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Sustainable Web3 gaming: A comprehensive guide

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Table of content

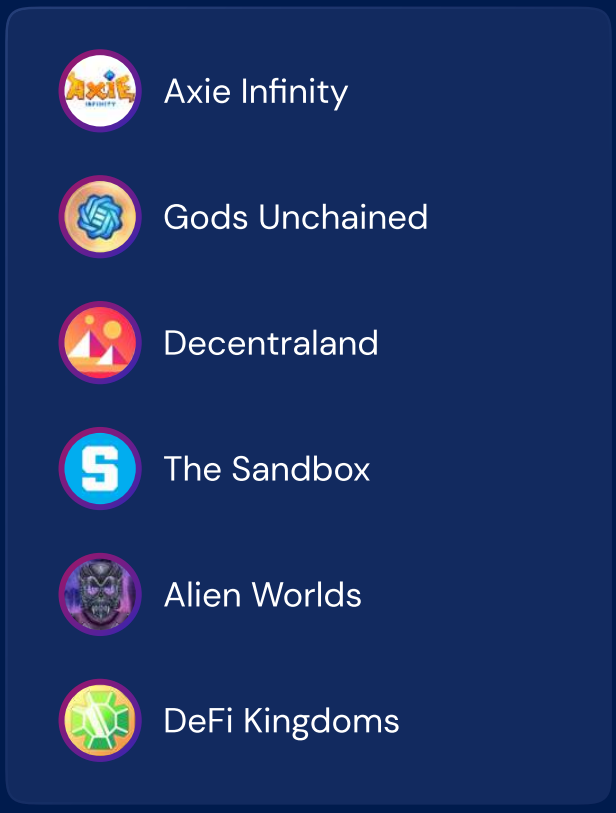
1. A quick Web3 gaming walkthrough

What is Web3 gaming?

Web3 games are different from traditional games in that they allow players to earn **cryptocurrency and non-fungible tokens (NFTs)**, powered by blockchain applications. Players can own their acquired assets, which can then be traded on marketplaces for virtual or real-world currencies, blurring the line between two worlds.

Trending Web3 games

In 2017, CryptoKitties started the first Web3 game, a niche community that breeds and trades customized cat NFTs. Then amid the global pandemic in 2021, Axie Infinity (a name we must all have heard of) emerged with scalability solutions, drawing in millions of users and driving up billions in market cap. As of today, we have seen nearly 2,000 Web3 games launched, with significant names including:



Market forecast

The Web3 gaming industry is still in its early stages, with ample room for exploration and growth. While the traditional gaming market has reached its maturity with a growth prediction of only 10% CAGR from 2021 to 2025 (source: Accenture), the number for Web3 gaming is 10 times bigger. At a **CAGR of 100%**, the market is expected to grow from $1.5 billion in 2021 to $50 billion in 2025, and from 1 million to 10 million daily gamers involved (source: Bitkraft Ventures & Naavik and Dizon).

CAGR prediction for gaming platforms in 2025

Why the growing popularity?

We have defined the five main drivers for the massive adoption of Web3 games as follows:

- The increasing **demand for entertainment**, especially video games
- The inevitable **need for digitalization**, fuelled by the Covid-19 pandemic
- New models & applications of the **make money online (MMO)** trend
- The public's gradual **acceptance of blockchain** and cryptocurrency
- Exploration from major players in the **traditional game industry** such as Epic Games Store, Bandai Namco, Apple & more.

2. Factors to consider for your Web3 game project

If your business is planning to enter the market with a brand new Web3 project, or an add-on feature of your existing traditional games, keep in mind that there are multiple factors to be carefully evaluated - besides gameplay, of course!

Revenue streams

The Web3 economy gives players the power to own and trade their digital assets, but there are still many ways for game developers to make money.

Entry capital

Most Web3 games require an upfront investment to enter. The fee is relatively small ($5 to $20) but remains a consistent source of revenue. Some games are free to enter (e.g. Splinterlands and Gods Unchained) but feature premium items for purchase.

Native tokens

You can issue native tokens which can be used for in-game transactions and are equivalent to real money. In addition, often a token designated solely for DAOs or governance is also available.

NFTs

They are much rarer than tokens because of their non-fungible nature. NFT can be traded freely on in-game NFT marketplaces, with you gaining a small percentage as transaction fees.

Traditional streams

Such as asset sales, advertising, and collaborations with other games or blockchain projects.

Technology requirements

Blockchain platforms	Programming languages	Operating systems
WAX	unity	Web
BNB	C#	PC
polygon	ASP.NET Core	Android
Ronin	MySQL	iOS
HIVE	MongoDB	
	aws	
	TRUFFLE	

Key elements of a Web3 game include:

- **Web3 dApps:** to support in-game assets and transactions.
- **Smart Contracts:** to define voting and decision-making rules for game development.
- **Node Providers:** to extract game information on the blockchain network.
- **Web3 dApps:** to support in-game assets and transactions.
- **Media Standards:** to support dApp handle text, audio, video, 3D scenes, and other media types.
- **Digital Wallet:** to identify and store various in-game assets and collectibles.
- **NXR Hardware:** to enhance the Web3 experience with haptic gloves, smart glasses, scanning sensors, etc.

NFT Applications

NFTs can serve a variety of functions. For example, they can be used to facilitate ownership and possession by players— some items within the game may be unique collectibles that can only be collected and owned by a few parties. Players who want to express their characteristics can purchase NFTs within gain some through playing. Plus, those who wish to trade NFTs with other can do so right within the game environment, which help them advance in the game or win over opponents.

Depending on the category that your game belongs to, NFTs can be any type of digital asset: from avatars, cards, to equipment and properties.

NFTs with different stats and utilities in **Splinterlands**

Community

Community is an important pillar of gaming because it helps players form relationships, stay connected to the game, and share experiences. The epicenter of the Web3 life today includes Telegram, Discord and Twitter, while other social media channels like TikTok, Instagram and Twitch remain telling of the project's connection with the community.

Decentralized autonomous organizations (DAOs) will play a pivotal role in fulfilling the Web3 promise of a truly decentralized, thriving community—which is why those doing it must get it right.

Sustainability

Onboarding a Web3 game player is enough of a hassle: one must create a wallet, obtain crypto, enter the game and pay any related fees - not to mention the must-have blockchain knowledge to absorb! Therefore, it's crucial to retain players by ensuring the **long-term value** of the game. We boil down sustainability to 3 key pillars:

Accessibility and attractiveness

How you can make the game easy to enter while engaging to play will determine how quickly the game can grow and maintain its player base.

Asset utilities

How you can design various benefits for in-game assets to be used inside and outside the game.

Partnerships

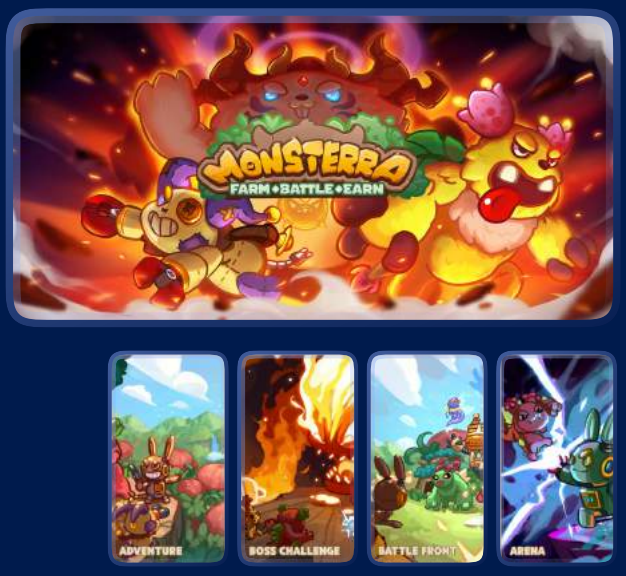
The ties with multiple sources of investors and players make the project more stable and act as a safety net should one of the sources fail.

A Case Study: Monsterra

A popular Web3 project that we helped develop, **Monsterra**, is a multi-chain game in a fictional world revolving around farming, property building, and battling other lands with magical creatures named Mongen.

What makes Monsterra special?

- Multi-chain (BNB, Avalanche, OKX) and multi-platform (web, desktop & mobile) operation
- No initial investment required
- Unique gameplay with breeding mechanism, landscaping and customization mechanics
- Dual-token method: native token MSTR and payout token MAG to achieve sustainability & scalability
- Balanced in-game economy with diverse utilities for token & NFT, and a smart token-burning mechanism
- Innovative token & NFT staking with offline earning opportunities
- A fully-inclusive ecosystem with a gaming platform, payment engine and marketplace



3. More on Web3 game sustainability

Current challenges

Hundreds of Web3 game projects come out every year, yet only a few can retain their value in the long run. The rest was trapped in the short-lived P2E model that **puts too much focus on "earn" rather than "play"**, which ultimately fails because of the following reasons:

Supply & demand imbalance grows as the number of new players stagnates

Releases of new assets and currencies that **inflate asset value**

Disruptive players that focus solely on earning, who invest and exit early

Not to mention the lack of interoperability solutions limiting asset utilities, the subpar user experience with Web3 transactions, and crypto scams that can happen anytime you're not careful.

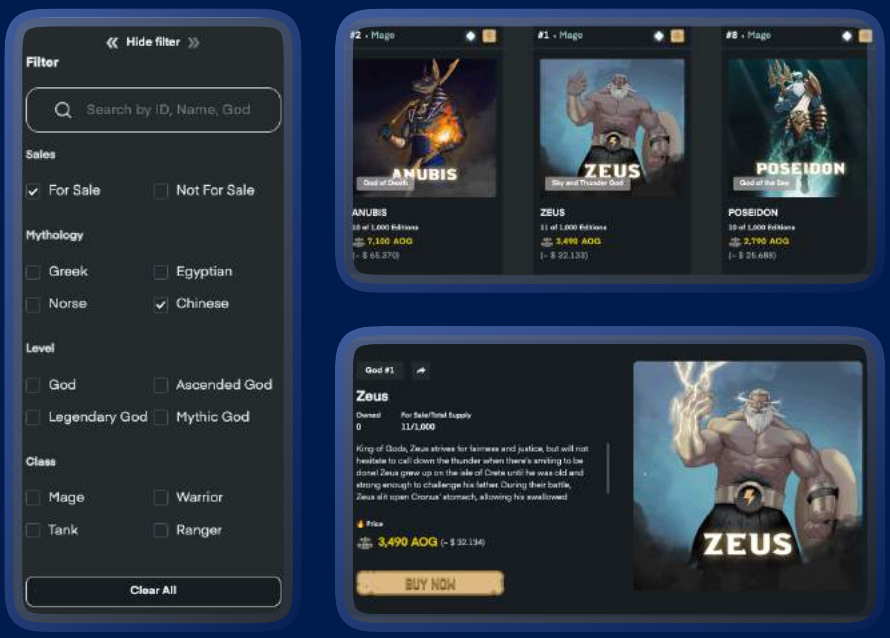
Our proposed solutions

#1 Move away from the P2E model

In order for a game to be sustainable in Web3, developers must change the way they develop and market the product. Instead of making it all about money, they should focus on ensuring a **fun, engaging and challenging environment.** Tokenomics should be carefully designed so that inflation rates are low and users find incentives to keep playing. Finally, developers need to stay close to their communities in order to gain real insights into player traits and motivations.

Our proven tactics:

- **Do not pressure players to pay** for the game upfront. Hook them in with compelling gameplay, then get them to purchase additional assets.
- **Provide multiple sources to earn and spend**, encouraging players to engage more with the game.
- **Develop a dynamic marketplace** to best showcase in-game assets and make the buying experience seamless for all stakeholders.



Age of Gods' NFT Marketplace project.
Delivery time: 2 months

#2 Build an inclusive game ecosystem

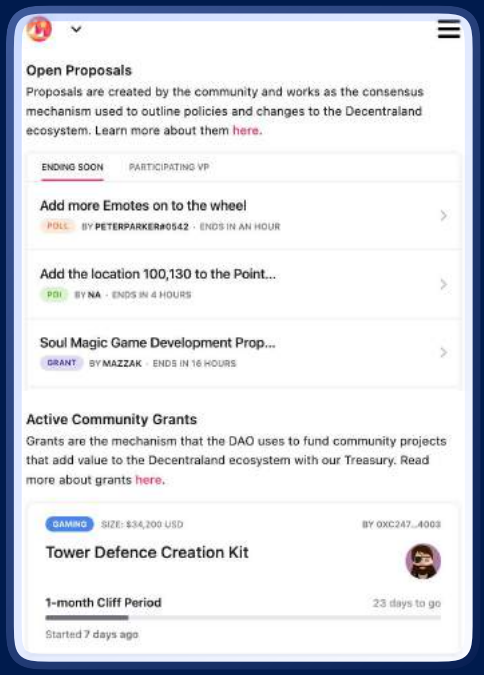
A game's ecosystem should be built not only for players but also for project stakeholders. The goal is to get them **socially, financially and personally invested in the game** and keep them involved even after exiting. NFT has made this possible by attaching exclusive utilities and benefits for buyers (e.g. voting rights, membership, merchandise, offline events & so on).

#3 Harness the community power

A tight-knit community of like-minded people is the booster your game needs to succeed, as mentioned in the section above. Communities create in-game friendships, foster rivalries, and promote clan allegiances. This helps maintain the interest of devoted players, which ultimately drives up user retention and revenue potential.

Our recommended tactics:

- **Increase engagement** with daily reminders & rewards, personalized communication and in-game activities
- Encourage **user-generated content** across both in-game and social platforms
- Form **decentralized autonomous organizations (DAOs)** to govern your game in a way that benefits all stakeholders.



Decentraland's DAO

4. Closing thoughts

Gaming, as an integral part of modern society, is considered one of the key enablers to fuel up blockchain mass adoption. We stand optimistic for the upcoming future - with the maturation of Web3 games and exploration from traditional games into the space.

However, getting there is not without challenges. If your company is looking for an experienced partner in game and blockchain development, then look no further. Ekoios Technology offers end-to-end **Web3 game solutions:** from game design, blockchain integration to ecosystem development, with world-class quality and service to guarantee your project success.

Let's start by discussing your idea! **Book a free consultation with us** →

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