Enjin, Ludovic Courcelas from ConsenSys, Aleksander Larsen, co-founder and COO of Sky Mavis, Nicolas Gilot, co-founder and CEO of Ultra, Gabby Dizon, co-founder of Yield Guild Games (YGG), Shaban Shaame, co-founder of EverdreamSoft who will remain Treasurer of the BGA, Piers Kicks, venture partner at BITKRAFT Ventures, and Serena Tabacchi, co-founder and Director of the Museum of Contemporary Digital Art (MoCDA).

The team has also expanded with the addition of Maude Perrin, our full time events manager, Melanie Dow, full-time content manager, Jonathan Jungers, our APAC representative based in Hong Kong, Alex Lim, our South Korea representative, and Luis Diego Rojas, our LATAM ambassador, who will work alongside our official LATAM and Spanish-speaking representatives, Mariano Rubinstein and Martin Spinetto.

2023 was a year of transformation. Those building in the space have certainly felt the pressure of the economic environment and less favorable media sentiment, but it has also allowed them to be more disciplined and focused. New winners will certainly emerge from these times. The BGA is well-positioned to signal the trends and showcase the gaming industry leaders of tomorrow.

Our survey received more responses than ever this year, and I thank everyone for demonstrating their commitment to shaping the future of our industry. I look forward to discovering what we will build together in the coming year.

**Sebastien Borget**  
President  
Blockchain Game Alliance (BGA)

**“The BGA is well-positioned to signal the trends and showcase the gaming industry leaders of tomorrow.”**

# BGA BOARD MEMBERS

The BGA held a mid-year election to bring new faces to the board. The election was open to all BGA members through the on-chain voting platform Snapshot, and each vote was recorded on the Ethereum blockchain for transparency. The election had a focus on ensuring that previously underrepresented groups would become part of the governing body of the BGA. The BGA's founding board members were transitioned to honorary board members as thanks for their service.



## **SEBASTIEN BORGET (President)**

### **The Sandbox**

Sebastien is the co-founder and COO of The Sandbox, a decentralized virtual world where players can create, play, own, govern and monetize their experiences. He has been President of the BGA since 2020 and has been named one of the most influential people in crypto by Cointelegraph.



## **SHABAN SHAAME (Treasurer)**

### **EverdreamSoft**

A veteran of mobile game production, Shaban is the co-founder of EverdreamSoft. He has been developing blockchain games since 2014, with one of his first releases being Spells of Genesis through EverdreamSoft. It was one of the first projects that emphasized “true ownership” of digital assets.



## **YASMINA KAZITANI**

### **Interverse**

Yasmina's 18 years of expertise lie in franchising, ecosystem building, and licensing business models. She is currently working with the UK parliament and other institutions to set regulations and frameworks to help blockchain gaming grow and thrive safely.



## LEAH CALLON-BUTLER

**Emfarsis**

Leah is the Director of Emfarsis, a web3 investment and advisory firm with special expertise in communications. In crypto since 2017, Leah has taken an active role in guiding public discourse around web3, leading conversations in world-class events like Consensus 2023, the V20 Summit in Osaka, and YGG Web3 Games Summit.



## HIDEAKI UEHARA

**Square Enix**

Since 2019, Hideaki has been active in driving investments toward blockchain projects and promoting collaborations with web3 companies at Square Enix. He believes Japan can be a very promising market for blockchain games and uses his experience to push forward development in this sector.



## CHRISTINA MACEDO

**READYgg**

Christina inspires many women to pursue their journey in gaming, tech and web3. After a law career in digital contracts, she went into the health and wellness industry, where she discovered the power of gamification. This eventually led her to become one of the co-founders of READYgg.



## MARIANO RUBINSTEIN

**Sura Gaming**

Under Mariano's leadership, Sura Gaming has been one of the most active BGA members in LATAM and Spain. Mariano has represented the BGA at the LABITCONF in Buenos Aires and Block World Tour in Granada, Spain. He's actively participated in numerous BGA events, with an aim to develop blockchain gaming further.



## ALEX KOSLOFF

**Altura**

As part of Altura, Alex has helped sign 100+ major partnerships with industry leaders such as Unity and Cronos Labs. He has over a decade of experience and a proven track record in leading sales teams, running companies, and working with the largest companies in the world.

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## HONORARY MEMBERS

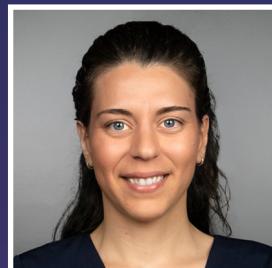
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**NICOLAS POUARD**  
UBISOFT



**ALEKSANDER  
LARSEN**  
SKY MAVIS



**SERENA  
TABACCHI**  
MOCDA



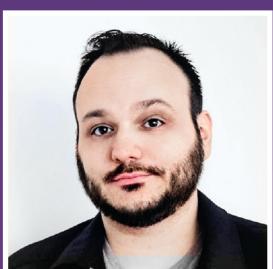
**NICOLAS GILOT**  
ULTRA



**LUDOVIC  
COURCELAS**  
CONSENSYS



**PIERS KICKS**  
BITKRAFT



**MARC COUPAL**  
ENJIN



**GABBY DIZON**  
YIELD GUILD GAMES



# SURVEY OVERVIEW

## OBJECTIVE

The purpose of the survey was to assess the views of BGA members and blockchain gaming professionals regarding the drivers, challenges and opportunities facing the industry in 2023. Insights from this year's survey can be compared to previous years, providing a longitudinal view of blockchain gaming and its direction. This information serves as a valuable resource for the industry as well as investors, the media, researchers, educators, policymakers, regulators, and government leaders, providing a comprehensive overview of the industry's current status with critical insights into the health and potential growth of the industry, its emerging trends, and potential areas of risk.

The report is also used to align the BGA's future activities and priorities.

## METHODOLOGY

For the third successive year, the BGA has partnered with consulting firm Emfarsis to conduct the survey and analyze its responses. In 2023, the survey consisted of 22 questions, covering careers, industry growth, adoption and key issues.

The survey was launched on August 23, 2023, at Gamescom, Cologne, Germany, and was closed on October 9, 2023. Emfarsis used SurveyMonkey to conduct the survey, while the distribution was

done via the BGA Member Database, LinkedIn, email, X (formerly Twitter), WhatsApp and Telegram. To amplify the reach, the survey was promoted via media partners including DappRadar, PocketGamer.biz and VentureBeat. In addition, on-site responses were gathered at events including Gamescom Cologne, TOKEN2049 and Tokyo Game Show. The survey was open to individuals working in the blockchain gaming industry, and it was not limited to BGA members.

There were a total of 536 responses; however, 10 responses were deemed invalid or incomplete and removed prior to commencing the data analysis. The survey was a hybrid (qualitative-quantitative) study, which used a cohort-cluster and time series data analysis where similar group samples were compared in consideration of the previous year's results.

In terms of changes made, questions 5 to 10, pertaining to the respondents' job status and current role, were updated to include an option for the respondent to say they were unemployed and/or between jobs.

For Question 9, the terminology "salary" was updated to "compensation" when asking how the respondent receives their remuneration. This was to reflect those in the industry, such as freelancers or founders, who earn income through professional engagements but do not receive a structured salary.

For questions 14, 15, 17 and 18 of the 2023 survey, which were about pain points facing the industry, and factors to drive it forward, as well as the biggest positive and negative impacts for the current year, the multiple choice options were updated to improve readability and ensure they reflected the current industry landscape. Specifically, to reflect recent emerging trends, three new options were added to the multiple response selection list for this section, including: *AI (artificial intelligence)*, *Web2 (or traditional) gaming transitioning to Web3*, and *Web3 Growth Tech* (e.g., *UA, Distribution & Scaling*).

The optional answer *Ethereum Merge* was removed as a possible response to questions 17 and 18, as the event was no longer deemed a major influencing factor in 2023.

## RESPONDENTS

The 2023 survey saw 526 valid responses from blockchain gaming professionals. The number of responses was up by 51.6% from 2022, when 347 valid responses were received. This growth has been consistent since 2021 when the survey only had 212 valid responses. The survey and report have been gaining reach and influence each year, with more participants eager to share their views.

Over the past three years, while we have seen growth in the number of respondents, there has been a decreasing percentage of women participating in the BGA survey. This signals an increasing lack of female representation and gender diversity in the blockchain gaming industry. In 2021,

“Since 2020, Asia has been a harbinger for web3 gaming. From cutting-edge games development in Vietnam, to world-class IPs in Japan and Korea, to forward-thinking regulation in Singapore and Hong Kong, to unprecedented adoption rates in the Philippines, look to Asia if you want to know where this industry is going next.”

**LEAH CALLON-BUTLER**  
DIRECTOR, EMFARSIS

20.3% of respondents were female. By 2022, females represented 19.0% of respondents, and by 2023, they were 16.9% of the cohort.

There has also been a decrease in younger respondents aged 18 to 24, reflecting only 7.0% of the overall respondents in 2023. This demographic represented 22.8% of the survey group in 2022.

From a geographic standpoint, Europe represented the majority of survey respondents at 38.8%. Historically, Europe has been a strong region in gaming and home to big studios that are openly developing web3 projects, including the likes of Ubisoft and The Sandbox in France, and CCP in Iceland.

After Europe, Asia had the largest representation at 29.1%. In recent years, Asia has made a play to become the global leader in web3 gaming. Established studios in South Korea and Japan have not been shy about their interest in web3 — including SEGA, Netmarble, Nexon, Bandai Namco and Square Enix — with Wemade being among the first major game developers

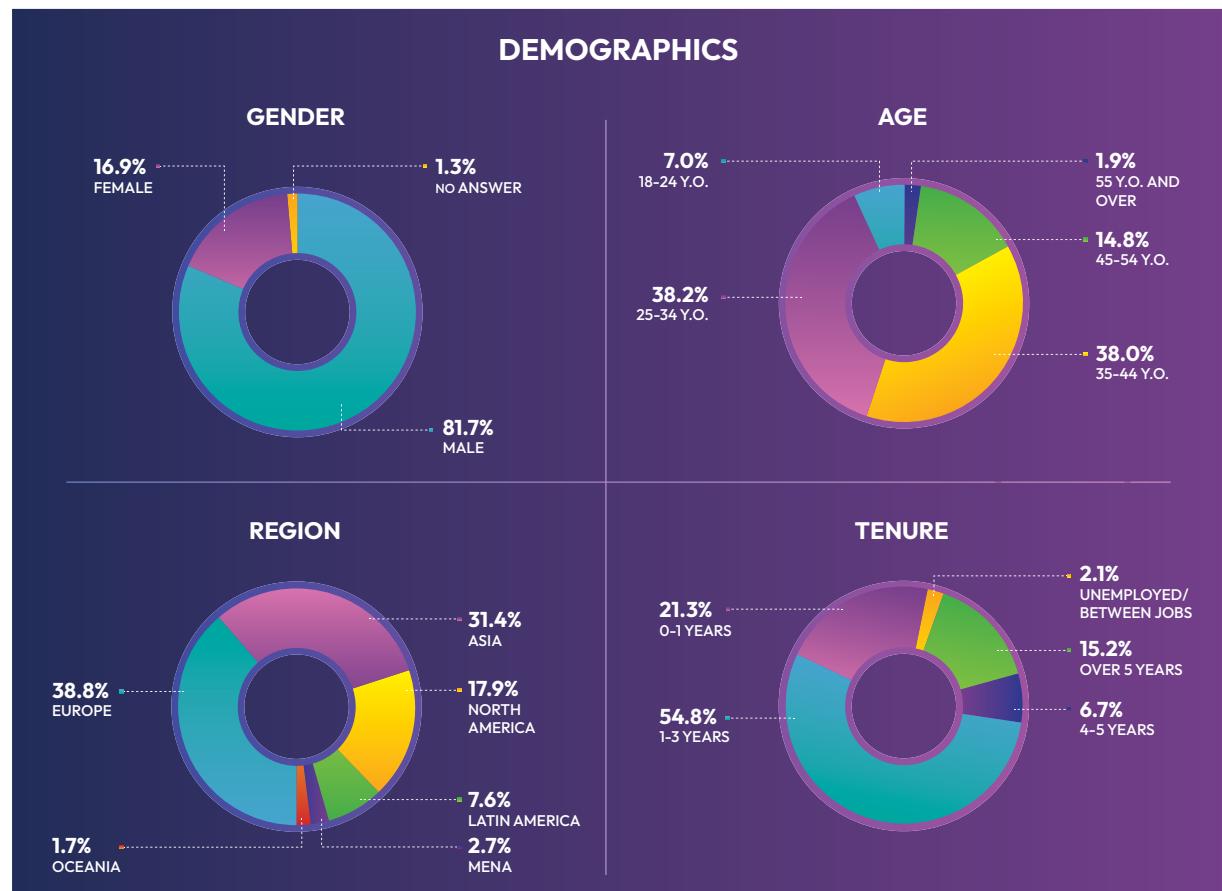
in South Korea to embrace blockchain. Singapore and Hong Kong have been some of the first in the world to create regulation that supports and legitimizes web3 companies. Vietnam is a leader in web3 gaming development, with Sky Mavis, the developer of Axie Infinity, headquartered in Ho Chi Minh City. Meanwhile, the Philippines has been the leader in web3 gaming adoption for three years running, according to CoinGecko. India, too, boasts over 500 million gamers, and blockchain gaming interest is growing in the country.

After Asia, North America and LATAM made up 17.1% and 8.4% of respondents, respectively. North America is an established global gaming hub and despite regulatory challenges surrounding crypto in the United States, the audience pool is massive and still a top market that blockchain games want to break into — especially with distribution platforms including Google Play, App Store, Epic

Games Store and Amazon relaxing attitudes to web3. Meanwhile, web3 gaming companies have also looked to Spanish-speaking LATAM for its huge population of passionate gamers and growing interest in web3.

One of the most interesting new regions to emerge in the BGA 2023 State of the Industry report is the Middle East and North Africa (MENA), representing 5.0% of total respondents. Over the past two years, few survey responses were received from this region so they were collapsed into the “Others” category.

In 2023, the rise of MENA can be attributed to improved regulatory clarity for web3 in places such as Dubai and the United Arab Emirates (UAE). In 2022, Dubai allotted US\$4 billion to metaverse development over the following five years. There has also been significant investment from Saudi Arabia’s special economic zone, NEOM, including a US\$50



million investment into Animoca Brands to develop a local hub for web3 services. All this has put MENA on the map as an attractive place for blockchain gaming.

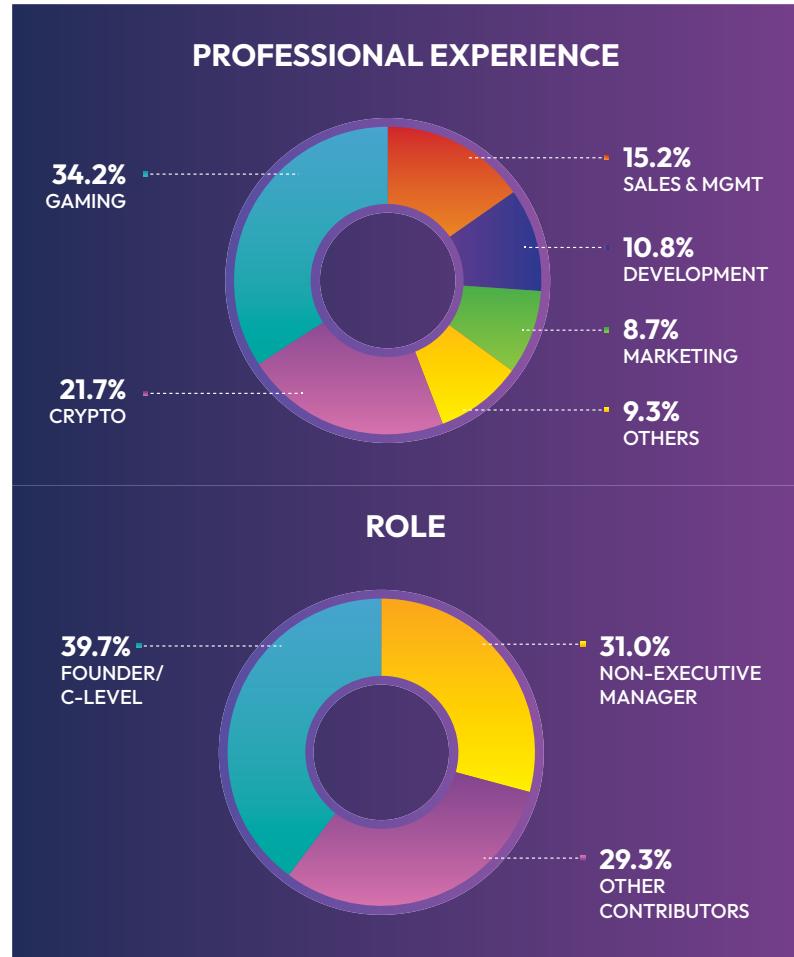
Oceania, which includes Australia and New Zealand, has a low representation in the survey at 1.7%, despite the region being one of the most impactful. Leading protocol Immutable X is headquartered in Sydney, while games including Gods Unchained, Illuvium, Zed Run, and Sunflower Land have been developed in Australia.

The larger number of respondents from Europe and Asia may also be partially attributed to various live industry events that were held in those regions and where the BGA had a distinct live presence during the survey collection period, such as Gamescom Cologne, TOKEN2049 and Tokyo Game Show.

Over 320 individual companies, projects and protocols responded to the 2023 survey, with 43.5% of respondents working for gaming studios (web3, web2 or hybrid). More than half of the respondents have been working in the industry for one to three years, indicating that many of them would have experienced the previous bull market of 2020-21 through to the current bear market. Their experience and insights from the past few years are reflected in the data.

70.7% of respondents in 2023 were in senior positions, whether as founders or at the executive level, or as non-executive managers within their companies and protocols.

“Other Contributors” made up a significant 29.3% of survey respondents, reflecting the many different roles in web3 gaming and the broad range of skills required. Roles that were collapsed into this category included (but were not limited to) non-executive roles as well as independent roles including freelancers, interns, content creators and KOLs, community managers, moderators, professional esports players, and more. The sheer diversity in roles and modes of employment, as well as the fast-evolving nature of the industry, suggests it would be worthwhile to explore this topic in greater detail and depth in future surveys.



## A SAMPLE OF SURVEY RESPONDENTS

As part of its mission to represent a diverse range of viewpoints, the BGA called upon a wide spectrum of industry roles to respond to the survey with their thoughts and opinions. Eligible roles included (but were not limited to) founders, developers, publishers, venture capital, and service providers in legal, finance, marketing and PR, who were currently working or between jobs in blockchain gaming. Journalists and content creators who actively cover blockchain gaming were also encouraged to complete the survey. Esports players that were signed to a competitive guild or receiving financial support in the form of a salary or sponsorship were also eligible.

Listed below is a non-exhaustive overview of some notable companies where survey respondents said they currently work. These include The Sandbox, Yield Guild Games (YGG), Upland, Star Atlas, DappRadar, Game7, Polygon, Binance, Square Enix, Google Cloud, Amazon Web Services (AWS), Georgia State University and more.

MYTHIC PROTOCOL	SKALE	METACENE	YIELD GUILD GAMES	THE SANDBOX
420 VENTURES	IMAGI	EDEN Ventures	LAGUNA GAMES	DMM.com
AVOCADO DAO	Google Cloud	DappRadar	SingularityNET	HACKERNOON
UPLAND	AWS FOR GAMES	SQUARE ENIX	BITPINAS	TIER ONE ENTERTAINMENT
FUNFAIR VENTURES	near	ULTRA	PlayMining	Pixelcraft Studios
COINTELEGRAPH The future of money	ALICE	Georgia State University	STARDUST	polygon
STAR ATLAS	GAME7	Economics Design	Sequence	MIRAILABS
Polkastarter	QuickNode	nWay	DLNews	BINANCE

“When we launched Axie Infinity in 2018, our core community was 300 people strong and only a handful of other projects were building alongside us. Today, I’m proud to see the most talented builders and leaders strengthening our industry, from big tech companies to passionate web3 natives — all working together to forever change the world of gaming and provide digital property rights to users. Together, we’ll keep building relentlessly for the future we want to see.”

**ALEKSANDER LARSEN**

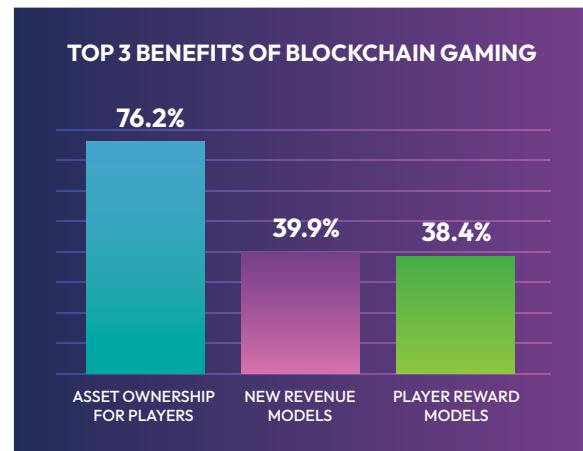
CO-FOUNDER AND COO  
SKY MAVIS

# WHY BLOCKCHAIN FOR GAMING?

In 2023, asset ownership for players was cited as the top benefit that blockchain can bring, according to 76.2% of the respondents. This has consistently been the top benefit of blockchain gaming cited by industry professionals since the survey began three years ago in 2021.

While it is possible to own items in a web2 game, and players can sell their in-game items from their favorite MMORPG in its dedicated marketplace, the terms and conditions of these games have always prohibited them from being exchanged outside the game for real-world value. With the advent of blockchain technology, players can actually own, trade, and collect in-game resources, skins, and other digital items, rather than renting them from the game developer or publisher.

This delivers true property rights and ownership to players in a space that has traditionally been controlled by the game developers and publishers, opening up many possibilities for interoperability between games, composability of



## CHANGING ATTITUDES: TOP 10 BENEFITS OF BLOCKCHAIN GAMING

2021	2022	2023
1 Asset ownership (players)	1 Asset ownership (players)	1 Asset ownership (players)
2 New revenue models	2 Player reward models	2 New revenue models
3 Player reward models	3 New revenue models	3 Player reward models
4 Decentralized project ownership	4 Creativity and gameplay	4 Decentralized project ownership
5 Transparency	5 Decentralized project ownership	5 Interoperability
6 Enabling new collaborations	6 Interoperability	6 Transparency
7 Creativity and gameplay	7 DAOs / Community governance	7 Creativity and gameplay
8 Provably fair mechanics	8 Transparency	8 DAOs / Community governance
9 Improved data security	9 Enabling new collaborations	9 Enabling new collaborations
10 Data management	10 Provably fair mechanics	10 Optional creator royalties

## PROPORTION OF THE GAMING INDUSTRY LIKELY TO LEVERAGE BLOCKCHAIN WITHIN THE NEXT YEAR



games, new business models and monetization strategies, and more.

Following asset ownership, new revenue models and player reward models were cited as the second and third top benefits of blockchain gaming, respectively. These two benefits have cycled between second and third place since the survey started in 2021.

While all respondents believe asset ownership is the biggest benefit of blockchain gaming, there are subtle differences between the second and third biggest benefits depending on the region. Respondents from the United States, Europe and Oceania believe that new revenue models should be the second biggest benefit, while those in Asia and Latin America place more emphasis on player reward models.

There is also a strong belief that mainstream adoption will gain momentum in 2024, with more than half (52.1%) of respondents confident that at least 20% of the gaming industry will likely leverage blockchain technology in some way within 12 months.

**“Blockchain gaming is not merely an evolution of entertainment but a revolution in digital asset ownership and value creation. Beyond the interactive experiences, blockchain gaming positions itself at the confluence of creativity, economy and technology. It grants players true ownership of their in-game assets, fosters decentralized communities, and can even pave the way for novel economic models that empower and reward both developers and players.”**

**TIM DIERCKXSENS**  
CO-FOUNDER AND CEO, VENLY



“Web2 gamers will find value in digital ownership of their in-game assets by coincidence, not because someone told them they should play a game with blockchain elements. They will find out their items have value, are owned by them, can be transferred, and slowly let go of most of the misconceptions.”

**JEFFREY GWEI**  
FOUNDER  
THEWEB3GAME.COM

“The resounding consensus among gamers is crystal clear — ownership isn’t just a feature; it’s the heartbeat of blockchain games and by extension all of web3. That is why web3 is so often described as the web of ownership. Over the last many years we have been advocating for the transformative power of true digital ownership, breathing life and innovation into gaming experiences that are reshaping the very essence of our virtual existence that speak to our identity, culture and sense of community.”

**YAT SIU**  
CHAIRMAN  
ANIMOCA BRANDS

“Beyond having the rights to own or sell assets, true asset ownership must also mean having control over how an asset looks, what it does, and where it can be used. We have seen decentralized asset ownership evolve to integrate other emerging technologies, such as AI, to lower the technical barriers to creating NFTs, enabling more users to customize their creations according to their preferences. Empowering blockchain gamers and users with this level of ownership is what truly defines our industry.”

**RENZ CHONG**  
CO-FOUNDER AND CEO  
BREEDERDAO

“Blockchain will move away from being a game’s USP and instead work in the background as a fundamental technology.”

**ROBERT BAGGS**  
CO-FOUNDER  
TOKEN GAMER



## JOIN THE BLOCKCHAIN GAME ALLIANCE

Membership is open to all individuals and organizations around the globe that are professionally interested in the blockchain gaming industry. If you are interested in formal membership with the BGA, please submit the expression of interest form below.

We ask that you agree to knowledge sharing within our community and participation in our many events where possible.

You can be part of the network on an individual basis, or apply on your company's behalf. The BGA board carefully reviews each application, then contacts applicants with further instructions.

**VISIT THIS LINK TO APPLY**

**[www.blockchaingamealliance.org/join-the-bga](http://www.blockchaingamealliance.org/join-the-bga)**

# BGA IN ACTION

The BGA's role is to serve its members by raising awareness of the industry, providing education, actively promoting collaboration between members, and to increase their visibility through events to showcase innovation in blockchain games and related infrastructure, tools, and services. The BGA achieved its mandate in a variety of ways throughout 2023.

## GLOBAL EVENTS

### GAME DEVELOPERS CONFERENCE (GDC) SAN FRANCISCO (20-23.03.2023)

- Raised awareness of blockchain gaming at one of the largest global industry conferences in the US
- Connected with more professionals in the gaming industry
- Showcased BGA members' games, products and services
- Promoted blockchain gaming to professionals in the traditional gaming industry
- Connected with members in the US and onboarded new members into the BGA



### NFT PARIS FRANCE (24-25.02.2023)

- Created a successful side event where the BGA curated and moderated nine panel discussions with 27 expert speakers on various aspects of blockchain gaming
- Organized an all-female panel discussion



### GAMESCOM COLOGNE (23-27.08.2023)

- Raised awareness of blockchain gaming at one of the largest global industry conferences in Europe
- Dispelled the myths of blockchain gaming through demos of 19 exciting projects under the BGA banner
- Hosted the Annual BGA dinner with 60+ members in attendance
- Interviewed Hideaki Uehara from Square Enix
- Kicked off the BGA 2023 Survey
- Organized the Sébastien Borget panel: Giving Value to the Community



### TOKEN2049 SINGAPORE (18-19.09.2023)

- Connected with the global web3 community in Singapore and showcased the BGA to a new audience
- Onboarded new members from the APAC region
- Organized Lifeflow networking event with Sébastien Borget



### TOKYO GAME SHOW JAPAN (21-25.09.2023)

- Began nurturing connections with the Japanese web3 and gaming community
- Onboarded new members from Japan

**“The BGA organizes numerous activities to raise awareness of blockchain gaming, providing opportunities for our members to gain visibility and showcase the latest advancements in blockchain technology. Initiatives such as panel discussions on the latest topics, Demo Days, and the BGA Academy aim to support this mission. We will continue working with our members to bring about collaboration that will help the entire ecosystem grow.”**

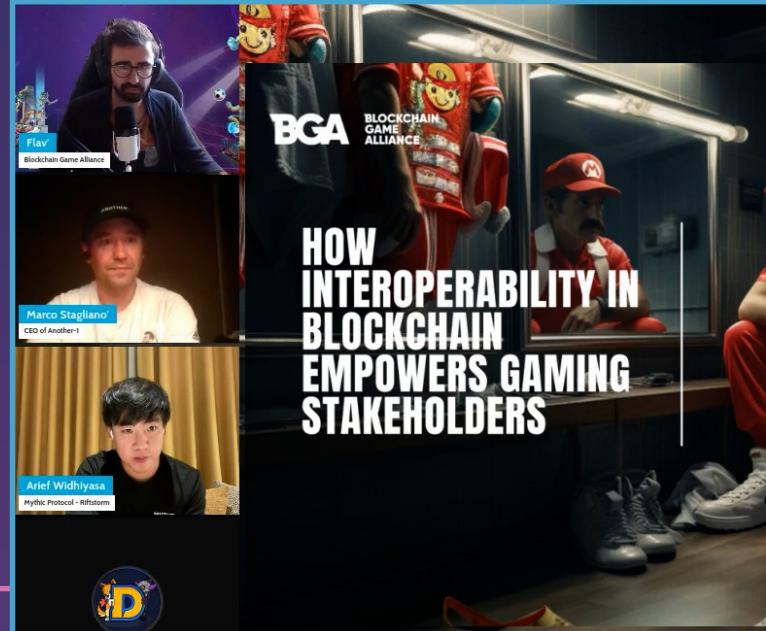
**MELANIE DOW**  
CONTENT MANAGER, BGA

**“The Blockchain Game Alliance’s efforts in expanding its reach are groundbreaking, especially in Spanish-speaking regions. By organizing IRL and online events in both Latin America and Spain, we are bridging cultural gaps and bringing the exciting world of blockchain gaming to a diverse audience.”**

**MARIANO RUBINSTEIN**  
FOUNDER, SURA GAMING

## WEBINARS

This year, we have run 46 online presentations featuring over 150 BGA members. The purpose of the online panel discussions is to discuss some of the challenges and solutions in the web3 gaming industry, including game design, player engagement, user acquisition, interoperability, VC funding, and more. Each panel features three to four BGA members who can share their knowledge, expertise and insights on relevant topics. These sessions are available to view on the BGA YouTube channel, shared within the private members' groups and public newsletter.



## BGA DEMO DAYS

Demo Days are an opportunity for BGA members to showcase the projects they are building and enable other members as well as the public to view the possibilities of blockchain games, products and services. Members can get involved in these monthly sessions through our private channels, and viewers can tune into the livestream on the BGA's X profile, YouTube and Twitch for the opportunity to win prizes and giveaways from the companies presenting their projects. Some of the BGA members that have gained more visibility through Demo Days include PwC, Ballies, Aavegotchi, Falco, Venly and Gala Games.

## STATS SECTION

<b>200+</b> New members (164 companies & 38 individuals)	<b>500+</b> Direct partnership introductions	<b>12</b> Booths at conferences worldwide	<b>40+</b> Members showcased at booths	<b>70+</b> Speaking opportunities
<b>2,320</b> Printed copies of the 2022 report and magazines	<b>41</b> Media pickups of the BGA 2022 Member Survey & Report	<b>230</b> Members featured in newsletters	<b>15</b> BGA side events	<b>1,000+</b> Attendees across BGA side events

# ADDRESSING THE GENDER IMBALANCE

Since 2021, there has been a steadily declining percentage of female respondents to the survey. This downward trend underscores the urgent need to improve gender diversity in the blockchain gaming industry. The BGA strongly believes that gender diversity is crucial to blockchain gaming as it brings a variety of perspectives and experiences to the table, fostering innovation and creative problem-solving. Additionally, it promotes a more inclusive and equitable society, ensuring that everyone has equal opportunities and representation.

The BGA has promoted several initiatives to address inequality, including welcoming a new gender-balanced board. From previously having one female board member among nine male board members, the BGA is moving forward with three female and three male board members, along with Sebastien Borget as President and Shaban Shaame as Treasurer.



“The industry needs to represent the diversity of professionals within the ecosystem, and the BGA aims to reflect this through our activities, first by ensuring that we have a gender-balanced board and team. This is an industry-wide issue and something that we need to work towards together to ensure that all voices are heard and that the gaming industry represents the diversity within its professionals as well as the audience it serves.”

**SEBASTIEN BORGET**  
PRESIDENT  
BGA



“As builders and founders building for scale in an emerging technology, we need to make sure we are building for all consumers by encouraging diversity in our own teams and ensuring our products are made for a global market. As an example, mobile has allowed more women to enter gaming and therefore allowed gaming to become inclusive. So web3 needs to become mobile-first if we want that massive scale and consumer adoption.”

**CHRISTINA MACEDO**  
CO-FOUNDER AND CEO  
READYGG

“In our quest to unleash blockchain’s potential in gaming, elevating our common goal by integrating a spectrum of distinct viewpoints and skills is one of the strongest beliefs that will assist the web3 gaming ecosystem to flourish and be fully inclusive and as diverse as its players. This is something the BGA works actively to achieve to represent the large network of members within the Alliance.”

**FLAVIEN DEFRAIRE**  
DIRECTOR OF GLOBAL DEVELOPMENT  
BGA

“Diverse and inclusive games and tech companies generate unconventional solutions and offer up more ideas, and often will deliver winning products. We need to remember that diversity is about power structure, and women must have a seat at the decision-making table to create the change.”

**YASMINA KAZITANI**  
CMO  
INTERVERSE

“I was really happy to see more women entering the gaming industry during 2023. They’re not just joining in, they’re leading the charge and bringing fresh ideas to the table. Can’t wait to see this grow even stronger in 2024. Here’s to more games, more voices, and more girl power in the mix.”

**BOZENA REZAB**  
FOUNDER AND CEO  
GAMEE

# CHALLENGES IN THE INDUSTRY

Onboarding remains the biggest challenge for the industry, as cited by more than half of all respondents. Despite improvements in accessibility, such as implementing free-to-own and free-to-play (F2P) models, and making the blockchain elements optional, problems with onboarding continue to impede adoption momentum. The trend has persisted since the earliest days of blockchain gaming; in 2021, the popularity of NFT rental programs known as “scholarships” grew due to the high barriers to entry into web3 games.

“Every game’s first job is to onboard players seamlessly. It’s the only way games can scale. In blockchain gaming, this has traditionally been a challenging process.”

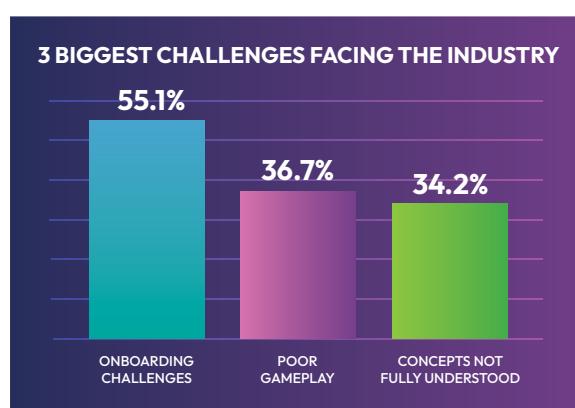
**SAM BARBERIE**

HEAD OF STRATEGY AND PARTNERSHIPS  
SEQUENCE

Poor gameplay was cited as the next issue, with web3 games often drawing lackluster comparisons to web2 games in terms of features and gameplay. However, in 2023, some web3 games have challenged this. Games such as My Pet Hooligan and Illuvium have gained a lot of attention for their high-quality aesthetic. Star Atlas, which is currently under development, is another title that has awed gamers with its use of Unreal Engine 5 and its potential to rival world-class titles like Star Citizen and EVE Online. Other web3 games that have earned acclaim include Cross the Ages, a collectible card game (CCG) featuring a story mode and player-versus-player mode akin to current web2 CCGs like Hearthstone and Legends of Runeterra, Upland, a simulation game where players purchase and trade virtual properties representing real-world landmarks.

In 2023, the topic of regulation regained some mindshare, becoming the fifth biggest concern among respondents when it was sitting at 10th place in 2022. This is unsurprising given high-profile enforcement actions in crypto over the past year, such

as FTX and Binance. However, during our inaugural industry survey in 2021, regulation was cited as the number one challenge facing the industry, with fears that adoption would slow if countries began implementing stricter policy or compliance measures. Additionally, it was difficult for web3 founders to navigate the uncertain regulatory environment with



any level of clarity or confidence. This was a reflection of the times, given that the earliest blockchain games were highly financialized.

Male and female respondents agreed that onboarding challenges were the top concern in 2023. However, males saw poor gameplay as the second biggest challenge, after citing concerns about industry funding in 2022. Females, on the other hand, saw blockchain concepts not being understood as the next biggest challenge, having been concerned about player retention in the previous year.

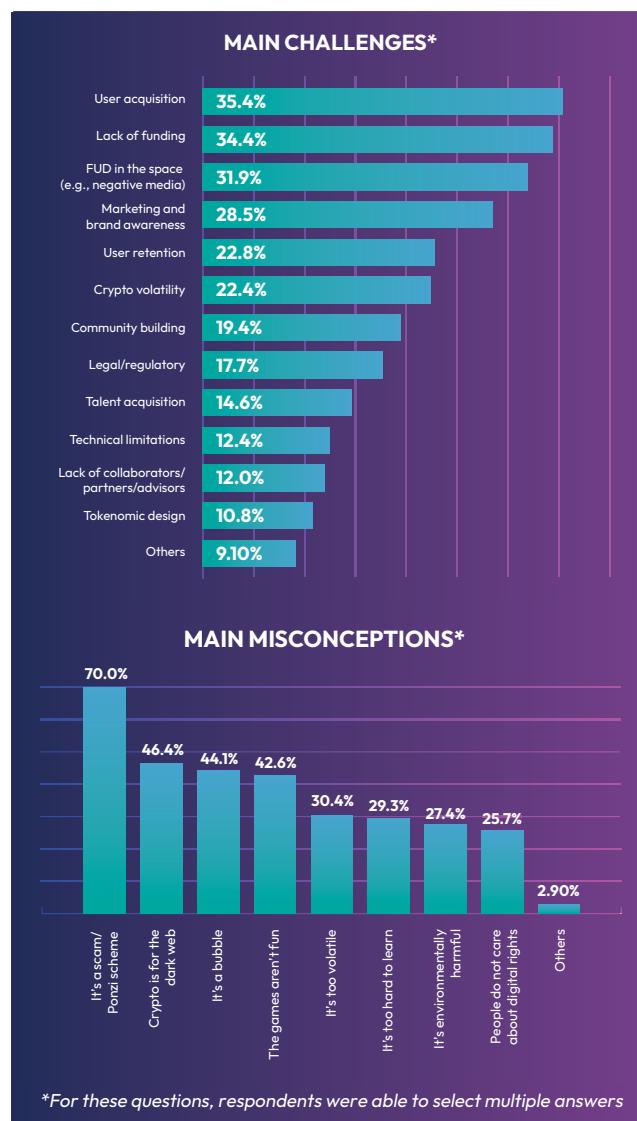
The younger demographic, aged 18 to 24, also pointed to blockchain concepts not being understood as their second biggest concern, while older professionals aged 25 to 54 cited gameplay as the biggest challenge after onboarding.

## THE BIGGEST NEGATIVE IMPACT

For two consecutive years, survey respondents have agreed that Crypto Winter has had the biggest negative influence on blockchain gaming. With the bear market came a loss of interest in web3 from the general public and media, and even those who have continued playing actively may have experienced some fatigue brought about by stagnant markets. According to DappRadar, 2023 has shown a slight decline from 2022 in terms of people actively playing web3 games. There was an average of 2.2 million monthly active users (MAU) in 2023, 15.4% lower than 2022's 2.6 million average MAU. Despite this, companies are using the quiet time to build solutions that

“Despite highly publicized legal actions against crypto companies over the last year and relentless negative press in mainstream media (mostly oblivious to the fact that the fraud has taken place almost entirely in traditional intermediary structures), blockchain game developers continue to build, and the core user group continues to grow. User ownership is the future, and blockchain games are not going away.”

**DAVID B. HOPPE**  
FOUNDER AND MANAGING PARTNER  
GAMMA LAW

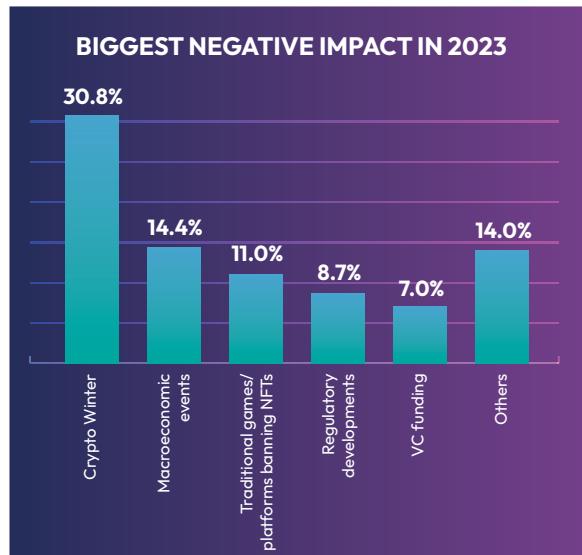


can enhance gameplay experiences and facilitate better onboarding. Things have also started to look up as monthly active users started increasing to 2.6 million in October 2023, auguring well for the coming year.

From there, the next biggest concern among respondents is macroeconomic events. Global macros, such as economic downturns, have heightened challenges by creating an environment of financial instability and restricted access to capital. Additionally, geopolitical tensions further amplify the complexities, making it harder for emerging businesses to navigate and thrive in the global market.

Crypto Winter and global macroeconomics are external factors influencing the industry. Combined, they were the strongest forces putting pressure on blockchain gaming, cited by 51.3% and 45.2% of survey respondents in 2022 and 2023 respectively. This suggests that blockchain gaming industry professionals believe their companies and projects will come out strong, once markets improve.

The only perceived internal challenge coming from within the web3 space was NFT bans by traditional gaming studios. This ranked third in both 2022 and 2023, cited by 8.7% and 11.0% respectively. Notable bans over the past year include those by Minecraft developer Mojang Studios, who had concerns about NFTs potentially affecting the game's inclusive community experience as not all players would have access to them. Grand Theft Auto developer Rockstar Games banned NFTs and crypto due to concerns surrounding game property rights being distributed and monetized without explicit consent from the publisher. South Korea also made a clear stance on banning NFT games due to their speculative nature.



*“As we look to the future, we need to go back to the basics and remind people that the best games are those that are the most fun and enjoyable to play. We just need to show how blockchain technology makes already good games great games by connecting in-game economies with the real-life economy. Imagine a massive phenomenon of multiple games being connected through blockchain technology, with NFTs and game tokens minting and flowing freely between games and networks.”*

**HENRY CHANG**  
CEO  
WEMADE

# MAIN MISCONCEPTIONS SURROUNDING BLOCKCHAIN GAMING

Since 2021, respondents cited that the biggest misconception surrounding all of blockchain gaming is that people assume it is a scam or a Ponzi scheme. In 2023, 70.0% agreed that this was still the top fallacy about the industry. In 2022, it was 69.5%, and in 2021, it was 59.0%, suggesting that the misconception is becoming a greater concern for blockchain gaming professionals.

While there have been a number of fraudulent projects in the space, these bad actors do not represent the entire blockchain gaming ecosystem. Unfortunately, their malicious schemes have tarnished the overall reputation of the industry. As with any investment or emerging technology, individuals should exercise caution, conduct thorough research, and be aware of potential risks before getting involved. It's also crucial for the industry to adopt best practices and regulatory measures to build trust among users.

In 2023, another misconception cited by 46.4% of respondents was persistent associations between crypto and the dark web. It seems that this is an increasing concern for blockchain gaming professionals, as 38.0% highlighted the problem in 2022 and 38.2% in 2021. Mainstream media reports about crypto being used for crime and to fund terrorist activity may have fueled this belief. Greater education is needed to demonstrate blockchain's transparent nature and how it can be an advantage to law enforcement in tracking and tracing crime-related transactions.

Increasing efforts to further educate the mainstream audience about the benefits of blockchain will be essential to move past these misconceptions and improve public sentiment.



## BLOCKCHAIN GAMES REPORT

In addition to its annual State of the Industry Report, the BGA partners with DappRadar to produce a monthly Blockchain Games Report, using on-chain data to measure and analyze the performance of dapps, games, tokens, DeFi, NFTs and wallets across dozens of blockchains.

To access all our reports from 2023, follow this link:

<https://dappadar.com/blog/category/bga-game-reports>

The grid displays 15 reports from the BGA x DappRadar Blockchain Games Report series, each with a unique title and image:

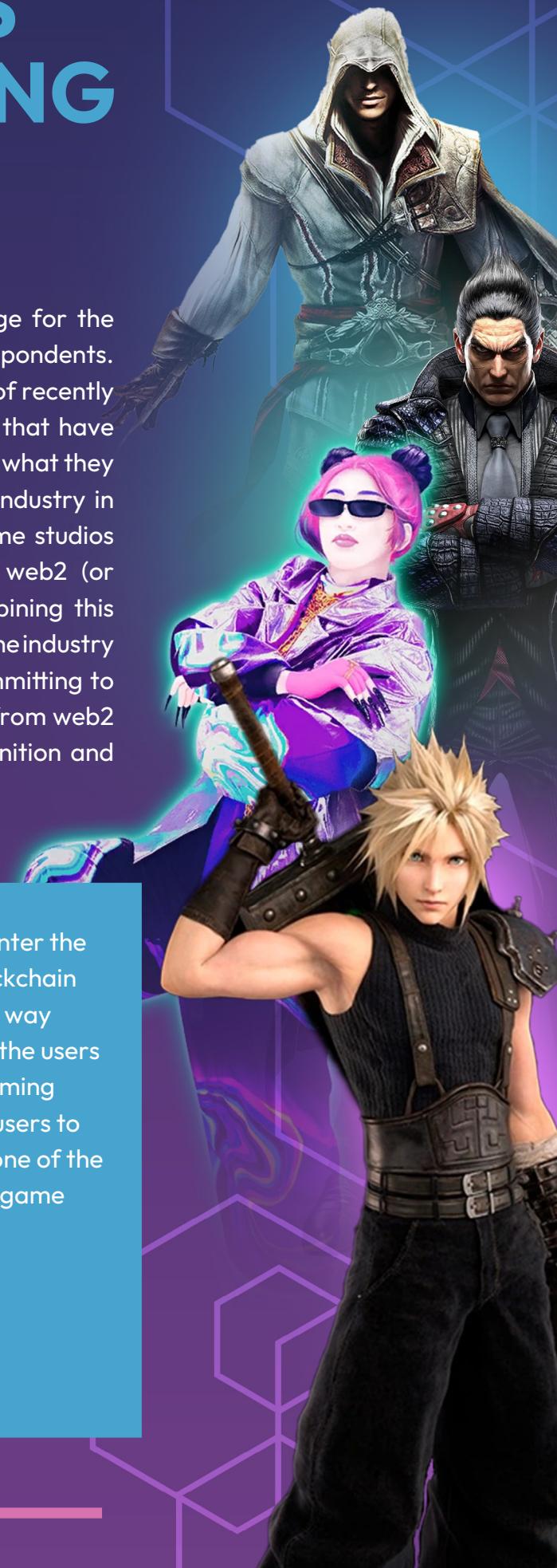
- Blockchain Gaming Hits 1 Million Daily Unique Active Wallets
- State of Blockchain Gaming in Q3 2023
- Casual Game Platforms Lead with 10% On-chain Gaming Activity
- \$297M Investment Surge: What's Ahead for Web3 Gaming & Metaverse?
- State of Blockchain Gaming in Q2 2023
- Web3 Gaming: 716K UAV Amid 36% Market Dominance
- Web3 Games Flourishing on iOS Despite Resistance: Axie Infinity Leading the Charge
- Blockchain Gaming Resilience: \$421M Investment Amid Meme Token Hype
- Polygon's Rise as a Gaming Chain: Second Only to Wax with 138k Daily Gaming Wallets
- State of Blockchain Gaming in Q1 2023
- Unlocking Exciting Developments: Why a Down Month for Blockchain Gaming is Misleading
- DappRadar x BGA Games Report – 2022 Overview

# WEB2 FRANCHISES AND STUDIOS TRANSITIONING TO WEB3

Poor gameplay was the second biggest challenge for the industry in 2023, as cited by 36.7% of survey respondents. This may come from comparing the current crop of recently funded web3 games to titles from web2 studios that have been developing games for decades. When asked what they thought had the biggest positive impact on the industry in 2023, 19.8% of respondents cited traditional game studios launching NFT games, while 15.2% pointed to web2 (or traditional) gaming transitioning to web3. Combining this data reveals that 35.0% of all respondents believe the industry benefited the most from web2 game studios committing to adopt web3 in 2023. This positive impact comes from web2 studios bringing talent, experience, brand recognition and huge mainstream audiences to the web3 industry.

**"I believe that when web2 game publishers enter the blockchain gaming space, many will add blockchain gaming elements to their existing games in a way that may be unnoticeable to users. It is up to the users to choose to use and enjoy the blockchain gaming elements, and F2P-based games that allow users to choose to purchase and own NFTs could be one of the solutions to significantly increase blockchain game adoption among web2 gamers."**

**HIDEAKI UEHARA**  
GENERAL MANAGER, INVESTMENT & BUSINESS  
DEVELOPMENT DEPARTMENT  
SQUARE ENIX





**“Great games will emerge as the first high-budget blockchain games debut. Notable game triumphs will prompt a new surge in strategic investments. Conventional game studios that were hesitant about venturing into web3 games will reconsider their stances. Developers will comprehend the constraints imposed by their chosen technologies, leading to the first migrations of games toward more suitable blockchain solutions.”**

**NICOLAS GILOT**  
CO-FOUNDER AND CEO  
ULTRA

Major gaming studios have been exploring and experimenting in this space, as many of them see the potential for blockchain games to evolve gaming as a whole. Several web2 studios have been working on web3 versions of popular IPs or new web3 games under their studio banner. These are:

#### **UBISOFT**

Ubisoft has been developing a new web3 game called Champions Tactics: Grimoria Chronicles and announced a formal partnership with Immutable X. Ubisoft was one of the first major studios to explore NFTs and web3 applications for their franchises. They have deployed several characters from the Rabbids and Assassin's Creed franchises into The Sandbox.

#### **SQUARE ENIX**

In early 2023, Square Enix unveiled plans to release the web3 game Symbiogenesis, deployed on the Polygon blockchain. The publisher also plans to bring their Dungeon Siege IP to The Sandbox and has released an NFT collection based on Final Fantasy VII.

#### **CCP**

The studio behind EVE Online announced in 2023 that they were making a AAA blockchain game set in the EVE Universe titled Project Awakening. With US\$40 million in funding led by a16z, the game is in deep development and is scheduled to have its first confidential playtest in December 2023, as part of PHASE II of the project.

#### **NEXON**

The developer of the long-running side-scrolling MMORPG MapleStory announced that they were developing

MapleStory Universe, which will integrate the Polygon blockchain for NFTs. The developer has released several videos of their development work and collaboration with Polygon Labs.

### **BANDAI NAMCO**

Bandai Namco launched a virtual pet NFT game called Ryu on the Oasys network. The game is working on releasing a second series of pets on the blockchain.

### **COM2US**

The South Korean mobile gaming company launched the XPLA platform last year and has been busy onboarding blockchain games including The Walking Dead: All-Stars, Summoners War: Chronicles and Ace Fishing: Crew.

A number of web2 studios also began exploring the web3 space through partnerships, test projects or foundational work. Some big names that made headlines in 2023 include:

### **SEGA**

SEGA partnered with double jump.tokyo to publish the web3 game, Battle of Three Kingdoms (Sangokushi Taisen). The game is set to release in late 2023.

### **KONAMI**

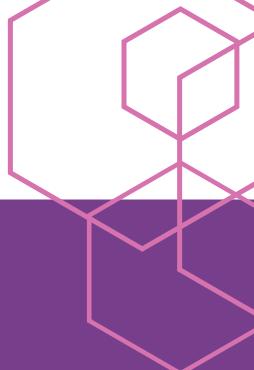
Konami recently dipped their toes into blockchain by auctioning Castlevania NFTs during the game's 35th anniversary celebration.

### **ATARI**

According to the company, they have been laying the groundwork for their gaming-focused blockchain, Atari X, through numerous partnerships and collaborations including investing in parcels of land in The Sandbox as early as 2020.

### **NETMARBLE**

Netmarble entered a partnership with The Sandbox with the aim of introducing their IPs into the metaverse. The Sandbox will create a Netmarble IP land located in the Korean specialized space, K-verse. They also plan on using some of the IPs as part of the board game Meta World: My City.



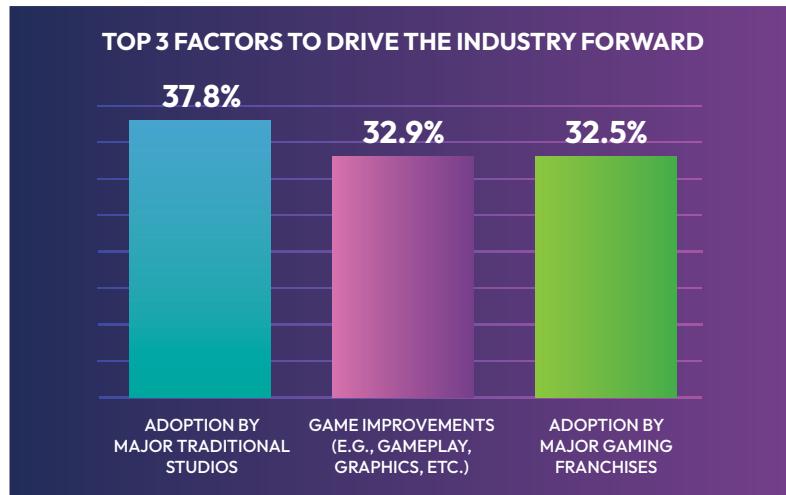
“A major trend to follow over the next few years will be more traditional game studios adopting blockchain technology. This will not only bring more attention to web3 gaming, but crypto in general as people outside of crypto get in touch with it for the first time.”

**MIKE STEIN**  
FOUNDER AND CEO  
PLAYTOEARN.NET

# DRIVING THE INDUSTRY FORWARD

More than a third (37.8%) of blockchain gaming professionals believe that blockchain adoption by major web2 game studios can move the industry forward. This is when a web2 studio launches a new game in web3, either by applying web3 elements to one of their existing games or by introducing an entirely new web3-native project. Game improvements come in as the second driver, with almost a third of responses. These two factors have been at the top spot since 2021, and they go hand in hand, as major traditional studios can bring in the experience and talent needed to take more web3 games to the same caliber as web2 games.

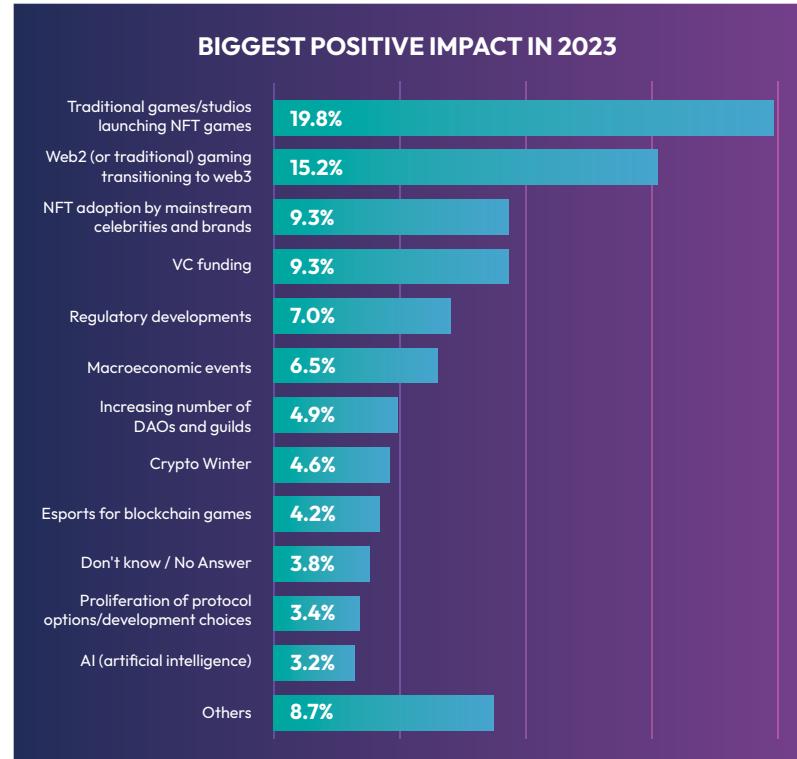
Outside of the top three, there was a big jump in improved onboarding and accessibility, securing 27.8% of the responses at fourth place. In 2022, it was only ranked 10th, meaning that the industry is increasing its focus on making blockchain games easier to get started with.



“The blockchain provides additional functionality, distributed ownership models, and other innovative technology to enhance gaming design, production and distribution, but we need to stop creating artificial silos for game development. Not all gaming will benefit from blockchain technology, and those that do are not necessarily better games. The games industry needs to work together and use the features and technology that best suit the game. It’s harmful to the industry as a whole to place artificial barriers and terminology around game development based on technology used within it.”

**ROB KEANALLEY**  
FOUNDER  
AQUATIC METAVERSE PTY LTD

Another noticeable trend is how respondents believe that more blockchain game releases are a significant driver for the industry, jumping from 12th place in 2021 to sixth place in 2023. In total, one in four survey respondents (25.7%) said they believe that the release of more web3 games would help advance the industry. More games mean greater variety, catering to a wider range of preferences.



Play-to-earn mechanics has lost its significance as

an industry driver, falling to eighth place in 2023 when it was ranked first in 2021 and fifth in 2022. In 2021, millions of new players onboarded to web3 through play-to-earn games, treating these games like jobs as they grinded for tokenized rewards that could be cashed out for cryptocurrencies and fiat. However, the sustainability of these virtual economies would soon be tested when prices of tokens dropped and financially-motivated players were the first to exit.

There is still an interest in play-to-earn, particularly in Asia, where the gaming culture is more open to the financialization of games. However, there remains a lingering skepticism on how to balance play-to-earn tokenomics with the volatility of the crypto market. Developers have to figure out how to make their games sustainable for the long-term. Play-to-earn remaining low in the rankings is not surprising, considering that these games are more popular during bull markets when crypto prices are on an upward trend.

Based on data from DappRadar, many established blockchains experienced a dip in gaming chain activity in the two years following play-to-earn's rise and fall in popularity. BNB, for example, saw reduced activity

“Our games should be competing with every other game out there. I’m done saying, ‘Well, it’s good for a blockchain game.’ If you’re going to ask for players’ money and time, then they will hold you to the same standard as every other game they play. We as an industry need to start raising the bar on what constitutes a game.”

**BENJAMIN RAY**  
BD AND PARTNERSHIPS  
MANAGER, GAMING  
HORIZON GAMES



in games by about 47.6% between October 2022 and October 2023. The same can be said for many other blockchains, such as Solana (69.2% decrease), Hive (75.0% decrease), Ronin (40.9% decrease), WAX (17.2% decrease), Avalanche (13.8% decrease), Immutable (35.7% decrease), Tezos (72.2% decrease) and Polygon (27.2% decrease).

While this may be perceived as a drawback, it is actually a sign of ongoing innovation. Rather than a drop in overall gaming activity, data shows that wallet activity and transactions have instead shifted to other blockchains providing better utility, ease of use and new gaming projects. ZkSync, for instance, gained a surge of users after its ecosystem launch in 2023. It currently has over 42,000 active wallets, the biggest increase of the year. Some of the popular games on the platform include Robots Farm, Tevaera and SecondLive.

Reduced transaction costs and reduced NFT costs moved down in priority when talking about the factors that will drive the industry forward. They are ranked 12th and 15th, respectively. One of the possible reasons for this is the scalability improvements towards L1s and L2s. One example is the transition of Polygon toward zkEVM rollups, which significantly lowers latency for transactions and aggregates numerous transactions into one for lower costs.

The industry also adjusted to reduce cost barriers for new players interested in playing web3 games. In 2021, many blockchain games required players to buy at least one NFT to be able to play. Especially as NFT prices picked up from the bull run, it became increasingly expensive for new players to purchase NFTs on the secondary market. Nowadays, most games have adopted a free-to-play model, where players can start the game without having to buy NFTs upfront. As such, the cost of NFTs is now less of a concern as it is no longer compulsory to buy an NFT or NFTs to get started with most web3 games.

“This year has been challenging for our ecosystem, but it has also provided the perfect opportunity to build and develop our projects in a more robust manner. Indeed, there is no better time than now to create a valuable ecosystem. In a more favorable market and timeframe, we might not have had the opportunity to do so because of heightened expectations. It’s certainly an opportune time to prepare for the next wave of newcomers.”

**LOUIS MICHALOT**  
MARKETING AND WEB3  
ADVISOR  
CROSS THE AGES

# WEB3 GROWTH UA, DISTRIBUTION & SCALING

Games live and die by two metrics, user acquisition (UA) and retention. For decades, web2 games have relied on centralized models for collection of personal data, such as age, gender, and geographics. Using tried-and-tested tools including ads on Facebook, Twitter, YouTube and Twitch, as well as in-app recommendations and email promotions, web2 games have followed a trusted playbook to launch and scale their products and attract new players.

Conversely, web3 games prioritize user privacy and operate on decentralized platforms, making it difficult to collect all the usual data required for traditional user profiling. Unlike traditional UA strategies, however, web3-native approaches often emphasize demonstrable community engagement, decentralized governance, and token incentives. Users are recognized not only as consumers but also as active participants contributing to the network's growth and sustainability. This approach aims to create more inclusive and equitable digital ecosystems by redistributing value and decision-making power among participants, fostering a sense of ownership and collaboration.

## WEB3'S ONBOARDING CHALLENGE

In 2022, onboarding and accessibility was the biggest challenge with 51.0% of respondents citing it as the top concern. The trend continued in 2023 where an even higher number, that is, 55.1% of respondents, called it out as their top concern again.

There are also many hurdles that prevent blockchain games from getting visibility. For example, Steam, the largest video game distribution platform for PC gaming, has banned any form of cryptocurrency or NFT trading. Web3 games have to redirect any transactions outside Steam or use third-party programs, making the process more tedious. The ban is not a permanent stance, but one that hurts the industry as it removes access to an avenue of game discovery from one of the behemoths of web2.



App stores are also imposing their limits. The Apple App Store is treating all web3 and NFT projects the same as traditional applications, imposing a 30% commission for all transactions done using their marketplace. Google Play, on the other hand, has been slow when it comes to enabling web3 games. Google itself has been supportive of blockchain technology, recently changing its policy to allow blockchain apps on Google Play. However, this change only occurred in mid-2023, meaning that many developers have only begun development of blockchain games for Android mobile phones.

## WEB3 OPPORTUNITIES FOR MAJOR PLAYERS

With that said, there are some big web2 platforms that have been facilitating game discovery in web3. The Epic Games Store has released more than 20 web3 games on its platform, with plans for more in the future. These games include Illuvium, GRIT, and My Pet Hooligan. Amazon Prime Gaming partnered with WAX's gaming studio and the game Brawlers, offering exclusive in-game items and physical prizes. The game Mojo Melee also started a six-month Amazon Prime Gaming partnership, offering monthly drops.

## A NEW APPROACH TO UA



Blockchain technology also offers unique possibilities for UA. One of the first experiments with this was the play-to-earn model that became very popular in 2021. Players could gain reward tokens and airdrops as they continued to play the game. Back in 2021, play-to-earn was considered by respondents as the biggest industry driver at 67.9%. There was nothing like it in gaming when it first erupted, and that drove a lot of players to try.

While it is no longer considered a main industry driver, play-to-earn did open the possibilities of new user acquisition strategies.

Many BGA members are exploring the following as web3-native methods of UA, distribution and analytics:

- **On-chain targeting:** Being able to see on-chain activity means that developers can track wallets that engage in web3 games or NFTs. Marketing to them, or inviting addresses directly can help with user acquisition and scaling. Companies and developers can also get more concrete data on player behavior using the data tracked from their on-chain activity. For example, it will display the player's preference for play-to-earn games or RPGs.
- **On-chain reputation:** Blockchain provides an opportunity for players to build their reputation online. Others will be able to view in-game achievements that are permanently and verifiably attached to a player's wallet. This gives players the opportunity to present themselves with credibility.
- **Web3 launches:** Being able to launch on a dedicated web3 platform can help improve visibility, targeting the audience companies want to reach. Apart from that, many big companies from both web3 and web2 are now beginning to offer programs to help develop this ecosystem.

The BGA witnessed a surge in interest from web3-specific UA projects throughout the year with a record number of members identifying as UA solution providers, such as Adikteev, Azarus and Trophy, among many others.

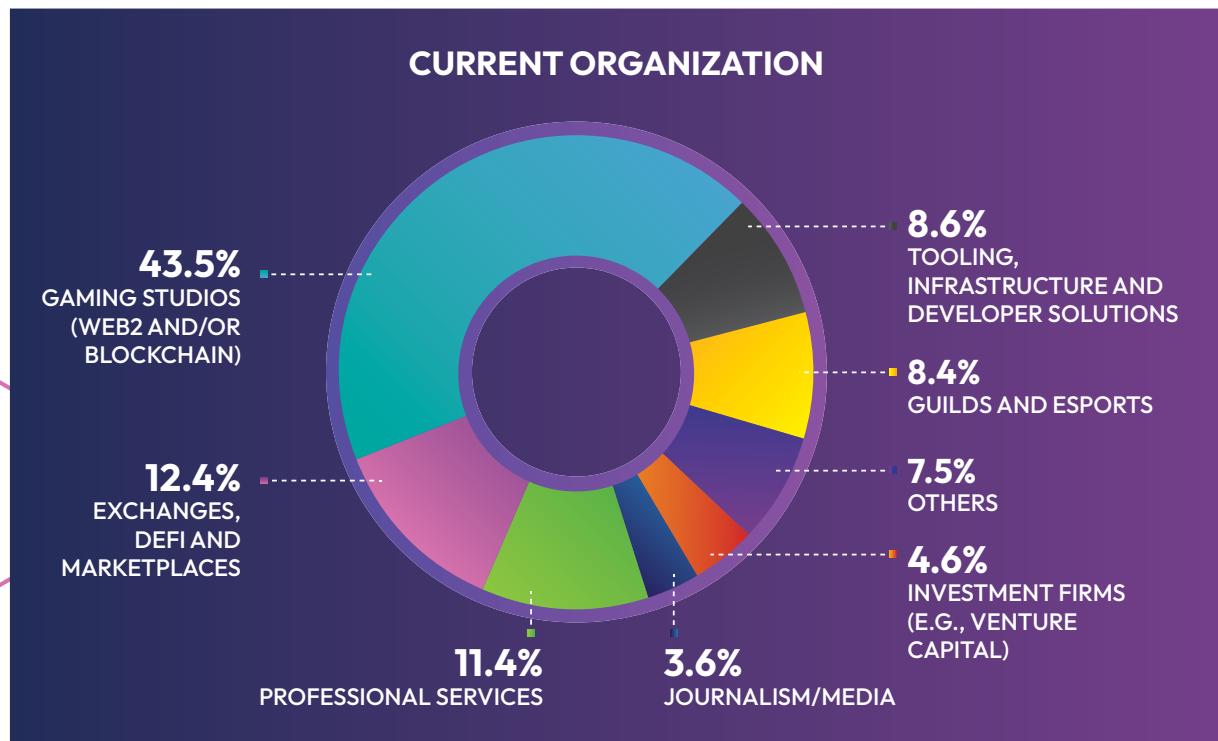
“Quests are now the bedrock of user acquisition for web3 because they give players opportunities to build their on-chain reputation and provide insight into what each community member has achieved. All the traditional top-of-the-funnel strategies we used in web2 to build general awareness will still be important, like advertising on Facebook, Twitter, Twitch, and YouTube. But we’re also going to see web3 games targeting and converting higher value, more engaged players at the bottom-of-the-funnel, through their on-chain reputation.”

**GABBY DIZON**  
CO-FOUNDER  
YIELD GUILD GAMES

# CAREERS IN BLOCKCHAIN GAMING

The blockchain gaming industry has opened up numerous career pathways and opportunities for people coming from gaming, blockchain, crypto, and other backgrounds. In 2023, 26.6% of respondents were from dedicated blockchain gaming studios, while 14.1% worked in companies that developed both web2 and web3 games. Traditional and blockchain games operate under the same elements, such as graphics and gameplay. The main thing that differentiates them is the use of blockchain technology, but the gameplay is often almost fundamentally the same. For a popular collectible card game (CCG) like Hearthstone, there will be a similar web3 game, like Gods Unchained or Splinterlands. Both have developer teams, marketing, media and the like. Every facet of business that surrounds traditional gaming can, more often than not, work with web3 games as well.

One significant change in 2023 is that there were very few new hires in the blockchain gaming space. There was a 57.3% decrease in employees who have been in their company for a year or less. This comes at one of the most volatile periods in the games industry



in the last 15 years where most gaming companies are cutting costs by laying off parts of their workforce. In 2023, an estimated 7,000 jobs were cut in gaming. Studios both big and small have axed jobs, including CD Projekt Red, Electronic Arts, Embracer Group, Telltale Games, and Bungie. Microsoft laid off 10,000 people, affecting Starfield developer, Bethesda Game Studios, and the studio behind Halo Infinite, 343 Industries.

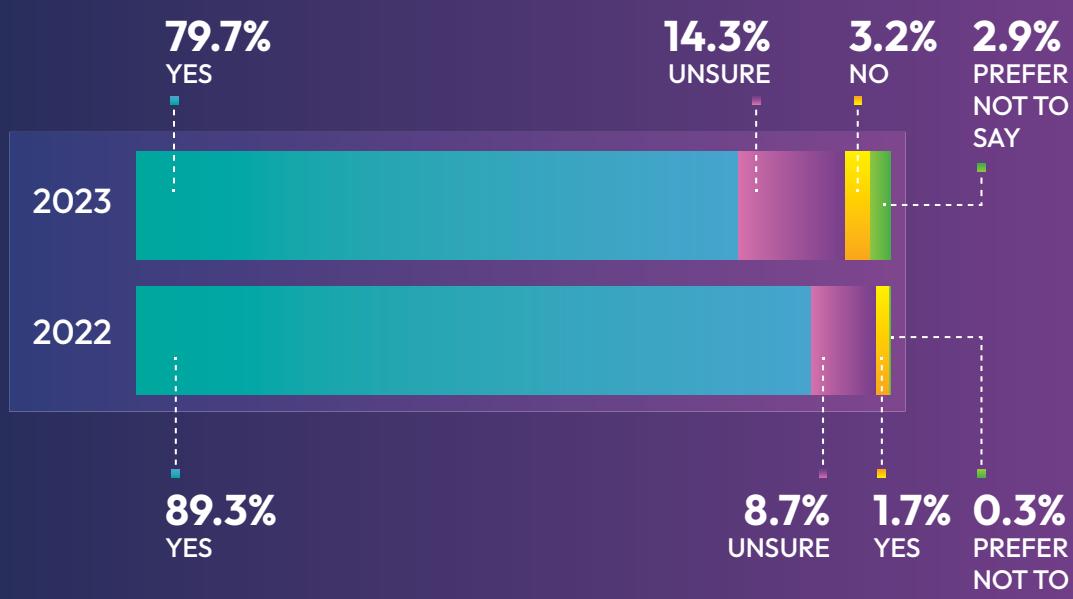
The same can be said for the crypto space that has continued to adjust through a difficult Crypto Winter. In the first two months of 2023 alone, over 2000 jobs were cut. Coinbase reduced its workforce by 20% last January. A month later, Polygon Labs and Dapper Labs laid off 20% of its workforce, while Messari and Immutable reduced their workforces by 15% and 11%, respectively. Other companies that announced job cuts include ConsenSys, Yuga Labs,

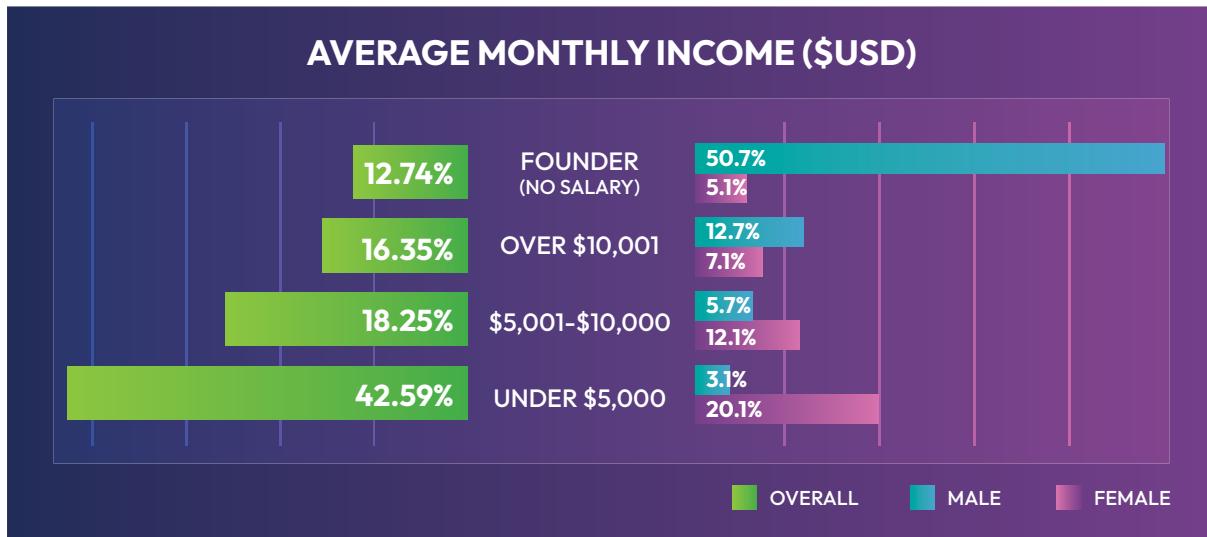
Ledger, Huobi Global, Crypto.com and Robinhood.

Despite the layoffs and budget cuts across tech, crypto and gaming, the vast majority of blockchain gaming professionals remain highly optimistic, with an overwhelming 79.7% of respondents saying they are confident they will still be working in the industry in one year's time. This remarkably positive sentiment has waned only slightly since 2022, when 89.3% of respondents said the same.

Additionally, staff retention has been strong this year, for people employed in the blockchain gaming industry. Compared to 2022, there was a 16.4% increase in respondents that have worked at their companies for one to three years. Further, the number of respondents who have been in their companies for more than five years tripled since 2022.

### PROFESSIONALS THAT BELIEVE THEY WILL STILL WORK IN THE BLOCKCHAIN GAMING INDUSTRY, ONE YEAR FROM NOW





When it comes to remuneration, blockchain gaming professionals are open to receiving major cryptocurrency, project-issued tokens, and stablecoins, with 44.3% of respondents receiving at least some portion of their salary in crypto. 18.4% get their entire salary paid in stablecoins such as USDC or USDT. Professionals aged 35 to 54 are more open to having a mix of fiat with their crypto as an alternative, with 24.8% citing it as their second option.

The data also shows 57.3% of females are getting paid below US\$5,000 monthly while 39.8% of males fall into this category. Going up the ladder, there is a smaller difference with 12.4% of females getting paid US\$10,000 or more, while 17.4% of males get paid the same. Those getting paid US\$10,000 or more are aged 45 to 54 and are in senior positions in their respective companies. North America pays 34.0% of its workforce US\$10,000 or more, while other regions predominantly pay US\$5,000 or less.

**“The limited presence of women in senior-level positions highlights a pressing issue. Although gaming audiences are nearly balanced, there’s a lot to be improved on the industry side of things. Embracing diversity enriches game development by incorporating a broader range of perspectives, experiences and talents.”**

**CATHERINE BISCHOFF**  
CEO  
SOVEREIGN NATURE INITIATIVE

# 2024 PREDICTIONS

## A SHIFT TO WEB3 ADOPTION BY WEB2 STUDIOS

In the background, many web2 studios have been experimenting with blockchain technology. There are some companies that have been more overt about it, like Square Enix and Ubisoft, and others that are on a “wait and see” basis. As these studios begin to look at evolving their technology, they will likely dip their toes into web3. Mobile games and multiplayer games are the likeliest for adoption based on survey respondents’ sentiment. Web2 studios can bring the talent and experience, which will likely improve important aspects such as onboarding and user experience. Some may try their hand at implementing on-chain assets, and because there is still a lingering negative sentiment surrounding NFTs and blockchain, some developers may have them work in the background instead of advertising them overtly as NFTs, blockchain, crypto or web3.

## ARTIFICIAL INTELLIGENCE IN BLOCKCHAIN GAMING BECOMES A HOT TOPIC

AI has dominated the conversation in many industries this year, including blockchain gaming. With the popularity of generative AI and Large Language Models like ChatGPT, some respondents believe that blockchain games are already testing AI for web3 games. Behavioral AI, for example, allows NPCs to have more varied dialogue and more engaging interactions, while also improving their decision-making. Some, however, fear that the ability to create games using AI could lead to a supply shock of low-quality assets and collectibles. On the other hand, AI could unlock creative production unlike anything that was previously possible.

“Blockchain gaming is poised to see mainstream adoption with traditional developers integrating blockchain elements. The model will likely mature alongside an emphasis on interoperability, allowing for assets to be used across games. As the metaverse concept grows, blockchain’s role in verifying and trading virtual assets will become crucial, bridging gaming, entertainment, and digital property rights. Collaborations between gaming companies and blockchain tech firms will become commonplace, shaping the next frontier of digital entertainment.”

**IQBAL BAHARUM**  
CREATOR  
LINEAGE PROTOCOL

“I expect AI to be incorporated to be a critical part of narrative generation, immersive interactions and even worldbuilding for games and metaverse, which would enrich the landscape as a whole.”

**GEORGE WONG**  
HEAD OF SINGAPORE  
THE SANDBOX

## THE DEVELOPMENT AND LAUNCH OF A MAJOR WEB3 GAMING HIT

With continued development over the past two years, it's possible that a massive blockchain gaming hit will surface in 2024, creating a domino effect that will attract millions more new players to web3 and shift the opinion of the majority. Looking at historical trends, it is possible that such a game may be initially-adopted and propelled throughout the Eastern world before it is embraced by the West. This would not be dissimilar to the hearty adoption of free-to-play games, such as League of Legends, that was seen across Asia in the early 2000s — well before the model was accepted elsewhere around the world.

## BLOCKCHAIN GAMES WILL JUST BE CALLED GAMES

Right now, there is a separation between web2 and web3 games, but that is expected to change. With more web2 studios exploring blockchain technology, it is likely that they will work hard to seamlessly integrate its rails into new and existing games, striking a balance to ensure they appeal to their existing audiences.

## THE END OF PREDATORY REVENUE MODELS

Free-to-play revolutionized gaming by removing barriers to entry. However, it also led some developers to delve into predatory practices to try and gain more profits from their players, whether by putting a price on a quality of life feature or by imposing time-limited offers that evoke the fear of missing out. 2024 signifies a shift toward a trade-centric environment where both developers and players can benefit as more games adopt blockchain. With this new model, we will see the end of predatory practices in gaming.

“I genuinely believe it'll just take one game to hit the mark, and the domino effect will be unstoppable. Once that happens, blockchain gaming will redefine how gamers not only play but truly own, trust and reshape their digital universes. The future of gaming isn't just about immersive experiences; it's about ownership and transparency.”

**ALEX KOSLOFF**  
HEAD OF SALES, ALTURA

“More and more web3 games will pivot to a communicating style that doesn't mention web3 tech or NFTs but will instead move to more traditional namings and use the web3 tech behind the scenes without giving it much mention. Shifting to a more user-friendly UI and no contract interactions for the user, instead having that all on the backend, where the user doesn't even know it's there.”

**HUBERT VAN VLIET**  
COMMUNITY LEAD  
POLKASTARTER GAMING

“For gaming to keep growing exponentially, it needs a next revolution. I think blockchain gaming is going to pioneer it with games becoming platforms. Developers encourage trading between players and take a microroyalty from those trades. It completely removes that antagonistic relationship between developers and players. The developer is not trying to force a sale anymore. All this predatory stuff in free-to-play disappears.”

**GIULIO XILOYANNIS**  
CEO, PIXELMON

# HOW TO GET INVOLVED

Our commitment at the BGA is to push development and adoption of blockchain technologies, highlighting their potential to take games to the next level. Blockchain gaming has the capability to build strong communities, encourage creativity, motivate players and bring them to the forefront. Through the BGA, companies, members, and projects have a chance to:

- Participate in BGA events like panels, Demo Days, and Play the Game. Events help build strong relationships and create opportunities for visibility and partnership.
- Establish the best practices in the industry and become part of a positive collaborative environment for blockchain professionals
- Gain exclusive access to the 500+ members of the BGA network

## Membership in the BGA provides:

- BGA association voting rights
- BGA panel invitations
- Working group access
- Member-exclusive newsletters
- Invites to events organized by the BGA
- Exclusive discounts and offers
- Access to a members-only Discord and Telegram
- Listing in BGA members directory
- Industry introductions
- Speaking opportunities
- Other educational and networking opportunities

To join the Alliance and know more about the basic, silver and gold sponsorships, please visit the [BGA website](#). Updates are also available at the [Twitter](#) and [LinkedIn](#) pages.



# GLOSSARY

Below is a list of terms used in the report and their basic definitions. For more blockchain and cryptocurrency terms, [visit this page](#).

**Crypto Winter** A natural part of the cryptocurrency market cycle where the value of most cryptocurrencies decreases significantly. Crypto winter is often characterized by a lack of investor interest and a decrease in the number of new investors entering the market.

**Decentralization** In the context of cryptocurrency, decentralization means that the network is not controlled by any one person or entity, but instead relies on a network of computers and users to validate and verify transactions. This decentralized structure allows for greater transparency and security, as it is more difficult for any one person or group to manipulate the network.

**Fear, Uncertainty and Doubt (FUD)** A negative or uncertain feeling about a particular product, investment or idea that can discourage or prevent people from using or buying assets.

**Free-to-Own** A new model where companies provide players with free NFTs that often act as generators of more NFTs that can be used within the game.

**Free-to-Play (F2P)** A type of business model in which a game or service is offered for free, but users have the option to purchase in-game items or additional features with real money or virtual currency.

**Interoperability** The ability of different blockchain protocols and their respective cryptocurrencies to interact and exchange information with each other.

**Layer 2 (L2)** A layer built on top of a base blockchain, known as a Layer 1 (L1) blockchain, that aims to improve the scalability, privacy and security of the base blockchain. It does this by allowing transactions to be processed off-chain, rather than on the main blockchain network.

**Metaverse** A place where people can interact with each other and with virtual objects and environments in a digital reality. In the metaverse, people can buy and sell virtual goods, participate in virtual events and activities, and even create their own virtual spaces and experiences.

## Non-Fungible Token (NFT)

A digital asset that represents ownership of a unique item or piece of content, such as an artwork, a collectible or even a tweet.

## Play-to-Earn (P2E)

A concept in the cryptocurrency world that refers to the idea of using games or other types of interactive digital experiences to earn cryptocurrency rewards. These rewards can then be used to purchase goods or services within the game or traded on exchanges for other cryptocurrencies or fiat currencies.

## Property Rights

The legal ownership of an asset or piece of property.

## Protocols

A set of rules and standards that govern the way information is transmitted and processed within a particular system. Protocols can be described as a set of instructions that dictate how different parties should communicate and interact with each other in order to achieve a specific goal.

## Royalties

Payment made to the owner of a digital asset, such as a piece of music, artwork or software, for the use of that asset. This is similar to how traditional royalty payments work in the physical world, but in the digital world, royalties are often paid in cryptocurrency rather than traditional currency.

## Secondary Market

A place where people can buy and sell assets that have already been issued and traded on the primary market.

## Secondary Sales

The buying and selling of assets that have already been purchased and owned by someone else. This is in contrast to primary sales, which refers to the initial sale of an asset by the company or organization that created it.

## Web3

The third generation of the World Wide Web focused on decentralized technologies and applications. Web3 is based on the concept of blockchain, which is a distributed ledger technology that allows for secure, transparent and tamper-proof record-keeping.

## Zk-rollup

Short for Zero-Knowledge rollup. It is a layer-2 scaling solution that stores transactional data on a layer-1 network while moving computations into off-chain networks to increase transactions while reducing transaction costs.



# BGA MEMBERS OVERVIEW

With over 500 members, the Blockchain Game Alliance (BGA) membership base is located across more than 70 countries, including the United States, United Kingdom, France, Estonia, Switzerland and Singapore. This year, the BGA has organized live events, such as meetups and dinners, and participated with booths to promote the BGA at notable annual industry events such as Game Developers Conference (GDC) San Francisco, NFT.NYC, TOKEN2049 Singapore and Gamescom Cologne.

The BGA continues to host monthly “Demo Days” where members can talk about their projects that other members may find useful for collaboration or knowledge-sharing. The Alliance also hosted panel discussions and was invited to participate in various speaking engagements about the industry.

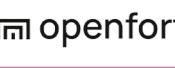
To know more about BGA member activities and projects, visit the [BGA website](#).

# INDIVIDUAL TITLES AND PROJECTS

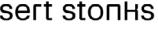
## List of classifications:

<b>Blockchain Game Platforms and Protocols</b>	Gaming platforms and protocols that enable the integration of blockchain into gaming
<b>Developer Solutions</b>	Tooling and developer solutions that help game developers build their projects
<b>Esports, Gaming Guilds and Blockchain Tournament Platforms</b>	Esports-related projects, gaming guilds and tournament platforms that focus on blockchain gaming
<b>Games and Gaming Companies</b>	Game development companies, studios and games
<b>Investment Firms</b>	Venture capital, DAOs or investment firms that aim to invest in projects and help them raise funds
<b>Launchpads</b>	Platforms that help incubate
<b>Legal, Accounting, Marketing, Consulting and Professional Services</b>	Firms with interest in blockchain gaming and NFTs
<b>UA, Growth, Marketing and Discovery Platforms</b>	Marketing, public relations and content creation companies focused on blockchain gaming industry
<b>News, Media and Publications Platforms</b>	Media publications and platforms focused on gaming, crypto, blockchain and NFT industries
<b>Gaming and NFT Marketplaces and NFT Tools</b>	NFT-focused protocols and marketplaces
<b>Others</b>	Other services such as hardware, financial gateways and miscellaneous organizations

Blockchain Game Platforms and Protocols				
 ACROSS	 aelf.	 ajuna .network	 Algorand	 AVALANCHE
 BLOCKCHAIN SPACE	 BLOCKUS	 CARTESI	 Chainlink Labs	 Chromia
 CITY	 Clarnium	 CONTINENT	 COSMIC ACTIONS	 cronos
 CUDOS	 DEGEN ROYALE	 EDEN	 EOS Network Foundation	 face wallet
 feta	 FIO	 GAMIN POWERING THE GAME	 GAMERHASH	 GAME TRADE MARKET
 Gamevolution® Blockchain Incubator for Gaming Companies	 GNUS.AI	 HashUp	 KONGREGATE	 MAGIC SQUARE
 MetaEngine	 Mirror World	 myria	 near	 OASYS
 Othentic	 PHANTASM	 PlayMining	 POLYGONAL MIND	 POKY
 RE:DREAMER	 respect	 Ronin	 SAGA	 SingularityNET
 SKALE	 Spaceport	 STABILITY	 ULTRA	 vorto
 ZEXO				

Developer Solutions				
 ANOTHER	 CAUSALITY	 ChainPatrol	 consensys	 crossmint
 exaion GROUPE EDF	 Fireblocks	 Halliday	 JR	 Liteflow
moonstream.to	 SUITE	 ONE EARTH RISING	 PYLONS	 READYgg
 venly	 Aleph.im	 Altura	 Polyhive	 AWS FOR GAMES
 Curvegrid	 DeepSquare	 ekoios	 olympics	 freename
 Gekko	 liquality	 LYNC	 machinations	 MADE FOR GAMERS
 Narval	 NODEREAL	 openfort	 RPS LABS INC	 Sequence
 Shardeum	 spanning labs	 SphereOne	 STARDUST	 StarFall
 STARTON	 gtm.gg	 Tilia™	 UNION AVATARS	 VAREGER GROUP
 Verso	 XTERNITY			

Esports, Gaming Guilds and Blockchain Tournament Platforms				
 Aggero	 blast	 COMMUNITY GAMING	 DUBBZ	 EARN ALLIANCE
 eXeedme	 Liberty Metaverse	 MEGAFANS eSports for All!	 METASPORTS	 OFFCHAIN
 OLA GG	 OVI ESPORTS	 PROLEAGUE.GG	 SURA GAMING	 unix gaming
 YIELD GUILD GAMES				

Games and Gaming Companies				
 Ravegotchi	 AFAR	 ALIEN WORLDS	 ALTERVERSE	 AMUZED
 ANARCHY	 animoca BRANDS	 ANTLER INTERACTIVE	 ARADENA	 ARGEOR
 aura	 BALLIES	 BEAMABLE	 EFFORT ECONOMY	 BLOCK BRAWLERS
 blocklabs	 bloxbytes	 BLUE SKY INTERACTIVE	 BoomLand	 canVERSE
 CHAIN OF INSIGHT	 CHAINIFY LABS	 CHAINS ETERNALS	 COIN CLASH	
 COMETH	 CROSS THE AGES	 CROWN CHASER	 CRYSPWAR	 CRYPTO COLOSSA
 Crypto-Guilds	 CRYPTOMIBS	 CryptoMotors™	 Curve Reality	 CYBER LEGENDS
 CYBERPUNK 2077	 CYREX	 DAREWISE	 DEAD GAMES	 Decentral Games
 DECIMATED	 Déjà Vu QUEST	 DEVOMON	 Digital Dogs	 DOGAMÍ
 DOUBLE COCONUT	 DRAGON DREAM STUDIO	 ELDARUNE	 ELEET GAMES	 EMPIRES
 ENGINES OF FURY	 EPOCH 2140	 EverdreamSoft	 Eyeball	 FALCO
 FASHION LEAGUE	 fql	 Flootopia	 FLYING CACTUS	 Forest Knight
 FROGLAND	 FUNVERSE GAMES	 GALA GAMES	 GAMEE	 GameFi
 GAMEON	 widow games	 GLIP	 GoldenTides	 GROW
 HATINH INTERACTIVE	 HERMITCRAB	 HERO TRAINER	 HUMAN DIVERGENCE	 ICON-X
 ILLUVIUM	 Inkling	 INKLING	 insert stones	 Iron Fox Games
 JADU	 KEPITHOR STUDIOS	 KRYXIVIA	 LAZY SOCCER	 LEGENDARY
 legendary plays	 LEGENDS ELYSIUM	 LEGENDS OF THE PAST	 LITLAB GAMES	 LONG LITTLE GAMES

Games and Gaming Companies				
				
				
				
				
	MYTHIC PROTOCOL			
	NOVACREED			
				
	REVENGE		REALITY METAVERSE	
			SATOSHIVERSE	
			GAME PILL	
SQUARE ENIX				
				
				WEMADE   
				

Venture Capital, DAOs or Investment Firms				
 Research. Education. Investments.				
				

Legal, Accounting, Marketing, Consulting and Professional Services				
				
				
				
				

UA, Growth, Marketing and Discovery Platforms				
<b>absolute</b> labs	ΔCYXN	adikteev	adshares	AZARUS
BARAKATECH	cookie3	firebond	GRAMES.GG	HELIKA
CVIO	PERSONA	SANDSTORM	SNICKERDOODLE <small>BETA</small>	Solsten
ソルバント SOLVENT	supernova	Telescope Labs	TENTANGO	THX
Tribally	TROPHY	upptic	W3W	

News, Media and Publications Platforms				
1bitlab —Every bit matters—	ALTCOINBUZZ	BLOCKCHAIN GAMER.BIZ	Blockminds	CHARLIE GAMING
CRYPTOSPACEFLEET	CryptoStache	EDGE of NFT	HACKERNOON	NFT 24 STUDIO
NFT HORIZON	NonFungible	POLEMOS	the dapp list.	TOKEN GAMER
NO				

Gaming and NFT Marketplaces and NFT Tools				
AURUS	FRACTAL	fruitlab™	GAMEFI.ORG	GGS.IO
GOART METAVERSE	IQ PROTOCOL	LIFTY	MIRAGE PLAZA	MYMETVERSE
NFTTrade	OCTOGAMEX	Parcel	qudo	RUNE
SeaCows	TAPBIT	ternoa	UNBOUND	Unlockd

Others				
AMD	ARGOS.	Billy	DappRadar	DOJO —TALENT—
KRIPTOMAT CRYPTO BUT SIMPLE	Minnapad	NFTb	poko	pwc
Ramp	REAP	Request	SHELLBOXES	soundpickr
Sovereign Nature INITIATIVE	Superfluid	SWAGGA	unstoppable domains	volpex Digital Asset Management
VR FUTURE	Wert			



# BGA

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