Daolab

Whitepaper

Abstract

Daolab is a digital platform for establishing distributed organizations and investing in them. In essence, we provide a wallet for teams to manage their resources in a safe and streamlined manner, and a namespace with which investors can invest in them.

Why

For every company, every transaction and business decision made and acted upon is ultimately done within the limits of what the bank allows it to do with its money. Why? Because only the bank has access to the power of the state for reconciliation.

We provide a viable alternative for organizations and startups to manage their assets without having to depend on a centralized authority for making financial decisions.

A user can create a business anywhere in the world, set up a payroll and arrange funding from investors - all without having to rely on a banking account. Using smart contracts, we provide software templates that include the necessary business logic for users to deploy and configure to their necessary requirements.

1. Introduction

1.1 Current Limitations

Ethereum as a cryptocurrency has continued to gain traction and its foundation has proven itself as a frontrunner in innovation. The promise of becoming a platform for distributed applications however, still has much left to be desired.

The conceptual essence of decentralized autonomous organizations is the use of smart contracts to manage and track a broad range of financial interactions without the need of a trusted third party. This in turn eliminates the need of repetitive recording of contract exchanges between different records.

While lucrative, the development and deployment of such organizations have high barriers of entry. Smart contract development practices and tooling are still in their prenatal stages of maturity, with zero margin for error. Communication between daos' is essential and requires the establishment of new protocols to assign contract agreements between parties. Additionally, the system must be extensible upfront to allow changes and upgrades to such protocols and still maintain high standards of safety.

1.2 Solution

With the velocity of how fast thing change within the protocol space, we need to define what are the minimal requirements needed in order for teams to start an organization.

This involves managing three crucial elements: **assets**, **human resources** and **shares**. To reduce the barrier to entry, we provide a wallet with a streamlined user experience for teams to interface with.

2. The Daolab Wallet

2.1 Wallet Specification

A wallet for organizations has several requirements

Identity: this is the establishment of the identity and name of the organization similar to a twitter handle. They sell twitter handle names as twitter sells valuable twitter handles at a premium.

Shares: shares are a way to reward founders, investors, advisors, partners and employees and can determine the ownership and direction of the company.

Voting: the company's shareholders should be able to have a word over its actions. We will directly link this to ownership.

Policies: different decisions require different rules. Allowing different rules allows more flexibility and performance for decision-making within an organization.

Outgoing Payments: In order to facilitate spending and bookkeeping.

Incoming Payments: In order to facilitate payment processors

2.2 Asset Management

Asset Management involves the rules on delegating incoming and outgoing transactions. Assets include tokens, shares and gas. Spending assets involves the proposal and approval of an additional expense. Expenses can have rules of their own, can have schedules and custom policies.

2.3 Human Resources

Human resources involves the individual rights of each member, their permissions, their ultimate voting power and their salary. Salaries are a type of expense that are directly tied to individual members, thus any change in salary requires member approval. There are no financial tools for start up, they can't sell successful products.

2.4 Portfolio Management

Shares involve the management of shareholders and creation of portfolio indexes. The management of individual portfolios is a focus as well. We facilitate growth and tools both for startups and investors to setup clear-cut shareholder rights and expectations.

2.5 Funding

Getting funding is hard, requires significant marketing and requires looking for the right investors. For discovery, we provide namespace and a crowdfunding model for funding. With a low fee, we provide a market for both startups and investors to find the right fit based on their expectations for both results, risk and ownership of the company..

2.5 Implementation

As a dApp, Daoab will be based within an ethereum dApp runner. There are several runners available.

Runner	Description	Pros	Cons
Metamask	A Chrome Extension	Low Friction	> Chrome Only > Central Control
Parity	Full node with dApp browser	Full Node	High Friction
Native Application	A fully custom application based on electron	> Fully tailored user experience	> High Friction > Duplicated Work

3. The Daolab Foundation

The Daolab Network will be the decentralized autonomous organization as a service provider whose role is to provide easy and friendly for organizations and investors to operate.

Daolab will be bootstrapped with a very thin Constitution voted by its governance. New laws can be added and they can be amended by the governance of the Daolab.

Also a very important role of the core Daolab contracts will be to ensure membership of organizations in the network and check that they are following the established rules.

The network will operate by accumulating capital in the form of fees to the operation of the organizations transacting on the network. This fees will contribute to the network internal capital, that the network governance will freely allocate. The main destination of these funds will probably be service providers to the network, that will be necessary for the network operations.

These main services are:
- Development of core contracts that allows running decentralized organizations
- Share Exchange Service for selling and purchasing share indexes

4. DST, Daolab Service Token

As a currency, DST will be designed to represent the aggregate wealth of all registered organizations.

4.1 Network Kickoff and DST Issuance

To kickstart the network, an uncapped number of DST will be sold based on a predetermined price function that increases over time. The funds raised from the initial sale will be transferred to the Daolab Foundation to fund development of the Daolab Kernel and the Daolab Registry.

Some time after the sale ends, a Community members multisig will deploy the Daolab Registry once they consider it implements its stated mission and it is secure to do so. At this moment the network will initiate and governance decisions will begin to be made by DST token holders.

4.2 A Continuous Token model

DST will continue to be minted by the network following the initial sale and network deployment. Minting new tokens will have a cost, and a percentage of the fees (decided by governance) paid by organizations to join the network will fund the minting of new tokens. This creates an incentive for Daolab organizations to pay fees, as organizations that contribute more will receive more DST. This means that the organization will be more influential in network decisions.

The cost to mint new tokens will be determined by DST token holders. This will likely be a contentious decision, and one where the basic economic principles of supply and demand need to be considered. For example, consider the scenario where the cost of minting tokens is too low. More and more tokens will be added to the supply, until supply greatly outweighs demand. This is a recipe for inflation and the value of individual DST tokens will fall. Ultimately, we believe that token holders will eventually decide on a healthy equilibrium for inflation. By weighing the opinion of every stakeholder, the market will accurately reflect the optimal minting cost.

5. Network Services

5.1 Namespace Registration

One of the crucial parts of an ecosystem such as this will be the registry to facilitate visibility and a namespace of public organizations. With a namespace available, both members and users are able to have an accessible interface to find and search other organizations.

5.1 Shared Token Fund Registration

When managing a portfolio, it is desirable to have high level of performance and diversification. One one hand, the investor can manually decide on each individual investment, or buy shares of an already existing well performing, curated portfolio. It is thus pertinent for existing investment funds to be able to act as mutual funds and sell shares of their portfolio as well.

We can provide a market of portfolio's with specified performance. If a an existing portfolio wishes, they can register and sell shares of their portfolio at a market price they decide. This involves creating tokens that represent a group curated token pools that can be exchanged directly on the market.

5.2 Crowdsale

Startups require initial funding sources. Which can range from initial investors, public offers and/or crowdsales. As a solution, we provide marketing, arbitration and discovery for startups to reach their funding goals.

6. Goals

1. To provide users a free and streamlined wallet interface that offers the minimum necessary tools to establish a business on the Ethereum blockchain. This involves managing roles, policies, shares and payroll.
2. To provide a namespace service for companies to get visibility and to be accessible publicly online.
3. To provide a crowdfunding service for startups to submit their campaigns and access funding.