

Mossland

Mossland Ltd.



Ver 1.25

Contents

Contents	2
1 Introduction	3
2 Mossland	6
2.1 Location-based Augmented Reality Mobile Game	6
2.2 Property Trading	9
2.3 Location based P2P(Peer to Peer) Advertisement platform	11
3 Moss Coin	14
3.1 Summary	14
3.2 Moss Coin and Moss	14
3.3 Moss Coin Distribution	16
3.4 Issuance of Moss Coin	17
4 Moss Chain	18
4.1 Technical Aspects of the <i>Mossland</i> Blockchain Application	18
4.2 Decentralization of Mossland	18
4.3 Economy of Moss Chain	20
5 ICO (Initial Coin Offering)	22
5.1 Pre-ICO	22
5.2 Main ICO	23
5.3 Moss Coin lock-up period and distribution schedule	25
5.4 Perks for Moss Coin buyers	26
5.5 Policy and precautions	27
6 Market Insights	28
6.1 Location-based Check-in app	28
6.2 Item Trading Market	28
7 Mossland Development and Launch Schedule	31
8 Team	32
8.1 Reality Reflection	32
8.2 Members	35

1 Introduction

Mossland is a real estate-centric location-based Augmented Reality (AR) mobile game. In the game, players identify real properties in the world and add them into the game world - giving other users the ability to buy and sell real world properties in the *Mossland* virtual world. *Mossland* utilizes a blockchain-based cryptocurrency to facilitate trades, sales and purchases by users of in-game properties, emulating the real-world property market in game and giving our players a new and compelling way to interact with each other.

If a new blockchain technology with higher performance and correspondingly lower transaction fees is introduced after *Mossland* is launched, *Mossland* will be converted to a Decentralized Application and all *Mossland* assets (and ownership) will become on-blockchain assets. From that point, *Mossland*'s virtual assets will be available on a decentralized trading platform, making them available to more players, developers, and services.



Figure 1: Real-world property with a player-added accessory

Augmented Reality(AR) The value of virtual property in *Mossland* is proportionate to the number of check-ins by users at the locations. In-game property owners can purchase and apply accessories to their properties. Accessories are virtual property dressings attached to virtual properties, and create a way for players to make their properties unique in a way that other players can see in-game. Accessory serve two purposes in-game: To beautify virtual properties, and provide in-game benefits to users when they check into properties - both of which are designed to increase engagement with properties in the *Mossland* virtual world.

As our player base expands, the property market will continue to expand with new locales, and properties will continue to be improved by users in the game with AR accessories. Real-world cities will see their virtual AR counterparts landscape change over time with a large number of diverse accessories, increasing engagement and competition within the virtual property market and creating a unique opportunity to market the game in a hyper-local context-sensitive way.

Property and Accessory Auction House Tradable properties and accessories in *Mossland* can be bought, sold, and exchanged between players via an in-game auction house. Transactions in the *Mossland* auction house will be executed using Moss Coin, a blockchain-based cryptocurrency.

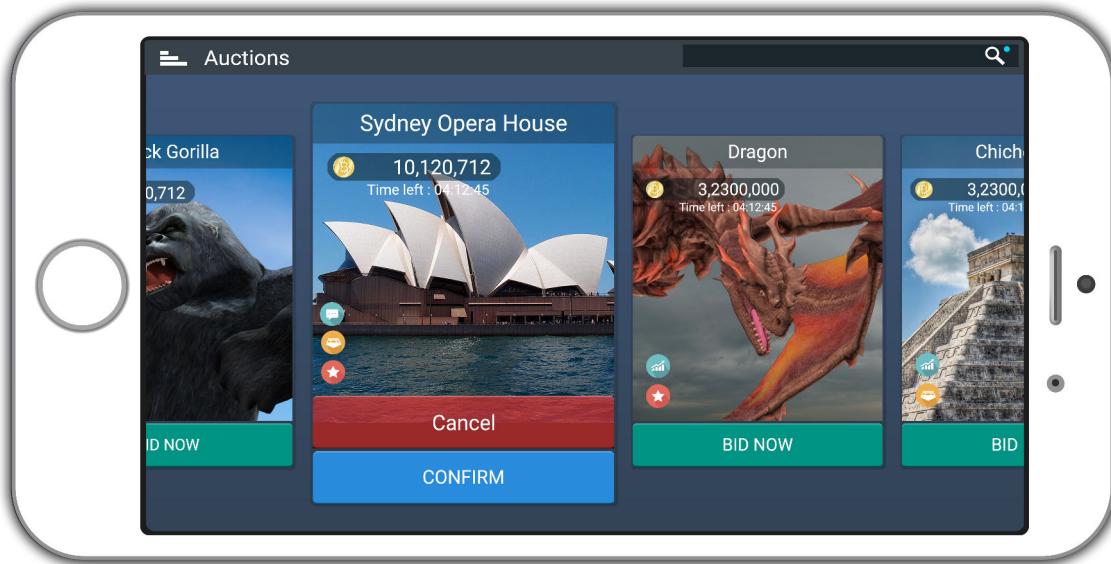


Figure 2: *Mossland*'s in-game Auction House. Exchanges are made with Moss

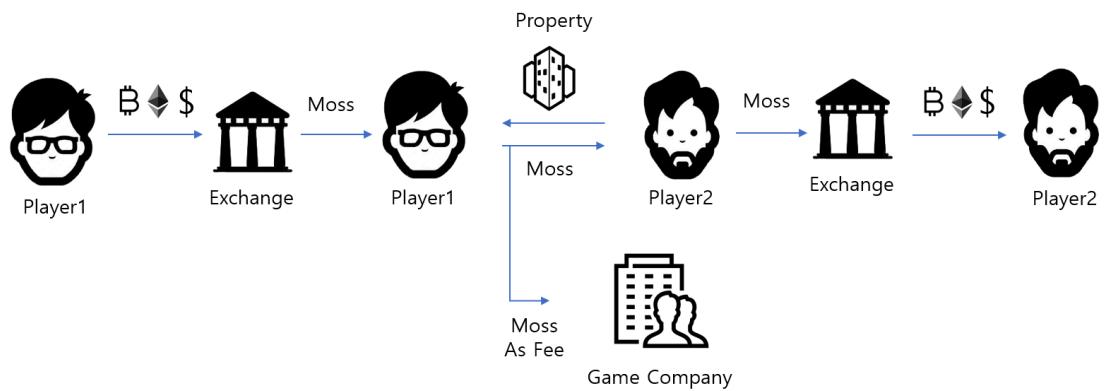


Figure 3: Currency flow of Moss Coin

Location Based P2P Advertising *Mossland* creates a new advertising platform based on the convergence of real location-based games with AR technology. Any *Mossland* player can create and run advertisement campaigns by budgeting Moss through a simple in-game interface. Advertising fees will be collected on each campaign and the remainder of the Moss budget will be used to reward and incentivize players who visit the properties. Since *Mossland* is location-based, ads will be organically exposed to players in the vicinity of the real properties, resulting in a higher overall conversion rate for each campaign.

Moss Chain *Mossland*'s virtual real estate and augmented reality accessories are virtual assets produced by the developer team and through players' gameplay. In order for these virtual assets to be secure and maintain value, users and services outside of the *Mossland* ecosystem need to be able to use them, create them, and modify them. Therefore, *Mossland* intends for virtual assets in the game to be held on the blockchain, and to make them available for trading.

Virtual assets and their ownership in *Mossland* could be also transferred to other location-based games or services, creating new avenues for owners to realize value and ensure the security of virtual assets through a new blockchain known as Moss Chain. In addition, third-party artists and developers will be able to create and sell virtual assets through this open market, expanding the size and quality of the virtual market far beyond the capabilities of the internal *Mossland* team.

When virtual assets become available in services besides *Mossland*, the advertising value of those assets also rises thanks to the additional exposure. All aspects of the advertising process (ad campaign creation, acceptance, management, and compensation) will be recorded in the blockchain for transparency, and to create a reliable location-based advertising market.

2 Mossland

2.1 Location-based Augmented Reality Mobile Game

Location Based Services (LBS) became popular as a result of GPS functionality in our personal mobile devices. Widespread adoption of GPS functionality led to the creation and popularization of location-based social networks and mobile applications, such as Foursquare. Users were able to visit physical locations and “check in” to the location, competing with friends and others on the network for “ownership” of a virtual version of a physical location.

Following the rapid adoption of first-generation check-in services, Facebook and Google began to integrate similar functionality into their existing social graphs. While first-generation services such as Foursquare, Gowalla, and MyTown remained popular, the advancement of mobile hardware promised additional augmented reality functionality. *Ingress*’s launch in 2012, followed by *Pokemon Go*’s launch in 2016, both hinted at a more engaging, social future driven by augmented reality on mobile. Through the lens of *Pokemon Go*, integration of our physical world with a virtual counterpart started to become a near-future reality, and established the foundation for a surge in AR interest and development.

Mossland attempts to build on the compelling check-in model first established by services such as Foursquare, while also integrating many of the collection and gameplay elements found in *Ingress* and *Pokemon Go*. By giving players the ability to check in to, claim, and enhance virtual properties, *Mossland* takes location-based AR games to the next level. Players are not just incentivized to check-in to properties more often, but to explore and discover ways to promote their properties to other players, thus creating a dynamic, player-centric attention economy paired with a more traditional virtual real estate economy. Put more simply, every aspect of *Mossland*’s design is anchored by the goal of creating a more engaging, social, virtual world.

The Mossland Check-in One of the foundational actions in *Mossland* is checking in. Players can explore their location and check into any nearby buildings. Players are rewarded with gold or items as a reward, and can use these resources to purchase and develop their properties.

While traditional check-in services such as Foursquare are designed to enhance an existing social graph, *Mossland* attempts to add more player value to every check-in, further incentivizing players to check into nearby buildings as often as possible.

Player check-ins also benefit property owners, creating a supply and demand economy that incentivizes both promotion of properties and player check-ins. This combines the traditional social incentivization of sharing and interaction with in-game incentivization of game actions with in-game rewards. This alignment of ownership with foundational gameplay actions makes up the core gameplay loop of *Mossland*, creating opportunities for rich player-to-player interaction and traditional collection and optimization all centered on a fundamentally social experience.

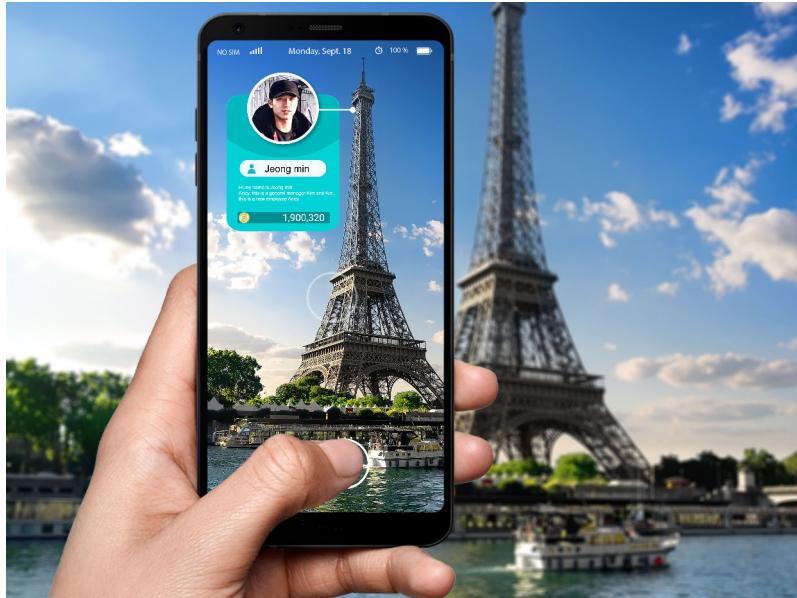


Figure 4: Check-in to nearby Property

Property In *Mossland*, property is a finite virtual asset tied to real-world real estate. Unlike Foursquare, in which Points of Interest (POI) were originally player-registered, *Mossland* will utilize existing map and location data to ensure that properties aren't duplicated and can be controlled only by a single player at any given time. This is necessary in order to create a working property economy in *Mossland*, ensuring incentivisation of both ownership and check-ins.

Accessories Accessories are AR objects which can be added to player-owned properties by their owners. Adding additional accessories is akin to "upgrading" a property, increasing its value both to the owner and players who check into into the property (by providing more value per check-in). Purchasing accessories and adding them to properties requires utilization of in-game currency and time. Players are also incentivized to create a coherent strategy around resource and time allocation per property, allowing players to optimize their experience to a great degree.

Accessories also allow players to display their progress to other players by showcasing their success on properties visually. This type of boasting is an important part of both advertising properties to other players and to helping new players see their path to success in *Mossland*. Accessories represent a promise made to new players regarding their potential achievements, and are an integral part of our engagement strategy for both new and experienced players.

As an example, an unmodified Leaning Tower of Pisa would appear to be the same in the real world as in *Mossland*. However, if a player adds the "Pteranodon" accessory to the property, other players would be able to see an AR Pteranodon flying around the tower. As the property owner benefits from additional player check-ins to the property driven by the

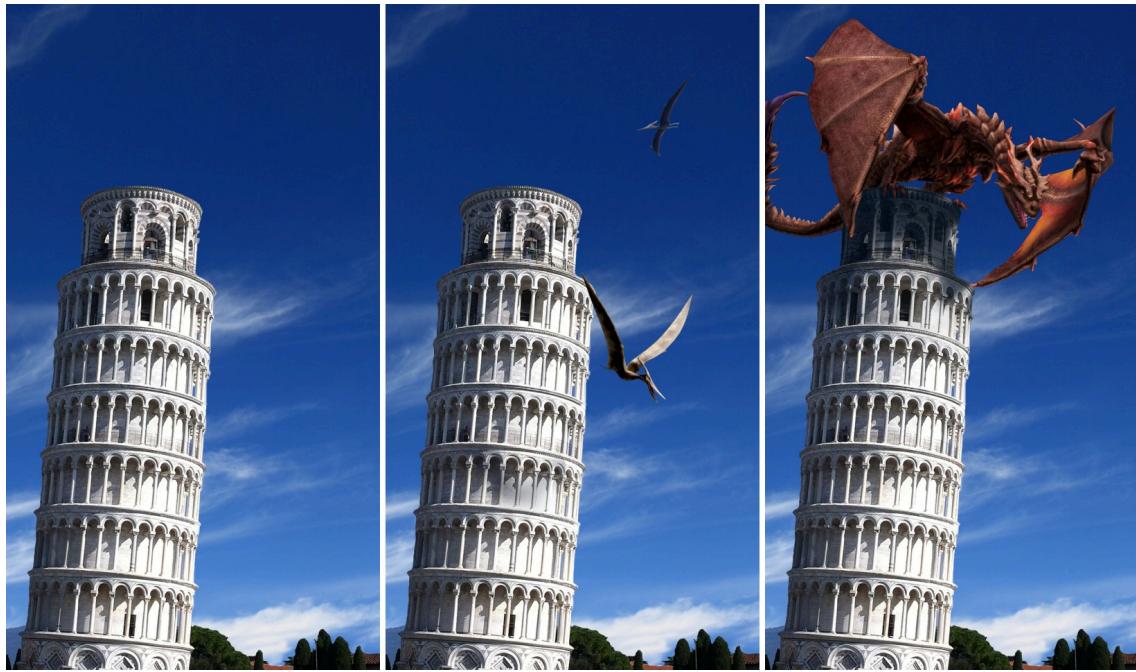


Figure 5: An AR Accessory

accessory, they can upgrade the Pteranodon to a Dragon, further increasing the benefit to other players for checking into the property and also increasing the rewards they receive from each player check-in.

The physical size of properties accessories also affect the value of properties and player check-ins. Because AR is based on the player's device camera, tall buildings and landmarks with large accessories can be seen by distant players. This would allow players to more easily identify valuable check-in opportunities and drive the value of more visible landmarks in the *Mossland* property market.



Figure 6: Large properties and accessories can be seen from a distance

Accessories are also associated with unique rewards, creating additional incentives for players to seek out properties with specific accessories according to their specific needs.

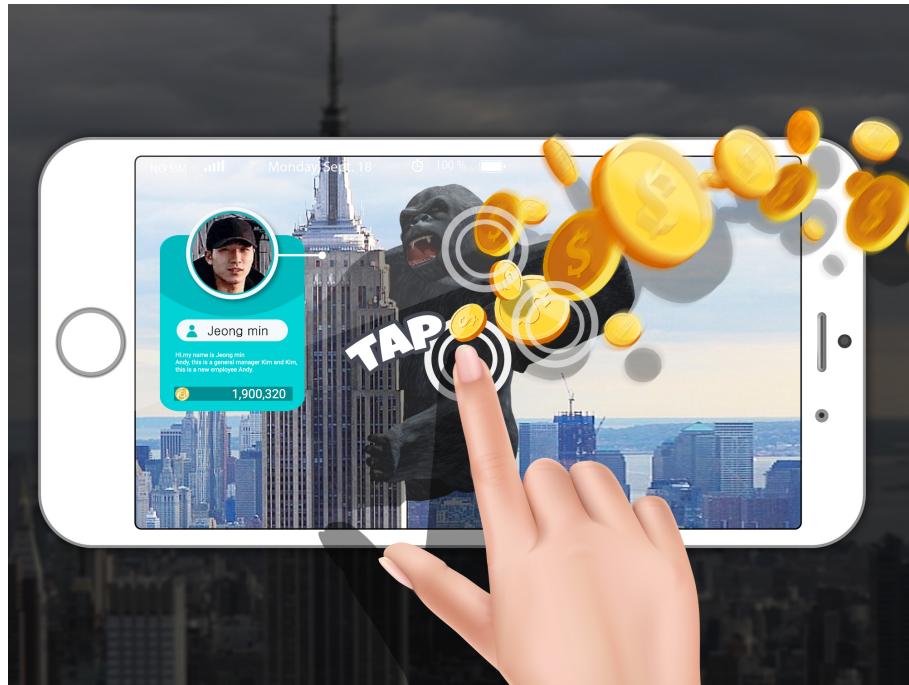


Figure 7: Accessory provide in-game reward in addition to visual effect

Mossland will allow players to check into properties, but also to tap and interact with accessories for additional unique rewards. This cements the added value of an accessory both to a property owner and to players looking for properties and check-in rewards. Each accessory will also have unique visual effects and animations both in their idle state on a property and after direct player interactions.

Items Items are an integral part of the property and accessory acquisition process. Players will collect items through check-ins, accessory interactions, and property ownership - items are semi-random, and have rarity. The cost of accessories will scale with their rarity, making common accessories easy to acquire, while the rarest accessories will require very rare items and significant in-game currency to purchase.

2.2 Property Trading

Properties acquired in *Mossland* can be traded between players through an in-game auction house, which will require uses of a dedicated auction-house currency governing every transaction.

Currency The *Mossland* economy will be governed by three currencies: Gold, Gems, and Moss. Each currency has a different value and a slightly different use case.

Gold is the most common in-game currency, and is generated by the core gameplay loop. It is moderated in-game with common source and sink mechanics and generally easy both

easy to acquire and easy to spend. Players can acquire gold with check-ins, by completing missions, and through in-app purchases.

Gems can only be acquired through in-app purchases and is a premium currency in *Mossland*. Gems are primarily used to speed up gameplay, speed up item purchases and unlocks, and to unlock premium gameplay features unrelated to gameplay progress and the core gameplay loop.

Moss is the the *Mossland* auction house currency, and is used by players to purchase and exchange property. Moss is cryptocurrency-base and the total supply of Moss is finite, and tightly controlled. Players will be able to purchase Moss through cryptocurrency exchanges with other cryptocurrencies such as Bitcoin and Ethereum or through in-app purchases while there is remaining supply. Once the total amount of Moss available for in-app purchase has been bought by players in-game, players will no longer be able to purchase moss and can only acquire it externally on exchanges or through property sales in the *Mossland* Auction House. Each Moss transaction in the Auction House will also have an associated transaction fee, which will be collected by the company. Transactions fees will be partially redistributed in-game and partially burned in order to moderate the overall supply of Moss.

Currency Type	Gold	Gem	Moss
Supply	Unlimited, In-Game	Unlimited, In-Game	Finite, Limited
Currency Sources	In-game Rewards In-app Purchases	In-app Purchases	In-app Purchases Exchange Purchases B2C & P2P Ads Property Sales
Currency Sinks	Game Contents	Game Contents	P2P Ad Purchases Property Purchases Auction House Fees

Table 1: Currencies of Mossland

Mossland Auction House Players can buy, sell, and exchange properties with other players in the Auction House. All transactions are moderated by an open auction system - no direct exchanges between players is allowed in order to ensure that all exchanges are fair, and that all exchanges take place within *Mossland*. There are several reasons for requiring all property transactions to take place within the *Mossland* Auction House:

- Requiring all transactions to use Moss will provide additional motivation for players to level up and accessorize their properties.
- Because the value of properties will increase over time, and Moss Coin can be exchanged for other currencies on external exchanges, we expect fewer properties to

be lost to players who leave the game. Because the value of those properties will continue to increase, players are incentivized to “cash out” before they leave the game, thus ensuring that valuable properties continue to be actively owned and operated.

- The Auction House is a compelling gameplay addition in a mobile game, and adds a new platform through which players can interact. Because it’s an open market, it will draw players that are interested in this form of optimization, and create a compelling experience for players who enjoy buying and selling property.

2.3 Location based P2P(Peer to Peer) Advertisement platform

Global advertising markets are controlled by a small number of large players with the capital necessary to purchase access to players and markets, making it difficult for smaller advertisers to gain a foothold in the market and reach their audience. *Mossland* endeavors to create an advertising platform that can empower local businesses to advertise directly to players in their vicinity, making it easier for restaurants, shops, and other retail businesses to find their audience and bring players into their businesses. The basic structure of the *Mossland* P2P advertising platform is outlined in Figure 8:

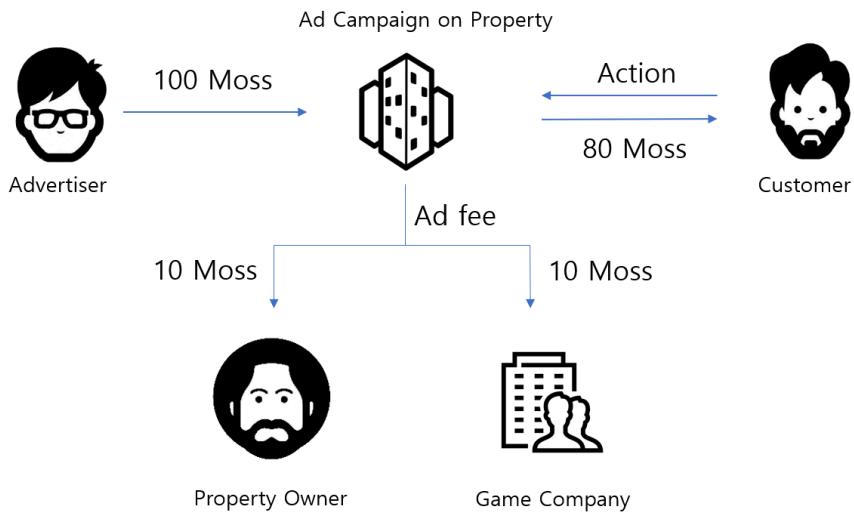


Figure 8: Mossland Advertising Platform, High-Level

Any *Mossland* player can run an ad campaign by choosing a property and paying to begin advertising. While it would obviously be cheaper to run an ad campaign on a property controlled by the advertising player, any player can submit an ad campaign to be run on any property or properties. If a player submits an ad campaign for another player’s property, the property owner would need to approve the ad campaign prior to the campaign beginning. All ads can be reported as inappropriate or harmful by players and moderators.

The *Mossland* advertising platform is a CPA (cost per action) platform, resulting in cost and payment based on when players interact with the advertising in the specified way (view,

click, visit, register, purchase, etc). The largest portion of the advertising fee will be paid directly to the player which takes the action, with the remainder split between the property owner and the company (in the form of fees). There are several advertising-related and more general benefits to running an in-game advertising platform based on the virtual property market: These are what *Mossland* expects from the advertising platform:

- Most importantly, it will create an opportunity for players to acquire Moss without having to spend money on exchanges or through in-app purchases. This enables auction house participation by a larger percentage of the player base and incentivizes players to be active members of the community.
- It will create upward pressure on the value of properties that are effective advertising points by effectively making them “income” properties. For advertisers, as the cost of advertising increases, it will make sense to eventually purchase a property to decrease their cost of advertising - this creates another market force incentivizing use of the auction house and increases demand and liquidity in the virtual property market.

Mossland will create one of the first micro advertising platforms integrated into a mobile game, enabled by its virtual property market. By enabling any player to create an ad on the platform, *Mossland* is attempting to democratize access to customers and enable hyper-local advertising, all of which are a result of *Mossland*’s unique virtual property market. Players will be able to start, stop, and evaluate the success of their ads by using simple management tools supported in-game.



Figure 9: Examples of Augmented Reality advertisement

3 Moss Coin

3.1 Summary

Moss Coin is an ERC-20 Token based on Ethereum.

Title	Contents
Token Name	Moss Coin
Symbol	MOC
Platform	Ethereum (ERC-20)
Total Supply	500,000,000 MOC
Pre-ICO base price	1 MOC = 0.0001 ETH 1 ETH = 10,000 MOC
Main ICO base price	1 MOC = 0.12 USD

Table 2: Moss Coin

3.2 Moss Coin and Moss

As mentioned in 2.2, players will use three different in-game currencies in *Mossland*. The third, Moss, is a currency controlled by the company and is used by players for the purchase of Properties and Accessories, and to purchase and run P2P ad campaigns. Moss and Moss Coin are technically separate; Moss Coin is traded on exchanges, and Moss is used in-game. Moss and Moss Coin are interchangeable, but players will need to exchange their Moss Coin for Moss through the *Mossland* website, after which Moss will be made available in the player's account, in-game. Exchanged Moss Coin will be securely managed and stored on the *Mossland* servers. There are three ways to acquire Moss in *Mossland*:

- **Extra-game Acquisition and Exchange**

Players will be able to purchase Moss Coin through the Moss Coin ICO, or later on exchanges. Players will then be able to visit the *Mossland* website and exchange their Moss Coin for Moss in-game, with their Moss Coin securely stored and managed on the *Mossland* servers. Just as players can exchange Moss Coin for Moss, which can be used in *Mossland*, players can also exchange Moss for Moss Coin, later trading it for other currencies on cryptocurrency exchanges.

- **In-game In-App Purchases**

Players will be able to conveniently purchase Moss in *Mossland* through in-app purchases. However, purchasing Moss in the game will be more expensive than purchasing through an external exchange due to the 30% fee imposed by Google Play and the Apple App Store. In addition, the amount of Moss available will be limited to Moss that initially reserved for in-app purchases and Moss collected by the company via transac-

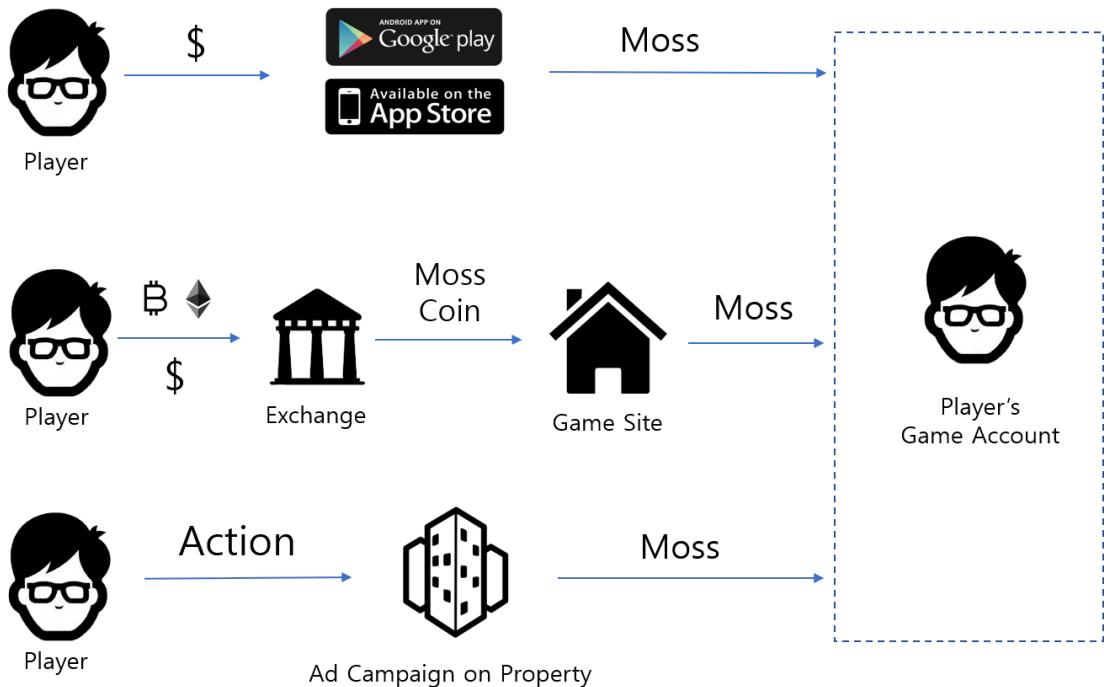


Figure 10: Player's acquisition channel of Moss

tion fees in the Auction House and advertising fees when players purchase advertising in game.

- **Auction House Sales**

Property owners will be able to receive Moss by selling properties that they own.

- **Advertising Engagement**

Players will be able to receive Moss in-game by interacting with advertising created by other players, or by allowing other players to advertise on their properties. These fees may be fairly small on a per-player basis, but overall will contribute significantly to liquidity in the Moss market.

Players will be able to withdraw Moss for Moss Coin at any time through the *Mossland* website.



Figure 11: Withdrawal of Moss

3.3 Moss Coin Distribution

The total supply of Moss Coin will not exceed 500,000,000 MOC. After all Moss Coins have been issued, new MOC will not be created. Issued Moss Coin will be distributed as outlined in Table 3 and Fig 12.

Item		Volume
Pre ICO	Private	41,949,405 MOC
	Public	24,999,451 MOC
Main ICO	Strategic Partners	101,250,247 MOC
	Public	123,750,302 MOC
	Team	75,000,000 MOC
	Advisor	25,000,000 MOC
	Initial IAP	75,000,000 MOC
	Reserve	33,050,595 MOC

Table 3: Moss Coin Distribution

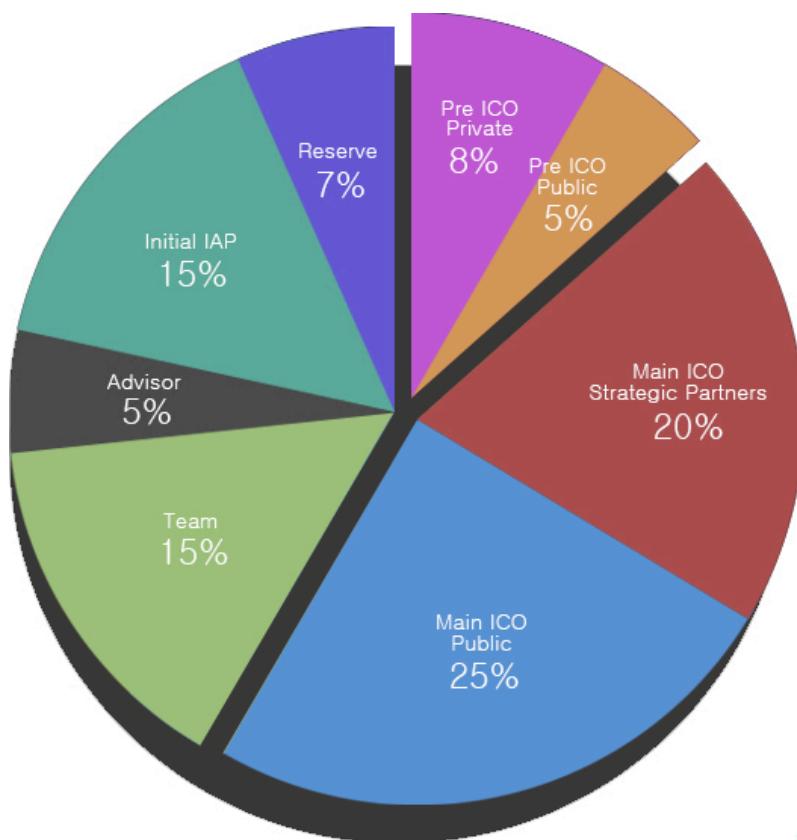


Figure 12: Moss Coin Distribution Chart

- 58% of total coin supply will be distributed during the Moss Coin pre-ICO and main ICO. The pre-ICO will each be divided into two rounds: A private round for volume participants and a public round for general participants. The main ICO will also be divided into two rounds; a round for strategic partners and fund partners and a public round for general participants.
- To ensure commitment to the project by the team and advisors, Moss Coin allocated to the *Mossland* team and advisors will not be distributed until 1 year after completion of the main ICO.
- In order to ensure that players will be able to purchase Moss directly via In-App purchases in *Mossland*, 75,000,000 Moss Coin will be reserved only for those purpose. When this Moss Coin reserve has been exhausted, only Moss Coin acquired via auction house and advertising fees will be available for purchase directly through the *Mossland* application's In-App purchase system.

3.4 Issuance of Moss Coin

The Company will collect Moss Coin (through the use of in-game Moss) from Auction House and Advertising fees. This Moss (and the associated Moss Coin) will be resold to players through in-app purchases.

- **Additional Moss Coin Issuance**

There will be no additional issuance of Moss Coin beyond the original 500,000,000 coins.

- **Seeding and Redistribution**

If the company deems it necessary or beneficial, reserve Moss Coin may be distributed by making in-app purchases of Moss available to Players. All in-app purchases of Moss will be determined by the market price of Moss Coin on the day the Moss is made available for purchases. The store price may be higher or lower than the available purchase price depending on live market movements. Additional Moss Coins will not be made available directly on exchanges, and only available as in-app purchases within *Mossland*.

4 Moss Chain

4.1 Technical Aspects of the *Mossland* Blockchain Application

Mossland will be developed as a game service on a proprietary central server. When a sufficient number of players have joined the community, player data will be transferred to a blockchain. After performance can be verified and optimized, the game will be transferred to a Decentralized App (DApp) in the corresponding blockchain.

- **Transaction Performance**

Mossland is an entertainment product for which the player experience is paramount. Transaction speeds are essential to a good player experience, and current public blockchains do not satisfy the performance requirements required. Specifically, it is difficult to immediately check whether a bid during an auction is successful due to the slow response of existing blockchains in the event that there are many users bidding on an asset. This can lead to a sub-par user experience due to confusion around which bids are successful, why, and how transaction fees are calculated and collected.

- **Fees**

Transaction fee designs in contemporary blockchains will discourage in-game activity, and require a different model for *Mossland* to operate efficiently. Currently, every action creates information which must be stored in a new block, added to a given blockchain. For *Mossland* this will include all game actions in addition to transactions. Therefore *Mossland* will need to utilize a blockchain which has minimal transaction fees in order to ensure that both the game and asset exchange operate in a way that is both logical and satisfying to players.

These issues have already been addressed in several public blockchain projects (such as EOS), and we anticipate that a public blockchain platform that has undergone tremendous advancement will be commercialized in the near future. Until then, *Mossland* will be developed as an off-chain project in order to begin the process of growing the player base and to demonstrate the value of virtual assets in the game's property market. Then, once a proven blockchain platform has been introduced, *Mossland* will be transferred to an on-chain project, allowing virtual assets to be leveraged across multiple AR projects.

4.2 Decentralization of *Mossland*

Figure 13 shows how *Mossland*, an off-chain project will be changed to an on-chain project in the future.

- Property and accessory information stored on the *Mossland* server will be transferred to the blockchain, and resource files stored in the *Mossland* client application will be transferred to the resource download server. Therefore, augmented reality DApps that

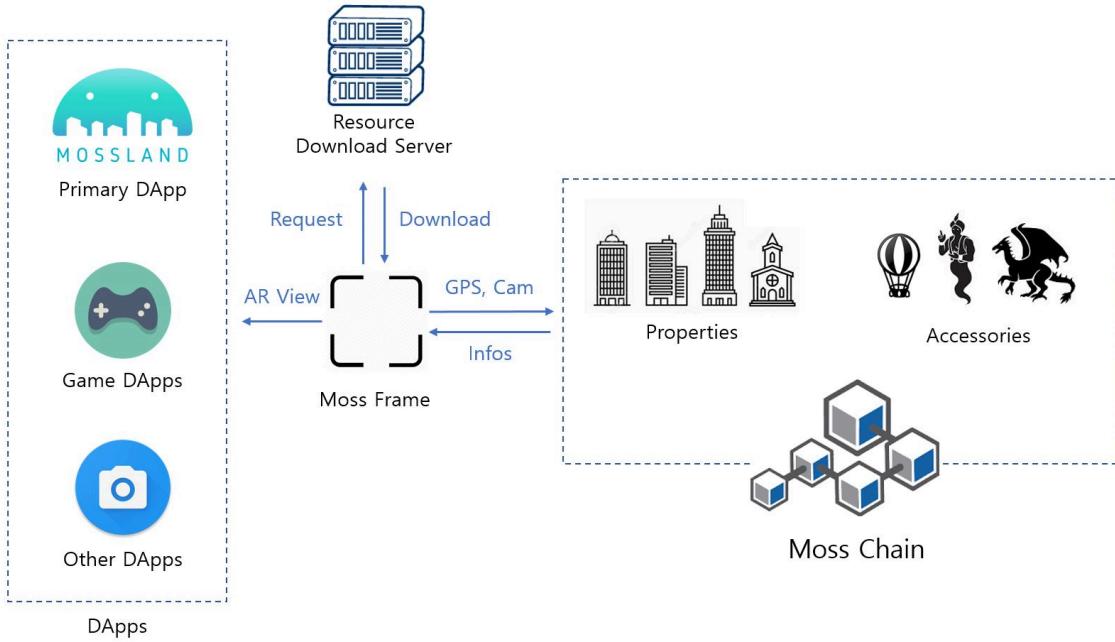


Figure 13: Decentralization of Mossland

want to utilize virtual assets on the *Moss Chain* (*Mossland*'s blockchain) can be developed as lighter clients, which will lead to more open environment where *Mossland*'s virtual assets can be utilized by more services.

- An AR SDK called *Moss Frame* will be developed and distributed. *Moss Frame* reads information about the properties and accessories stored in the *Moss Chain* based on the user's location and camera information. It also accesses the necessary resources from the resource download server and makes them available to the player's client application, also giving developers the ability to directly display them to a player's screen. *Moss Frame* will facilitate the development of DApps by allowing developers to easily render *Mossland*'s virtual world without in-depth AR technology.
- *Mossland*, as an off-chain game app to handle all the functions with all the resources is going to be transformed to one of *Moss Chain*'s DApp. It will serve as the primary DApp that best exemplifies the *Moss Chain* and *Moss Frame* to encourage third party developers to develop more DApps based on the expected success in the market.

In this way, *Mossland* wants to increase the value of virtual assets by releasing its own assets on the blockchain instead of monopolizing them. In addition to *Mossland*, we will also support other DApps to increase the value of virtual assets.

4.3 Economy of Moss Chain

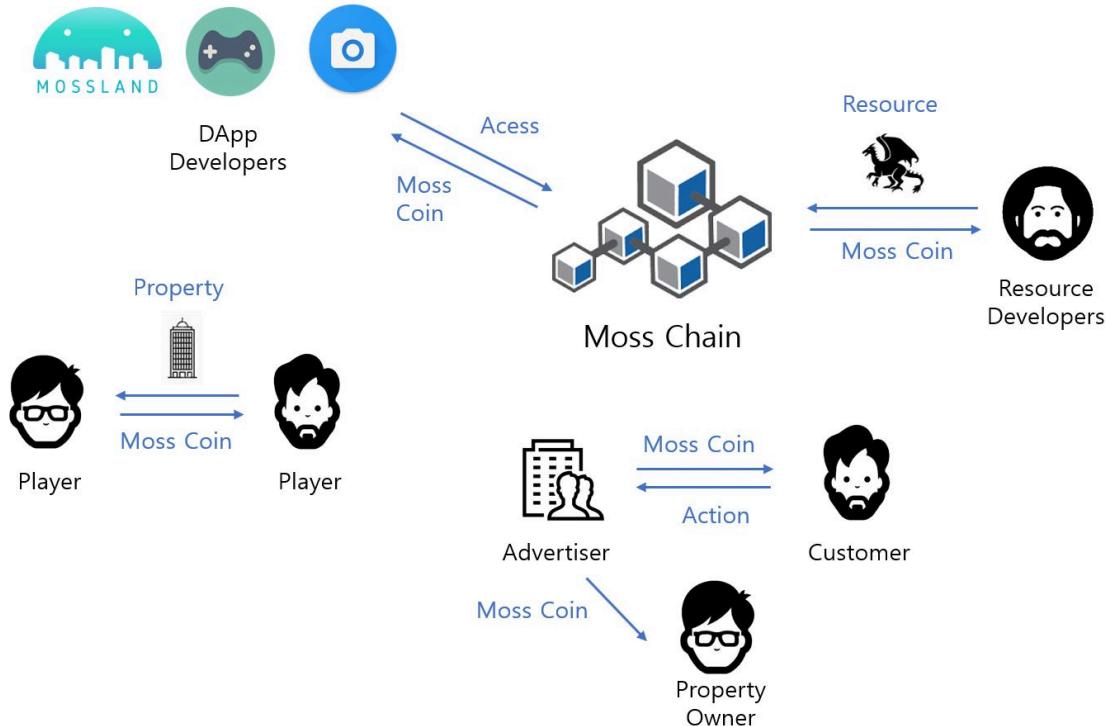


Figure 14: Transactions on Moss Chain

Figure 14 shows the economic transactions typically taking place on Moss Chain. Note that when *Mossland* changes from off-chain to on-chain, all trades by Moss will be replaced with Moss Coin.

- **Resource Development and Sales**

Resource developers create 3D model data and animations suitable for augmented reality accessories and register them on the Moss Chain at the desired selling price. When someone purchases the Accessory, the resource developer receives the Moss Coin and pays the fee to the Moss Chain. When this pipeline is operational, content creation by any developer will be permissible on the blockchain and within the *Mossland* platform created by Moss Chain. This will greatly increase asset production capacity by allowing anyone to create and sell register virtual assets on the blockchain.

- **Property Auction**

Mossland's in-game auction house will turn into an on-chain auction through Moss Chain. Instead of Moss, all the assets will be traded in Moss Coin and entire process of auction bidding and winning will be recorded and stored in Moss Chain transparently. A certain percentage of the transaction is paid to Moss Chain as a transaction fee, and Moss Chain distributes some of these fees to DApp developers.

- **Advertising**

Negotiations between advertisers and property owners will now take place through Moss Chain. All advertisers and the property owners who want to advertise will find their partners through Moss Chain and agree on terms and fees. The fee for the advertisement is distributed to the property owner, DApp developers and Moss Chain.

- **DApp Development and Commission**

The DApp developer receives a commission from the Moss Chain in almost all Moss Coin transactions, including auction and advertising. This type of direct commission will be a strong driver for Moss Chain's DApp development.

5 ICO (Initial Coin Offering)

5.1 Pre-ICO

The Pre-ICO is divided into a private round for volume participants and a public round for general participants, with a minimum purchase of 0.1 ETH and a maximum purchase of 1,000 ETH. The Moss Coin exchange rate will be set at 1 ETH = 10,000 MOC. A detailed overview can be found in Table 4, below. The Pre-ICO bonus structure for purchases made during the Pre-ICO will be applied as outlined in Table 5.

Table 4: Details of Pre-ICO

Item	Contents	
Schedule	Jan.29,2018 - Feb.11,2018	
Regular Price	1 ETH = 10,000 MOC	
Supply	Private	41,949,405 MOC
	Public	24,999,451 MOC
	Total	66,948,856 MOC
Min Purchase	0.1 ETH	
Max Purchase	1,000 ETH	
Limitation	Country where ICO banned	

Table 5: Pre ICO bonus plan

Tier	< 5 ETH	< 10 ETH	< 25 ETH	< 75 ETH	\geq 75 ETH
Pre ICO	35%	40%	45%	50%	55%

5.2 Main ICO

The main ICO will be divided into two rounds. The first is a strategic partners round for strategic fund partners and a public round for general participants. Participants can buy Moss Coin with Qtum(QTUM) and Ethereum(ETH). General participants in the public round can participate a minimum of 2 QTUM to a maximum of 1000 QTUM and minimum of 0.1 ETH to a maximum of 20 ETH. A detailed outline of the main ICO can be found in Table 6.

Table 6: Details of Main-ICO

Item	Contents	
Schedule	Mar.21,2018 - Apr.17,2018	
Regular Price	$1 \text{ MOC} = 0.12 \text{ USD}$ $1 \text{ MOC} = 0.12 / Q_{\text{main}} \text{ QTUM}$ $1 \text{ MOC} = 0.12 / E_{\text{main}} \text{ ETH}$	
Supply	Strategic Partners	101,250,247 MOC
	Public	123,750,302 MOC
	Total	225,000,549 MOC
Purchase Limit	$2 \text{ QTUM} \sim 1000 \text{ QTUM}$ $0.1 \text{ ETH} \sim 20 \text{ ETH}$	
Limitation	Country where ICO banned	

Table 7: Main ICO Bonus Plan

Purchase Period	Week 1	Week 2	Week 3	Week 4
	3.21 - 3.27	3.28 - 4.3	4.4 - 4.10	4.11 - 4.17
Bonus	15%	10%	5%	2.5%

The exchange rate for the main ICO will be determined based on the average value of Ethereum during the Pre-ICO and the value of Ethereum at the time of the main ICO. This is designed to protect both participants in the Pre-ICO and the main ICO. The Ethereum price for the calculation will be set according to the market price of Bittrex¹⁾, and the average price of the Pre-ICO will be calculated as a median price between minimum and maximum prices during the Pre-ICO. Since the Main ICO is held over four weeks, the price of Moss Coin during the Main ICO will be updated each day and will be determined by the respective market price of QTUM and ETH at the time of the renewal. Bonuses for Moss Coin purchases during the main ICO are outlined in Table 7.

1) <https://www.bittrex.com>

$$P_{main_ico} = \frac{2E_{main}}{E_{pre_max} + E_{pre_min}} \times 10,000(MOC/ETH)$$

- P_{main_ico} = Standard rate of Moss Coin during Main ICO (MOC/ETH)
 E_{main} = Ethereum price during Main ICO (USD/ETH)
 E_{pre_max} = Maximum Ethereum price during Pre ICO (USD/ETH)
 E_{pre_min} = Minimum Ethereum price during Pre ICO (USD/ETH)

Updated after the Pre ICO According to Bittrex, the maximum price of Ethereum during the Pre-ICO was 1198.6 USD/ETH and the minimum price was 1182.0 USD/ETH. Therefore, the median price of Ethereum is determined as 1190.3 USD/ETH. The price for Moss Coin during the main ICO will be set based on this calculation, and round up to the nearest cent.

$$1 \text{ MOC} = 0.12 \text{ USD}$$

$$1 \text{ MOC} = 0.12 / Q_{main} \text{ QTUM}$$

$$1 \text{ MOC} = 0.12 / E_{main} \text{ ETH}$$

Q_{main} = Quantum price during Main ICO (USD/QTUM)

E_{main} = Ethereum price during Main ICO (USD/ETH)

5.3 Moss Coin lock-up period and distribution schedule

Moss Coin purchased during the Pre-ICO and the main ICO will be distributed after completion of a Know Your Customer verification period. Moss Coin will be distributed according to the distribution timeline found in Table 9. For reference, D+0 is the date initial Moss Coin is distributed after the main ICO. Note that the distribution timeline for Moss Coin purchased at a standard price and Moss Coin received as a Bonus have separate lock-up periods.

Moss Coin Volume	< 250K MOC	< 1M MOC	$\geq 1\text{M MOC}$
Participated MOC Lock-up Period	-	30 days - 90 days	30 days - 180 days
Bonus MOC Lock-up Period	30 days - 90 days	30 days - 180 days	30 days - 360 days
Team, Advisor MOC Lock-up Period	360 days		

Table 8: Moss Coin Lock-up Period

MOC Distribution	< 250K MOC		< 1M MOC		$\geq 1\text{M MOC}$		Team & Advisor
	Partici-pated	Bonus	Partici-pated	Bonus	Partici-pated	Bonus	
D+0	100%	-	-	-	-	-	-
D+30	-	34%	34%	17%	17%	9%	-
D+60	-	33%	33%	17%	17%	9%	-
D+90	-	33%	33%	17%	17%	9%	-
D+120	-	-	-	17%	17%	9%	-
D+150	-	-	-	16%	16%	8%	-
D+180	-	-	-	16%	16%	8%	-
D+210	-	-	-	-	-	8%	-
D+240	-	-	-	-	-	8%	-
D+270	-	-	-	-	-	8%	-
D+300	-	-	-	-	-	8%	-
D+330	-	-	-	-	-	8%	-
D+360	-	-	-	-	-	8%	100%
Total	100%	100%	100%	100%	100%	100%	100%

Table 9: Moss Coin Distribution Schedule

5.4 Perks for Moss Coin buyers

The following perks are provided to the ICO participants.

- **Bonus**

Pre-ICO and ICO participants will receive a bonus which allows the purchase of Moss Coin at a discount compared to the primary exchange rate. The company will not issue additional Moss Coin.

- **Pre-Auction for Landmark Properties**

Due to the nature of the *Mossland* virtual property market, early competition and squatting on famous properties is inevitable. To prevent squatting and massive consolidation in the *Mossland* property market, the company will be the first owner of a number of major landmarks around the world. These properties could later be auctioned off by the company for purchase by players, after the market has been more well established and populated.

Some company-owned landmark properties may be utilized to create Augmented Reality Demonstration Streets as a showcase for *Mossland*. This will allow us to showcase properties and accessories in a virtual property market which players are just beginning to beautify. This will serve two purposes: To create a more compelling early-game experience, and to showcase how players can improve their own properties as they play.

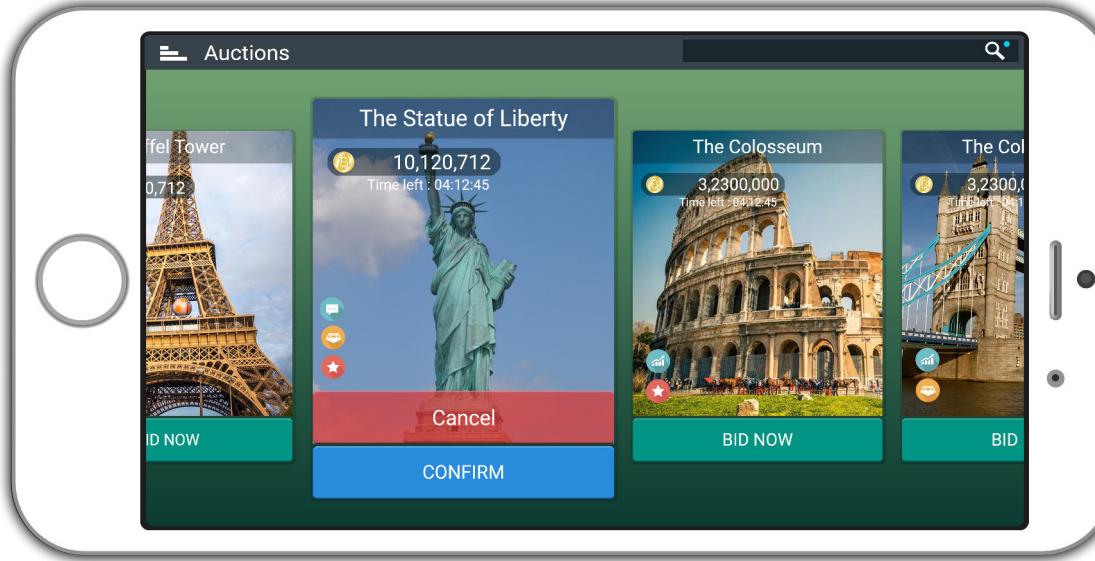


Figure 15: Pre-auction for the landmark properties

The company will also select a number of properties globally to be sold during the *Mossland* pre-auction. The pre-auction will take place prior to the enabling of in-app purchases, in order to give ICO participants and Moss Coin owners the opportunity to

acquire properties at launch. Early property owners will benefit from reliable increases in value over time of their virtual properties.

5.5 Policy and precautions

ICO participants must acknowledge the following policies and precautions.

- **Risk and uncertainty**

This White Paper only describes a business plan and a vision, and does not guarantee any positive business result. Players and participants must acknowledge that the business plan can be altered at any time. Please note that all purchases of Moss Coin during the Pre-ICO and the Main ICO shall be governed by the terms and conditions : <https://moss.land/terms>

- **ICO participants**

Citizens of countries where ICOs are prohibited cannot participate in the Pre-ICO or the Main ICO.

- **Languages**

The original version of this White Paper is in English and translated versions may have inaccuracies or errors. The English version of the White Paper shall take precedence over the translated versions. Please refer to the English version of the White Paper if you have require any clarification.

- **Usage of Moss Coin**

Moss Coin will only be used as described in the White Paper and is a utility token. The Moss Coin does not entitle its owner to any voting rights or dividends and is not intended to constitute securities in any jurisdiction.

- **Cancellation and Refunds**

There will be no cancellations of Moss Coin purchases, and no refunds for completed purchases.

6 Market Insights

6.1 Location-based Check-in app

When GPS technology became a core component in most smartphones, many location-based apps and networks were created. These include Foursquare, Latitude, Loopt, and Gowalla, among others. Foursquare was the market leader before giants such as Facebook and Google introduced check-in features to their existing social networks. As a result, Foursquare's usage is in decline.

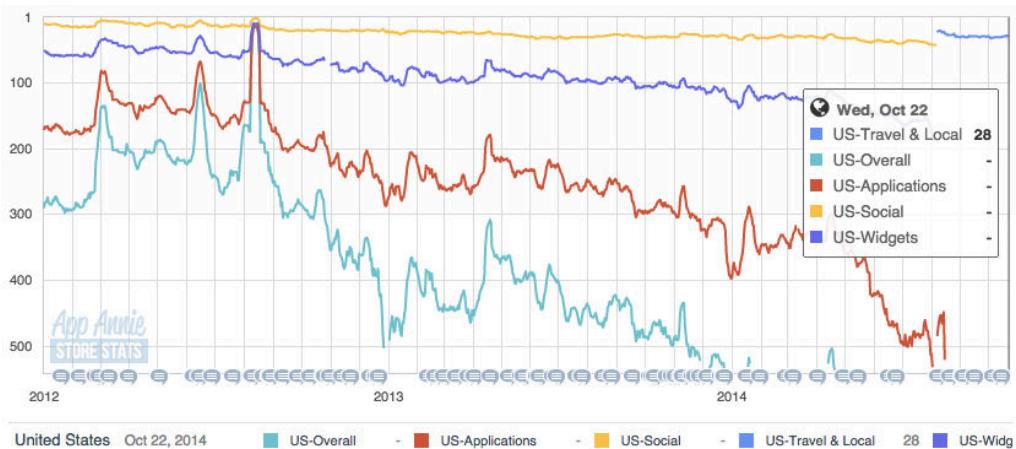


Figure 16: Foursquare's Google Play historical ranking data

Once the market leader, Foursquare's success and progress contributed served as inspiration for *Mossland*. By focusing on a simple action of rather than extensive gamification, Foursquare was able to grow rapidly and hold ground against Facebook Places. However, as Facebook continued to position itself as an integrated social networking service, using another app only to check-in became inconvenient. Pressure from Facebook Places in the social space, along with Yelp and other check-in applications meant that Foursquare's simple mechanics were no longer sufficient to drive engagement.

Mossland attempts to combine the best of both strategies: A simple, proven core interaction loop in check-in, and a more complex layer of gameplay that promotes many forms of player-player interaction and market engagement. Players are rewarded for their participating with in-game rewards, and driven to achieve and to optimize their gameplay experience by owning and improving properties. This focus on player-centric engagement differentiates *Mossland* from other social networks or simple check-in services by putting the player at the center of the experience and giving them the ability to explore, achieve, and interact with other players in a way that is both rewarding and engaging.

6.2 Item Trading Market

In-game item trading markets have a long history in online gaming. In the beginning, the value of digital game items was questionable, but players often created ways to trade them

online. In spite of this, many countries banned sales or trades of digital game items due to similarities with online gambling.

One of the most well-known cases of regulation around real-money auction houses and digital item sales took place in South Korea, with the release of Diablo III. Activision-Blizzard originally planned to support a real money auction house in Diablo III in South Korea. However, the Korean Game Rating and Administration Committee classified the auction house as online gambling, and regulating it accordingly. After a long dispute, the release of Diablo III was finally approved, but only after Activision-Blizzard removed the real-money auction house from the game in South Korea.

However, the Korean Supreme Court has ruled digital game items in NCsoft's Lineage as legitimate assets, which can be rewarded in exchange of long hours of digital labor and time. But virtual item trading for real money when purchases are governed by any random probability or unlocks is classified as online gambling and therefore illegal in South Korea. Therefore most gaming companies do not support game item trading with real money to avoid the legal risk of having their games classified as online gambling. In the meantime, 3rd party game item trading platforms such as Itembay support item trading between players and collect a transaction fee. Due to the lack of safety and security, there are many cases of fraud.

Although some countries restrict and the others allow in-game item trading for real money, the overall market size is substantial and has great growth potential. It is no secret that Planet Calypso in Entropia Universe was sold for \$6,000,000 USD. Entropia Universe supports real money game item trading.



Figure 17: Most expensive digital game item : Entropia Universe - Planet Calypso

The primary advantage of using a cryptocurrency-based system to manage transactions in *Mossland* is that it allows for secure transactions between players and between the com-

pany and players. These secured transactions ensure that in-game items can't be simply stolen or misallocated, and when a player makes a purchase, that purchase can be verified.

In such circumstances, introduction of cryptocurrency using blockchain technology can be a game changer in digital game item trading market. Cryptocurrency do not have a country of issuance nor a concept of nationality and only cryptocurrency owners are bound to be responsible in the country where they withdraw to the fiat money. Service operation company's role is only to issue the cryptocurrency and distribute in the trading market. Withdrawal of game money to fiat money will be externalized through cryptocurrency exchange and secured by blockchain technology.

Mossland envisions a service that can securely and safely enable digital game item trading and exchanges using cryptocurrency and helping players avoid using unreliable or dangerous 3rd party platforms.

7 Mossland Development and Launch Schedule

Mossland 's development milestones and launch schedule are outlined in Fig. 18 below. After the *Mossland* Pre ICO and Main ICO are complete. Any proceeds will go to fund alpha build development in 2018 and a closed beta test in early 2019. *Mossland* will then be soft launched in a limited number of countries to test and enhance the gameplay and resolve any remaining technical issues before a global launch in late 2019. The *Mossland* pre-auction for landmark Properties will be held after global launch.



Figure 18: Project Roadmap

8 Team

8.1 Reality Reflection

Reality Reflection is a VC-backed Virtual Reality and Augmented Reality startup specialized in digital human character and game development. Founded in 2015, the Reality Reflection team is made up of 18 professionals with backgrounds in VR and AR technology, game design, and marketing.

Company Name	Reality Reflection
Location	Korea
Established	2015
Homepage	https://www.realityreflection.com
Business area	VR, AR, Digital Human character
Portfolio	Miniature Tower Defense (2016) Music Inside (2016) Speed Ball Arena (2017) VMoji (2017) Gangsta Underground Poker (2018)



Figure 19: Reality Reflection VR Studio for 3D Digital Human Character

VR Games Reality Reflection was established with a clear vision of the Virtual Reality world. The studio has released VR games on all available VR platforms including HTC Vive, Oculus Rift, Playstation VR, and Samsung Gear VR, and has accumulated a great deal of technical and design experience in AR/VR game development.



Music Inside

VR Music Rhythm Action Game
Oculus Touch launch title
Unreal Engine showcase game
Amazon AWS Gamelift showcase
<http://www.musicinsidevr.com>



Speedball Arena

Multiplayer VR Sports game
Unreal Engine showcase
<https://www.speedballarena.co/>



Gangsta Underground Poker

Multiplayer VR poker
Release planned in 1Q 2018

Digital Human Reality Reflection also has a focus in digital human technology with a goal of accurately representing human characters in virtual worlds. Utilizing Asia's biggest 3D scanning studio, with 160 Digital SLRDSLR and depth cameras, they have been experimenting with enhanced 3D human scanning, image compression, and real-time photo realistic rendering technology. Based on internally developed technology, Vmoji, a 3D face recognition video chatting app, was released in December 2017. Reality Reflection is also engaged in a joint R&D project with SK Telecom, developing artificial intelligence-based realistic avatars. This project will be demonstrated at Mobile World Congress 2018 in Barcelona.



Figure 20: Digital 3D human scanning

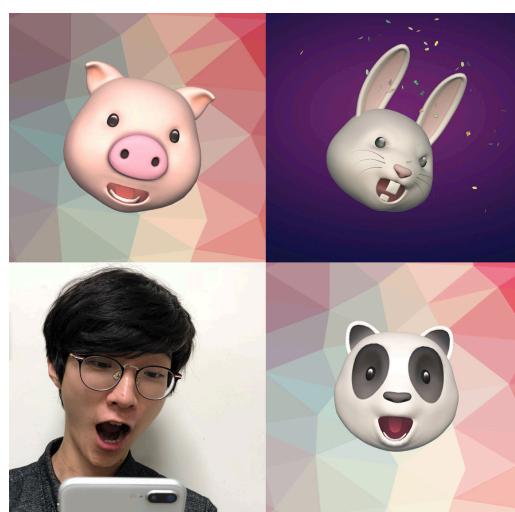


Figure 21: Face recognition chatting app VMoji

8.2 Members

8.2.1 Team



Wooram Son
CEO, Co-Founder

3D Computer Graphics Expert
Former Samsung Electronics
Software Engineer



Chester Roh
CSO, Co-Founder

Serial Entrepreneur
Founder of
Inzen (IPO in Korea),
TNC (acquired by Google),
5Rocks (acquired by Tapjoy)



Minuk Kim
CTO, Co-Founder

3D Computer Graphics Expert
Former Pantech Software
Engineer



Yongjun Hong
CFO, Co-Founder, KICPA

Former 5Rocks CFO
Former PwC Korea Accountant



Sean Oh
COO, Co-Founder

Digital Human Character Expert
Former Samsung Electronics
Software Engineer



Don Lim
VP of Business Development

Former General Manager of
Com2us USA, Inc.
Former IBM Advisory Sales Rep



Byukryun Choi
Lead Character Artist

Former NS Studio
Character Artist



Sangmin Lee
Lead Environment Artist

Former M Game
Environment Artist



Youngdae Cho
Client Engineer

Former NHN Next
Software Engineer
Former 5Rocks
PR/Marketer



Yunu Kim
Server Engineer

Former Line Games
Software Engineer



Junchel Park
Blockchain Engineer

Former Kakao Games
Software Engineer



Hyunwook Nam
Blockchain Engineer

Former NHN Next
Software Engineer



Seunghyun Kim
Software Engineer

Former NHN Next
Software Engineer



Hyunbin Nam
Game Designer

Former Affinity Game
Designer



Jerome Hernandez
Creative Engineer

Former CERN
Creative Manager



Emily Park
PR Manager

Former Lineable
PR Manager
Cheil Worldwide A.E.

8.2.2 Advisors



Jason Han
Blockchain Advisor

Co-Founder & Partner/CTO,
FuturePlay
Founder & CEO,
NexR (Acquired by KT)
Adjunct Professor, KAIST MBA
KAIST PhD in
P2P and Distributed System



Louis Jinhwa Kim
Blockchain Advisor

Co-founder, Director, Korea
Blockchain Association
Co-founder, Korbit
Director, Tide Institute
Author of World 1st Bitcoin Book,
'Next Money Bitcoin(2013)'



Jeffrey Lim
Startup Advisor

18+ years of experience in
startup ecosystem,
Former Head of Campus Seoul,
Google
Former venture capitalist at
Softbank Ventures
Serial Entrepreneur



Duhee Lee
Startup Advisor

Founder LIKELION,
Founder Kongdoo,
Google Impact Challenge, First
Place (People's Choice)
Speaker, 66th UN NGO



Charles Rim
M&A Advisor

General Partner, Access Ventures
MD, Tapjoy Korea & SE Asia
Venture Partner, DFJ Athena VC
Head of M&A, Google APAC
CSO, Yahoo Korea & SE Asia



John Chang
Investment Advisor

General Partner, Access Ventures
APAC Head-Equities,
Barclays Asia
CEO, Deutsche Bank Korea
Co-Founder, Access
Communications



Peter Van Dyke
AR UX & Design Advisor

Interactive UX/Production, Apple
CSO & Product Head, GTR
Production Head,
npnf KR/SK Planet
Creative Co-Director, Com2uS



Min Pyo Hong
Security Advisor

Founder, SEWORKS
Founder, SHIFTWORKS
(acquired by Infraware)
Advised governments on digital
security issues for 20+ years
Five-time consecutive finalist at
DEFCON CTF



Wonchai Lee
Monetization Advisor

Sr. Football Trader,
The Hong Kong Jockey Club
Sr. Odds Compiler,
Singapore Pools
Oddsmaker, SportsToto



Ilya Mikov
Cryptocurrency Gaming
Advisor

Co-Founder, Active Games
Founder, Mobile Active
Successfully raised an ICO round
for its mobile MMORPG
Lordmancer II.