Mossland White Paper

Date: September 27, 2023
Version: 3.1
Purpose: This document is intended to introduce the Mossland project and provide transparent and systematic information to project stakeholders, service users, Moss Coin holders, and others. It aims to increase the understanding of the project's goals, vision, core values, mission, and more for those interested in Mossland. Furthermore, through detailed information about the Mossland project's metaverse system, service users can gain an understanding of Mossland's various features and potential benefits. Additionally, Moss Coin holders can access clear and transparent information regarding the utility of Moss Coin and details about ecosystem funds and Decentralized Autonomous Organizations (DAOs[1]). Through providing this information, the Mossland project emphasizes transparency and reliability, aiming to promote positive interactions with stakeholders.

Mossland White Paper Link:

- 2023 White Paper Version 3.1 (Korean)
- 2018 White Paper Version 2.2.1 (Korean)
- 2018 White Paper Version 2.2.1 (English)

[1] Decentralized Autonomous Organization https://en.wikipedia.org/wiki/Decentralized_autonomous_organization

1. INTRODUCTION

Mossland is a metaverse project based on blockchain technology that connects the real and virtual worlds. The Mossland metaverse utilizes virtual reality, augmented reality technology, and Non-Fungible Token (NFT) technology to offer various digital assets and entertainment services. To achieve this, it establishes a virtual economic ecosystem within the metaverse using a digital asset called Moss Coin.

Moss Coin serves various purposes within the Mossland metaverse. It is used for purchasing and trading NFTs, providing rewards to game participants through Play to Earn (P2E) services, and facilitating exchanges between digital assets and real-world products. Mossland's metaverse supports the developer ecosystem and makes it easy to develop and offer blockchain services based on digital NFT assets like virtual real estate within the metaverse.

The funds and various smart contracts and services of the Mossland project are managed through the Mossland DAO, a decentralized governance framework. This DAO follows a proposal process to determine how the Mossland Foundation allocates funds for ecosystem development. Through the Mossland DAO, Moss Coin holders can more actively participate in shaping the project's future direction.

1.1. Vision

Mossland is a blockchain-based metaverse project that aims to bridge the gap between the real and virtual worlds, striving for the realization of a highly connected world. The ultimate goal is to contribute to human society by implementing cutting-edge technology through the pursuit of Mossland's core values and mission.

1.2. Mission

Continuously discover services based on Virtual Reality, Augmented Reality, and Non-fungible token (NFT) technologies.

Feature digital NFT assets and services reflecting real-life, with an integrated economic circulation structure using Moss Coin (MOC).

1.3. Core Values

- Transparency: All processes, decisions, and executions are openly disclosed.
- Courage and Innovation: We are not afraid to create something new and unique.
- High Standards: We pursue excellence.
- Equality: All participants in the Mossland project are treated equally.

1.4. Related Links

- Mossland Website
- Mossland Disclosure Website
- Mossland Twitter
- Mossland Blog
- Mossland Opensource

2. Mossland

2.1. Overview

Mossland has been developing and releasing approximately ten types of blockchain services from 2017 to the first half of 2023. Mossland has been pioneering new markets by developing various blockchain application services, including rewards, games, esports, auctions, NFTs, in an effort to discover the potential of blockchain technology and tokens. Additionally, Mossland has been committed to finding sustainable business models. Mossland plays a crucial role in disseminating the project's values and vision through real services. Moss Coin holders can evaluate the Mossland project more transparently and objectively by directly examining the entire service portfolio, including successes and failures.

2.1.1. Key Technical Capabilities

- Web3 Metaverse
  - An architecture that allows the expansion of multiple services within the metaverse in iFrame format.
  - Currently in open beta (https://meta.moss.land).
- Decentralized Autonomous Organization (DAO) based on Luniverse Main Token.
  - Development of DAO for voting, result disclosure, and execution in the metaverse.
  - Developed in a combination of on-chain and off-chain using Luniverse's DEOA.
- Decentralized Autonomous Organization (DAO) based on Klaytn.
  - CyberTHUG DAO service available at https://portal.thecyberthug.com.
  - Developed in a combination of on-chain and off-chain.
- Multi-chain Transaction
  - Developed the ability to purchase Klaytn-based NFTs as Luniverse Main Token (MOC)
  - Performed NFT minting using MOC without concurrency issues or deposit errors through smart contract development
- Minting, re-billing, and contract updates for non-fungible tokens (NFTs)
  - Established a generative pipeline for PFP NFT creation
  - Smooth execution of Klaytn-based NFT minting and re-billing
  - Successfully completed KIP17 smart contract updates after re-billing and completed the swap.

2.1.2. Project Team Capabilities

The Mossland team has experience in developing and releasing around 12 blockchain services since 2017. The team also has experience in directly developing core blockchain technologies, legal reviews, and marketing for services. Instead of emphasizing the team's backgrounds, Mossland showcases the value and vision of the project by demonstrating its track record of launching over 12 services in five years. Moss Coin holders can transparently assess the capabilities of the Mossland team and make an objective judgment about the future value of the Mossland project.

Experience in the Development of Key Blockchain Technologies	Experience in Legal Review and Operation of Blockchain Businesses
• Ethereum Network • NFT Auction Service (Mossland The Auction) • Location-Based Reward Service (Mossland The Hunters) • Development of a LunaVerse Ethereum Swap Service • Klaytn Network • NFT Minting, Reveal, Contract Development (PFP-NFT Project) • Development of a Decentralized Autonomous Organization (DAO) Voting System • Klaytn NFT Minting Service using Luiniverse Tokens • Luiniverse Network • Development of a Decentralized Governance Framework • Development of Web3 Metaverse Services • Ongoing Development of ERC20 Token Bridge	• 2018 in Singapore: Review of Singapore MAS Regulations and Securities Laws • 2018 in the United States: Review of U.S. Securities Laws and CFTC Regulations • 2019 in Malta (Europe): Review of Securities Laws at Bitrex Global • 2019 in Indonesia: Legal Review for Blockchain Game Services • 2020 in Singapore: Review of PSA (Payment Service Act) Regulations • 2021 in South Korea: Legal Review of the Mosscoin Buyback Model • 2021 in South Korea: Legal Review of Mosscoin Securities Laws • 2023 in the EU: Legal Review of Mosscoin's Financial Products or Cryptocurrency Laws

Table 1. Blockchain Technology Development and Business Experience of the Mossland Project Team

Mosscoin is issued and managed by a nonprofit entity called "LITTLE WING GAMES LTD," which was established in Singapore in 2018 and is commonly referred to as the "Mossland Foundation." LITTLE WING GAMES LTD owns 100% of another entity, "ML GAMES PTE LTD," which was established in Singapore in 2018 and serves as the operational entity for the Mossland project. Through this subsidiary, the development and operation of the Mossland service are conducted.

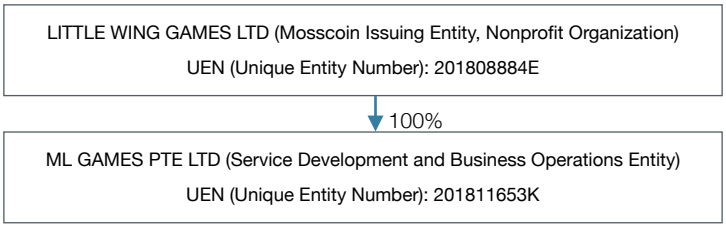

Figure 1. Mosscoin Issuing Entity and Subsidiary Structure

The Mossland Foundation is governed by a board of three registered directors, and decisions are made through a consensus-based approach. The key qualifications and responsibilities of the registered directors are detailed in [Table 2].

Name	Responsibilities	Key Qualifications
WOO RAM SON	Management	Experience at Mossland (since 2018), Software Engineer at Samsung Electronics, Master of Science from Seoul National University
MINUK KIM	Blockchain Technology	Technical responsibilities at Mossland (since 2018), S/W Engineer at Pantech, Ph.D. candidate in Engineering from Konkuk University.
YOUNGDAE CHO	Service Development	Development responsibilities at Mossland (since 2018), Experience at NHN NEXT, Bachelor's degree from Sungkyunkwan University

Table 2. Registered Directors of the Mosscoin Issuing Entity

2.1.3. Team Decentralization and Open Source Adoption

To enhance the long-term sustainability of the Mossland project, we have initiated the process of open-sourcing all development outputs and transitioning to a decentralized development team. The primary goal is to minimize the risks associated with project delays and interruptions while expanding the Mossland project development ecosystem. Starting from the second half of 2022, we have begun making the Mossland project's source code available to the public on GitHub.[2]

Item	Content	
Ongoing Open Source Github Repository	11 repositories	
Open Source Contribution Status	Code Added	381,999 lines
	Code Deleted	295,997 lines
	Total Code Modified	677,996 lines
Open Source Contributing Developers	13 individuals	
Github Contribution From Open Source Community (Since 2021)	323 contributions (including private repositories)	
Service Projects Within the Metaverse Being Developed as Open Source	13 Projects https://github.com/mossland/Hackathon	

Table 3. Mossland Open Source Status (As of June 26, 2023)

Mossland has established partnerships with six companies to facilitate the decentralization of its development team and advance the Mossland project. Mossland's subsidiary, ML GAMES PTE LTD, is responsible for the overall development and operation of the Mossland service. With H9 Co., Ltd., Mossland developed Mossland The Hunters. Furthermore, collaborative efforts with Pixelica focus on the fusion of gaming and blockchain.

Starting from 2021, Mossland has been working with Puffin Place on the development of Metaverse services and the Mosscoin swap service, all of which are being developed as open source projects. In 2023, in cooperation with Ndotlight, preparations are underway for Metaverse content production.

These partnerships and collaborations reflect Mossland's commitment to diverse aspects of its project, from development to content creation and the integration of blockchain technology.

[2] https://github.com/mossland

Mossland Partner	Key Qualifications	Responsibilities
ML GAMES PTE LTD (Subsidiary of Mossland Foundation)	NFT Auction, Location-Based Gaming Reward Service, Web3-based Metaverse Development	Mosscoin Development, Service Development
Puffin Place	Development of Akamir NFT, LG Life Health NFT, Doge Soundclub Metaverse, MIB19 NFT	Metaverse Development
Pixelica	Launch of Lamp Chronicle Game. (Represented by Kwon Junho, former NCsoft Final Blade Art Director)	Game Development and Research on Integrating Blockchain Technology
HNINE Co., Ltd	Collaboration with Various Large Corporate Clients in the Capacity of a Technology-Based Design Agency since 2010	Collaboration in Service Development (The Hunters)
SEWORKS	(Security Company Operated by Hong Minpyo, Recognized as one of the World's Top Three Hackers)	Blockchain Security (Mosscoin)
AI Spera	Operated by Professor Kim Hwigang, a Key Figure in Hacking Wars at KAIST and Pohang University of Science and Technology	Blockchain Security (NFT)
Ndotlight	Creator of 'NdotCAD,' 3D Content Creation Software Applicable to Metaverse Platforms	Metaverse Content Creation and NFT Collaboration

Table 4. Mossland Partners and Their Respective Responsibilities

2.1.4. Activating the Open Source Community to Encourage Participation from Open Source Developers

Mossland aims to increase the involvement of open-source developers to enhance the sustainability of the project and significantly expand the services that utilize Mosscoin. Mossland supports open-source developers through developer support programs[3] and open-source hackathons[4], encouraging their participation in the Mossland project. Furthermore, Mossland is dedicated to revitalizing the blockchain development ecosystem. To achieve this, they have successfully organized events such as the Blockchain Game Jam Seoul (2018), the Metaverse Hackathon Open (2022), and sponsorship of university blockchain hackathons (since 2018).

- Open Source Community Activation
  - Initiation of the Mossland Developer Support Program
    https://github.com/mossland/MosslandDeveloperSupportProgram
  - Establishment of the Discord Community
    https://discord.gg/N6RCGZuDqV
- Open Sourcing the Project
  - Open sourcing of the Mossland Metaverse project
    https://github.com/mossland/mossverse

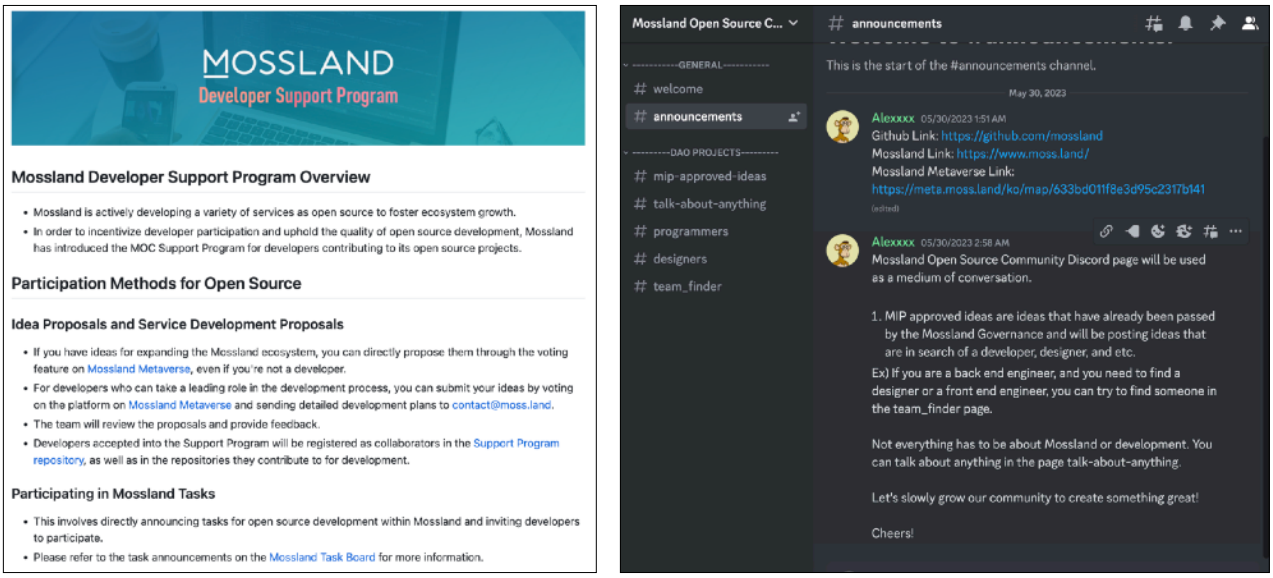

Figure 2. Mossland Open Source Developer Support Program (Github) and Mossland Open Source Community (Discord)

[3] https://github.com/mossland/MosslandDeveloperSupportProgram

[4] https://github.com/mossland/Hackathon

2.2. Non-Fungible Token Project

2.2.1 CyberTHUG Profile Picture Replacement NFT (CyberTHUG PFP NFT)

Figure 3. CyberTHUG Profile Picture Replacement Inalienable Token Project

CyberTHUG is a PFP (Profile Picture) NFT (Non-fungible Token) project initiated by Mossland. This project is forming a unique CyberTHUG DAO (Decentralized Autonomous Organization) composed of distinctive THUG characters. The DAO operates as a decentralized autonomous organization based on blockchain technology, allowing participants to collectively determine the project's direction and operation.

CyberTHUG aims to harness social influence through THUG characters. This project seeks to provide positive influence to its participants, thereby striving to positively impact people's behaviors and society as a whole. To achieve this, it implements a structure that allows participants to create social value and receive rewards using blockchain technology and various incentive models.

Furthermore, CyberTHUG places significant importance on Public Service Announcements (PSA). PSAs play a role in conveying important information to the public and raising awareness of social issues. CyberTHUG is committed to using PSAs to improve the state of society, create awareness of social issues, instill a sense of social responsibility in participants, and contribute to increasing social value.

As a result, CyberTHUG's goal is to pursue positive influence through its unique THUG characters within the CyberTHUG DAO and enhance society's image and social value through PSAs.

- Website Link

2.2.2 CyberTHUG Gecko Club

Figure 4. CyberTHUG Gecko Club Game

CyberTHUG Gecko Club is an NFT game that allows players to experience the process of breeding crested geckos. This game takes place within the CyberTHUG Gecko Club and is centered around the crested gecko, a lizard species known as "Pallete Gecko" that is native to New Caledonia. The unique appearance and characteristics of this lizard are faithfully recreated within the game.

In the CyberTHUG Gecko Club, breeding is used to develop various gecko morphs. Morphs are digital artworks that represent the gecko's appearance and traits within the game, and they are issued in the form of NFTs. Players can experience the process of combining specific features or colors of different geckos to create new morphs. Each gecko morph can be considered a unique NFT, representing a valuable digital asset for its owner.

CyberTHUG Gecko Club is implemented as an NFT game, and blockchain technology transparently records ownership and transactions of in-game items. This enables participants to own and trade gecko morphs, generate value through in-game activities, and receive economic rewards. Through gecko breeding and morph development, participants can own unique and diverse digital assets, enhancing their gaming experiences and social interactions within the platform.

In summary, CyberTHUG Gecko Club is an NFT game that focuses on breeding crested gecko lizards, particularly the Pallete Gecko native to New Caledonia. Players can develop various morphs, each represented as a real-world NFT. The game offers participants the opportunity to own and trade unique digital assets, enhancing their in-game experiences and social interactions.

- Guidebook Link

2.2.3 Mossland: The Auction

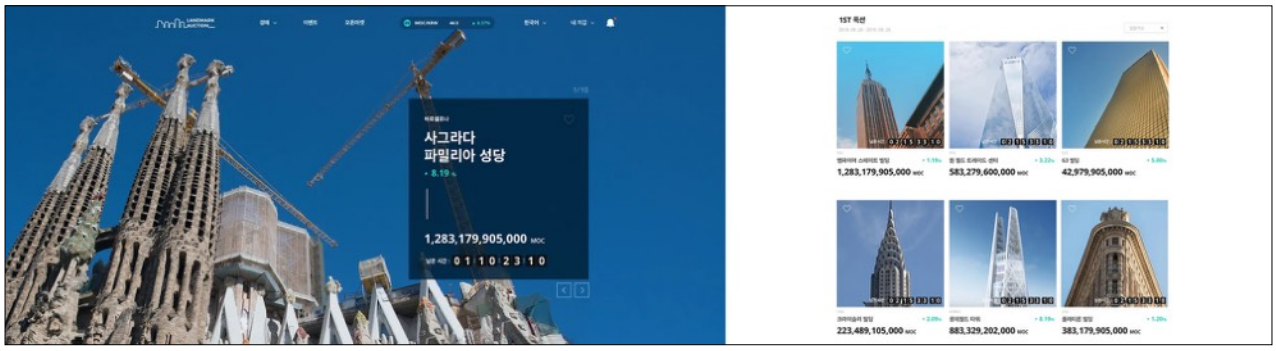

Figure 5. Mossland: The Auction Service Interface

Mossland: The Auction is an auction service offered by Mossland, providing a platform for the sale of virtual landmarks. Through this service, users have the opportunity to become owners of famous landmarks such as Lotte World Tower, the Eiffel Tower, and the Statue of Liberty.

Mossland developed the auction service to explore new areas beyond token trading within the blockchain market. The purpose of this service is to investigate and expand the utility of blockchain technology and tokens.

In Mossland: The Auction, the buying and selling of landmarks take place, and users can place bids on their desired landmarks through auctions. The user with the highest bid becomes the new owner of the respective landmark. This allows anyone to acquire ownership of renowned landmarks, with the transparency and security of blockchain confirming and managing ownership.

The primary token used for transactions within Mossland: The Auction is Moss Coin. Moss Coin is a digital token used for trading within the service and is employed for various transaction activities on the Mossland platform. Moss Coin has recorded a trading volume of around $7.4 million per day within the service, surpassing the trading volume on exchanges.

This trading volume is a significant indicator showcasing the potential and utility of the blockchain services offered by Mossland. Through Mossland: The Auction, users can acquire ownership of virtual landmarks via auctions, experiencing a transparent and secure trading environment provided by blockchain technology.

In summary, Mossland: The Auction is an auction service offered by Mossland for the sale of virtual landmarks. Users can acquire ownership of famous landmarks through auctions using Moss Coin. The service's high trading volume demonstrates the potential and utility of Mossland's blockchain services.

- Service Duration: October 12, 2018, to February 26, 2020.
- ~~Homepage Link~~
- Guide Video Link

2.3. Game Projects

2.3.1. Mossland Metaverse Hackathon

The Mossland Metaverse Hackathon project involves developing mini-services within the Mossland Metaverse through open-source hackathons. The goal of this project is to enhance transparency in the Mossland project and stimulate open-source contributions, thereby increasing the use cases for Moss Coin. This project focuses on developing a variety of content within the Metaverse as open-source.

The hackathons are conducted within publicly available GitHub repositories, allowing anyone to propose ideas and participate in development. Participating developers can review the project's source code and work on feature enhancements or develop new features. Idea proposals and development are executed through collaboration and communication. The developed features and content are then made available to users within the Mossverse.

Mossland encourages open-source community participation and collaboration through the Moss Coin reward program. The project aims to utilize diverse ideas and technical skills to advance the functionality and content of the Metaverse while diversifying the use cases for Moss Coin.

- Metaverse Hackthon Link
- Mossland Developer Support Program Link

2.3.2. Blockchain Game Jam Seoul

Figure 6. Blockchain Game Jam Seoul Poster and Event Photos

Mossland and Loom Network co-organized the Blockchain Game Jam Seoul to promote the development of the blockchain gaming industry. This event brought together various participants interested in blockchain and gaming, who formed seven teams and spent three days developing games while showcasing different blockchain technologies. At this event, Mossland and Loom Network provided a sidechain for blockchain game development, enabling participants to easily and rapidly create blockchain-based games. Approximately 60 developers, designers, and planners took part, and the winning team received prizes, Moss Coin cryptocurrency, and support for further development.

Blockchain Game Jam Seoul took place at the Nonce community space, a blockchain research group. It was sponsored by GOPAX, a cryptocurrency exchange, LikeLion, a programming education organization, and Decenter, a blockchain media company.

- Trailer Video Link
- Related Article Link

2.3.3. Mossland: The Hunters

Figure 7. Mossland: The Hunters Service Screen

Mossland: The Hunters is a location-based gaming reward app. Users of this app collect virtual gold scattered around their vicinity and can exchange it for virtual currency called Moss Coin through landmark check-ins. The app is designed to engage users in an entertaining way by incorporating game elements based on real-world location information.

Users of The Hunters app can check their location within the app and collect virtual gold scattered in their vicinity. This gold may be located in specific real-world locations, which can be identified using the app. Users can obtain gold by visiting these locations, scanning, or collecting it in various ways.

The collected gold can be exchanged for Moss Coin through landmark check-ins. Landmarks refer to specific locations in the real world, such as famous buildings, monuments, parks, and more. By visiting these places and checking in through the app, users can earn Moss Coin. These Moss Coins can be used in various ways within the app.

Moss Coin can be used for purchasing goods or services within the app, or it can be withdrawn to a personal wallet and converted to cryptocurrency or transferred to other wallets. Users can explore various items and services available for purchase with Moss Coin within the app.

Mossland: The Hunters is a location-based gaming reward app, where users collect virtual gold in their surroundings and exchange it for Moss Coin through landmark check-ins. Moss Coin has various uses, including purchasing items and services within the app, offering users an enjoyable experience with rewards.

- Service Period: Service commenced on May 20, 2019, and ended on May 18, 2020
- Reason for Termination: Early service termination to participate in COVID-19 response activities

- Trailer Video Link
- Service Guide Video Link
- Development Partner HNINE Link

2.3.4. Mobile Game: Royal Marble

Figure 8. Mobile Game: Royal Marble

Royal Marble is a board game manager that allows users to compete with other players in 1:1 matches by combining various elements within the game, such as buildings, avatars, and dice. The game falls under the category of casual collectible board and manager games, and it takes place in a Monopoly-inspired world that reflects the real world. Each match lasts for approximately one minute, and battles occur on a one-time basis. The target user personas for Royal Marble include players who prefer auto-play and those who enjoy CCG (Collectible Card Game) strategy games.

The objective of the game is to collect and enhance cards while competing for top ranks. Some of the key features of Royal Marble include a 1:1 PvP game that incorporates real-world landmarks into the global tabletop game "Monopoly." In the game, users can collect and enhance buildings, dice, and avatar cards through gotcha, strengthening, and combination mechanics, allowing them to implement their unique strategies. Royal Marble offers both a "Normal Mode," which focuses on leveling up, and a "Gostop Mode," which enables players to bet and plunder in-game assets. Players can also participate in "tournaments" where they can earn prizes based on accumulated match results.

Royal Marble explores the use of Moss Coin through the operation of eSports tournaments. To achieve this, they introduce paid tournament content called Mossland League, where participants can pay entry fees and earn rewards in Moss Coin. Entry fees are divided into the free Pre-League and the paid Premium League, with weekly and monthly rewards as well as different levels of prize money and rewards. This approach provides substantial rewards to the top performers, encouraging competition.

- Google Play Link
- Trailer Video Link
- Gameplay Video Link

2.3.5. Virtual Reality Game: Gangsta Underground: The Poker

Figure 9. Virtual Reality Game: Gangsta Underground: The Poker

Gangsta Underground: The Poker is a poker league game that takes place in the dark back alleys among gangsters. This game provides players with an immersive and challenging experience by featuring realistic characters resembling gangsters in intense gameplay. Using Unreal Engine 4, the game offers a high-quality virtual reality (VR) experience. Players take on the role of gangsters playing poker in the gritty streets of the real world.

The game aims to integrate blockchain technology and NFT (Non-Fungible Token) digital assets. Players can own and trade NFT digital assets acquired within the game, allowing them to interact with the game's economic system. This combination leverages the transparency and security of blockchain to ensure ownership of in-game assets and transaction records while providing players with new experiences and value.

Gangsta Underground: The Poker is a project that attempts to implement a high-quality virtual reality experience by merging virtual reality and blockchain technology. This enables players to experience realistic and immersive gameplay while exploring a new form of asset ownership and trading, all backed by the advantages of blockchain technology.

- Steam Store Link
- Trailer Video Link
- Gameplay Video Link

2.4. e-Sports Projects

2.4.1. e-Sports AMX Match Prediction

Figure 10. e-Sports Gaming Service: AMX Match Prediction

AMX and Mossland have collaborated to organize a match prediction event for the first professional e-sports racing competition in South Korea, the "Kolon AMX E-Sports Championship." This championship is jointly hosted by AMX and Africa Colosseum Co., Ltd. The event took place over two days on October 27 and 28, 2021.

- Service Webpage Link | AMX Website Link
- Trailer Video Link

2.4.2. e-Sports Match Prediction 999

Figure 11. e-Sports Gaming Service: Match Prediction 999

'Seungbu Yechuk 999' is a service that allows participants to predict the outcomes of sports matches and win prizes accordingly. Participants make daily predictions based on presented sports match results. Depending on their predictions, participants are ranked, and they have the chance to win MossCoin (MOC) as weekly prizes. 'Seungbu Yechuk 999' involves prediction competitions for various sports matches, including professional baseball, soccer, League of Legends, and international soccer games. Participants earn MossCoin (MOC) as weekly prizes based on their rankings. Mossland aims to provide a way for individuals to enjoy sports by analyzing and predicting match outcomes, combining sports data with blockchain technology.

- Service Period: Service open from April 1, 2021, to service termination on March 8, 2022
- ~~Google Play Store Link~~ | ~~Service Website Link~~ | Trailer Video Link

2.4.3. Mobile Game: Liga Rocket

Figure 12. Mobile Game: Liga Rocket Service Screen

'Liga Rocket' is a mobile casual game that provides a platform for sustainable e-sports competitions. This game features an easy-to-enjoy casual playstyle that appeals to players of all ages and genders and offers cash prizes in competitions, targeting the Southeast Asian market. The operational model of successful e-sports profit platforms from the United States and India, such as Skillz, PlayVS, MPL, and Dream11, was benchmarked. These companies run competitions and offer cash prizes. 'Liga Rocket' has based its sustainable competition operation and prize system on these successful models.

The game focuses on providing sustainable e-sports competitions with daily tournaments and cash prize operation. Competition operation is a core element of the game and encourages the passion and participation of competitors through the prize system. The sustainability of competition operation and prize systems has been proven through successful cases like Skillz and MPL. 'Liga Rocket' is characterized by highly addictive and intensely competitive hyper-casual gameplay. Players can engage in the game quickly, receive immediate results, and maintain high levels of enthusiasm. Additionally, 'Liga Rocket' introduces a digital asset prize system, allowing for global access without national barriers.

- Google Play Store Link

2.5. Mossland Metaverse Project

2.5.1. Overview

Figure 13. Mossland Metaverse Project

The Mossland Metaverse is an open-source platform that integrates various microservices using Moss Coin. This platform was developed to expand the utility of Moss Coin and attract more users and developers into the Mossland ecosystem.

Within the Mossland Metaverse, Moss Coin serves various purposes. Users can utilize Moss Coin to purchase digital assets such as non-fungible tokens (NFTs), character skins, and engage in user-to-user transactions. Furthermore, Moss Coin enables participation in advertising platform bids and allows users to display advertisements within the metaverse. Simultaneously, Moss Coin is used as a means to make proposals to the Mossland project and participate in DAO to influence the project's direction.

This platform is developed as an open-source[5] solution, offering an environment where anyone can propose ideas and participate in development. The source code for the Mossland Metaverse is publicly available, and APIs for key features are provided to encourage the involvement of open-source developers. As a result, users can enjoy a variety of web3 services developed within the open-source community. With the expectation of attracting many users through these diverse experiences, the liquidity and utility of Moss Coin are anticipated to significantly improve. This expanded convenience is likely to lead to the development of various services within the Mossland Metaverse, ultimately attracting more users and forming a self-sustaining ecosystem.

[5] You can download the source code and the Metaverse usage manual from the Mossland Metaverse open-source repository at https://github.com/mossland/mossverse

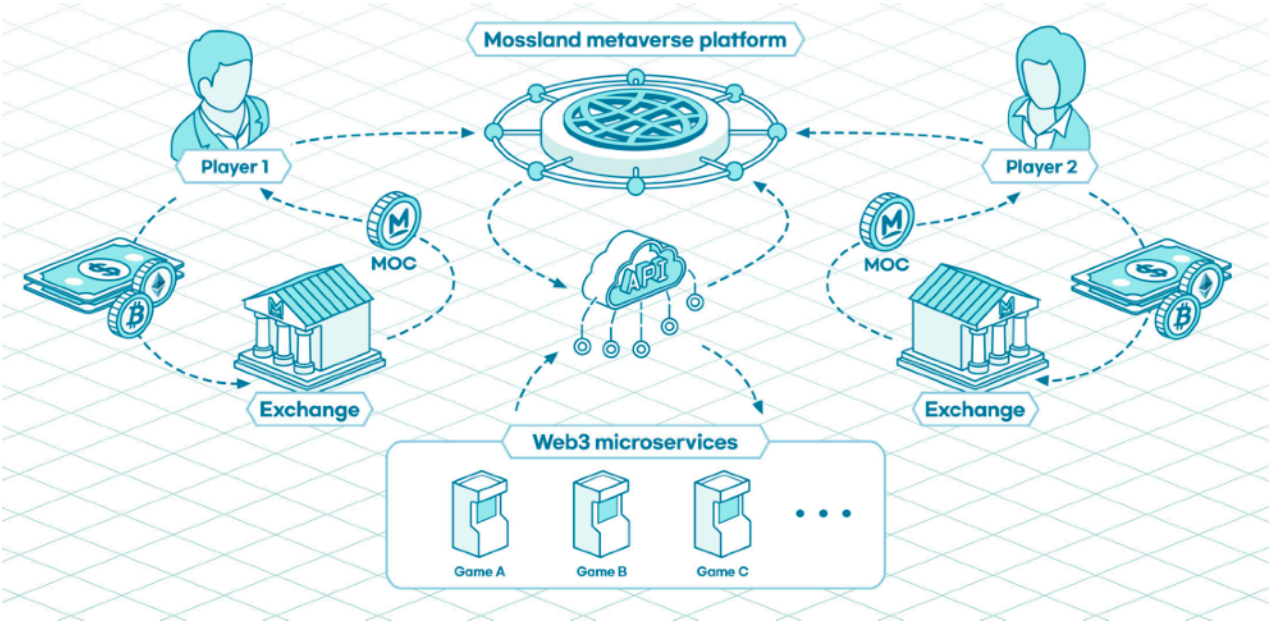

Figure 14. Flowchart of Moss Coin within the Mossland Metaverse

Key Features

- Support for Various Blockchain Wallets: Kaikas[6], Metamask[7]
- Integration with Multiple Blockchain Networks: Klaytn[8], Luniverse[9], Ethereum[10]
- Compatibility with Various Blockchain Standards: ERC-20[11], ERC-721[12], ERC-1155[13]
- DAO (Decentralized Autonomous Organization) Voting Functionality
- Marketplace Features: Support for P2P Trading and Sales of Various Digital Assets and Offline Goods
- Advertising Platform: In-Metaverse Advertising Placement, Bidding with MossCoin
- Microservices: Offering a Variety of Web3 Microservices
- API Provision: Providing Multiple APIs for Open Source Developer Participation

[6] https://docs.klaytn.foundation/content/dapp/developer-tools/getting-started/kaikas

[7] https://metamask.io/

[8] https://klaytn.foundation/

[9] https://luniverse.io/

[10] https://ethereum.org/

[11] https://ethereum.org/en/developers/docs/standards/tokens/erc-20/

[12] https://eips.ethereum.org/EIPS/eip-721

[13] https://eips.ethereum.org/EIPS/eip-1155

Comparison with Similar Services

	Mossland Metaverse	Sandbox	Decentraland
Blockchain	• Luniverse • Klayton • Ethereum	Ethereum	Ethereum
Currency	• MOC • Points	• SAND • ASSETS • GAMES • LAND	• MANA • WEAR • LAND
DAO Support	Supported (using MossCoin)	Supported (using SAND digital currency)	Supported (using MANA digital assets)
Graphics	2D (Pixel Art)	3D	3D
Token Economy	Play-to-Earn (P2E) model and developer-created services	P2E model and user-created content	P2E model and user-created content
Key Features	• No separate client installation • Multiplayer support • Easy addition of microservices • Good performance on low-end devices	• Mandatory client download • Multiplayer still in alpha version	• P2P communication without a central server • Better performance with client installation • Multiplayer environment introduced since 2020

Table 5. Comparison of Mossland Metaverse with Similar Services

Types of Virtual Currencies

Mossland Metaverse supports three types of virtual currencies. Firstly, Moss Coin (MOC) is an on-chain token issued on the Luniverse blockchain network, characterized by strict limitations on its issuance and circulation, ensuring secure storage in personal blockchain wallets. Secondly, Meta MOC (MMOC) is an off-chain token developed within the metaverse to provide rapid responsiveness and an excellent user experience. It can be exchanged at a 1:1 ratio with Moss Coin and is exclusively used within the metaverse. Lastly, Points represent a virtual currency circulating solely within the metaverse, designed for easy utilization across various microservices. The currency supply is regulated in line with metaverse policies to establish a sustainable economic ecosystem.

	Moss Coin (MOC)	Meta MOC (MMOC)	Points
Circulation	Strong Limitation	Not applicable (Same as Moss Coin)	Weak Limitation
Generation	Exchange: MMOC → Moss Coin	• Exchange: Moss Coin → MMOC • Marketplace: Asset Sale • (Upcoming) Advertising Platform: Ad Viewing Rewards	Points Charging Station
Burned	Exchange: Moss Coin → MMOC	• Exchange: MMOC → Moss Coin • Marketplace: Asset Purchase • Advertising Platform: Ad Bidding	Web3 Services
Ownership	None	DAO Voting Rights	None

Table 6. Types and Features of Virtual Currencies in Mossland Metaverse

Exchange Functionality

Within the Mossland Metaverse, Moss Coin serves as the primary currency for various essential functions, including the exchange, marketplace, and advertising platform. However, Moss Coin relies on on-chain transactions, potentially resulting in slower responsiveness within the metaverse and impacting the user experience. To address this issue, the introduction of MMOC, a virtual currency exchangeable with Moss Coin at a 1:1 ratio, has been implemented. Users have the flexibility to exchange Moss Coin and MMOC with each other at any time within the metaverse. To facilitate this exchange, users engage with the exchange functionality to receive a deposit address for Moss Coin. Upon depositing Moss Coins into the provided address, users receive an equivalent amount of MMOC in exchange, significantly enhancing the responsiveness and user experience.

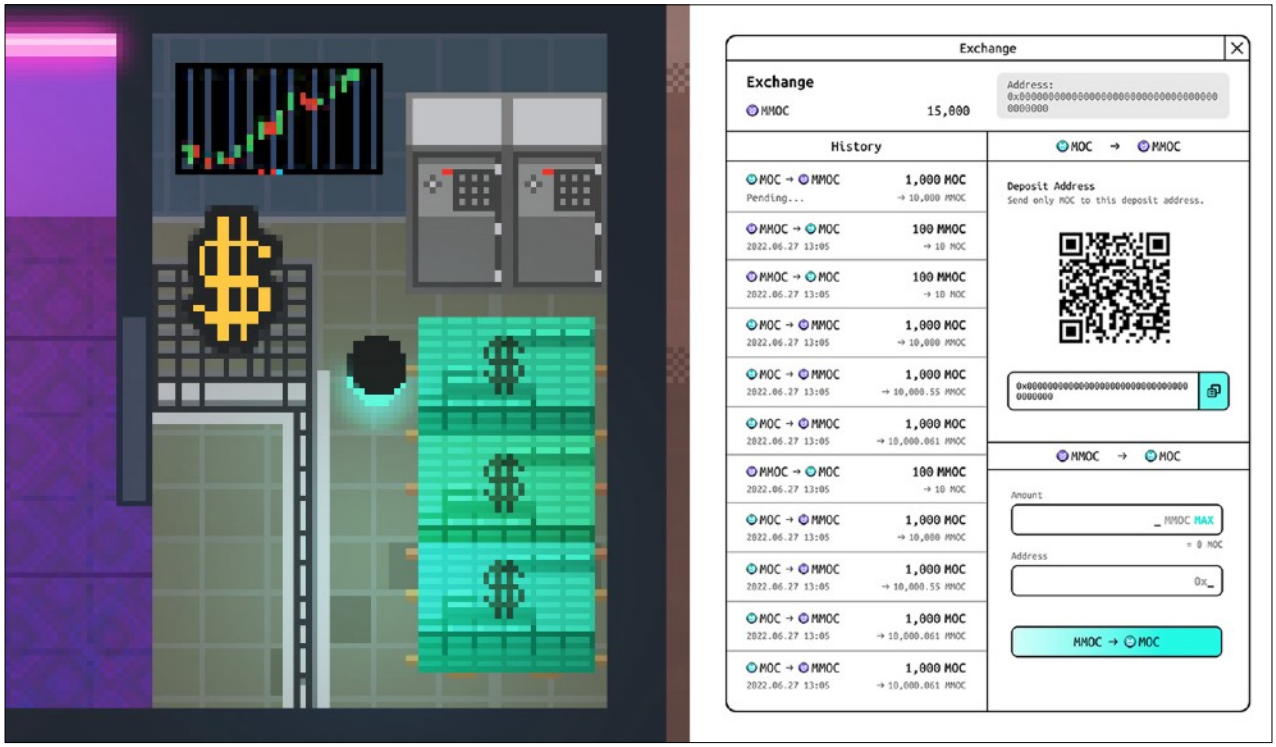

Figure 15. Mossland Metaverse Project: Exchange Functionality

Marketplace Functionality

The Marketplace function within the Mossland Metaverse enables users to engage in peer-to-peer (P2P) transactions using MMOC. This allows users to exchange or sell their digital assets and items within the metaverse to other users. It promotes active virtual economic activities among users, facilitating ownership transfers and value exchanges in the metaverse.

Furthermore, within the Marketplace, users can utilize MMOC to purchase real-world products, items, and gift certificates from various stores. This exemplifies the connection between the virtual economic ecosystem of the metaverse and the real world.

Additionally, Mossland's hosted raffle events provide exciting opportunities within the Marketplace. Users can participate in these raffle events using MMOC and stand a chance to win a variety of prizes and benefits. This enhances user experiences and contributes to the vibrant activities within the metaverse.

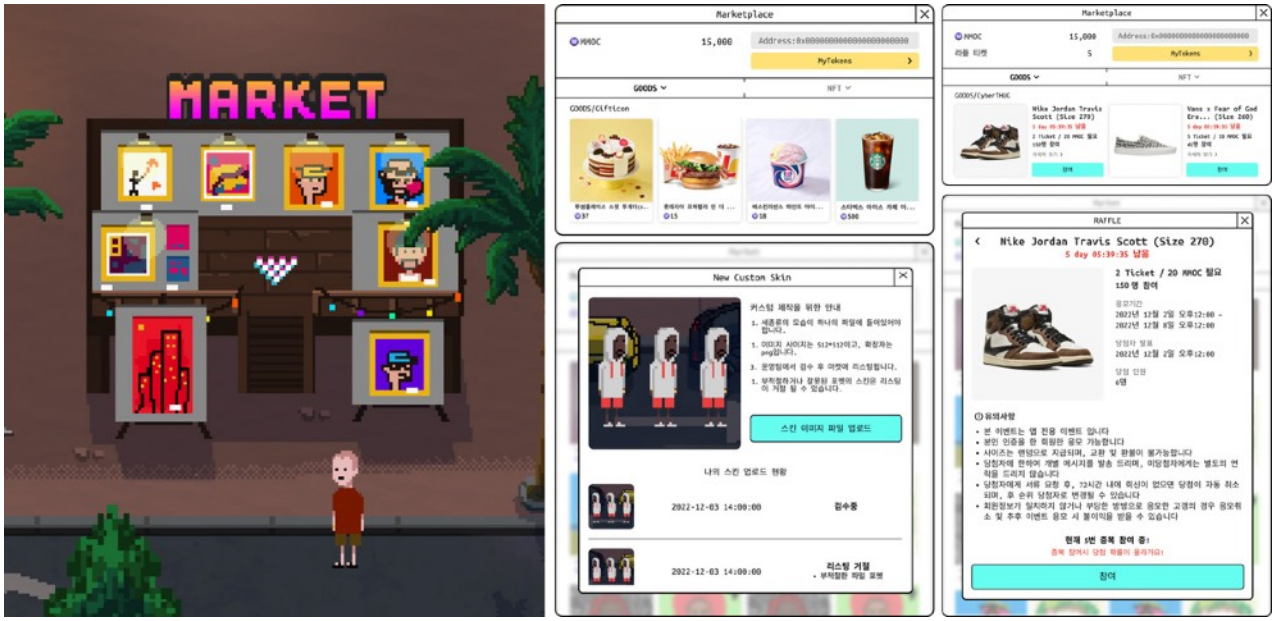

Figure 16. Mossland Metaverse: Marketplace Functionality

- Support for Peer-to-Peer (P2P) User Transactions
  - Character Skins: Users have the option to sell their personally created character skins or purchase a variety of character skins to customize their avatars and in-game appearance.
  - Non-Fungible Tokens (NFTs): Users can trade NFTs they have created or own using MMOC as the medium of exchange. This functionality enhances the diversity of tradable assets within the metaverse.
- Sale of Digital Assets and Offline Goods in Stores
  - CyberTHUG Merchandise: Users can acquire a variety of products by leveraging the intellectual property associated with CyberTHUG, offering unique and thematic shopping opportunities.
  - Gift Certificates: Using MMOC, users can purchase gift certificates within the metaverse, providing a flexible and convenient way to shop or send gifts to others.
  - Raffle Events: Mossland Metaverse regularly hosts raffle events where specific items are distributed to winners through a lottery system. Users can purchase raffle tickets using MMOC for a chance to win exclusive prizes.

Ad Platform Functionality

Within the metaverse, users have the capability to place advertisements through a dedicated ad platform. This platform allows users to utilize virtual billboards within the metaverse to display advertisements. To place an ad, users must participate in bidding at their desired date and time. The currency used during the bidding process is MMOC, and users make use of it to participate in ad bidding. Competition occurs during the bidding process, and the user offering the highest bid wins the right to display their ad at a specific time.

The ad platform offers new promotional opportunities for various participants within the metaverse. Advertisers gain access to a broader audience through fresh perspectives and experiences. Simultaneously, metaverse users have the chance to interact with more captivating ad content and brands. This creates a connection between advertising and consumers through a novel medium, enriching the metaverse experience.

Key Features of the Ad Platform

- Billboard Ad Placement: Users can place ads using virtual billboards within the metaverse.
- Bid Time Setting: Ad bids can be scheduled based on specific dates and times.
- MMOC Bidding: Users utilize MMOC for the bidding process.
- Bidding Competition and Awarding: The winning bidder, determined through competitive bidding among users, gains the right to display the ad at a specified time.

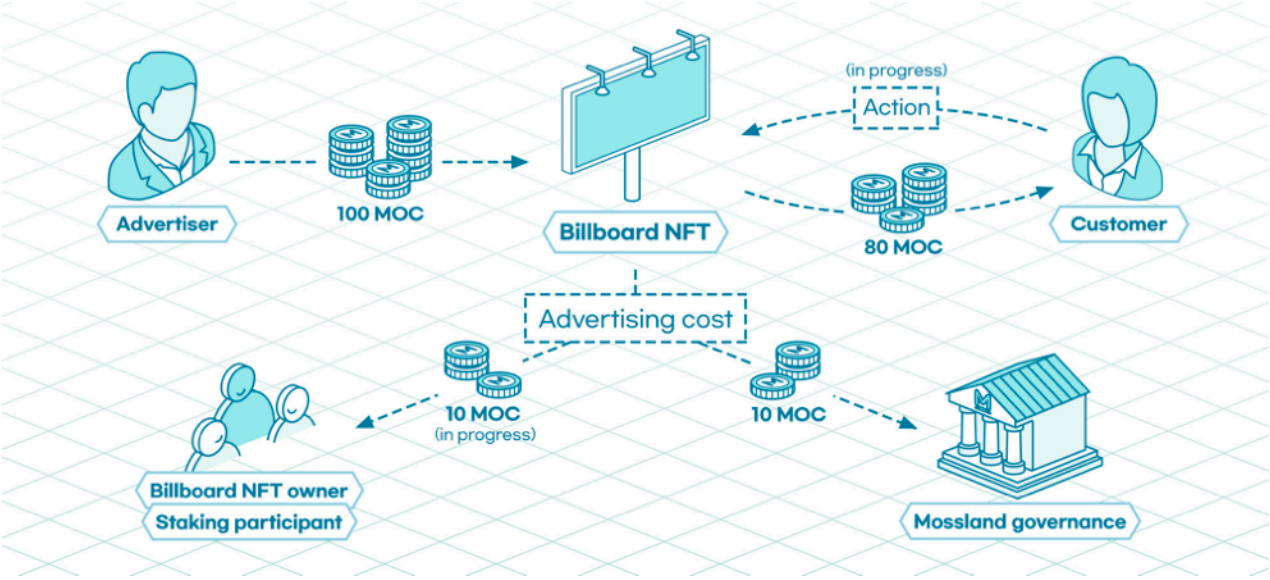

Figure 17. Introduction to Mossland Metaverse Ad Platform

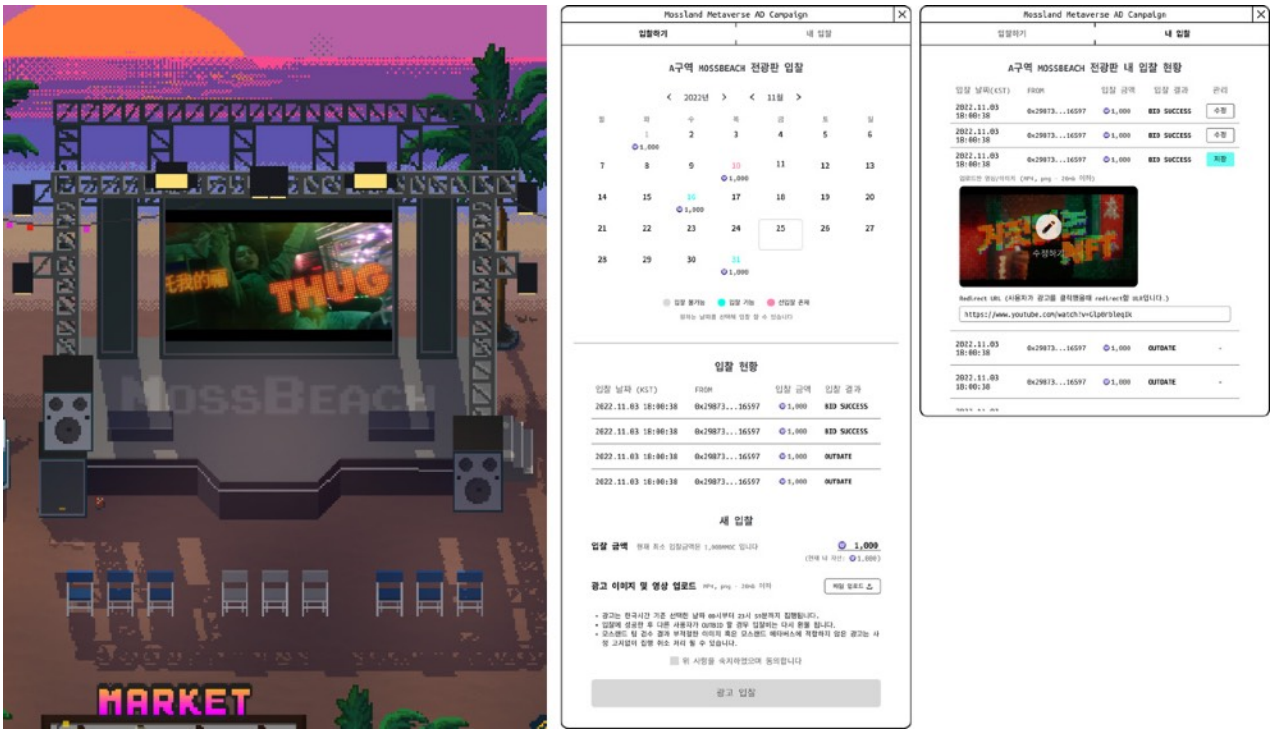

Figure 18. Mossland Metaverse: Bidding Screen of the Ad Platform

DAO Voting Feature

In the metaverse's polling station, Moss Coin holders have the ability to propose and vote on matters related to the Mossland metaverse. This voting feature is a critical function of a DAO (Decentralized Autonomous Organization) that is operated through smart contracts. Moss Coin serves as the governance token for the Mossland decentralized governance network, indicating the decentralized distribution of decision-making authority to Moss Coin holders. Proposals approved through these votes are subsequently developed and integrated into the metaverse ecosystem with the active participation of the Mossland Foundation and open-source developers.

Figure 19. Mossland Metaverse: DAO Voting Feature Screen

Key Features

- Proposals for Voting: Moss Coin holders can propose and vote on various issues in the voting booth.
- Development and Ecosystem Integration of Proposals: Proposals that pass the vote are developed with the participation of the Mossland Foundation and open-source developers.
- Voting Eligibility: Voting is open to users who have exchanged Moss Coin for MMOC within the metaverse.

Through the voting booth, Moss Coin holders can directly influence the direction and development of the metaverse. They can exercise their voting rights based on the amount of MMOC they hold, thereby participating in the decision-making process that shapes the direction of the metaverse ecosystem.

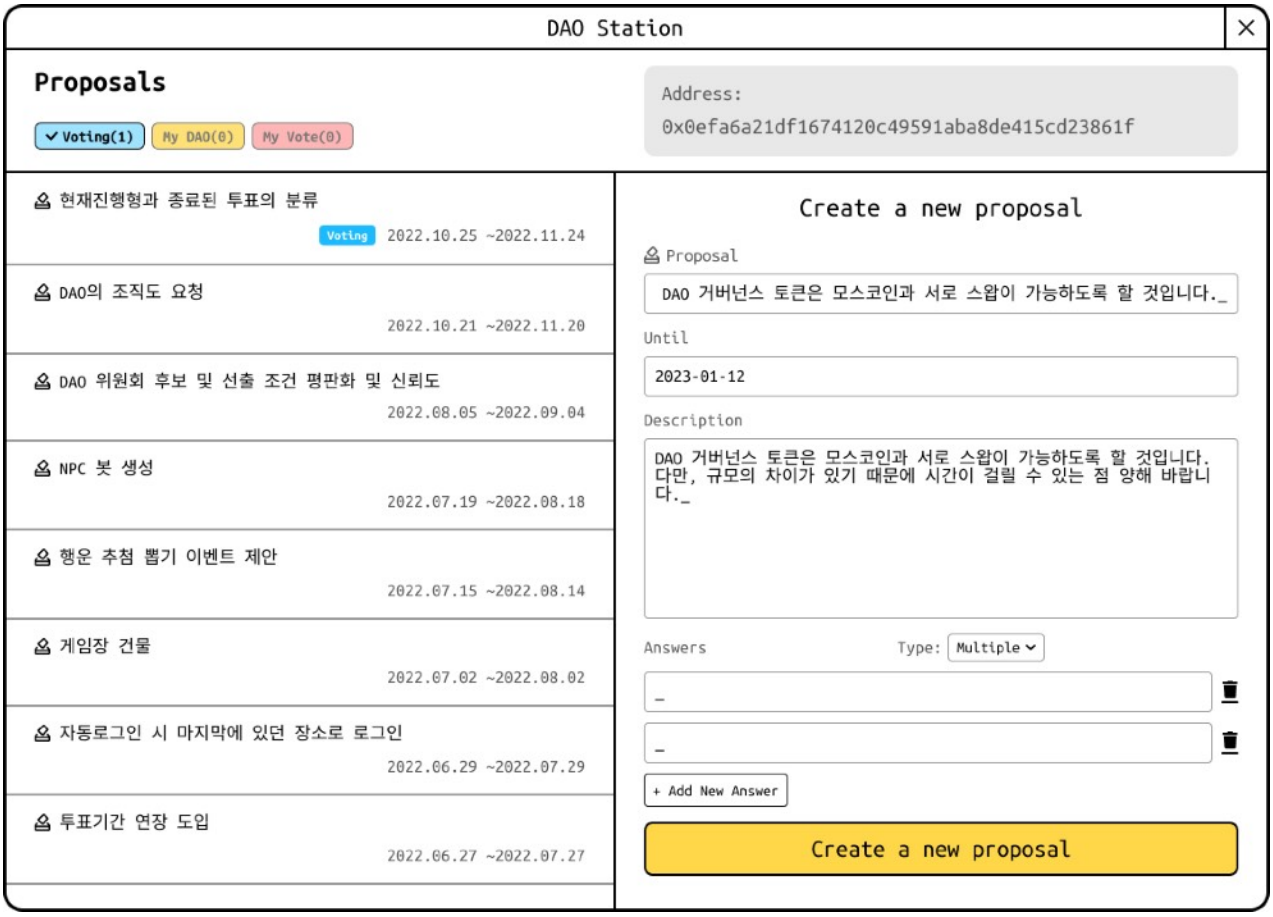

Figure 20. Mossland Metaverse: DAO Proposal Submission Function Screen

Key Features for Users

- Support for Kaikas and Metamask wallet login
- Communication channels for video, voice, text, and emojis
- Mossland DAO voting feature
- Personal wallet for MOC deposits and withdrawals
- Offering various web games
- Purchase of NFTs and various online/offline goods using MOC

Key Features for Developers

Provision of Auth and Point APIs

Mossland Metaverse actively encourages the participation of third-party developers by enhancing their development convenience. To achieve this, Auth and Point APIs are provided. The Auth API supplies users' basic information (ID, nickname, etc.) using user tokens. Additionally, developers can use the Point API to retrieve and update user Point information. The provision of APIs enhances the development convenience for developers and is expected to attract a wide range of content to the Mossland Metaverse created by various development teams. This will create quantitative and qualitative growth in content, surpassing the capabilities of a centralized team, through the strength of an open-source community..

Example Usage of Auth API

```
GET /user/whoAmI
Host: app.moss.land
Header:
    Authorization: Bearer abdxxxxx


// typescript sample code
import axios from 'Axios';

interface IUserInfo {
    _id: string;
    nickname: string;
    keyring: string;
    role: string;
    status: string;
}

function fetchUserInfo(): Prmise<IUserInfo> {
    return axios.get(
        `https://app.moss.land/user/whoAmI`,
        {
            headers: {
                Authorization: 'Bearer abcdefgxxxx'
            }
        }
    )
}
```

Table 7. Mossland Metaverse: Developer SDK - Example Usage of Auth API

Example Usage of Point API

Fetch	GET /point/{userId}
	Host: app.moss.land
	Header:
	  Authorization: Bearer abdxxxxx
	
	// typescript sample code
	import axios from 'Axios';
	
	function fetchUserPoint(): Prmise<number> {
	  return axios.get(
	  `https://app.moss.land/point/a97dfmn233eXf`,
	  {
	  headers: {
	  Authorization: 'Bearer abcdefgxxxx'
	  }
	  }
	  )
	}

Update	POST /point/{userId}
	Host: app.moss.land
	Header:
	  Authorization: Bearer abdxxxxx
	
	// typescript sample code
	import axios from 'Axios';
	
	function updateUserPoint(): Prmise<number> {
	  return axios.post(
	  `https://app.moss.land/point/a97dfmn233eXf`,
	  { hash: '1234-2345-abcd-efgh', num: 1000000 },
	  {
	  headers: {
	  Authorization: 'Bearer abcdefgxxxx'
	  }
	  }
	  )
	}

Table 8. Mossland Metaverse: Developer SDK - Example Usage of Point API

2.5.2. Platform Introduction

The Metaverse is comprised of various buildings with different functionalities, allowing users to access content and earn rewards. This platform consists of a currency system, user authentication, user profiles, building systems, DApps, and an inventory system. A Metaverse platform with these features provides users with a diverse range of content and experiences, offering an exciting environment where they can engage in games and activities to earn rewards.

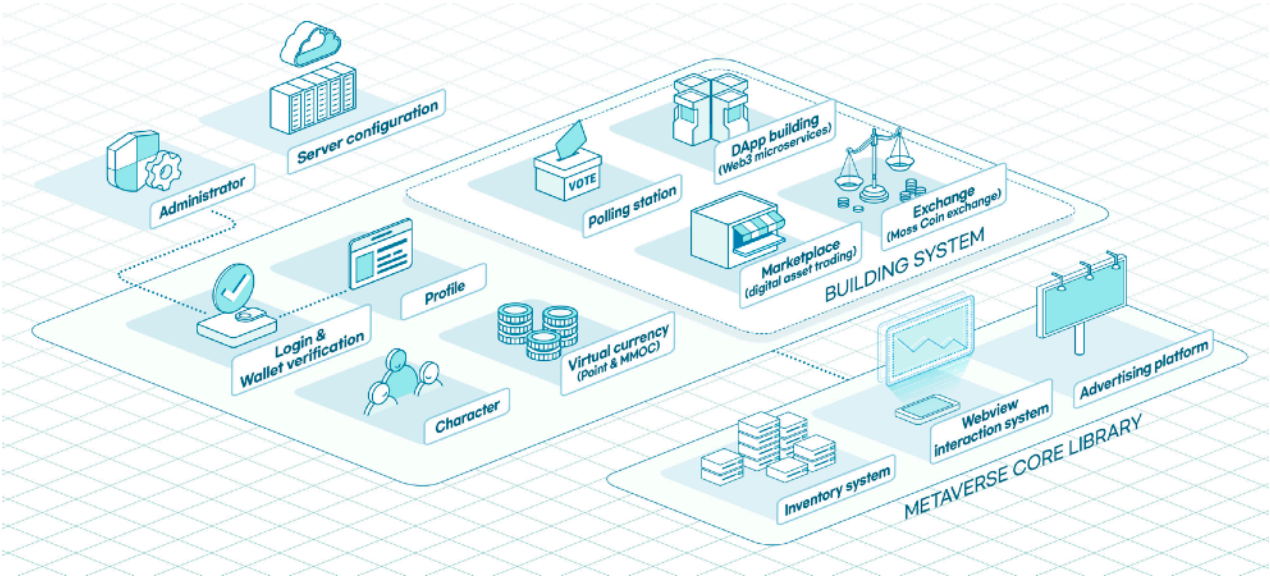

Figure 21. Mossland Metaverse: Platform Overview

System	Explanation
Currency System	Mossland Metaverse uses three virtual currencies: • Moss Coin: An on-chain token based on the Luniverse blockchain. • Meta MOC (MMOC): An off-chain token designed for fast responsiveness within the Metaverse. • Points: Users can use points in various Web3 microservices.
User Authentication and Profiles	Users can log in using MetaMask and must be connected to the Luniverse chain. Upon logging in, the Luniverse address is registered as the user ID. Users can manage basic information such as changing their nickname by connecting Kaikas or MetaMask wallets.
Building System	The various functionalities of the Metaverse are implemented through buildings. These buildings offer a variety of features, including voting booths, marketplaces, billboards (advertising platforms), and exchanges. Users can access these features through buildings. The voting booth allows for differentiated voting based on MOC ownership, and the marketplace enables users to purchase or trade virtual assets.
Web3 Microservices	A wide range of content within the Metaverse is implemented as Web3 microservices, accessible through various buildings. Mossland Metaverse hosts an open-source content development and delivery platform through the Mossland Metaverse Hackathon, adding new buildings and games for users to enjoy.
Inventory System	Users can manage their owned assets and items through an inventory system, including digital assets, volatile points, and in-game Metaverse assets.

Table 9. Mossland Metaverse Platform System Types and Descriptions

The Currency System

Mossland Metaverse has implemented an economic system based on three types of virtual currencies. Users can exchange Mosscoin, an on-chain token based on the LooneyVerse blockchain, for MMOC to use within the metaverse. Points, on the other hand, were designed for easy use across various microservices offered in the metaverse. Users can earn or spend points while utilizing different microservices and can accumulate points to receive rewards, such as non-fungible tokens (NFTs) or MMOC. This multi-currency system allows for flexibility and diversity in the economic interactions within the metaverse.

Introduction of Virtual Currencies and Their Features

- Mosscoin:
  - An on-chain token issued on the LooneyVerse blockchain.
  - Convertible to MMOC for use within the metaverse.
- MetaMOC (MMOC):
  - An off-chain token designed for rapid responsiveness and an excellent user experience within the metaverse.
  - Exchangeable 1:1 with Mosscoin and used primarily within the metaverse in marketplaces, advertising platforms, and voting systems.
- Points (PT):
  - A virtual currency circulated exclusively within the metaverse for convenient use across various microservices.
  - The currency volume is adjusted in line with metaverse policies to create a sustainable economic ecosystem.
  - Mainly used in web3 microservices.

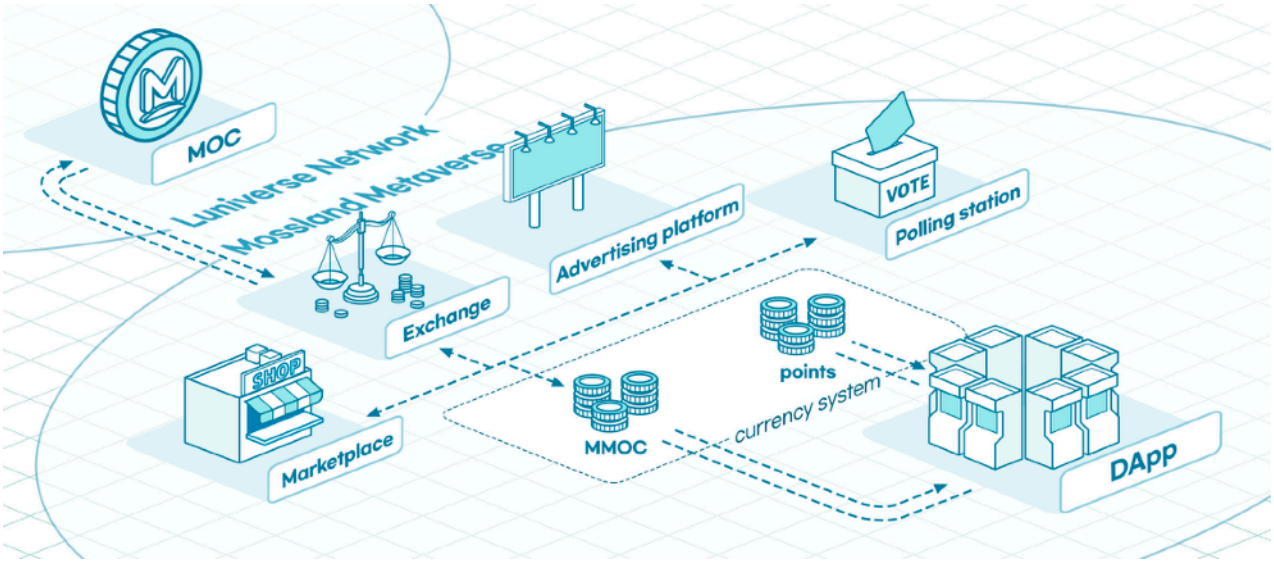

Figure 22. Interconnection of Currency Systems in Mossland Metaverse

Building System

The various features in the Mossland Metaverse are implemented through buildings, and users access these features by moving their characters to the relevant building.

- Voting Booth
  - A building that implements the voting function of the Mossland decentralized governance framework.
  - Features for viewing the list of votes and the detailed status of votes.
  - Users can check closed votes, scheduled votes, and ongoing votes.
  - Voting participation features.
  - Users can check their holdings of mosscoin in their wallets.
  - Voting quantity varies based on mosscoin holdings.
  - Users can vote by calling the voting function in the voting contract deployed on the LooneyVerse blockchain through their connected MetaMask wallet.

- Marketplace
  - A building where users can buy and trade virtual goods.
  - Exchange function for MMOC and mosscoin.
  - Withdrawal: Deducts the user's MMOC and withdraws mosscoin to the user's LooneyVerse wallet.
  - Deposit: When mosscoin is deposited, MMOC is charged.
  - Purchase: Users can buy digital assets such as gifticons, character skins, non-fungible tokens (NFTs), and more using MMOC.
  - Non-fungible token user-to-user trading: A building where users can trade non-fungible tokens.
  - Listing for Sale: Listing for sale of non-fungible tokens on the LooneyVerse and Klaytn networks.
  - Listing for Purchase: Listing for purchase of non-fungible tokens on the LooneyVerse and Klaytn networks.

- Raffle Event Function
  - Billboard: Provides advertising platform functionality.
  - Billboard Advertising: Users can post advertisements using billboards within the metaverse.
  - MMOC Bidding: Bidding for billboard advertising is conducted using MMOC.
  - Bidding Competition and Award: Users compete in bidding to determine the winning bidder who can post advertisements at specific times.
  - Airdrop: Provides non-fungible token airdrop event functionality for the LooneyVerse and Klaytn network non-fungible tokens.

- MMOC Staking Supported Building
  - As each game is added to the metaverse, a corresponding building is added where users can play the game.
  - Users can access the building by moving their characters and watch advertisements and play games.
  - Users can stake MMOC in the game building.
  - Advertising revenue distribution based on the staking period and amount.

- Point Charging Station:
  - A station for watching advertisements and recharging points.
  - Users deposit points and receive advertising revenue in MMOC in exchange for the deposited points.

User Authentication

The Mossland Metaverse supports login via MetaMask.

- Users can log in using MetaMask with LooneyVerse chain integration.
- Upon login, the LooneyVerse wallet address is automatically registered as the user's ID in the database.

User Profiles

Mossland Metaverse offers user profile management functionality integrated with Kaikas and MetaMask wallets.

- It provides basic user information management such as changing nicknames.
- Support for Kaikas wallet14 integration.
  - Mapping of one LooneyVerse wallet address to one Klaytn address.
- Support for MetaMask wallet15 integration.
-

Web3 Microservices

Various content within the metaverse is implemented as Web3 microservices and represented through buildings within the metaverse.

- The goal is to develop and provide a variety of content as open source within the Mossverse through the Mossverse Hackathon.
  - The hackathon is conducted in a public GitHub repository, allowing anyone to propose ideas and participate in development.
  - Hackathon GitHub Repository Link
- With each addition of a game, buildings are added to the metaverse map.
- Users earn points based on the results of the game.

Inventory System

The inventory system allows users to effectively manage various digital assets and in-game currencies used within the metaverse. Users can easily organize and utilize their holdings and items through this system. Digital assets can take various forms, including virtual currencies, non-fungible tokens, character skins, and more. These digital assets are stored in the inventory system, which acts like a user's warehouse, providing easy access and management.

Volatile points are virtual currencies that users can obtain through specific activities within the metaverse, such as watching advertisements, but they disappear after a certain period. Users can track and use these points in the inventory system, allowing them to effectively utilize points to enhance their experience and benefits.

In summary, the inventory system is a crucial tool for efficiently managing and utilizing users' digital assets and in-game currencies within the metaverse, enriching their overall experience.

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[14] https://docs.kaikas.io/

[15] https://metamask.io/

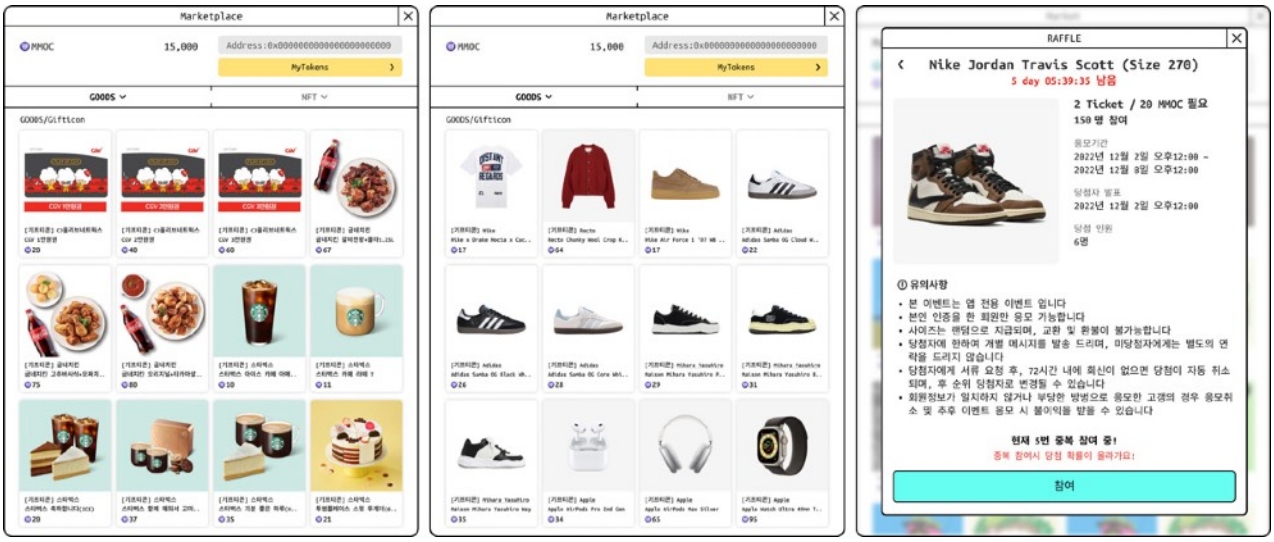

Figure 23. Mossland Metaverse: Peer-to-Peer Trading Functionality for Gifticons, Character Skins, and Non-Fungible Tokens

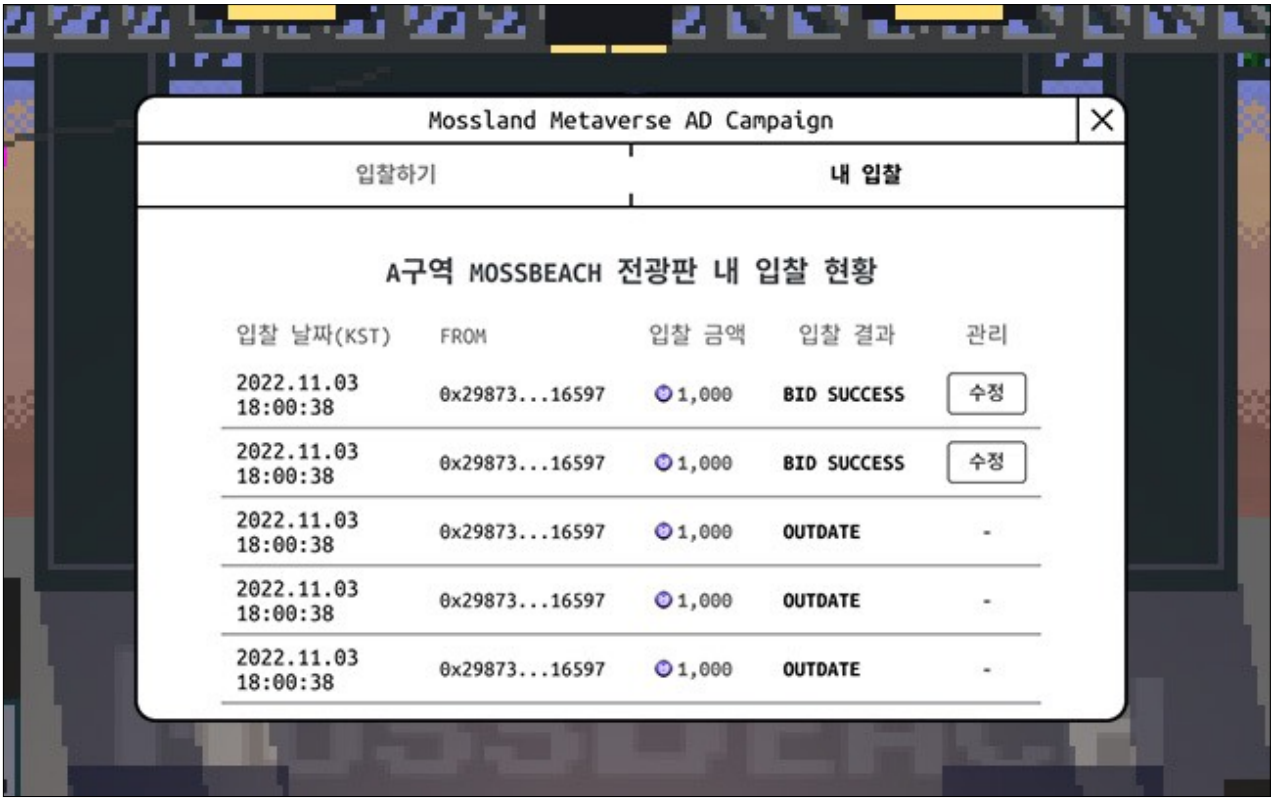

Figure 24. Mossland Metaverse: Advertising Platform Bidding Functionality

2.5.3. Key Achievements

As of June 26, 2023, the Metaverse platform has garnered a total of 5,367 cumulative users. This platform offers a variety of features and services, attracting the interest and participation of users. In particular, the 'Metaverse MMOC Exchange' has 3,423 cumulative deposit and withdrawal users. Through this exchange, users can conveniently trade the virtual currency MMOC. As a result, the number of MMOC deposits and withdrawals has reached 4,772 transactions, with a total amount of 169,313 MMOC being recorded. This indicates that active economic activities are taking place within the Metaverse.

Furthermore, the 'MOSSLAND DAO within the Metaverse' has seen a total of 80 proposals submitted, with a cumulative participation of 137,294 votes. Users are actively participating in decision-making through MOSSLAND DAO, strengthening the platform's democratic operation and governance. Additionally, the cumulative MMOC votes have reached a substantial amount, approximately 10,513,628 MMOC.

These results reflect the continuous growth of the Metaverse platform, its ability to capture user interest and engagement, and its provision of diverse services. It suggests that the platform is poised to achieve even greater success in the future, in alignment with the development of the Metaverse ecosystem.

Category	Subcategory	Description
Metaverse Platform	Culmative Users	5,367 Users
Metaverse MMOC Exchange	Cumulative Deposit and Withdrawal Users	3,423 Users
	MMOC Deposit and Withdrawal Transactions	4,772 Transactions
	Total MMOC Deposited and Withdrawn	169,313 MMOC
Metaverse MOSSLAND DAO	Total Proposals Submitted	80 Proposals
	Cumulative Participation in Votes	137,294 Votes
	Cumulative MMOC Voted	Approximately 10,513,628 MMOC

Table 10. Key Performance Indicators (KPIs) for Mossland Metaverse

2.5.4. Future Plans

- Second Half of 2023: Metaverse-based Advertising Platform Functionality Update
  - Objective: Expand the usage of Moss Coin through the advertising platform.
  - Goal: Implement and update the advertising platform within the metaverse.
- Second Half of 2024: Activation of the Open Source Community
  - Objective: Enhance project transparency and activate open source community participation, leading to increased use cases for Moss Coin.
  - Goal: Activate the open source community through Moss Coin reward programs. Secure various services within the metaverse.

3. MOSSCOIN

3.1. Overview

Moss Coin is a utility token based on Luniverse Main Token (LMT)[16], primarily used within the metaverse platform called Mossland. It is utilized for various services and functions within Mossland. Mossland has previously used Moss Coin for activities such as digital asset trading and user-to-user ad transactions, proving its value and utility. Currently, Moss Coin is being utilized within various functions of the Mossland metaverse, including the exchange, marketplace, and advertising platform. It is also used for voting in the Mossland decentralized governance framework.

- Name: Moss Coin (Mosscoin)
- Ticker: MOC
- Initial Issuance: May 2018
- Total Issuance Limit: 500,000,000 MOC
- Total Issued Amount: 500,000,000 MOC
- Platform: Luniverse Main Token (LMT)
- Circulation Information:
  - Mossland Disclosure Site Link
  - Coinmarketcap Link
  - CoinGecko Link

3.2. Use Cases

There are four primary ways to acquire Moss Coin within Mossland:

1. Purchase via Cryptocurrency Exchanges: Users can buy Moss Coin on cryptocurrency exchanges.
2. Project Activity Rewards: Users can earn Moss Coin as rewards for participating in various services within Mossland projects.
3. Participation in Advertising (Feature in Development): Users will be able to earn Moss Coin by interacting with ads posted by other users or allowing ads on their digital assets. Moss Coin circulates within the advertising platform, generating fees and contributing to the economic circulation within the metaverse.
4. Digital Asset Sales: Users can sell various digital assets (such as non-fungible tokens and metaverse character skins) within Mossland projects to earn Moss Coin.

[16] Token based on the Luniverse Network https://luniverse.io/

3.3. Distribution Plan

The total supply of Moss Coin is limited to 500 million Moss Coins, and once all 500 million tokens have been issued, no more new tokens will be created. Among the distribution components, the In-App Purchase Reserve is a reserve used for the liquidity of Moss Coin, which is used in various services within Mossland. It is utilized to ensure the activation of Mossland services, and if the IAP Reserve becomes insufficient, revenue generated from the services will be used to repurchase Moss Coins from the market to replenish it.

Allocation Categories

Item	Quantity
Pre Sale	182,149,508
Crowd Sale	13,964,845
Marketing Reserve	128,885,647
In-App Purchase Reserve	75,000,000
Team	75,000,000
Advisor	25,000,000

Table 11. Items and Quantities According to the Moss Coin Distribution Plan

3.4. Issuance Policy

The Mossland Foundation will collect Moss Coins as transaction fees when users engage in activities related to Moss Coins, such as user-to-user transactions and advertising. The collected Moss Coins will be resold.

- Additional Issuance of Moss Coins: There is no additional supply beyond the initial 500 million Moss Coins.
- Recirculation: To ensure the smooth operation of Mossland services, the Mossland Foundation has the option to recirculate the collected Moss Coins.
- Participants in the Mossland ICO or Moss Coin holders should fully understand the following policies and precautions.
  - Mossland is actively developing the functionalities introduced in this whitepaper.
  - Moss Coins are digital assets used within Mossland projects (metaverse, games, etc.). Purchasing Moss Coins based solely on speculation regarding the successful implementation of these features should be avoided.
- Precautions and Uncertainties
  - The whitepaper represents the technical description of the business plan and vision and does not constitute a guarantee of the business. Participants in the ICO and Moss Coin holders should be aware that the actual implementation of the business may vary based on the business environment and progress.
  - Moss Coins purchased during Pre-ICO (Pre Sale) and Main ICO (Crowd Sale) are subject to the terms of use of Mossland.
- ICO Participants
  - Citizens of countries where ICOs are prohibited are not eligible to participate in the Pre-ICO (Pre Sale) and Main ICO (Crowd Sale).
- Use of Moss Coins
  - Moss Coins are utility tokens for use only in the purposes specified in the whitepaper. Moss Coins are not securities and do not grant any form of dividend or voting rights to the holders.
- Moss Coins as Digital Assets within Mossland Projects (Metaverse, Games, etc.)
  - Moss Coins are digital assets used within Mossland projects. They have no intrinsic value and should not be purchased for speculative or investment purposes to seek profit.
- Cancellation and Refund: Purchased Moss Coins cannot be canceled or refunded once the transaction is completed.

3.5. Issuer Information

Moss Coins are issued by Mossland LTD (PUBLIC COMPANY LIMITED BY GUARANTEE), a foundation incorporated in Singapore in 2018.

Item	Description
Foundation Name	LITTLE WING GAMES LTD (MOSSLAND LTD)
Incorporation Type	PUBLIC COMPANY LIMITED BY GUARANTEE
Business Registration Number (UEN)	201808884E
Year of Establishment	2018
Location	Singapore
Contact Email	contact@moss.land
Website	https://moss.land

Table 12. Moss Coin Issuer Information

3.6. Disclosure System

Mossland operates a disclosure system to ensure the fair participation of Moss Coin holders in the project. In addition to external circulation information providers such as CoinMarketCap[17] and CoinGecko[18], Mossland[19] provides its own disclosure site to transparently reveal the circulation status and plans in real-time. Moss Coin holders can use the disclosure system to monitor the project's direction, development progress, developer capabilities, commit logs from the Mossland open-source repository, and activity statistics in real-time.

- Circulation Plan Disclosure: Mossland discloses the circulation plan until December 31, 2024, and ensures compliance with the circulation plan.
  - Circulation Plan Link: https://static.upbit.com/guide/circulating_supply/MOC.pdf

- Circulation Status Disclosure
  - Self-provided through API: https://api.moss.land/MOC/info
  - External Services:
    - CoinMarketCap: https://coinmarketcap.com/currencies/moss-coin/
    - CoinGecko: https://www.coingecko.com/en/coins/mossland

- Project Progress: Mossland has proactively shared its project progress through various communication channels.
  - Twitter[20]: Project progress has been shared with 23.4K followers since January 2018.
  - GitHub[21]: Source code and various documents have been openly available since April 3, 2018, through 9 public repositories.
  - Mossland Website[22]: Project progress has been shared from the beginning of the project in 2018 until now

- Disclosures: From July 8, 2019, to March 8, 2021, Mossland made a total of 13 major project disclosures through Upbit Project Disclosure, the official website, and GitHub.
  - Upbit Project Disclosure: https://upbit.com/service_center/disclosure
  - Mossland Website: https://www.moss.land/#docs
  - Mossland GitHub:: https://github.com/mossland/Disclosure-and-Materials

[17] https://coinmarketcap.com/

[18] https://www.coingecko.com/

[19] https://disclosure.moss.land/

[20] https://twitter.com/themossland

[21] https://github.com/mossland

[22] https://www.moss.land/

Timeline	Description
Q1 2023	Launch of the Moss Coin real-time circulation, circulation plan, foundation wallet information, and Mossland project document public site
Q1 2023	Update of real-time transaction data, market data, and open-source community activation statistics for Moss Coin
2024	Real-time information and statistics update for the Mossland decentralized governance framework.

Table 13. Future Plans for the Mossland Disclosure System

3.7. Trading Levels

Moss Coin (MOC) was traded on numerous exchanges in various countries, including South Korea, the United States, Europe, and China, from the second quarter of 2018 until the first quarter of 2020. In the first half of 2020, Mossland established a partnership with Luniverse, a blockchain platform developer, and conducted a swap from the Ethereum network to the Luniverse network, anticipating synergy. During that transition, most exchanges, except Upbit, ceased trading as they did not support the Luniverse network. Recently, exchanges that support the Luniverse network have been expanding, and Mossland has been actively working on extending the functionality to trade Moss Coin on the Ethereum network, aiming to increase the trading levels of Moss Coin.

Exchanges	Countries	Listing Dates
Gopax, Gopax IN	South Korea, Indonesia	Q2 2018
BCEX	China	Q3 2018
Kyber	China	Q3 2018
Bittrex US	United States	Q4 2018
Bittrex International	Europe	Q4 2018
Upbit, Upbit SG	South Korea, Singapore	Q1 2019
LATOKEN	Europe	Q3 2023

Table 14. Historical Exchange Support for Moss Coin (MOC)

Current Moss Coin (MOC) Trading Levels (As of September 4, 2023)

- Upbit (South Korea): MOC/KRW, MOC/BTC
- Upbit SG (Singapore): MOC/BTC
- LATOKEN (Europe): WMOC[23]/USDT

Future Plans

- 2023 4Q: Expansion of trading levels to international exchanges with Luniverse Network support (Targeted for 4th quarter of 2023).
- 2024 1Q: Expansion of support for the Ethereum network (Development of Moss Coin swap service[24])
- 2024 2Q: Pursuing the expansion of trading levels to exchanges that support the Ethereum network.

[23] Moss Coin (MOC) is being developed as an Ethereum-based ERC-20 token, allowing for a 1:1 exchange between Moss Coin and this Ethereum-based token, with the goal of expanding Moss Coin to the Ethereum network.
https://etherscan.io/token/0xBeE20B9Df360B8442534Ed8059f3e5bAEeB74EaF

[24] The service provides a swap feature between Moss Coin on the Luniverse network and WMOC on the Ethereum network.
https://swap.moss.land

4. DISTRIBUTED GOVERNANCE FRAMEWORK

4.1. What is the Distributed Governance Framework?

Mossland is a blockchain-based metaverse open-source project with the goal of transitioning into a decentralized autonomous organization (DAO). The Mossland project owns and operates various smart contracts and services, including essential smart contracts, non-fungible token contracts, service servers, and marketplaces, along with the ecosystem fund of the project.

Mossland is developing a distributed governance framework to implement key components of DAO. This framework provides a transparent and automated decision-making process, promotes community participation in the Mossland ecosystem, and aims to provide a foundation where the future direction of the ecosystem can be decided collectively by all Moss Coin holders.

In this chapter, we describe the draft design of the distributed governance framework Mossland is implementing for its transition to DAO and outline the future development plans. Through these efforts, Mossland intends to manage and develop its metaverse project in a decentralized manner, building a more transparent and inclusive ecosystem.

4.2. DAO Members

The ability to submit ideas, comment, submit proposals, and participate in voting is limited to Mossland DAO members. Owning Moss Coin qualifies you as a DAO member.

4.3. Communication Channels

The Mossland website serves as an informational platform for DAO members regarding the governance process and is used as a communication channel among DAO members. Additionally, various third-party solutions such as Discord and Snapshot can also be utilized. All proposals begin in the form of MIPs (Mossland Improvement Proposals). MIP ideas are submitted as posts on the communication channels and require confirmation from moderators that they adhere to DAO approval guidelines before being made public. To post MIP ideas or provide feedback on ideas through comments, users must go through a wallet verification process to confirm their Moss Coin holdings.

4.4. Proposal Process

The Mossland Distributed Governance Framework is implemented on the Luniverse Network and Ethereum Network and operates as a community-centered governance through the official Mossland DAO proposal process.

4.4.1. Proposal Categories

MIPs have three main categories: Core, Process, or Informational.

1. Core Proposals:
    1.1. Allocation of ecosystem funds
        1.1.1. Proposals for the utilization of DAO funds
        1.1.2. Resubmission proposals for the utilization of DAO funds
    1.2. Brand Decisions
        1.2.1. Brand decisions related to brands created by DAO
        1.2.2. Resubmission proposals related to brands created by DAO
2. Process Proposals:
    2.1. Proposals suggesting changes in project processes or implementations (e.g., changes in procedures, guidelines, decision-making processes, changes to DAO or foundation tools or environments, etc.)
    2.2. Resubmission proposals suggesting changes in project processes or implementations
3. Informational Proposals:
    3.1. Proposals for general guidelines or information for the community
    3.2. Resubmission proposals for general guidelines or information for the community

4.4.2. Proposal Template

MIP proposals typically include the following sections. If necessary, authors may add additional sections to fully convey the intent, details, and significance of the MIP draft.

- Summary (Abstract): A brief summary of the proposal in a few sentences.
- Motivation: Explanation of the reason why this proposal should be implemented within the Mossland community.
- Rationale: How the proposal aligns with the vision and mission of the Mossland community.
- Specifications: Description of the platforms and technologies to be used.
- Steps to Implement: Explanation of the required resources, costs, and personnel needed at each step to implement the proposal.
- Timeline: Information about the start and completion dates, including scheduling.
- Overall Cost: Information about the total cost to implement the proposal.
- For proposals that are resubmitted without going through the approval process, the following information must be included:
- Original proposal link
- Reasons for not being approved
- Changes made and reasons for it now requiring approval

MIP proposals can be written in the following format.

(MIP Example)
Title: MIP-1: Proposal for Introducing DAO (Decentralized Autonomous Organization) for the Mossland Project

Author: Mossland
Stage: Idea
Category: Core (Core)
Creation Date: 2022-07-18

Rationale:
We propose the introduction of DAO to grow Mossland as an initiative led by Moss Coin holders. The ecosystem fund of the Mossland project will be managed through a decentralized governance framework called Mossland DAO. This will allow Moss Coin holders to have a greater say in shaping the future direction of the Mossland project. Mossland believes that the introduction of DAO is essential for effectively performing various activities such as community building and management, content creation related to Mossland, collaboration projects, and support for secondary creations.

Specifications:
Overview of Mossland DAO
Our team is planning to design an initial draft of the Mossland DAO by forking the recently designed ApeCoin DAO (https://apecoin.com/governance). Ultimately, it will be operated with Moss Coin holders at its core, aiming to continuously manage the funds and various resources of Mossland through Mossland DAO.

Mossland Governance Model
We have designed a decentralized autonomous organization (DAO) governance model for the Mossland project. The governance document includes an overview of the proposal process for Mossland DAO, and its content can be improved based on the feedback from the DAO community.
https://github.com/mossland/MossDAO/blob/main/Mossland_DAO_Governance.md

Mossland DAO Board
The initial board members consist of Mossland team members and external personnel, and their initial term is set at 12 months. Subsequent decisions, such as term extensions and board member replacements, will be made by Mossland DAO.

Mossland DAO Management Team
The team responsible for implementing decisions made by Mossland DAO will initially consist of Mossland team members. In the future, the budget and roles of the team will be determined by Mossland DAO. The initial goals of the Mossland DAO management team are to support the development of the DAO platform, operational support, and marketing activities. Subsequent goals and roles will follow the decisions of Mossland DAO.

Table 15. Example of Writing a MIP (Mossland Improvement Proposal) Idea

4.4.3. Proposal Process (Steps)

- Step 1: MIP Idea
  - MIP ideas are submitted as posts to the community, and they must be reviewed by a moderator to ensure they comply with DAO-approved guidelines before they appear in the community. The individuals or groups who submit MIP ideas, known as authors (multiple members can collaborate on an MIP idea, but there should be only one submission), gather informal feedback from the community through comments for 7 days. Authors cannot edit the original post; they must propose changes through comments.
- Step 2: MIP Draft
  - Once the 7-day feedback period ends, and a moderator closes the discussion, the moderator guides the author through the proposal template and the subsequent submission and voting steps. If the category is not specified in the proposal, authors can also suggest one.
  - The author drafts the MIP, incorporating community feedback. Authors may add additional items to the template as necessary to fully convey the intent, specifics, and meaning of the MIP. Moderators can also notify authors of any incorrect or missing information that needs clarification. If the author does not respond to the moderator's requests within 30 days, the MIP draft will be automatically rejected.
  - Once the moderator confirms that the MIP draft complies with DAO-approved guidelines, a unique number is assigned to the MIP for identification. In subsequent steps, the MIP will be referred to as "MIP-#: (Name) - (Category)." For example, the first MIP would be "MIP-1: DAO Proposal - Process."
- Step 3: MIP Assessment Report
  - The MIP draft is reviewed by the Project Management Team of Mossland Foundation, who provide an MIP Assessment Report that identifies costs, implementation steps, legal considerations, third-party audit requirements, potential conflicts among stakeholders, and other potential impacts. This service ensures that DAO members have sufficient information to make informed decisions during the voting process since MIP authors may have limited resources to submit a draft.
- Step 4: MIP Review
  - The MIP draft and its associated MIP Assessment Report are reviewed by the moderator team, who determine whether it complies with DAO-approved guidelines and make a decision to approve or reject it. If approved, the pending MIP proceeds to Step 5. If rejected, the proposal may be resubmitted if deemed necessary, but resubmission is not possible in cases of suspected legal violations, misconduct, or misinformation.
- Step 5: Post-Review Tagging
  - Pending MIPs that pass the review process are tagged as either "Direct to Vote" or "Management Review Needed."
  - The "Direct to Vote" tag is applied to pending MIPs with simple content and costs that pose no potential risk to DAO operations. All MIPs tagged "Direct to Vote" skip to Step 7.
  - The "Management Review Needed" tag is applied to pending MIPs with complex content, costs, or potential risks to DAO operations. All MIPs tagged "Management Review Needed" must go through Step 6.
- Step 6: Management Review
  - For pending MIPs tagged as "Management Review Needed," the management team decides whether additional explanations or actions are required before moving the pending MIP to Step 7. If no additional explanation or action is necessary, the pending MIP is tagged as "Vote Approval" and proceeds to Step 7. If the management team decides to return the pending MIP for additional explanation or action, they

must provide a clear explanation for their decision and tag it as "Return for Explanation Needed" or "Return for Restructuring Needed."
    - Reasons for tagging "Return for Explanation Needed" can include (but are not limited to):
        - Unclear or unquantifiable implementation costs.
        - Plans to allocate more than 5% of DAO funds.
        - Conflicts with other proposals.
    - Reasons for tagging "Return for Restructuring Needed" can include (but are not limited to):
        - Proposal contradicts DAO's mission/values.
        - Proposal poses potential risks to DAO operations.
        - Violation of laws or contrary to Mossland Foundation's legal counsel's advice.
        - Suspicion of fraud or misleading information.
- Step 7: Live MIP
    - MIPs that pass the review process are transitioned to "Live MIPs" collectively every Thursday at 9 PM (GMT+9). They are open for community voting until the following Wednesday at 9 PM (GMT+9). Only moderators have the authority to post Live MIPs.
- Step 8: Final MIP
    - If a Live MIP does not receive a vote or ends with a tie at the closing time, it is tagged as "Abandoned" and can be resubmitted if necessary. In all other cases, Live MIPs move to one of two Final MIP categories. Rejected Final MIPs can be resubmitted using the resubmission form if the author contacts a moderator. Approved Final MIPs move to Step 9.
    - Step 9: Proposal Implementation
    - For accepted Final MIPs, implementation
- Step 9: Proposal Implementation
    - For accepted Final MIPs, the implementation is initiated based on the content of the MIP Template. The Project Management Team associated with Mossland Foundation is responsible for assisting in the implementation of accepted Final MIPs but is not responsible for implementing them themselves.
    - For approved Final MIPs, the implementation commences following the steps outlined in the MIP proposal form. The responsibility for carrying out these steps lies with the Project Management Team affiliated with Mossland Foundation, but they do not directly execute the implementation.

4.4.4. Proposal Content Conflict

if newly proposed content directly conflicts with a proposal that is currently under voting, the second proposal should not go to a vote until a decision on the first proposal has been reached. This is to prevent conflicting requirements from being approved. Proposals that directly conflict with other approved proposals should not go to a vote for three months after the original proposal has been implemented. This is done to avoid wasting community assets.

4.5. Voting

The Mossland DAO's consensus mechanism aims to conduct voting fairly, transparently, and at a low cost, allowing Mosscoin holders to participate in DAO decision-making.

4.5.1. Voting Mechanism

The voting booth function implemented within the Mossland Metaverse has been chosen as the voting tool for the following reasons:

- No need to pay gas for each vote
- Ensures transparency
- Expands governance participation opportunities for all Moss Coin holders

4.5.2. Voting Procedure

1. After confirming that each proposal has gone through the correct approval process, moderators publish the proposal on the voting booth within the Mossland Metaverse. New MIPs are posted every Thursday at 9 PM (GMT+9), and voting remains open for six days at that time.
2. DAO members cast their votes within the Mossland Metaverse's voting booth. One Mosscoin equals one vote. If a voter owns a fraction of tokens, the fractional portion of their vote is discarded. In other words, if you have 100.1 tokens or 100.9 tokens, you can each cast 100 votes. The voting options for live MIPs are "For" and "Against." A "For" vote means the voter approves of implementing the MIP as it stands. A "Against" vote indicates opposition to implementing the MIP as it is. Voting "Against" can recommend the author to revise the proposal and resubmit it.
3. Voting for each proposal batch takes place over six days and closes the following Wednesday at 9 PM (GMT+9).
4. Proposals with a majority of "For" votes proceed to the implementation stage. Rejected proposals can be resubmitted through contact with the moderator, using the resubmission form. If there are no votes or a tie in the live MIPs by the voting deadline, that MIP is tagged as "Suspended," making it eligible for resubmission.

4.6. Mossland DAO FAQ

4.6.1. Why is Mossland DAO needed?

One of the primary objectives of the Mossland project is to implement a metaverse based on blockchain and decentralize the operation of the metaverse. Moss Coin holders can participate in the detailed design, development, and operation of the metaverse through Mossland DAO. It is expected that Moss Coin holders will have better control over the future of Mossland through Mossland DAO.

4.6.2. How does Mossland DAO operate?

Mossland DAO is implemented using the Luniverse and Ethereum networks and operates as a community-driven governance through the Mossland DAO official proposal process. Moss Coin holders can become DAO members, submit ideas, provide opinions, make proposals, and participate in voting. The Mossland website provides explanations of the governance process to DAO members, and communication among DAO members takes place through the Mossland metaverse. All proposals start as MIP (Mossland Improvement Proposal) ideas and must undergo moderator review to ensure compliance with DAO approval guidelines before being made public. Wallet verification is required to post ideas or provide opinions through comments.

4.6.3. What can be decided in Mossland DAO?

Mossland DAO can discuss and decide on various issues related to the use of Moss Coin DAO funds, project design, development, operation, collaboration proposals, community guidelines, and more. For example, decisions can be made on the following topics. However, proposals that include illegal activities, hate speech, or conflict with the mission and values of the Mossland Foundation will not be reflected in the voting.

- Mossland metaverse specifications and branding
- Development of specific services within the metaverse
- Development and operation of new services
- Marketplace fees
- Allocation of Mossland DAO funds for development
- Board and management member appointments

4.6.4. What can be decided in Mossland DAO?

The consensus mechanism of Mossland DAO aims to allow Moss Coin holders to participate fairly, transparently, and cost-effectively in voting. Idea submission, opinion provision, proposal submission, and voting participation are restricted to Mossland DAO members. By holding Moss Coin, you become a DAO member. Wallet authentication is required to post ideas or provide opinions through comments.

4.7. Future Plans

- 2023: Development of a Decentralized Governance Framework Voting System
  - Purpose: Expand the opportunity for fair participation by Moss Coin holders in the project through DAO involvement.
  - Goals: Implement the Decentralized Governance Framework (Holder Authentication Function, Voting System Implementation)
- 2024: Improvement of the Decentralized Governance Framework
  - Purpose: Enhance project transparency and improve project efficiency through DGF refinement.
  - Goals:
    - Implement integration of the voting system and on-chain transactions.
    - Implement a forum site and task management system for agenda discussions.

4.8. Guidelines

4.8.1. General Guidelines

1. The entire DAO membership conducts a vote to determine the DAO members who will act in the DAO Council. The purpose of the Council is to manage DAO proposals and execute the community's vision.
2. Council members can be removed and replaced by a majority vote of Moss Coin holders before their term expires.
3. For a proposal to go to a vote, the full execution cost must be clear.
4. DAO members should search for previous proposals to ensure that the idea they intend to propose hasn't already been submitted.
5. If a proposed proposal directly conflicts with a proposal currently under vote, the second proposal should not go to a vote until the decision on the first proposal is reached, and approval of conflicting requirements should be avoided.
6. Proposals that directly conflict with previously approved proposals should not go to a vote for a period of 3 months after the original proposal has been executed to avoid wasting community assets.
7. Proposals involving illegal activities, hate speech, explicit content, or conflicting with the mission or values of the Mossland Foundation will not be submitted to a vote.

5. APPENDIX

5.1. Milestone Achievement Assessment

We aim to retrospectively evaluate the progress of the Mossland project that commenced in the first quarter of 2018 up to September 27, 2023. We will identify the successful accomplishments and areas needing improvement, with the goal of moving forward in a better direction. Table 16 below summarizes the key milestones achieved by the Mossland project from 2018 to the present.

Date	Major Milestone	Description
2018 Q1	Mossland Project Start	The commencement of the Mossland project.
2018 Q2	Listing on Korean Gopax Exchange	Listing of Moss Coin on the Korean Gopax Exchange.
2018 Q4	Mossland: The Auction Release	Introduction of Mossland: The Auction, Korea's first NFT auction service.
2018 Q4	Listing on U.S. Bittrex Exchange	Listing of Moss Coin on the U.S. Bittrex Exchange.
2019 Q1	Listing on Korean Upbit Exchange	Listing of Moss Coin on the Korean Upbit Exchange.
2019 Q2	Mossland: The Hunters CBT Release	Launch of Mossland: The Hunters, Korea's first P2E gaming service.
2019 Q2	Mossland: The Hunters OBT Release	Official release of Mossland: The Hunters, a P2E gaming service.
2019 Q3	Collaboration with Samsung Electronics Blockchain Wallet	Integration of Moss Coin and Mossland: The Hunters into Samsung Blockchain Wallet.
2020 Q2	Release of Mobile Esports Game	Launch of a mobile esports game.
2020 Q2	Release of Virtual Reality Game	Experiment combining virtual reality and blockchain technologies.
2020 Q2	Release of Mobile Royal Marble Game	Experiment with a mobile game based on digital assets.
2021 Q2	Win Prediction Service	Introduction of a prediction service.
2022 Q1	CyberTHUG NFT Project Launch	Launch of the CyberTHUG NFT project.
2022 Q4	Mossland Open Source Metaverse Launch	Initiation of the project as an open-source metaverse.
2023 Q1	Mossland Official Website Launch	Enhancement of public disclosure for Moss Coin holder protection.
2023 Q4	Open Source Developer Support Program Launch	Part of the project's decentralization efforts.

Table 16: Summary of Key Milestones Achieved by the Mossland Project from 2018 to September 27, 2023

Mossland Public Documents Links

- In 2023, MOSSLAND WHITE PAPER 3.0
- In 2023, MOSSLAND WHITE PAPER 3.0 (KR)
- In 2023, MOSSLAND 2023-2024 PROJECT ROADMAP
- In 2022, Research and Plans for the Mossland: Decentralized Autonomous Organization (DAO) Governance Model
- In 2021, Mossland: Utilizing NFTs in the Sports Entertainment Metaverse
- In 2021, Mossland: Integration into a Metaverse with Moss Coin
- In 2020, Mossland Team and the Crypto Market Landscape
- In 2020, Landmark Owners: Pioneers in Growing the Mossland Ecosystem Together
- In 2020, Moss Coin: The Cryptocurrency Used in Mossland's Gaming Ecosystem
- In 2020, UDC 2020: Introduction Video for Mossland
- In 2018, MOSSLAND WHITE PAPER
- In 2018, MOSSLAND WHITE PAPER (KR)

In the Mossland public documents, you can find the objectives and features of the Mossland project that have been disclosed since early 2018. These are summarized in [Table 17]. The Mossland project primarily focuses on a blockchain-based metaverse project centered around virtual real estate and includes the following key components:

- Platform: A blockchain-based metaverse with a focus on virtual real estate.
- NFT Trading: Facilitating the purchase and trading of NFTs between users.
- Utilization of Mosscoin: Rewarding users in play-to-earn (P2E) games, facilitating the exchange of digital assets and real-world goods.
- Technical Features: Developing and distributing an AR SDK for developers.

Based on these project objectives and features, we have reviewed the achievements and areas for improvement within the Mossland project.

Mossland has progressively worked towards its project objectives since 2018. In the fourth quarter of 2018, Mossland introduced the Mossland: The Auction service, allowing virtual real estate NFT trading. This marked a crucial step in demonstrating the potential of blockchain services in the market. During this time, Mosscoin was actively traded within the platform itself, showcasing excellent progress in the potential for blockchain application services.

In the second quarter of 2019, Mossland launched the Mossland: The Hunters service, providing various use cases for Mosscoin, such as P2E game rewards and digital asset exchanges. Furthermore, this service was integrated into Samsung Electronics' blockchain wallet.

However, the objective of creating an AR SDK faced slower-than-expected progress in augmented reality technology and market growth, leading to a reassessment of the goals. In response, the Mossland team explored various applications of blockchain technology, such as virtual reality games, mobile board games, and esports competition platforms.

AR technology and the market still hold significant potential, especially with advancements in mobile device technology, the proliferation of AR technology and devices, and the progress of deep learning (DL)[25] technology. Furthermore, the upcoming release of Apple's first AR product, the "Apple Vision Pro,"[26] in 2024 is expected to further expand the possibilities in the AR market. The Mossland team continues its research in AR technology to prepare for future advancements.

Starting from 2023, Mossland has been integrating its previous goals into a Web3-based metaverse platform. This platform now offers NFT trading and various applications for Mosscoin. It also provides an SDK for open-source developers with ongoing updates.

While Mossland has launched various services since 2018, some projects have been discontinued. However, the open-sourcing of all work since 2022 aims to improve upcoming projects and contribute to the blockchain developer ecosystem. These efforts enhance the sustainability of the Mossland project.

Over the past five years, the Mossland project has explored various applications and services related to blockchain technology, successfully launching more than 12 blockchain-related services. This demonstrates their commitment to proving the value of blockchain technology and driving its development forward.

The primary goal going forward is to decentralize the project to increase autonomy and sustainability. By leveraging the collaboration and strength of the open-source community, Mossland intends to significantly enhance its service development capabilities. These efforts will enable Mossland to pursue continuous development and innovation in the world of blockchain technology and the metaverse on their journey into the future.

[25] Deep Learning https://en.wikipedia.org/wiki/Deep_learning

[26] Apple Vision Pro https://www.apple.com/apple-vision-pro/

Introduction to Digital Assets

Mossland is a blockchain-based metaverse project centered around virtual real estate, bridging the gap between the real world and the virtual world. It aims to facilitate the development of virtual real estate-related gaming environments without the need to build an entirely new system. Mosscoin (MOC) is utilized for purposes such as NFT purchases and transactions within Mossland, rewards in Play to Earn (P2E) games, and the exchange of digital assets for real-world goods.

Technical Features

As a location-based augmented reality (AR) mobile game, Mossland combines location-sharing and check-in services with augmented reality, adding depth to the gamification aspect. Mossland has developed and distributed an AR Software Development Kit (SDK) called Moss Frame, enabling developers, even those without extensive AR expertise, to easily render Mossland's virtual world at a high level of AR technology.

Present and Future

Mossland has launched a total of six games and entertainment services, beginning with virtual real estate, and has established its own metaverse ecosystem. Simultaneously, it has organized blockchain game jams to support various game developers. According to the project, approximately 1.3 million Mosscoins have been distributed to the community as incentives, contributing to the formation of a sustainable community. In the future, Mossland plans to expand the project's scope into the sports entertainment market.

Table 17: Summary of Mossland Project Goals and Features Set in 2018