

Mothership: A Model of a User Owned and Moderated Social Network

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As of October 2021, the market capitalisation of social media companies who advertise on top of user generated content approximates 2 trillion USD. According to Digiwatch 10 billion hours per day are spent creating and consuming social media content, generating hundreds of billions in advertising per year while the users have zero ownership in any such companies.

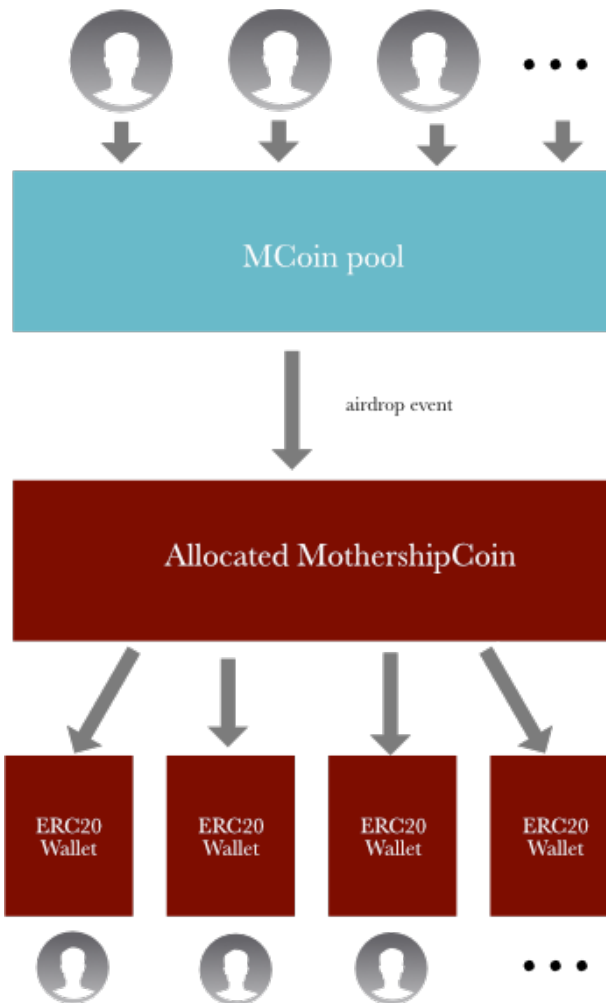
Perhaps a more pressing issue is the monopolisation that these companies have over the public forum. A small group of centralised individuals decide what who will heard and what will be seen according to their political or economic perspective.

With the help of blockchain technology, including Ethereum ERC smart contracts and XRP side-chains, Mothership takes aim at these problems in hopes of a future in which users own their content and what they can see in a more democratised way.

MothershipCoin: The ERC20 Coin for Mothership

MothershipCoin is the ERC20 smart contract governed coin that determines the ownership of Mothership. A fixed amount of MothershipCoin will be minted. A portion allocated to the founders, developers, investors, and users.

The 20% allocation of MothershipCoin earmarked for contributing users of Mothership and will be distributed monthly over the period of four years. MCoin is the in-app currency that will be later converted to MothershipCoin. Exactly how users earn their coin is defined and discussed later in the paper.

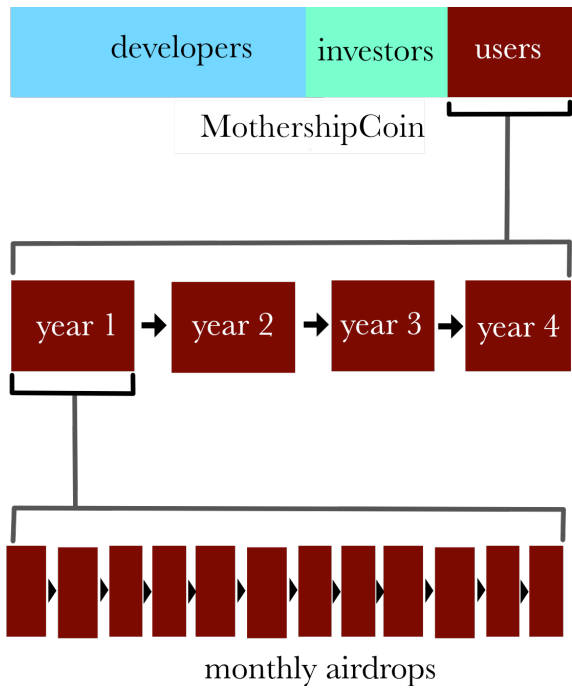


To participate in the monthly airdrop, users will allocate as much MCoin as they want into the monthly distribution pool. Once the airdrop event is triggered, all the MCoin in the pool will be deducted from the participating users accounts and converted into MothershipCoin. The amount of MothershipCoin received will be directly related to your portion of the pool and the size of the airdrop. For instance if Sally has contributed 0.01% of MCoin to the monthly MCoin pool. She will receive 0.01% of MothershipCoin contained in the airdrop.

Note: To deposit money in the pool, users will be required to connect ERC20 enabled wallet.

After the 4 years, a portion of the previous years cash revenue will be used to buy MothershipCoin. These purchased shares will be earmarked for airdropping to MCoin owners monthly over the following year.

Put simply, for the first four years the holders of MCoin will be able to purchase allocated ownership shares and subsequently will be able to purchase ownership shares through revenue apportioned buybacks.



MCoin: Tokenized User Interaction

The purpose of MCoin is to reward those who contribute value to Mothership. The only way to mine MCoin is through interaction in Mothership.

MCoin will live on an XRP sidechain. One of the many benefits of using XRP technology is the ability to scale transactions while not interrupting the main XRP blockchain.

How to Get MCoin

Contribute Quality Content in Mothership

Sell of a Mothership NFT

How to Spend MCoin

Participating in MothershipCoin Airdrops

Purchasing Mothership NFTs

Message User that is not a Follower

Contribution of Quality Content

The idea of a user reputation currency is not new. Reddit's Karma system is the best working example of a virtual currency used to reward good interactions on its platform. This includes rewarding upvoted posts and comments. MCoin will incorporate similar functionality except instead of the currency being virtual, it will have real value.

Earning and Deducting MCoin

Action	MCoin	Triggers
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Action	MCoin Rewarded	Triggers Account Review
Connect ERC20 Wallet	10	
Flagging a post violating community guidelines that is removed	8	
Logging activity for today and yesterday	3	
Voting on an account suspension	3	
Follower Gained	3	
User Photo Post Liked by a 3rd Party	2	
User Photo Post Shared by a 3rd Party	2	
Verifying a flagged post	2	
User Link Post Liked by a 3rd Party	1	
User Link Post Shared by a 3rd Party	1	
User Comment Liked by 3rd Party	1	
Reacting to 5 posts in 1 Day	1	
User Photo Post Disliked by a 3rd Party	-1	
User Link Post Disliked by a 3rd Party	-1	
User Comment Disliked by 3rd Party	-1	
Follower Lost	-3	
User Photo Post Flagged and Removed due to violation of community guidelines	-5	Yes
User Link Post Flagged and Removed due to violation of community guidelines	-5	Yes
Flagging a post that does not violate community guidelines (according to other users)	-3	
Account Suspension	-30	
Message a User that is not a Follower	-1	
Reading a Message from a NonFollower	1	

*These numbers and actions are subject to change before release

Rewards can be adjusted to incentivise the type of preferred content and interaction on the network. For instance, if Mothership adds a new feature like an audio post, the network can reward twice as much MCoin to a quality audio post in relation to a standard photo or link post. It is also possible to incentivise daily login behaviour, increasing the amount of MCoin for each successive day the user has logged in and logged some activity.

There is an economy to moderation of content on Mothership such that if your post is flagged and removed, you are de facto paying for other users to verify its violation against the Community Conduct Guidelines. If it is judged that a user unjustifiably flagged content, that user will also end up de facto paying for the price of polling other users to verify the flag.

Monitoring Suspicious Activity

Transacting MCoin on the blockchain will enhance the security of Mothership by assisting in detection of the accounts that are fraudulently farming MCoin to their own set of accounts. In addition, IP detection, collusion analysis tools, and human verification will be used to preclude users from creating multiple accounts and farming out MCoin to themselves. As its user base grows, Mothership will be able to hire hackers and developers to attempt to game a simulated development network and earn points for themselves. As vulnerabilities are exposed, updates will be made to the network.

A photo must be viewed for a minimum of 2 seconds for it to be marked as consumed and a video must be watched for the majority of its duration for it to be marked as consumed. Mothership may not reward the user for content in an instance where the video or photo is liked but not marked as consumed.

Multi-tiered Features based on MCoin Earned

Hacker News and Wikipedia have the notable mechanic of a multi-tier trust system based on reputation points by enabling more features as reputation level goes up. For example, a new Hacker News account will only be able to upvote a post, while an account with sufficient reputation points will have a new downvoting feature enabled.

Note that “MCoin Earned” are not the same as the MCoin in your wallet as you may have spent them on NFTs or an MothershipCoin airdrop.

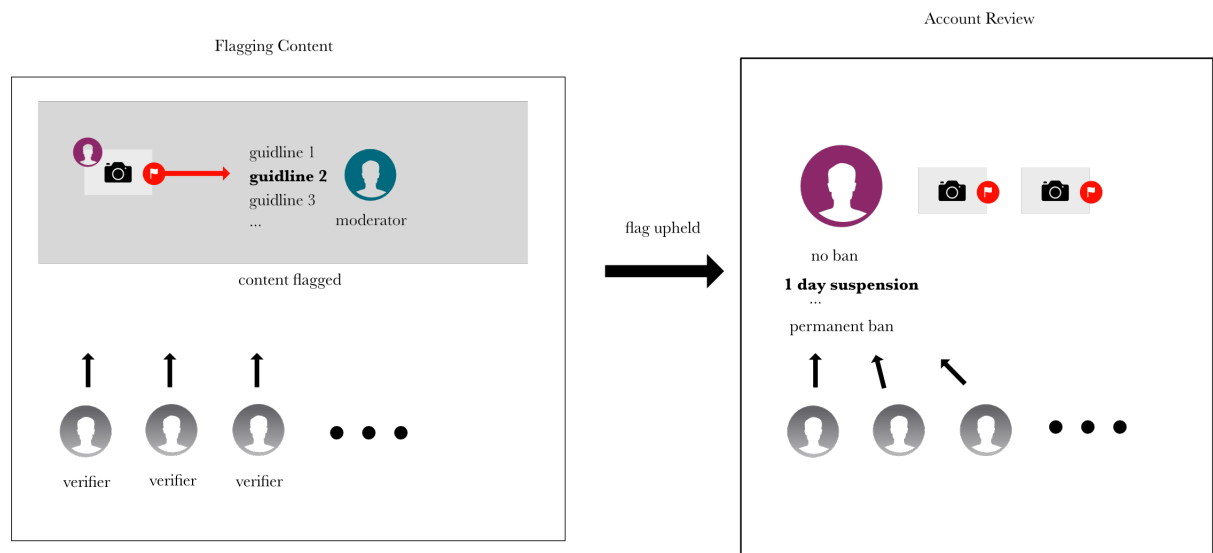
Feature	MCoin Earned Required
Disliking a Post	250
Reviewing a Flagged Post for Removal	250
Reviewing an Account for Suspension	700

*These numbers are subject to change before release

The Moderation Flow

In Mothership, a user will have to have earned a certain number of MCoins in order to be able to flag posts for removal, a certain number of coins to suspend an account, and a certain number of coins to ban an account.

When a post is flagged for removal, the flagger will chose the part of the Community Content Guidelines that the post violates along with an optional comment. the event will be broadcasted to a limited number of moderators for that either will vote to uphold the flag or remove the flag. If the flag is removed, MCoin will be deducted from the original flaggers account for flagging something that didn't violate any guidelines. If the flag is upheld, the post will be removed, MCoin will be added to the flagger's account. In all cases, voters will receive MCoin for their moderation. Once a flag has been confirmed and the post removed, a motion to suspend the account will broadcast to a new set of users. These Users will be presented with the removed post and a history of the account in question. From this data, the moderators will vote on the time period of banning ranging from "Don't Ban", "1 Day",, to "Permanent Ban". X Moderators will be polled. The option with the most number of responses will be implemented by the system. If there is a tie after X moderators have voted, X new moderators will be polled with the tied options only to break the tie. This algorithm will continue until a consensus is reached.



These governing rules imply that early, active users will hold most of the governing power so it is imperative that the network mindfully decentralizes the first users of the platform.

Community Content Guidelines

The Community Content Guidelines are out of the scope of this paper. However, it is the view of the author that the guidelines should closely follow the articles specified in the US Constitution and keep its hands from meddling in the political or cultural affairs. This means that the content's merit and exposure should be determined by the user, not by a centralised group of curators deciding who should be promoted, banned, shadow banned or otherwise.

As the stability of user trust increases, it may be possible to create a DAO (Distributed Autonomous Organisation) that is responsible for proposing and voting on Community Content Guidelines, fully removing the developers from administrative responsibility of content guidelines. Participation in the App Store and Google Play ecosystems will likely complicate such measures.

NFT Economy

It may be determined by the user that it is in their best interest to spend their MCoin on an NFT in hopes of profiting on the resale or displaying it on their profile. Many social media sites display a blue checkmark next to the user's name, elevating their status beyond a standard user. Mothership NFTs would enhance a user's exposure in a similar way. Number of NFTs owned, rarity of NFTs owned, and prestige of the NFT

Airdropping NFTs to its first users is a path to create awareness of Mothership itself. For instance, Mothership could initiate a promotional campaign where the first users to earn 1000 MCoin will receive one of 10,000 generated OG NFTs.

Partnering with companies to create collections will increase the exposure of the company and add legitimacy to the NFT drop. For example, if National Geographic created limited edition NFTs of outstanding nature photography for Mothership. These network effects would create mutual awareness of Nat Geo in the Mothership community and vice versa. By

strategically pursuing NFT partners, Mothership will be able to curate the demographics of its user base and it grows. Partners would not be limited to corporations. They can include artists, influencers, production companies (for movies/music), and more. These collectible NFTs can be bought with MCoin only.

NFTs are a valuable promotional vehicle but as the platform becomes fluent with NFTs, more opportunities involving NFTs will become available.

User Experience

The ideal of a user owned and moderated is pleasant thought but the success of Mothership will hinge on its name, design, and user experience.

The 18-29 demographic have the free time and open-mindedness to adopt new behaviours. According to a Pew Research study in April 2021, 65% of 18 to 29 year olds use Snapchat and 71% use Instagram. Motherships design and features will take cues from these apps while experimentally building rolling out new, simple to understand, functionality. An example of a new feature would be peer to peer payments.