Is Star Atlas the next evolution in blockchain gaming?

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Jan 12, 2022

Love him or hate him, Mark Zuckerberg's rebranding of Facebook to Meta could be the single most significant market validation for the metaverse revolution. With growing market validation of the metaverse and the recent success of blockchain play-to-earn games, this article investigates the current state of Star Atlas and its positioning within the blockchain gaming ecosystem.



Source: Star Atlas

The Play-To-Earn Phenomenon

Before we dive into Star Atlas, let's first unpack how blockchain technology has considerably impacted the gaming industry, enabling a fundamental change in the way players interact with their favorite games and think about the value and utility of their in-game items.

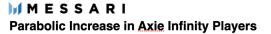
Traditionally with many free-to-play games (i.e. Fortnite, Roblox), the in-game assets and currencies have become one of the primary ways many games are monetized and derive most of their revenue from the sale of these assets. Games like Fortnite pioneered the free-to-play model and generated substantial revenue mainly from in-app purchases of cosmetic items (items with little in-game utility).

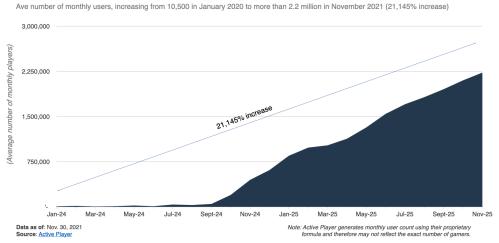
However, while the developers and publishers of these games are generating significant revenue from the volume of in-game items they sell, this value is not shared with the users/players. The in-game items possess a monetary value that is locked since these items generally cannot be sold or traded within or outside of the game.

In-Game-Economics Are Changing

The tokenization of assets on blockchains provides an alternative model to existing in-game economics by enabling players to own their in-game assets for the first time. This is a true game-changer, as people not only have fun while playing, but some blockchain games also empower gamers to earn rewards during the game. Further, in-game items issued as NFTs on blockchains have the opportunity to integrate with decentralized finance (DeFi), enabling players to exchange these in-game rewards for fiat currencies.

Blockchain play-to-earn games are beginning to achieve market validation and reach mainstream adoption, leading to further investments from prominent institutions and retail investors. An excellent example of this is the recent success of Axie Infinity. This innovative play-to-earn gaming concept has penetrated the mainstream, resulting in a parabolic increase in users, increasing from 10,500 average monthly users in January 2020 to more than 2.2 million in November 2021 (21,145% increase). Sky Marvis, the developer of Axie Infinity, recently raised \$152 million in capital at a \$3 billion valuation.





What Is Star Atlas?

Star Atlas aims to be the next-gen gaming metaverse emerging from integrating blockchain, real-time graphics, multiplayer video games, and decentralized financial technologies.

Star Atlas aspires to be the first blockchain Triple-A (AAA) Massive Multiplayer Online (MMO) game. Like its title suggests, the MMO is set in the year 2620, where the universe has been colonized and balkanized, and players must embark on space missions. Players can earn in-game currency (ATLAS and POLIS, more on that below), buy anything from ships to space stations to planetary land, and complete missions.

Utilizing Decentralized Financial Technologies To Underpin The Metaverse

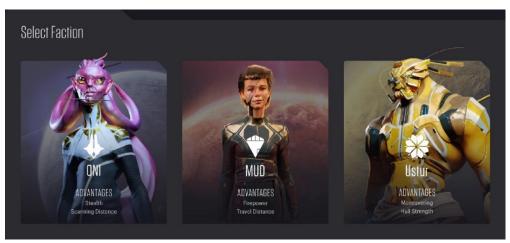
Although this sounds like the many sci-fi space games already out there, there's a fundamental difference - Star Atlas leverages the unique benefits of blockchain networks. First, the game uses smart contracts on the Solana blockchain to execute gaming scenarios. In addition to

using the Solana blockchain, Star Atlas features direct integration with Serum, Solana's largest decentralized exchange. Serum, among other Solana DeFi platforms, will permit players to trade in-game assets transparently on-chain via the game's marketplace. Similar to Axie Infinity, Star Atlas players will genuinely own what they earn and buy in the game. If a player ever decides to leave the Star Atlas universe, they can sell that asset (NFT) and hopefully make a profit or at least recoup a portion of the initial investment required to play the game.

How Does The Star Atlas Game Work?

The first step to exploring this futuristic science-fiction experience is to side with one of the three factions. By contributing to these factions through gameplay (i.e. deep space exploration, mining resources, building construction, combating, etc.), players can earn rewards for their contributions which enhance gameplay. The three factions of the game are:

- The ONI Region occupied by a consortium of alien races
- The MUD Territory occupied and controlled by humankind
- The Ustur Sector under the control of sentient androids.



Source: Star Atlas

Star Atlas plans to offer various gaming modes and combine multiple game genres to provide an immersive and flexible gaming environment. As the player, you can choose to be a strategist and fight wars between the factions, adventure as a deep space explorer, or live a peaceful space-bound life and enjoy hours of space-flight simulation.

More specifically, each game type offers a different experience for a variety of players, including:

- **Grand Strategy** The grand strategy genre incentivizes players to claim stakes to build and expand empires, implement trading routes, and participate in tactical battles that players can view across various regions within a map.
- **Exploration** Players will be able to explore deep-space to scan and discover celestial and terrestrial assets. Players can stake claims to discovered assets and mine them. These assets will be refined and traded via the Star Atlas Marketplace.

- Role-Playing Game (RPG) The first principle driving the entire economy of Star Atlas is the mining gameplay. By mining raw materials and refining them into various components and in-game items, players can establish a "career." The career path a player chooses determines the specializations they pursue to create revenue streams.
- **Space Flight Simulation** The space flight simulation mode of the Star Atlas game provides a first-person, seated visualization of a spaceship as it travels through deep space. Ships can be piloted manually, or players can captain their ships, take part in battles, and take advantage of role-specific game mechanics. Players will be able to manually control throttles, flight sticks, and complex control panels using the cockpit view.

Star Atlas will provide "multi-tiered engagement zones," where players can select the level of risk they wish to take on during various gaming scenarios. For the high-risk takers, players will be able to engage in battles that put their spaceships at risk of destruction. The battle winner can salvage certain assets (NFTs) left behind by their opponent. In this environment, asset destruction can permanently destroy assets via a token burn mechanism.

To reduce long-term player fatigue, Star Atlas will use a skill tree system, where players can allocate their time and resources to activities that suit their personal goals or those determined by the faction or in-game career they choose. The skill tree progression enables players to unlock bonuses and rewards that can be purchased using the native ATLAS token.

The Star Atlas Economy

The Star Atlas economy aims to mirror the richness of our real-world economy, where land has value, tokenized goods are provably scarce, and there is actual monetary policy and community governance. The in-game economy lets players build intergalactic empires by challenging other players and joining alliances to organize, build, and fight their way into unknown territories.

Players can earn ATLAS (in-game currency) by doing various activities, like mining ore and selling it in the in-game market, piloting (combat and exploration), or even selling their assets. Practically every asset in Star Atlas, from starships to land to buildings, is an NFT.

The Star Atlas economics paper outlining how the economy will work is 38 pages long, illustrating how complex and nuanced these new online digital economies will become.

To facilitate this economy Star Atlas has two fungible tokens:

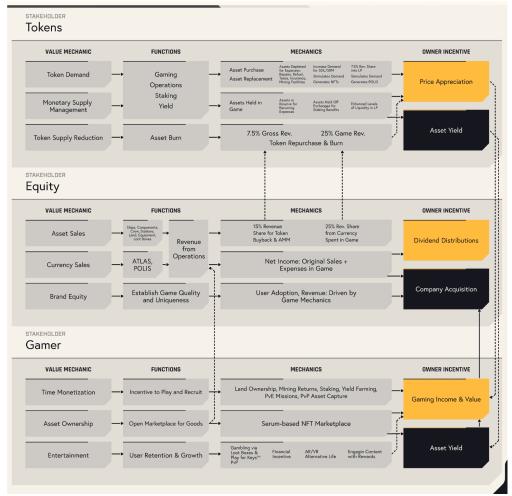
- **POLIS** is the governance token used at each level of governance, representing financial stake in the game, voting power in the DAOs (decentralized autonomous organizations) where it is staked, and control of the treasury. The total supply of the POLIS token is 360 million.
- **ATLAS** is the payment token used as a medium of exchange. ATLAS token is inflationary, aiming to match the growth of the in-game economy and provide a solid monetary base for in-game economic interactions and on-ramps to enter the game. The total supply of the ATLAS token is 36 billion.

POLIS and ATLAS are the monetary assets in the economy, but they are only the first of four key pillars to the economy. The other three core components are:

• Land ownership (NFT's)

- In-game items such as ships, crews, equipment, components, buildings, and more (NFT's)
- In-game resources (fungible assets that produced by miners and consumed by production)

A visual of how value is accrued for all stakeholders (token holders, equity, and gamers) is provided below:



Source: Star Atlas - white paper

The equity holders refer to the shareholders in Star Atlas, a for-profit company developing the Star Atlas game. The company was initially funded via two private funding rounds raising \$10 million from Megala Ventures and PetRock Capital, which occurred in February and June 2021 respectively, these preceded the initial token sales in August 2021.

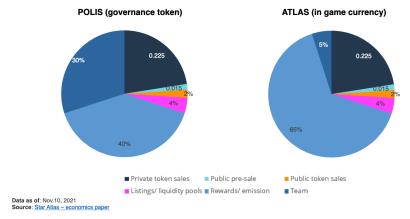
The POLIS token as an asset does not receive any direct value accrual (i.e. no fee accrual), it can be viewed as a low-velocity, long-term store-of-value that incentivizes governance of the ATLAS economy for its long-run production.

Star Atlas Token Distribution

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Token Distribution of Star Atlas Tokens

Initial distribution of POLIS the governance token is heavily distributed to the team (30%) and private token sale holders (22.5%), which will gradually be unlocked over a two-year period to late 2023



The governance token POLIS is currently heavily concentrated with the team and private token sale holders (holding a combined 52.5%). Over time as POLIS tokens get distributed, the team plans on giving up its majority stake and allowing the public at large to implement specific parameter changes within the game to create a community-driven metaverse.

Star Atlas Growth & Traction

Star Atlas was one of the more highly anticipated token releases (August 2021) in the Solana gaming ecosystem due to its large aspirations. Notably, the game is not yet released and may take years to develop. However, the recent excitement over the entire blockchain gaming space or growing interest in the metaverse has benefited Star Atlas. During the initial exchange offerings, ATLAS and POLIS reached an oversubscription rates of 5,000% in the FTX IEO, 1,600% in the Apollo X DEX offering, and 3,400% on Raydium.

As of early January 2022, Star Atlas has a large community with:

- Twitter 290,200 followers
- Discord 146,000 members
- 81,910 players registered for the browser-based mini-game

What's In The Roadmap

While the Star Atlas team has not committed publicly to a final product launch date, they have achieved milestones such as the initial NFT release (more on this below) and the browser-based mini-game. To date the mini-game doesn't include any live gameplay samples, however, on December, 16, 2021 Star Atlas officially launched SCORE (Ship Commissions on Remote Expeditions), the first on-chain gameplay. Which enables players to enlist their purchased spaceship (NFTs) to a faction and begin earning staking rewards in ATLAS (in-game currency token).

The team has been responsive to community feedback and has increased transparency by releasing a live document (here) that is an abridged version of their official roadmap.

Asset Sale Roadmap

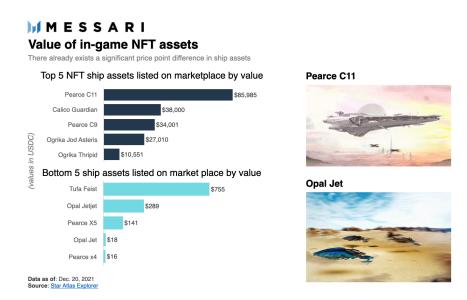
To help support the game's continued development, Star Atlas has planned a staggered release of five separate asset releases to sell in-game NFT items to would-be players. This will allow players to familiarize themselves with the game's core features while the final iteration is developed. Further details are provided below:

- Phase 1: Galactic Asset Offering (completed) the first tranche of in-game assets was released on the Star Atlas marketplace in Q3 2021. These assets are not playable until Phase 2, though open trading with other players and traders is available.
- Phase 2: Browser-Based Mini-Game (partially completed) this is where a minimum viable full version of Star Atlas will be made into a browser game for its early testing. There is no live gameplay in the current version, but players can purchase and trade in-game assets (NFTs), join a faction, and enlist their ships to a fleet and start to receive staking rewards.
- Phase 3: Shipyard Module Sale (in progress) following a successful launch of the browser-based mini-game, Star Atlas will make a complete transition onto Unreal Engine 5. The first milestone will be a functional Shipyard Module, where players can view their in-game assets (such as vessels, parts, or crew members) within a controlled shipyard zone. There will also be another batch of assets listed for public sale.
- Phase 4: Beta Version Pre-Sale (in progress) before Star Atlas can be fully launched to the public, players can opt to play it in its still-maturing beta state, and all remaining pre-live assets will go on sale.
- Phase 5: Ongoing Sales (in progress) following the full launch of Star Atlas, new items can still be disbursed and sold in the in-game marketplace, as well as an optional Salvage Wars section of the game where players can bid and buy containers filled with in-game assets (a loot box-like mechanic).

In-Game Asset Sales To Date

Since the Phase 1 sale of in-game assets, an economic picture of the three factions has developed. As of January, 10, 2022, players or guilds (i.e. Yield Guild Games) have purchased approximately \$65 million in-game assets and assigned them to the factions.

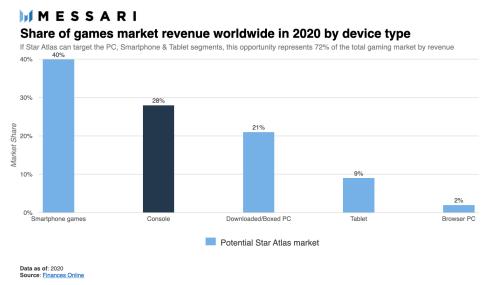
To date, the primary in-game assets sold have been the ships, which come in a wide range (both price and scarcity). The rarest is the Pearce C11, with a market price of \$85,985 and a limited supply of 126, to the most common ship being the Opal Jet (\$18 and supply of 129,592).



The Blockchain Gaming Opportunity

The traditional video game industry is currently going through a massive growth phase. To-day, the industry is valued at around \$168 billion, and it is expected to surge to \$287 billion over the next five years. The global market of gamers is expected to exceed three billion by 2022, with over half coming from PC users.

While it appears that Star Atlas will only be targeting users with a PC/laptop, their early launch of the browser-based mini-game means that there may be potential to capture users in the mobile/tablet market, depending on supported browsers (such as Brave with Solana integration). With economic incentives, these users can then be onboarded to the final PC version.



Suppose blockchain play-to-earn games can continue to improve the user experience and

maintain the correct balance of in-game economic incentives. In that case, there is a good chance of capturing a portion of the mainstream gaming market.

In an interview with Real Vision, Gabby Dizon, CEO, and Co-Founder of Yield Guild Games estimated that there is potential for 1-2 billion gamers that can be onboarded to play-to-earn, with a large cohort being first time gaming users, due to the economic incentives. While it is hard to know the migration rate from traditional gamers, a potential consumer base of over a billion people remains a massive market opportunity.

Reaching For The Stars: Evaluating The Risks

The Star Atlas team has committed to an ambitious project with multiple first-of-a-kind project deliverables. The billion-dollar question is whether the team can deliver a fantastic gameplay experience and balance the economic incentives. Some items for concern are that there is no public release of gameplay samples from a product delivery perspective. Additionally, there is no commitment to a release date (though the team acknowledges this as noted above).

However, the real elephant in the room is that traditional game firms already have a massive advantage in terms of successful product development track record, access to markets via established channels, game developer talent, and ownership of existing IP and franchises. To quote Sam Bankman-Fried, "I think you're going to see a big difference between crypto companies trying to make a game and gaming companies trying to introduce crypto. Frankly, it's hard to make an engaging video game."

To somewhat mitigate these risks in November 2021, Star Atlas announced a partnership with Sperasoft, a Keywords studio, to assist with the development of Star Atlas. The collaboration with Sperasoft will bolster the number of engineers, artists, and designers required to deliver the game.

Competitive Landscape

The Star Atlas white paper shows 13 other games competing in this genre that are soon to be launched, and three are blockchain-based. While the white paper provides a good feature comparison, it is important to note that several notable blockchain play-to-earn games at various stages of development are not captured in this market scan. With growing investment in play-to-earn gaming, there will likely be many more prominent competitors to come.

The below summarises the key features of the current prominent blockchain games:

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Notable competitors in the blockchain based play-to-earn gaming landscape



- Genre: trading and battling
- Blockchain: Ethereum + Ronin
- Fully diluted market cap: \$18.9 billion



- Genre: open-world RPG
- Blockchain: Ethereum
- Fully diluted market cap: \$7.8 billion



- Genre: fantasy/action RPG
- Blockchain: Ethereum + ImmutableX
- Fully diluted market cap: \$1.1 billion



- Genre: tactical trading card game (like Magic the Gathering)
- Blockchain: Ethereum + Illings
 Fully diluted market cap: \$1.6 billion

Data as of: Jan. 10, 2022 Source: Messari, CoinGecko

In addition to the above, the common features shared by this cohort of blockchain-based games include:

- Native tokens
- Staking rewards
- Marketplaces and exchanges
- Funds raised via a combination of VC investment, IDO/IEO/ICO, and NFT sales

To date, Star Atlas shares all these features and could be considered bolder in terms of the scope and size of the gaming universe and economy, aiming to be a blockchain-based MMO game. Given that there is no live gameplay and the fully diluted market cap of Star Atlas (POLIS and ATLAS) as of January, 10, 2022, is \$4.6 billion, suggests a significant portion of this future growth potential is priced in.

Closing Thoughts

The intersection between blockchain technology and gaming creates a new reality for gamers. Games like Star Atlas pose new business and monetization models for the gaming industry and have the potential to be the catalyst for a new wave of games more akin to the quality and complexity of games that exist in the traditional gaming market. Blockchain games and models like play-to-earn may end up altering the gaming market as new economic opportunities are created.

While the game has yet to transition into the metaverse, Star Atlas is immensely promising. The success of Star Atlas will ultimately come down to the team's ability to deliver a fantastic gameplay experience and balance the economic incentives to attract millions to hundreds of millions of potential players.