

DeBox: An issue, aggregation and redistribution system for social asset and liquidity

Version 1.01

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Abstract: The paper presents an innovative framework for aggregating and redistributing social assets and liquidity within the cryptocurrency realm. It highlights the untapped potential of integrating social networking dynamics into the cryptocurrency market to create and manage new assets derived from influence and attention. Utilizing network effects and bonding curves, the document outlines a methodology for pricing and distributing liquidity that aims to enhance the financial attributes of cryptocurrencies by introducing novel social assets and enabling their decentralized liquidation. © 2024 The Author(s)

1. Introduction

Social assets and liquidity are a new paradigm in the crypto world. Finance has been the most successful application of Blockchain Technology since the birth of Bitcoin. DeFi has brought about a revolution in the issuance and distribution of financial assets and liquidity, with Uniswap already surpassing Nasdaq in terms of trading volume [1]. However, social network applications that have the greatest influence on the traditional Internet, such as Facebook, X (formerly Twitter), and WeChat, have not yet achieved significant success in the crypto fields.

For social protocols and applications based on blockchain and crypto, creating brand new social assets and providing corresponding social liquidity and liquid redistribution are the most significant ways to release crypto's native financiality. Based on social networks, new assets will be created based on influence and attention, and the pricing and liquidity distribution will follow the rules of social network effects and bonding curves unlike any other assets before.

2. Social Asset

Proof of Influence (PoI): A novel consensus mechanism where users' influence, based on their social network, determines the intrinsic asset value. The mechanism redefines the intersection of social networking and crypto, offering a tangible way to quantify and reward social influence. Its value grows not just from financial speculation but from the real, measurable impact users have within their communities.

The social asset offers a visionary approach to reflecting the true value of social networks in the digital age, which creates a sustainable and equitable ecosystem where social capital is recognized as a valuable commodity.

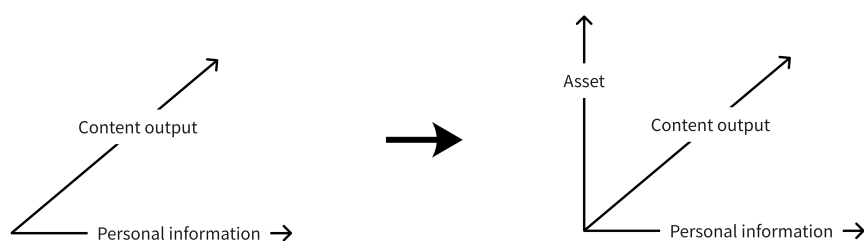


Fig. 1. Influence to asset

This concept underscores the potential for new cryptocurrencies to emerge from beyond traditional financial models, tapping into the vast untapped potential of social interactions and influence in the digital economy.

3. Social Liquidity

Before the birth of Uniswap, the term "liquidity" was not widely used to describe the efficiency of a pair; instead, centralized exchanges preferred the terms "depth" or "volume." Liquidity in DeFi typically refers to the total amount of liquidity in a pair as well as the pair's balance. A pair is also referred to as a "Pool", and the more tokens a pool has and the more evenly distributed (almost 1:1) it is, the better the pool's liquidity. Moreover, because of the Router mechanism (cross-pool token swap), the more pools that have access to the same token, such as ETH or WBTC, the higher the liquidity of this token.

Similar to this, Social liquidity is defined as the number of individuals that can be distributed in the same information distribution unit (e.g., group or channel). Take for instance how Discord, Telegram, and WeChat are compared. Discord allows for the grouping of all users into a single server, whereas Telegram requires the creation of multiple language groups and WeChat requires the creation of numerous groups due to its maximum user size. As a result, Discord is superior to Telegram and WeChat in terms of social liquidity (Discord, Telegram, Wechat).

The Social Aggregation Index (SAI) could measure the degree to which social features contribute to the aggregation of users and assets. A potential formula might be:

$$SAI = \frac{1}{N} \times \sum_{i=1}^N \frac{AI_i}{U_i} \quad (1)$$

Where:

- AI_i is the Aggregation Impact, measured by user retention or engagement metrics
- U_i is the number of Users interacting with the i th feature.
- N is the total number of social features on the platform.

The social liquidity shall be fully decentralized and not rely on specific controllers. Generating by contract addresses, anyone could create a token-gated information unit to provide social liquidity.

4. Social Trade

4.1. Decentralized trade rebate

Traditional decentralized trading incentives are not sustainable due to the lack of "positive externality", in which most dexes with trading incentives rely on the token emission of the project itself, which puts the trading volume and token price in a death spiral.

A new model of "decentralized social rebate protocol" with "positive externality" based on the social network can be proposed: *User A* shares information about tokens to *User B* through the protocol, and after *User B* completes the transaction, a part of the fee is sent directly through the protocol to *User A*. This model has a "positive externality" because the input of value does not depend on the token of the protocol but on the information provided by *User A*. Based on the economic man principle, *User A* will continue to input information into the protocol since sharing the information is self-rewarding, thus putting the decentralized trade incentives into a positive flywheel phase.

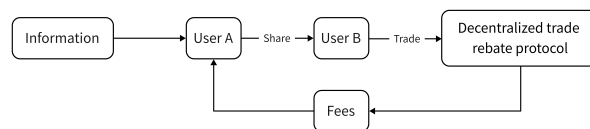


Fig. 2. Enter Caption

5. Social Infrastructure

DeBox is a DID-based blockchain community management solution and social infrastructure. It is poised to revolutionize the social landscape by introducing a novel protocol that takes into consideration of user's holdings and assets to create an accessible, authentic, multi-dimensional, and secure social graph for all. Through the credit

system, asset-gated chat group mechanism, and BOX feature, users are encouraged to provide authentic profiles of themselves and interact more actively on the platform to build their DID and social influence. Besides, with our mature content management system, high-quality content can be displayed and broadcast efficiently. In the meanwhile, creators are properly incentivized with the credits and commission fees.

To protect users' data and ensure security, we utilized the E2EE (End-to-end encryption method) for encrypting communications between receiver and sender such that they're the only parties that can decrypt the data (Fig. 3) [2]. This will be further reflected in our Voice Module like Voice Call and Space Room functionality.

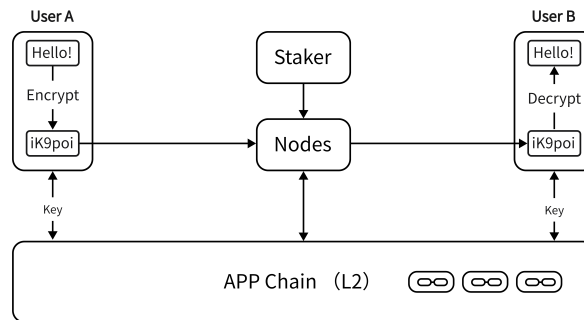


Fig. 3. E2EE process

Our vision extends beyond mere messaging or content sharing; we envision a decentralized ecosystem where users have ownership over their data, privacy, and social connections. With our novel protocol, DeBox aims to create a brand new paradigm for social interactions.

6. Permissionless Access Layer

DeBox is building the Permissionless Access Layer of Web3 through an Open Platform, serving as the gateway to a vibrant ecosystem of lightweight software applications. Think of it as the WeChat Mini-Programs for the decentralized world. Builders, developers, and entrepreneurs can permissionlessly create applications that seamlessly integrate with DeBox. For example, a marketplace called DeMoji on DeBox is built for artists who are keen on designing Meme Collections to benefit other users when they are messaging.

Leveraging smart contracts and standardized APIs and SDKs, builders are incentivized to create open-sourced micro-applications, social plugins, and personalized experiences on the DeBox Open Platform in a fast manner. Innovative initiatives after being reviewed by the founding team may have a chance of vDBX token rewards. In the long run, this will further enable frictionless interactions related to payment, accounts, content, and security while maintaining user sovereignty. Whether it's a decentralized marketplace, a collaborative workspace, or a social gaming hub, this will empower creators and builders to bridge the gap between social media and blockchain.

7. AI and Intent-Centric

The current landscape of Web3 systems is marked by complexity and accessibility challenges, necessitating users to navigate through fragmented infrastructure, which often results in suboptimal user experiences and vulnerabilities like MEV exploitation [3]. Intents, in the form of signed messages, provide users with a means to articulate their on-chain objectives, with third-party solvers managing technical intricacies to simplify processes and enhance user experiences [4]. Take the example of Account Abstraction, enabled by the validation logic inherent within smart contract wallets, which acts as the gateway for intents, has been increasingly used since debuting, which signifies the importance of the intent-centric approach.

DeBox leveraged AI's capabilities to address the technical complexities in intent-centric setups to make Web3 more accessible, engaging, and efficient. We introduced a variety of AI chat-bots designed to facilitate discussions, inject playfulness into conversations, manage user digital assets, enable peer-to-peer transactions, and contribute to governance decisions on blockchain networks. From comprehending context to deconstructing goals, to dynamically adapting to users' needs, and tailoring interactions accordingly, DeBox's infusion of AI transforms group dynamics into engaging experiences and aligns with the essence of an intent-centric approach.

8. Asset and Tokenization

8.1. DBX

8.1.1. Utility

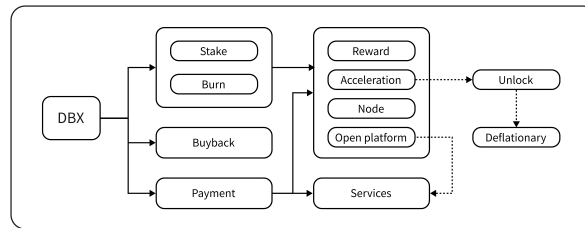


Fig. 4. DBX Utility

DBX is a core part of the DeBox ecosystem with multiple use cases, by staking or burning DBX, users can earn extra rewards or accelerate the unlocking process. DBX would be considered as the universal currency in the DeBox ecosystem, where all open platform DApp purchases and inner services are priced by DBX. For instance, DBX can be upgraded to the Club and Group or promote contents, as well as as a fee for certain transactions, these DBX will be bought back or burned. DBX is also liquidity in the DeBox, which allows users to reward, transfer, send Lucky Box, and reserve as DAO assets.

8.1.2. Allocation

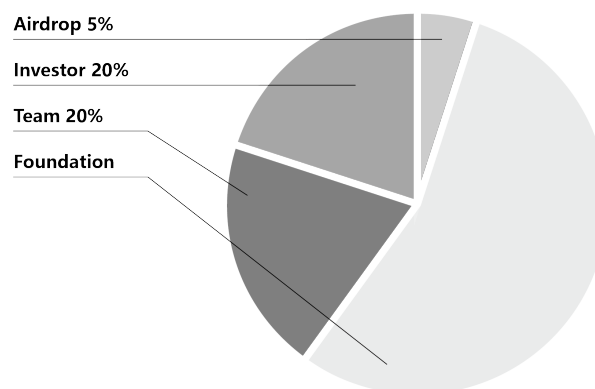


Fig. 5. Allocation

- Foundation: 55% unlocked in chronological batches after TGE

The majority of the tokens will be released to users and NFT holders in the form of Rewards

- Institutions: 20% Release in 24 months after TGE
- Team: 20% Release in 48 months after TGE
- Airdrop: 5% Release on TGE

8.1.3. Release

DBX will be unlocked in chronological batches after TGE based on the dynamic model, accelerating the unlocking process and active ecological activity will both burn more Token, sending DBX into the deflation phase.

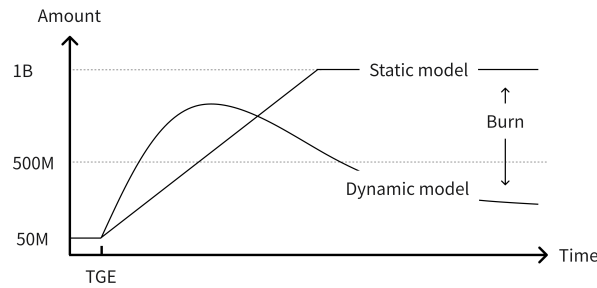


Fig. 6. Release model

8.2. NFT

Community governance in DeBox involves the collective participation of members who hold DeBox Guardians NFTs. These NFT holders can influence and drive the direction of the community's development through voting, proposing, and engaging in the decision-making process.

DeBox Guardians NFTs have additional premium rights to access extra DBX, privileges features, and benefits by holding and staking.

8.2.1. Role

- DeBox Guardians Penguin(DGP): Penguins are the OGs, wielding crucial governance power and influence within the community.
- DeBox Guardians Eagle(DGE): Eagles are enforcers, overseeing and managing the community, ensuring members adhere to rules and guidelines.
- DeBox Guardians Rabbit(DGR): Rabbits are builders, propelling community development, often in the role of developers.
- DeBox Guardians Cobra(DGC): Cobras represent the foundation, driving community growth and governance, and enhancing users' premium Web3 social experience.
- DeBox Guardians Shark(DGS): Sharks stand mysterious in the collection, and more information about DGS will be unveiled in the future.

9. Conclusion

The paper emphasizes the transformative potential of leveraging social network dynamics within the cryptocurrency ecosystem. It proposes a novel approach to asset creation and liquidity management, underscoring the significant role that social influence and engagement metrics can play in shaping the value and distribution of digital assets, and establishes a new trading and liquidity framework.

DeBox's architecture redefines social patterns, emphasizing user empowerment, trust, and community-driven governance. As we forge ahead, we'll introduce cryptographic primitives and consensus mechanisms that ensure data integrity, immutability, and censorship resistance.

10. References

References

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