



RISE OF THE WARBOTS

WHITEPAPER

June 4, 2022

Rise of the Warbots™ is a Player-vs-Player (PVP) Play-to-Earn (P2E) NFT gaming experience built on the **Avalanche C-Chain**, set in a post-apocalyptic world where players face off against each other.



The Next Great NFT Based Game

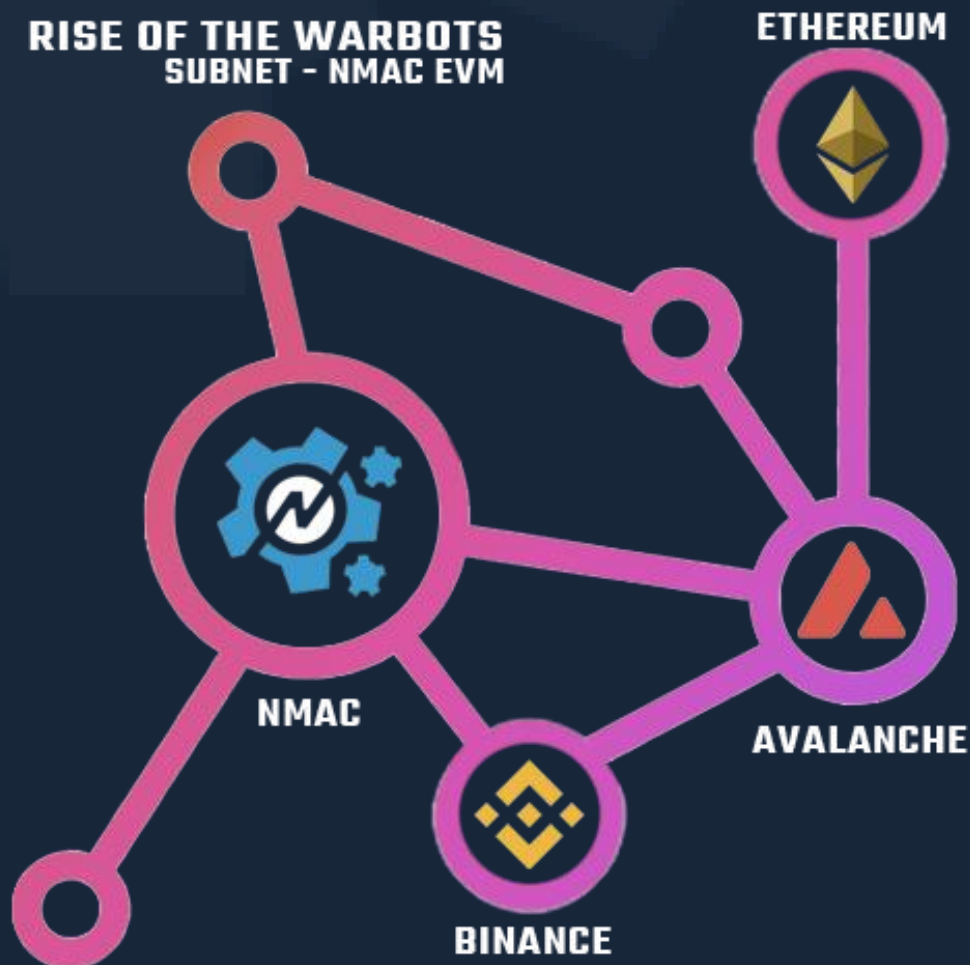
Rise of the Warbots™ (ROTW) is the next great cryptocurrency non-fungible token (NFT) based gaming experience that is sure to join projects such as CryptoKitties, Axie Infinity, and Sorare in becoming a massive hit with a huge dedicated fanbase. By time-staking special Micro Machines and Nano Machines tokens, players can create and upgrade playable Warbots, weapons and equipment which can be used to challenge other Warbots for prizes and bragging rights. The unique game mechanics require players to strategically balance their supply of tokens to determine how to most optimally acquire new tokens from Liquidity Pools, stake tokens to generate new Warbots, upgrade their existing roster of Warbots, or engage their Warbots in combat with other players' Warbots. Warbots, weapons and equipment are unique NFTs that also function as collectible items. What makes the ROTW gaming experience unique is, every player's portfolio (owned warbots, weapons and equipment aka NFTs) will be used in every gaming experience. To date an isometric action (Diablo like) PVP gaming experience is already in their prototype stages. ROTW just announced a CCG (Magic the Gathering) PVP gaming experience, and rumor has it, there will eventually be a VR PBP experience. There is no property in existence that empowers players to use their exact inventory in multiple gaming experiences all tightly woven together by a rich history that easily supports ancillary media: comic books, animated series, live action, games, etc.



By unifying the most exciting and dynamic aspects of blockchain technology, such as DeFi and Liquidity Pools, NFTs, and blockchain based gaming, Warbots is proud to be creating the most revolutionary decentralized gaming experience in the world.

Blockchain Technologies and Concepts

This section summarizes the key technologies and concepts that come together to make the Warbots gaming experience possible. It provides valuable background for understanding the rest of the whitepaper.



Blockchain and Cryptocurrencies

Given all the hype and noise, it can be hard to figure out what blockchain actually is and what it can accomplish. Fundamentally, blockchain acts as a way of recording transactions on a digital ledger. Each computer which connects to a blockchain maintains a copy of this digital ledger, and each time a transaction is conducted over a blockchain network, it is added as a block in the ledger along with other similar transactions. The computers connected to a blockchain also perform a complex mathematical process known as mining to verify that only valid transactions are added to a block in the ledger. Blockchains are ideally suited for creating decentralized, fully distributed peer-to-peer networks.

Blockchain technology represents the next revolutionary step in the services and manufacturing economy of the future. They allow automated distributed applications to settle multi-party transactions without the need of a centralized agency, making the entire digital economy more frictionless. Already, applications of blockchain have moved beyond simple currency-based payments, and now includes smart contracts, financial instruments, and distributed databases and record keeping. The digital currencies enabled by blockchain have enabled financial services that are secure, frictionless, and nearly free, such as distributed applications for lending pools and escrow services.

Advantages of blockchain include:

- Decentralization: The Blockchain is not controlled by a central authority, giving control to a large group of trustless peers.
- Scalable: Since it is maintained by a network of peers, blockchain is highly scalable, scaling up as more miners are incentivized to join the network.
- Secure: The public ledger used on a Blockchain network makes all records on it secure, auditable and undisputable. Transactions on a Blockchain network are secured by strong cryptographic algorithms.
- Robust: Due to its decentralized peer-to-peer network, a Blockchain network does not have a single point of failure.
- Autonomous: Blockchains can enable transactions to be performed autonomously, without trusted Third Parties.

Bitcoin, the first Blockchain based cryptocurrency, functions as a worldwide payments system. The algorithm used to mine Bitcoins not only verifies transactions added to a new block in the ledger, but also checks additional transactions in the cryptocurrency to prevent counterfeiting or the "double spending" problem in which a single Bitcoin is used

multiple times. Since the introduction of Bitcoin, several other cryptocurrencies have been introduced. Among the most popular is the Ethereum platform's native digital token Ether, which can be used to create tradeable digital tokens whose use is guided by Smart Contracts deployed on a globe-spanning Ethereum Virtual Machine.

Cryptocurrencies such as Ethereum Ether run on decentralized platforms on the blockchain. In that sense, blockchain functions as a shared global infrastructure that can move value between parties. Blockchains such as Ethereum blockchain possess two groundbreaking capabilities: keeping an encrypted perpetual record of every transaction performed anywhere in the world (which also tracks the ownership of all units of the cryptocurrency), and support for the use of "smart contracts" which can be used to create markets, store records of debts or promises and move funds in accordance with instructions such as the terms of a contract. More recently, these smart contracts have been used to enable Decentralized Finance without the need for traditional intermediaries.

Because no single party has control over the records or transactions of cryptocurrency and blockchain, there is no capacity for nefarious parties to commit fraud. Applications on blockchain run exactly as programmed without any possibility of downtime, censorship, fraud or third-party interference. As a result, user data remains secure and private, and is decentralized to prevent corruption or single point failures.

These Smart Contracts are implemented in a high-level language (the Solidity language in the case of Ethereum) and deployed on the blockchain network, where they can be accessed and used by other parties. Once deployed, these Smart Contracts benefit users by being completely immutable and transparent, ensuring a high level of trust without the need for traditional centralized trust mechanisms. As an example, the Ethereum blockchain uses the Ether cryptocurrency to pay for the energy cost of mining new transactions and running these Smart Contracts. A programmable blockchain can use these Smart Contracts to develop many different types of applications, known as decentralized applications or "DApps." For example, a user interacts with an Ethereum client via a DApp such as the browser MetaMask, a wallet, or custom software that incorporates web3.js for interfacing the DApp with the blockchain. These Smart Contracts can also be used to create fun and entertaining games that are enjoyed by people all over the world.

Avalanche Blockchain

Warbots is implemented as a subnet on Avalanche, often considered the most innovative and cutting edge blockchain in existence today. The Avalanche blockchain was developed by famed Cornell Computer Science Professor Emin Gun Sirer. From day 1, the project has made achieving the fastest possible time to finality (i.e., the time to process a transaction) a core goal. By leveraging a parallel consensus protocol, Avalanche is able to validate 4,500 transactions per second, as compared to Ethereum which can only handle a measly 15 transactions per second. This lightning-fast speed means our users can obtain, upgrade, or battle their Warbots almost instantaneously, without waiting for blocks to be mined and validated at a snail's pace. Avalanche blockchain is the best solution for enabling the kind of dynamic, no holds barred gameplay that we want our users to experience.

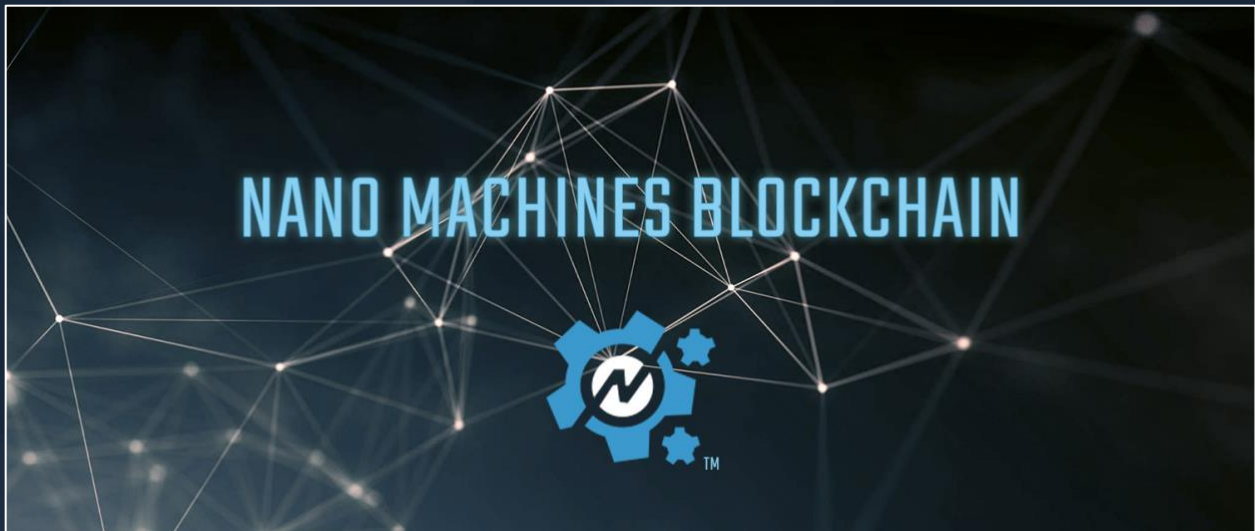
Just as important, Avalanche uses an inherently randomized consensus mechanism, making it among the most secure Blockchains in the world. By using Proof of Stake instead of Proof of Work, Avalanche achieves Sybil resistance. As an added benefit, Proof of Stake allows Avalanche to be more energy efficient as well. The platform also avoids the longest chain rule for achieving consensus, instead requiring the entire network to achieve consensus. Unlike other Blockchain networks, Avalanche can feasibly achieve this full network consensus by taking advantage of its blazing fast sub-second finality and incredibly low transaction fees.

The native token of the Avalanche platform, AVAX, is also valuable. As a community governed project, AVAX allows token-holders to control the governance and future direction of the platform. In addition, all AVAX used as gas in Avalanche transactions are burned - as opposed to Ethereum, where only a small percentage of the transaction processing fees are burned. This contributes even further to the value of the AVAX tokens.

Given the advantages of lightning-fast transaction speed (very possibly the fastest Blockchain transactions on Earth) and impenetrable security (that's enabled by this incredibly fast transaction speed), it was readily apparent that Avalanche is the best platform for building the Warbots project.

AVA Labs, the company behind Avalanche, has announced their primary focus is to become **the** Gaming Blockchain. Given the quantum leap advances in Blockchain speed, security, and usability provided by their platform, it seems assured that they will achieve this lofty goal.

The Warbots Subnet



The speed and security of Avalanche alone makes it a very appealing choice for launching Warbots, but the ability to launch the Warbot subnet made the decision a complete no-brainer. An Avalanche subnet is a clone of the default Blockchain (known as the “Primary Network” in Avalanche parlance) that’s connected to the original platform. These subnets can be created by Avalanche users on the fly, and are much more robust and decentralized than L2 networks. These subnets allow additional chains to be created for each new use case, such that a subnet can create its own additional subnets to overcome scaling limits. In order to become a validator and create these subnets, each validator must first become a Primary Network member on Avalanche by staking over 2000 AVAX tokens which the Warbot project has already secured.

By becoming one of the first NFT gaming projects to become validators on Avalanche, Warbots will be in the enviable position of being an Avalanche Primary Network member with the NMAC EVM subnet. This subnet can then be leveraged by other projects needing to join a subnet, as long as those projects first acquire our Nano Machines aka NMAC tokens. This all bodes very well for the value and utility of our NMAC tokens, both as the staking token for upgrading Warbots, weapons and equipment within the gaming experience, and as the staking token for using Warbots’ NMAC EVM subnet.

Non-Fungible Tokens

Unlike cryptocurrencies like Bitcoin, Non-Fungible Tokens (often abbreviated NFTs) are not mutually interchangeable with other digital tokens. Instead, they have the property of being rare and distinctive, and demand for these assets is driven by connoisseurs and collectors. The first set of NFTs were from Larva Labs' artwork project CryptoPunks, in which 10,000 unique artworks were released onto the Ethereum blockchain in June 2017. Most of these NFTs depict images of humans, though rarer (and often more valuable) CryptoPunk NFTs depict special types such as "Zombie", "Ape", and "Alien". More recently, basketball fans have spent more than \$230 million buying and trading NFTs related to NBA players and exciting plays on the Top Shot platform. Fans of the rock band Linkin Park have been buying up NFTs featuring artwork from their vocalist Mike Shinoda. And as of early March 2021, the most valuable NFT is a piece of digital art featuring a prone image of former US President Donald Trump that sold for a whopping \$6.6 million dollars. That was quickly followed by a Christie's auction of NFTs in which a new record breaking \$69 million dollar work of art was sold by the renowned digital artist Beeple. The NFT market is blazing hot and is expanding into domains ranging from sports to music to filmmaking, with many wealth managers and high net worth individuals treating them as an important new asset class.



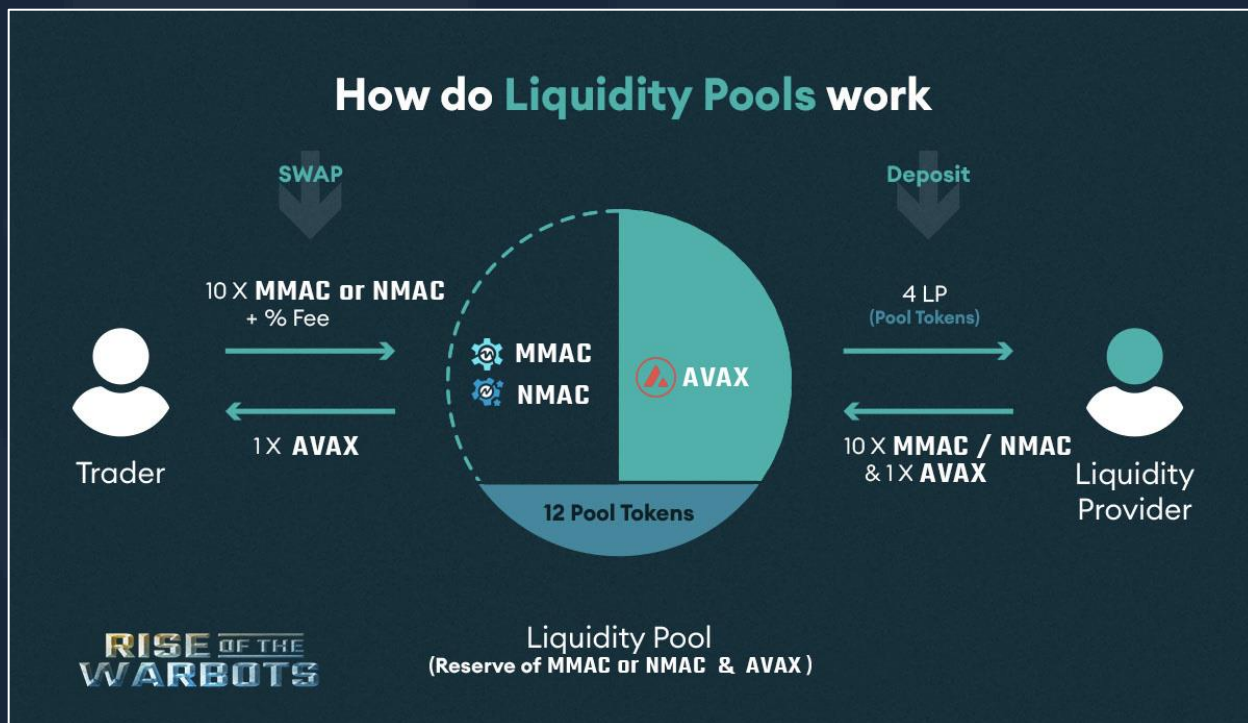
NFT Based Gaming

One of the first major applications of NFTs (and one of the first major applications of blockchain technology more generally) was the decentralized game CryptoKitties. Launched in late 2017, CryptoKitties was a game in which players could purchase and collect NFTs corresponding to virtual cats. They could then breed those virtual cats to create new CryptoKitties. By December 2017, the most valuable CryptoKitty at the time was sold for over 240 Ether (more than \$117,000 dollars based on the value of Ether on the sale date and more than \$480,000 dollars based on the value of Ether in Spring 2021). The popularity of the game skyrocketed through 2018, with the transactions clogging the entire Ethereum blockchain network. By May of 2018, a CryptoKitty was sold for \$140,000 dollars' worth of Ether valued at that time, and by October 2018 over a million digital cats had been bred on the CryptoKitties platform. Clearly, CryptoKitties was not only a fun game, but also a unique way of creating valuable assets on a decentralized digital platform.

Since then, other NFT based games have followed, such as the virtual fantasy soccer game Sorare in which players assemble teams based on digital player cards. Axie Infinity has laid claim to being the most popular NFT based game in which players inhabit a Pokemon based universe where they build kingdoms and battle using their unique digital pets. These games go beyond CryptoKitties by adding competitive and strategic game elements in addition to the fun of generating interesting and valuable new NFTs.



Liquidity Pools



Decentralized finance (DeFi) and the related idea of liquidity pools are some of the newest innovations taking the world of blockchain by storm, and Warbots is taking advantage of this surging trend to add a unique new strategic element to our game. These liquidity pools first gained popularity when DeFi platform UniSwap launched a decentralized exchange for trading cryptocurrencies issued on the Ethereum blockchain. Instead of traditional market makers, orders on UniSwap are filled through liquidity pools. Users of UniSwap are encouraged to contribute cryptocurrencies to these pools by rewarding these liquidity providers with trading fees in the form of additional tokens. Similar liquidity pools are used by Warbots players to access tokens which can be used to generate and upgrade playable character NFTs, creating a new and unique dimension of strategic gameplay.

Liquidity pools are incentivized with rewards. The two liquidity pools the Warbot project will incentivize are the MMAC/AVAX and NMAC/AVAX pool. Participants will be able to add liquidity to these two pools and earn NMAC rewards.

The rewards will be pulled from the Nano Reserve pool which is the project's treasury.

Rise of the Warbots Gaming Experience

Rise of the Warbots is a gaming experience that synthesizes the speed and efficiency of the Avalanche blockchain, the limitless creative possibilities of NFTs, and the innovative market dynamics of DeFi liquidity pools.



Micro Machines Token

Warbots is set in a futuristic world in which the masses are entertained by brutal battles between mechanized warrior robots. Micro Machines (MMAC) are the first token in the Rise of the Warbots ecosystem and are a *highly scarce asset*. Only 2000 MMAC were originally released, 1000 of which were instantly sent to a burn wallet so that the total supply is a mere 1000. The transaction tax of the MMAC token is 10% with 8% provided to liquidity and 2% reflected to token holders.



Since 50% of the available supply of MMAC lives in the burn wallet, 50% of every transaction *reflection* goes directly to the burn wallet. The total supply of 1000 MMAC therefore decreases over time, effectively creating an *even scarcer asset*. As if that wasn't enough, the majority of MMAC tokens will inevitably be locked up in staking to produce Warbot NFTs, so most of the MMAC tokens won't even be in circulation.

All of this means that holding a full MMAC token becomes more difficult over time since fewer of them will be available. This is important because in order to stake MMAC for Warbot NFTs, you need to stake a *minimum of 1 entire MMAC*, effectively limiting the number of holders who can mint Warbot NFTs. These dynamics will serve to drive demand for the MMAC tokens.

These MMAC tokens can then be staked to generate Warbots. A longer staking time increases the number of Warbots received every 90 days but also locks away the MMAC token for a longer duration.

- Longer staking time increases the number of Warbots received every 90 days but also locks the MMAC token for a longer duration
- Minimum staking time is 1 period (90 days), after which the user will receive 1 Warbot. Maximum staking time is 12 Periods (3 years), after which the user will receive 12 Warbots every 90 days. Note that the staking period (90 days) can be changed to meet demand/supply.
- Multiple MMAC tokens can be staked. If you stake 2 MMAC, for example, you receive twice the number of Warbots per period. However, the total out production is capped at 12 per factory due to limits in blockchain transactions size.

Nano Machines Token

Nano Machines (NMAC) are the second (soon-to-be-released) token in the Rise of the Warbots ecosystem. NMAC are needed to activate Warbots from their initial amorphous state, and are obtained and used to upgrade Warbots to higher levels. Players can also upgrade weapons and equipment for their Warbot (without changing the Warbot's level) by using Nano Machines tokens. These Nano Machines tokens can be obtained through liquidity pools with a \$DAI pairing, and can even be staked on a battle to receive a portion of the battle's winning pool. Further utility for NMAC is always being designed and implemented. Weapons & Equipment Factories, Ammo Factories, etc. The team behind ROTW want to ensure a healthy supply and demand of in-game assets/NFTs.



Dicesium Batteries

Dicesium Batteries are the 3rd token in the Rise of the Warbots ecosystem. The Tinkerer needed a powerful yet small power source for the Warbots. He found if he coupled Cesium with Dilithium crystals he could induce enough power to operate Warbots. The volatile nature of this coupled bond means the power is not unlimited but renewable. The dicesium batteries will be used to power the oracle engine which controls all the randomization of the game: things such as Warbot NFT stats and NanoNFT stats. The price of dicesium batteries is a TBA pegged ratio to NMAC.



Gameplay and Strategy

Warbots players will need to ingeniously and creatively balance their supply of initial Micro Machines tokens, Nano Machines tokens, and Warbot NFTs between liquidity pools and staking, upgrading, generating new Warbots, collecting and upgrading weapons and equipment and of course engaging their Warbots in gut-wrenching battles against other players' Warbots.

These battles will occur in Combat Zones where Warbots can battle each other for both wagered and gifted prizes such as new Micro Machines tokens, Nano Machines tokens, and other unique digital asset prizes. The player will be able to select one or a roster of Warbots to participate in the challenge, and the winner will be determined by a combination of NFT level, upgraded armaments and defenses, and roster of complimentary Warbots.



ACTUAL PROTOTYPE GAMEPLAY FOOTAGE

Combat Zones

Currently the ROTW team has announced two Combat Zones, which function as two different fun and exciting gaming experiences.

The first is an isometric, "Diablo" like action player-vs-player synchronous game. The PVP prototype for this game has been released to great acclaim and enthusiasm from the Blockchain gaming community.

The second, more recently announced game is similar to the "Magic the Gathering" card game. This still in development second game provides a computer-based turn-based card game experience in which the tokens from the action game serve new roles as tradable playing cards.

Players will enjoy customizing their Warbots, weapons and equipment to try and earn as much as they can in the gaming experience of their choice - or even try to maximize their fun in a combination of these two gaming experiences. Rise of the Warbots is unique among Blockchain based games in providing two differentiated gaming experiences through one gaming platform. Players who participate in our gaming ecosystem will be able to double down on the utility of their in-game tokens by using them in two different fun and exciting play-to-win games.



Warbots as Assets

Since each Warbot is a completely unique NFT (and since some of them may be destroyed in the process of leveling up existing Warbots), they will naturally become in demand items for collectors and connoisseurs. It is reasonable to expect that given the effort required to generate high level Warbots, there will be greater demand for these than for the more available lower-level Warbots. Our users will be able to sell or acquire their Warbot NFTs using other cryptocurrency assets, just like with any other non-fungible token. The difference is that no other NFT can be used to engage in the fun and exciting arena of the Warbot Combat Zones!

Similarly, all Weapons and Equipment will follow the same philosophy



Token Summary

The table below summarizes the various tokens that comprise the Warbots universe and their purpose and uses.

Micro Machines



Can be exchanged for Warbots or staked to generate new Warbots

Nano Machines



Used to upgrade Warbots, weapons and equipment, can also be staked to generate new Nano Machines

Dicesium Battery



Control gameplay randomization

Warbot /
Weapons &
Equipment



Unique NFTs which are graded across rarity and level, can be used to upgrade existing Warbots, weapons and equipment respectively, to a higher level or to battle other Warbots in the Combat Zones

Tokenomics



**NANO
MACHINES**

250,000,000
Supply

26,000,000
TEAM ALLOCATION

20,000,000
RESERVE POOL

9,000,000
LIQUIDITY POOL

165,000,000
LP EMISSIONS RESERVE

30,000,000
PRIVATE/PUBLIC SALE

Warbots as a Way to Earn: User Profiles

In addition to being extremely addictive and fun to play, Warbots also presents people with the opportunity to earn cryptocurrencies ranging from the NFT Warbots themselves, to the Micro Machines and Nano Machines tokens used to create and upgrade the Warbots. By combining Blockchain gaming with Decentralized Finance Liquidity Pools, Warbots even makes it easy to earn crypto and build wealth while you aren't actively gaming. Broadly speaking, we believe there are three user profiles with unique strategies that can be followed to earn crypto using Warbots, based on each user's interests and specific situation.



The Play-To-Earn Gamer



The Play-to-Earn Gamer may be the most obvious Warbots user, and their strategy may seem the most obvious: just build the best Warbots and have them destroy the competition in battle, right? In practice, this is more difficult (and also more fun and rewarding!) than it sounds at first. The nuances of the ROTW universe introduces a lot of interesting wrinkles that these Play-to-Earn Gamers must master. Do they use their knowledge of the game's dynamics to stake on the outcome of other people's battles? Do they compete in one of the large-scale tournaments hosted by the platform, and if so, which Warbots from their roster will make the cut and duke it out in the tournament? How will they optimally manage their Micro Machines and Nano Machines to ensure a solid army of Warbots that can be upgraded to the highest levels? Which spare parts does the player need the most to complete their desired Warbots upgrades, and how should they best go about acquiring those parts? Should a Warbot be equipped with a Warhelm Patch or NanoNFT before an important battle? And at what point should a player sell or lease out a Warbot to acquire the additional assets needed to upgrade the rest of their arsenal?

Balancing all of these strategic decisions makes playing Warbots fun and engaging. A player who spends time mastering all of these gameplay elements will have a strong Warbots arsenal capable of winning battles and tournaments, earning more and more valuable tokens ranging from Warbots to Nano Machines and Micro Machines to other spare parts in the process. The more you play, the more you will master this absorbing universe, and the better your Warbots will do in battles and tournaments where the spoils go to the victors. Our most dedicated players will also be awarded with Nano Machines tokens and occasional NFT drops as a reward for their passion for the game.

The DeFi Yield Farmer

Maybe you're not much of a gamer, but instead you're looking for a way to supercharge your DeFi returns. Warbots and its associated tokens are an ideal token for you. By pairing the Micro Machines MMAC tokens with other tokens in Liquidity Pools, you can stake these MMAC tokens to earn Nano Machines NMAC tokens or Warbots NFTs. Both of these tokens have a clear utility to the Play-to-Earn Gamers in the Warbots ecosystem: the Warbots NFTs drive the gameplay, while NMAC tokens are the only way for players to upgrade their Warbots. These NMAC tokens can even be staked again to earn even more NMAC. Both MMAC and NMAC present rewarding options for DeFi yield farmers who want to diversify into high yield Liquidity Pools with highly sought-after rewards.



The Long-Term Crypto Value Investor

For the true believers who want to hold cryptocurrencies with true long term value propositions, the Micro Machines MMAC tokens present an incredible opportunity. Given the game dynamics of Warbots, most of the MMAC tokens in circulation will be staked in DeFi Liquidity Pools, most of which will require the MMAC to be locked up for three years. As a result, there will be a very limited amount of MMAC tokens available on the open market. At the same time, we expect demand for MMAC to be very high since it's the only way for Play-to-Win Gamers to truly own the creation of their own Warbots. This will be beneficial for the value of these hard to obtain MMAC tokens, particularly as more and more of the available token supply becomes staked.



In addition, each Warbot NFT will be completely unique and collectable, and as the game expands its fanbase, more and more users will want to purchase these exciting assets. It's very likely that some of the earliest Warbots will come to be identified as "OG" NFTs which will command a high value in the future. Someone with patience and a long-term perspective might acquire one of these early Warbots and hold onto it while making constant upgrades instead of risking the Warbot in battle. The wise long-term investor might also hoard in-game asset tokens such as spare parts, NanoNFTs, or Dicesium batteries, waiting for times of in-game shortages (such as right before a tournament) to sell at a high profit.

Future Plans



Given the unique and dynamic nature of the Warbots NFTs, we will be exploring additional uses of the tokens in the Warbots ecosystem in the form of digital and physical playable trading card games, physical and digital comics, animation or live action media. The MMAC, NMAC and Warbots tokens will all have a distinctive role to play in this trading card game, with the utility of each token taking on different characteristics from other ROTW gaming experiences. This provides each Warbots player with additional possibilities and interesting strategic considerations. Each player will now need to consider whether to maximize their token roster for the isometric action Warbots game, for the additional trading card game, or an optimal combination of the two.

The Warbots ecosystem is also expected to grow to encompass physical assets, such as limited-edition collectible cards and merchandise. All of these branded physical assets will only be made available to token-holders in the Warbots ecosystem, providing an additional incentive to hold the tokens and participate in the game.

By synthesizing cutting edge concepts from NFTs, strategy and role-playing video games, and Decentralized Finance, Warbots is simultaneously creating the next hit blockchain game and launching the next must-have NFT digital asset. Join us and start creating your own completely unique battle-ready Warbots and start challenging other players in the Warbot Combat Zone!