

Genesis Engine

(Working title)

“Blockchain and Triolith Games is set to be the biggest leap in gaming technology in history.”

- Magnus (CEO, Triolith Games)

GENESIS ENGINE IS THE NEXT
GENERATION GAME ECONOMY AND
VIRTUAL ASSET MANAGEMENT
PLATFORM FOR THE GAMES INDUSTRY

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Introduction

Gaming has always evolved; never settling for a status quo and always advancing to newer and more immersive gaming experiences. And it did so due entirely to visionary game developers pushing the boundaries. Adopting, developing & sharing new technologies and methods that transformed from block smashing sprites to environments and challenges barely distinguishable from reality, but it was not always smooth.

Technology was often not ready for the ideas, executives protecting their bottom line found it difficult to let the visionaries run free. Those same visionaries would often enthusiastically argue that “free-roaming maps” were a good thing and gamers HAD to be able to “pick up” or “discover” different weaponry, equipment, ammo etc, finding it difficult to convince others why it was important. Why mess with what works?

Now without exception, the early adopters and the pioneers of the space can see the revolution on the horizon and are pitching the need to integrate Blockchain technology with games to investors and executives. Gaming will change forever, and Triolith Games will hand them **everything** they need to do just that!

Blockchain and Triolith Games’ developer tools, environment, marketplace and supporting technologies will change the landscape of the gaming industry forever, allowing gamers to showcase, monetise and own their achievements. Gaming companies will be able to engage and build their communities in ways no industry has ever been able to in the past.

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All references in this Triolith Games AB lite paper to the Triolith Games AB platform, regardless of tense, are intended to be references to how the Triolith Games AB platform will operate when it is fully operational. See the roadmap of this lite paper for information about the expected development of the platform.

What is the Genesis Engine

Triolith Games AB is a provider of a platform called Genesis Engine, a set of tools and frameworks for game developers to implement and manage their in-game assets and game economies using Blockchain, NFT's and cryptocurrencies. By enabling true ownership of in-game assets, game developers can empower gamers and incentivize sustainable game economies without losing control over how their games operate.

The Genesis Engine platform supports any type of game, from simple games like trading card games, to complex games such as League of Legends and massively multiplayer games such as Eve Online or Entropia Universe. The platform allows:

- gamers to truly own, manage and trade their unique assets as on a crypto exchange,
- be rewarded for time spent playing games,
- game developers to have new revenue streams,
- better secured games, games assets and the game economies,
- in-game assets to fully be on-chain

Our framework for managing in-game assets and economies provide features that Play-to-Earn games need, such as:

- Decentralised game finance (GameFi/Defi)
- Non-fungible tokens (NFTs)
- Cryptocurrencies
- Data oracles
- Market places
- Game asset management
- Smart contract development

The platform holds properties to serve different core financial functions with novel forms of community governance such as decentralised autonomous organisations (DAOs).

The service enables the complex interplay between the interface layer, the financial tooling for managing game economies and digital assets with the underlying platform, in which game developers may create unique digital tokens representing in-game items such as weapons, armour, clothes, avatars or characters, and players may earn real value simply from playing the games.

Game developers connect to the platform using APIs and a set of tools. This means that a game developer does not need to fully understand blockchain to implement the technology into their games. In addition to creating game-specific marketplaces where players may trade their items, game developers will be able to list in-game assets on an openly accessible marketplace.

The platform adds several features to its marketplace that provide significant improvements for the gaming economy and digital asset management, from allowing gamer-to-gamer transactions to opportunities for game developers to participate in the growth of their game economies, beyond simply taking a cut of every transaction, and to providing identities and curated token registries for determining the rules for trading, scarcity, fees and taxation.

The Problem

Each year, gamers purchase more than \$50 billion worth of virtual items worldwide. This however, doesn't mean they own the items; they only have the right to use them in the particular game the items belong in. This has led to the development of black markets where a lot of the trading occurs on unregulated sites or marketplaces like eBay. This means players can be tricked into paying for something that does not exist, or that after they have paid, as they must meet up with the seller in the game to receive the item.

For a long time, gamers have also been taken advantage of, and gamers pay a lot of money to access the games they play, but often only get a few hours of entertainment without the possibility to share or resell the access.

While we have seen traditional gaming platforms help the creation, discovery and curation process of in-game items, the early success of blockchain games like Axie Infinity has made it possible for gamers to transfer value between platforms and resell, borrow, and lend assets created in-game.

It is still hard and sometimes impossible, however, for gamers to transfer value of the gaming platform and withdraw real-world cash earned through in-game item sales due to the platform lacking the ability to verify the real identity of the user, in addition to a set of rules and regulations that must be complied with to detect and report suspicious financial activities.

Adding to the above, the current blockchain solutions come with several other challenges:

- It's too hard for both the developer and end-user to use current blockchain systems.
 - Friction in the user experience (UX) and poor user interfaces (UI).
 - Lack of support for various hardware and software products such as non-custodial wallets, secure and portable identities when using different avatars, fiat money and mobile payments.
- On most blockchains, the user merely owns a receipt of a purchased item.
 - No possibility to store the actual "item", metadata and corresponding data on-chain, and in case the game is discontinued, and the games' server is shut down, players only have the receipt left.
 - Multifunctional NFTs are not supported (i.e., only the transaction itself is stored on-chain).
- The economy of the games is not maintained on-chain.
 - Fundamental property rights (including transferability) and contractual obligations are not traceable between games, verses, or platforms.
 - There are no safeguards against money laundering and unlawful use of IPRs (including title, ownership, and 3rd party IP).

Scaling

Scaling and interoperability is a big issue for many native- and layer-1 or -2 protocols that use a shared application logic (e.g., smart contracts) and security frameworks making the transactions too slow to be suitable for games. Bridges and cross-chain technologies make transferability impossible in most cases and put limitations on the games' financial dynamics. Limitations in throughput, and lack of support for efficient transfers of very large volume, time-sensitive transactions in geographically dispersed locations, make it impossible to build multiplayer games with an immersive user experience.

As an example, Entropia Universe, which is a small niche game with an in-game economy based on Fiat currency has about one million accounts. It is estimated that on a good day Entropia has roughly 60 000 daily active players. However, the game processes more than 30 million micro-transactions per day. Scale this to a game with a few tens or hundreds of millions of accounts, with a few million daily active players, and then add more games of the same size and popularity, and the scaling problem becomes obvious.

The solution:

The Genesis Engine Game Economy and Asset Management Platform

The Genesis Engine platform enables gamers to monetize their gaming experience using cryptocurrencies and utility tokens that give gamers the opportunity to trade in-game assets – whether looted or bought in the form of NFTs. If players wish to withdraw funds, they can sell their NFTs on the exchange and withdraw their funds or move their tokens to another exchange where the token is listed.

For game developers, the Genesis Engine platform is a management system where they can manage their games through an easy-to-use user interface. They can mint NFTs and tokens. Developers can manage their in-game items (NFTs), design the game economy and game logic, decide how many items should exist, decide how players should be able to receive them, and more.

The platform is a virtual storefront, community, and asset marketplace where developers can list their games, tokens, and in-game assets. In a future version, the platform will also act as a launchpad for blockchain games.

For the gamers, the Genesis Engine platform is a place to find both curated and non-curated blockchain games to play, a community and marketplace for blockchain game NFTs that will enable the users to buy and sell virtual goods.

From a game developer's perspective, the platform makes it easy to market their blockchain games globally, rapidly integrate and test blockchain solutions, NFTs and cryptocurrencies into their games so they can focus on creating their game.

The platform will simplify the process of:

- Creating and managing game assets.
- Managing and controlling games virtual economies.
- Setting up game pages and storefronts.
- Create their own tokens and mint NFTs for free.

Game developers and -users will no longer have to develop any complex backend systems but will instead use the Genesis Engine platform to leverage the most powerful aspects of blockchain gaming.

The platform aims to solve compatibility issues between different game- and graphics engines, and the aim is to create a standard for blockchain games so that all assets are compatible with "all" games.

The platform is focusing a lot on the user experience to simplify the process of managing wallets and assets. We do this by having each user control their own internal wallet connected via the platform's website. This removes the need for seed phrases etc. All that's needed is a simple login using

Google, Facebook etc. If a user does want to have more control and decentralization of their assets, they will be able to use the platform's external, advanced wallet.

Finally, the platform will enable a new generation of entrepreneurs just like eBay, Shopify, Uber and Airbnb have. These platforms created millions of small businesses and created billions of dollars of value by making the platforms easy to use and available to everyone.

The market

Blockchain Market

The global Blockchain market size was \$4.9 billion in 2021 and is projected to reach \$67 billion by 2026, exhibiting a CAGR of 56% during the forecast period.

Virtual assets market

Each year, gamers purchase more than \$50 billion worth of virtual items worldwide and this market keeps growing each year. This trend has led to a greater need to secure and track the trade of virtual items.

NFT assets market

The NFT market grew to \$41 billion in 2021 which is nearly as much as the conventional fine art market was worth in 2020 (\$50 billion) The game Axie Infinity alone saw a total of \$3.74 billion in sales!

Games market

According to the analyst NewZoo.com, who analyses the gaming market, by the end of 2023, the market revenue is estimated to exceed \$200 billion. The market will have an estimated 7.2 percent CAGR or more from 2019 to 2023. <https://bit.ly/2Q22IJl>

Industry outlook

Blockchain is one of the technological trends in the gaming industry, although still in the early days. Many experts say gaming will be the first real use case for blockchain, revamping the industry and making games more immersive than ever. Blockchain could completely restructure the industry, turn the tables on the monopolistic console market, create a multiverse, and make games more immersive than ever. So far, blockchain games have been simple in scope, however that is changing at a rapid pace with new games hitting the market in the near future.

Genesis Engine Value Proposition

The Genesis Engine will empower a new generation of virtual asset traders just as eBay, Shopify, Uber, and Airbnb have done for millions of users.

While the Genesis Engine has a focus on games, the platform enables any developer to integrate blockchain, NFTs and cryptocurrencies into their project, and to operate a fully functional virtual marketplace with no investment into security, infrastructure, or settlement.

The platform is designed to be able to handle the immense scale needed to manage the ~3.2 billion gamers in the world. By using the Genesis Engine platform, they will have access to a worldwide market, secured and verified by blockchain technology.

The Genesis Engine platform will allow game developers and gamers to create their own virtual stores in one place and enable them to profit from both developing games and playing games. The platform will bring game developers and gamers closer to each other and democratize gaming by providing trust, security, transaction, and settlement services that will usher millions of new participants into a growing ecosystem.

Most gamers today are familiar with buying and selling virtual assets, but a lot of this trading is done using third parties and unverified websites, such as eBay or custom-built sites. This makes it easy for the users to fall victim to fraud or payment issues. Also, if an affiliate is selling an item, payment settlements are complicated and can take up to 30 days. As for the game Entropia Universe mentioned before, withdrawals can take several months. With the Genesis Engine platform this is alleviated since all deliveries of items are done automatically and settlement takes seconds.

How it works

Platform Functionality

The Genesis Engine platform is a development platform for game developers that lets them create, host, and manage their items (NFTs) and their data, tokens, and smart contracts all in one place. They can then deploy their game logic, assets, and smart contracts on-chain.

They will be able to create a storefront for their company and/or games where they can host information about the game(s) and trade their NFTs, and users can download the games.

The platform is also a peer-to-peer marketplace for virtual assets based on decentralized smart contracts on the blockchain. This allows a global user base to securely and with trust access the virtual goods on the marketplace that eliminates the financial risks and possible fraud on other marketplaces. For all participants – listing and selling agents, items settlement agents, appraisers, affiliates, buyers, and sellers – fees and settlements are handled quickly and securely.

The platform consists of several parts: one development part that helps developers to easily implement blockchain into their games using a Software Development Kit (SDK), an asset and Game Economy management part, and a marketplace for the end-user.

Platform features

- SDK and API for easy implementation.
- Pre-made smart contracts and templates that can be used and modified.
- Creation of game or company-specific tokens.
- Create fungible and non-fungible tokens for game(s)
 - A fungible token could be the game's currency, it can also be items that can be in multiples such as ammunition, ore, animal hides etc.
 - NFTs can be items such as a weapon, a car or skins.
 - Tokens can either be traded on the marketplace or found inside the games.
- Host assets (images, 3d models and data) on the backend and once deployed hosted on-chain.
- A maximum transaction confirmation of 1 second, to not break the immersion.
- Games and users can burn tokens, this could be used to burn ammunition in a game, for example, as the gamer consumes ammunition while shooting their gun.
- Transactions will be “free” (a fee is charged when players sell an item or is embedded in the cost to use an item).
- Developers will be able to create smart contracts through the platform and they will be able to do this using a simple drag and drop interface or code if they so choose.
- Insurance system to protect the gamers from companies and games getting bankrupted or shut down. The gamers can burn parts of the tokens and NFTs they have and get some tokens back to spend on other games.
- Each developer will be able to launch individual test nets to test if games and features work as intended before launching on the main net.

Game launchpad

A future version of the platform will feature a launchpad for blockchain games where game developers can launch and market their upcoming games. They will also be able to fund their games via token generation events and NFT sales.

The launchpad will have two sections, a “premium” section where we screen every game and company to make sure the company is legitimate and has developed games previously, and make sure the games’ tokenomics and economy design are well designed.

The second part will be the indie section where smaller companies and games can launch. On the indie platform, we will only screen the developer but not analyse the game as deeply as on the “premium” launchpad.

Earning Geen

Anyone can use the blockchain network to earn Geen tokens by helping to secure the network, running a node or by providing content such as games, and/or assets gaming companies can use in their games.

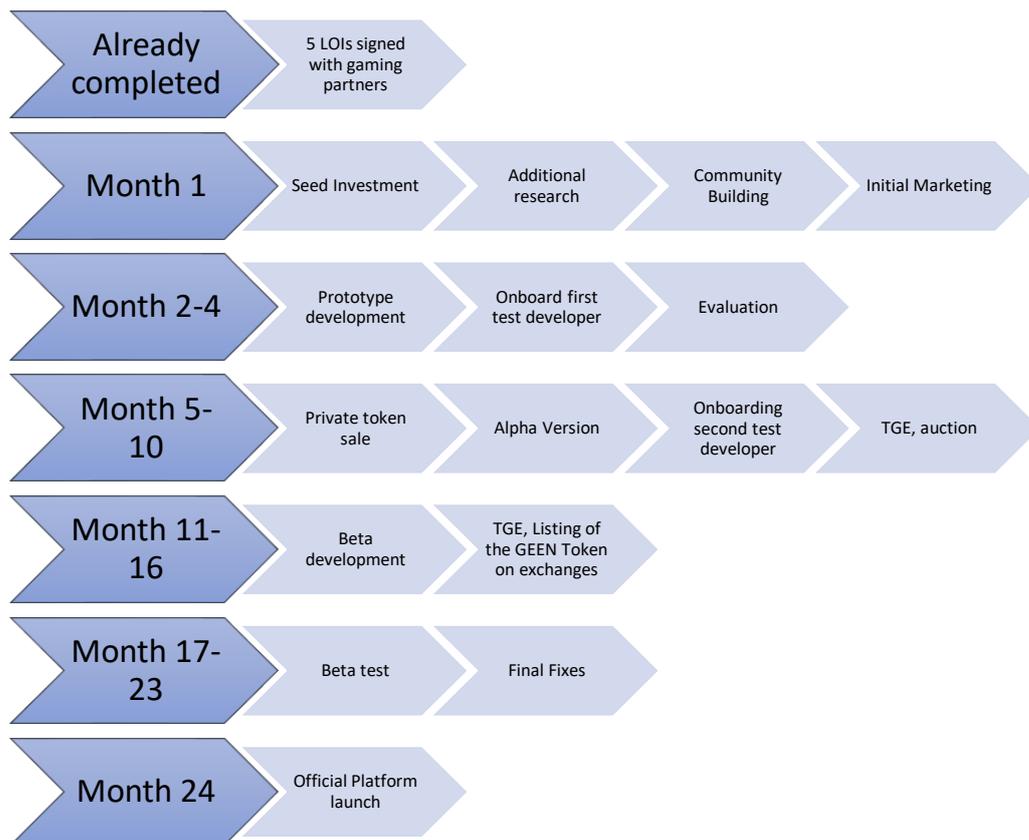
Scalable Consensus

The Genesis Engine protocol will be tailor-made and enabled to handle the immense scaling, transaction speed and I/O speed needed to manage all types of games, be it small indie games, card games or immense MMORPGs with millions of players simultaneously online. The Genesis Engine network uses an energy-efficient proof-of-stake consensus mechanism which makes it possible to have an extremely fast and scalable network.

Consensus Protocol

- The Geen token is used as the consensus and staking token.
- Anyone can stake any number of tokens, but after someone stakes more than a certain share of all staked tokens, a diminishing return will be applied.
- Any participant in the network can be selected to validate a transaction and the amount of Geen the validator is staking does not increase the probability of being selected.
- Rewards are pooled from the different games and are put into a specific reward wallet.
- Rewards are distributed to every staker at specific intervals.
- The reward amount is based on how many tokens the staker is staking.
- A user could potentially be able to select a specific game to focus on.

Roadmap



Tokenomics

Triolith Token	
Symbol:	(Proposal) Geen
Private sale Price	0.1
Auction (combined price)	0.25
Public Launch price	0.25
Max Supply (M)	500,000,000
Circulating Supply (M)	500,000,000
Token Sale	Target to raise
Private Sale	€ 1,500,000
Auction	€ 62,500,000
Total Raised	€ 64,000,000

Genesis Engine's incentive mechanism rewards validators, content creators and publishers by sharing the fees collected by the network from the marketplace, in-game economies, and trading happening between players. The more active users the games have the more fees will be generated, which increases the rewards for the participants in the network. This also incentivises the network participants to spread the word about the platform and games released on the platform.

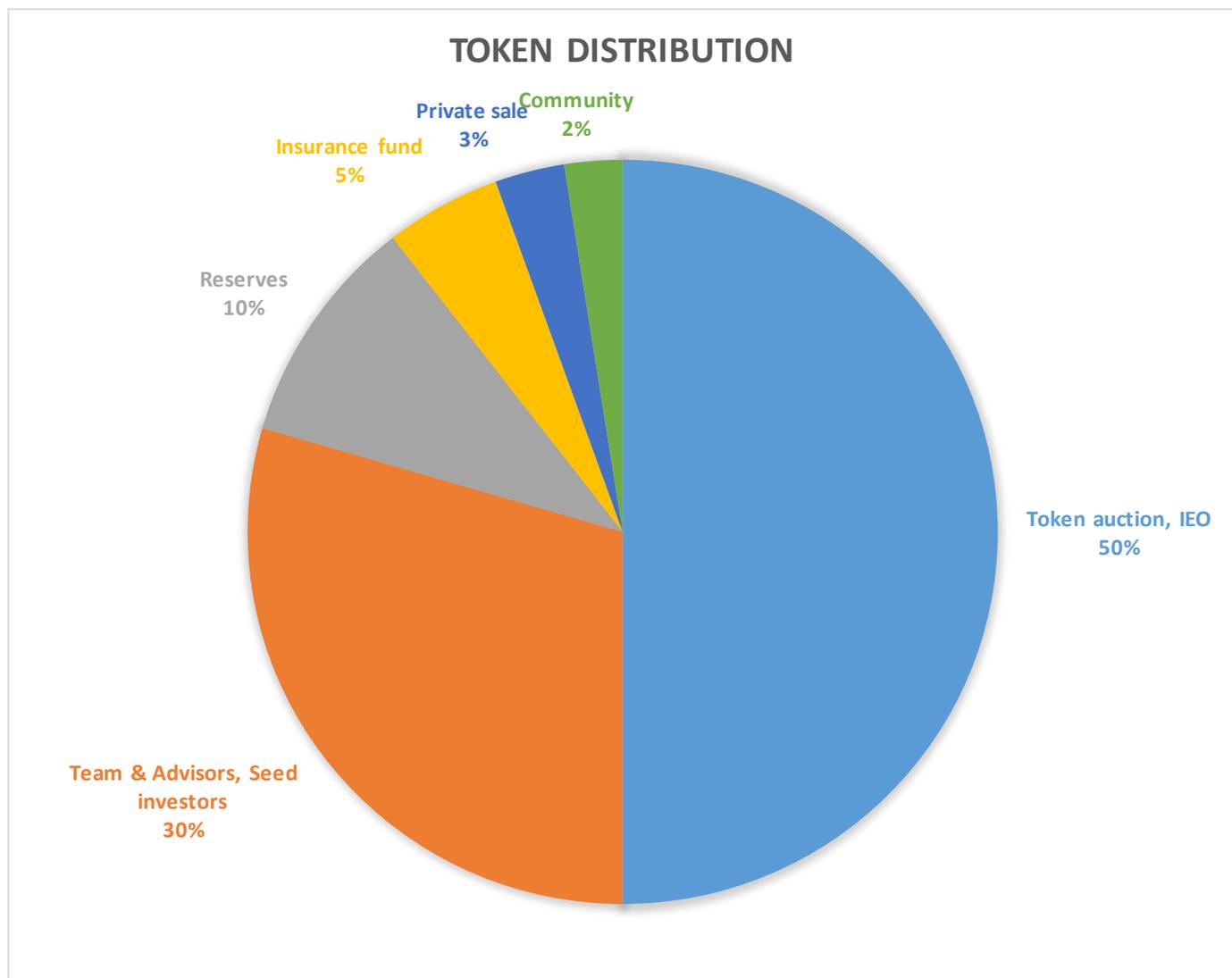
Geen Token Distribution

The Geen token will be pre-mined, and to participate validators will need to acquire tokens either by purchasing them at a Token Generation Event or win them, for example in a competition or through an airdrop. Once tokens have been acquired, they can take part in securing the network and earn rewards.

The tokens will be distributed over a few Token Generation Events and early investors will be subject to a lockup period as shown below. This is done to incentivise long-term investments and to counteract dumping of tokens once they are listed on an exchange.

Tokens will be distributed as per the chart below.

Token Distribution	% of Tokens	Tokens	IEO Launch worth
Equity investors	1.5%	7,500,000	£1,875,000
Executive team	14.0%	70,000,000	£17,500,000
Advisors & Board	5.0%	25,000,000	£6,250,000
Employee fund	9.0%	45,000,000	£11,250,000
Insurance fund	5.0%	25,000,000	£6,250,000
Community rewards	2.5%	12,500,000	£3,125,000
Reserves	10.0%	50,000,000	£12,500,000
Private sale	3.0%	15,000,000	£3,750,000
Auction	50.0%	250,000,000	£62,500,000
Totals:	100.0%	500,000,000	£125,000,000



Lockup time

Equity investors: On TGE 10% tokens available. Additional tokens released over 18 months.

Executive team: On TGE 2% tokens available. Additional tokens released over 2 years.

Private sale: On TGE 10% tokens available. Additional tokens released over 18 months.

Auction: On TGE 10% tokens available. Additional tokens released over 18 months.

Use of Proceeds

The proceeds from the token generation events will be put mainly into the development, marketing, and the creatives fund of the company.

Staking and rewards

The goal of the network's incentive model is to reward reliable participants, and to incentivise developers and publishers to publish great games with a high retention rate. The more games the bigger the platform's community will grow, and more games will be played.

Bridging Blockchains

As Genesis Engine expands, we will incorporate other blockchains into the platform so games that use different blockchains can be traded on the marketplace. We will also explore the possibilities to enable other blockchains for the platform to make it a multi-chain network.

Community Development

Gaming and blockchains have one major quality in common: community. Both gaming and blockchains are highly community-driven and they grow only as fast as the community. Therefore, it's imperative that the platform has a large and active community.

Triolith will leverage its community to expand; we will have volunteer community managers and also an experienced internal community management team. By having an easy to use platform, incentives, competitions and air-drops, and by using the latest trends in social media, the community will grow rapidly.

For the gamers, we will have an extremely low barrier to entry, and they should not have to be knowledgeable of the underlying blockchain technology, NFTs or crypto, **it should simply just work.**

Ecosystem growth

The Genesis Engine network is designed from the ground up to grow well beyond its initial scope and to be able to handle the immense scale needed. The network architecture utilizes social and monetary incentives for the community to help grow the ecosystem. The architecture also makes it possible to govern the network and the games deployed on the system.

Governance

Parts of the main Genesis Engine network will be governed by the Geen token holders through a decentralized smart contract system and likely, at a later stage, through a DAO. The longer and the more tokens a token holder stakes, the higher their voting power becomes. This ensures incentives remain aligned for a longer term. Games deployed on the network can also use a similar system to govern their games if they choose to do so.

Team

Management

Magnus Söderberg

CEO & Co-founder - [LinkedIn](#)

- 11 years of experience in leadership and management from leading teams in the gaming industry acting as CEO, office manager, producer etc.
- Co-founder of Gold Town Games AB & Vorto Gaming AB
- Participated in the listing of Gold Town Games on the Swedish stock market
- Bachelor's degree in game design.

Andreas Johansson

Co-founder & COO – [LinkedIn](#)

- Business angel
- Senior consultant in IT management.
- Extensive knowledge of leadership and management.
- Extensive knowledge in emerging technologies such as cloud technology, Martech and Blockchain.
- Built Sweden's first industry organization with a focus on blockchain and DLT, The Swedish Blockchain Association.

Tiago Loureiro (Consultant)

Feature design – [LinkedIn](#)

- 20 years of experience in ICT, with the last 14 years in the video game industry.
- Has published games with more than 11M daily active users.
- Has experience with blockchain in games and will help Triolith design the needed features of the platform.
- The company's ambition is to bring Tiago on as a full-time employee or co-founder.

In addition to this, we have two very senior developers interested in joining the production team once funding has been secured. In addition to this, one of them wants to bring along four other very senior colleagues.

An additional 2-4+ very senior developers, likely to join once this funding round is complete.

Advisors

Tabitha Hayes - [LinkedIn](#)

- Managing Director, EMEA Publishing at Epic Games
- Previously CMO - Star Stable
- Previously Vice President, Global Brand Management and Marketing at Electronic Arts Europe
- Nearly two decades of experience in building and leading global marketing teams across brands, products, subscriptions, and services in the video games industry.
- A change agent, driver of results, advocate for consumer first and inclusive thinking, a passionate leader and coach.

Åsa Sundqvist – [LinkedIn](#)

- Passionate about building disruptive products and growing exponential businesses.
- Has worked with innovative start-up's, edge cloud and blockchain technology for the last six years.
- Vast experience in leadership, growth strategies and delivering scalable solutions.

Linda Kiby Zetterman - [LinkedIn](#)

- Game developer since 2006
- Was part of Paradox's journey from 20 to 200 employees and the listing of the company.
- Been involved in developing several very popular titles as an executive producer.
- Member of Paradox Development Studio's management group.

Mika Levo - [LinkedIn](#)

- Several years of experience in the Finnish game industry.
- Finnish game industry veteran
- Extensive knowledge of user acquisition
- An expert at analysing data and analytics

Oscar Clark - [LinkedIn](#)

- A legend in the mobile games industry and the forever moderator at Pocket Gamer Connects
- Was one of the first to work with blockchain and games in the industry.
- Been an evangelist for several different brands, such as Unity etc.

Together, the advisory team possesses solid knowledge and experience from the gaming industry and other industries relevant to Triolith Games.

About Triolith Games AB

Triolith Games AB is a Blockchain game tech development company based in Skellefteå, Sweden and the developer of the Genesis Engine Platform. The company was founded on fairness, trust and work-life balance, and with three big objectives: To give the power back to the gamers and to democratize gaming while also trying to attract more females to the industry as they are gamers just as much as males.

Triolith Games, founded in 2018 by Magnus Söderberg, was established in Skellefteå as part of an investment project initiated by the Skellefteå municipality, and as an effort to attract and establish game developers to the municipality and to fund the Artic Game Lab.

Working in the games industry since 2011, Magnus was approached by a colleague and was asked if he would be interested in moving to Skellefteå and helping to build a games industry in Skellefteå.

During his first two years in Skellefteå, Magnus was involved in the successful start-up and listing of Gold Town Games AB on the NGM MTF exchange. Magnus left Gold Town Games in early 2018 to focus on Triolith Games.

Magnus started off by building a network of advisors and mentors, and after about a year into the project, he also got to know Andreas who became a co-founder. During the years that have passed the project has grown from a simple idea to a massive platform as Magnus has learnt more about blockchain and what is truly needed for blockchain to become the holy grail of gaming!

But now the time for quiet work is over and the real development to commence!