

Deconstructing DAO From an Individual-Centric Perspective

2021 Whitepaper

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DECONSTRUCTING DAO FROM AN INDIVIDUAL-CENTRIC PERSPECTIVE

WEB3 ECONOMY NEEDS SCALABLE, EXPANSIVE INFRASTRUCTURES AND BEYOND

The vision of Web3 is to build a decentralized economy, where decentralized businesses could run on top of the blockchain. Early iterations of the Web3 vision proliferated through DApps (Decentralized Apps) running directly on what is called the layer1 blockchain such as Ethereum. Due to many layer1 blockchains' low throughput design (e.g., Bitcoin ≈5 trxn/sec, Ethereum ≈15 trxn/sec), layer1 DApps are quite limited in terms of performance, scalability, and functionality.

Many in the blockchain community believe the real-world economy can be replicated on Web3. Yet layer1 DApps proved to be too inefficient and inadequate to achieve that goal. Those DApps settled on some isolated islands of applications that are far from a healthy decentralized economy. Nevertheless, the vision of Web3 lives on.

The blockchain community continues to push Web3 vision forward by building out infrastructures. One promising evolution path is various layer2 solutions on Ethereum, such as OR (Optimistic Rollup). The main goal of most layer2 solutions is to alleviate the performance bottleneck on layer1 blockchains by increasing throughput. However, one could argue that for the Web3 decentralized economy to flourish further, more functionalities are as important as high performance.

To build out more functionalities, we must look beyond the infrastructure layer and venture into what we call the organization layer of the Web3 decentralized economy, where we find a familiar construct called DAO – Decentralized Autonomous Organization. DAOs have been implemented on layer1 blockchains such as Ethereum but with limited functionality primarily centered around voting as a governance measure.

DAOs will play a much bigger role in the vision of a new generation of Web3 economy built on top of layer2 blockchains.

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DAO: THE BASIC UNIT OF THE WEB3 ECONOMY

Collaboration is a fundamental way in creating value, whether in a centralized economy or a decentralized one.

In a traditional centralized economy, company/corporation is the basic unit for conducting collaborations to create and transfer value. In Web3 decentralized economy, it is the individual-constituted DAO that performs a similar role.

Nevertheless, most people still view DAOs from a centralized organizational perspective. Seeing DAOs as the replacement for traditional organizations is a misleading conceptualization of a DAO in a decentralized economy context. In a decentralized economy, we must adopt a shift from our current perspective from an organization-centric one to an individual-centric one – that is the true essence of DAO.

A DAO has many distinctive features in a decentralized economy:

- **A company has boundaries,** but DAOs do not – with members joining or leaving all the time. A DAO is a flowing collective.
- **A DAO is composable,** which means a DAO can be combined to conduct specific missions and split or dissolve when missions are complete.
- **A DAO is individual-centric.** DAOs represent the innate attributes of their members where everyone has equal rights. Different and multiple values can coexist in a DAO.
- **Isomorphism** – two individuals who work with each other in a DAO, are the same as two DAOs who work together.
- **Inclusive.** DAO can provide services to other companies, and a company can also be a member of a DAO.

DECONSTRUCTING DAO

THE MISSION OF A DAO

A DAO should be a collective whose goal(s) are to accomplish missions. Without purpose, it will be meaningless for members to connect and collaborate.

WHAT ARE SOME FUNDAMENTAL PROBLEMS TO BE SOLVED IN A DAO?

The challenges are: how to build up trust; how to manage decentralized collaborations in decentralized environments where no prior trust foundation has been built.

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INDIVIDUAL-CONSTITUTED DAO – METISDAO

In the world of Web3, where decentralized and complex collaborations are happening all the time, people will need more than a wallet address to start the collaboration. Just as in the physical world, people need ID/certificates - a track record to do business, in the Web3 world, everyone begins as a standard module, which is constituted by a common handshake protocol(Optimistic Governance) to begin a connection, and a continuous programmable NFT that records one's RP *(Reputation Power– a tracking record mechanism that builds trust)* and attributes as the passport in the world of individual-constituted DAO -- **MetisDAO.**

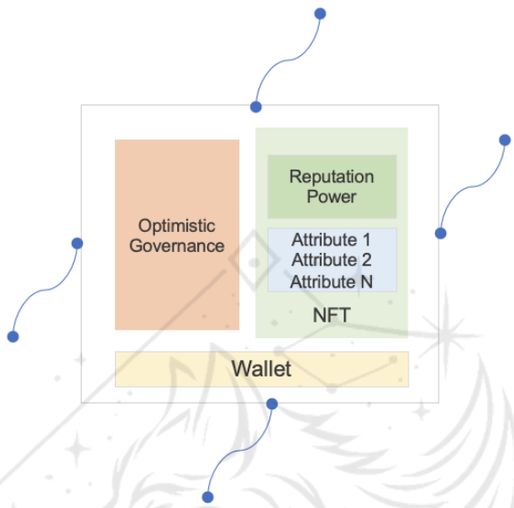


Figure 1: A MetisDAO Individual

KEY ELEMENTS TO FORM A METISDAO INDIVIDUAL IN THE WEB3 WORLD:

- **Optimistic Governance (OG):** Not for voting, but for building up trust, forming collaborative relationships and validating computation results. It's a handshake protocol for when someone wants to collaborate with others.
- **Reputation Power (RP):** The social contract and decentralized business credentials built on the track record of staking and collaborations.
- **Attribute:** Characteristics of an individual, including interests, professions, and other tags.
- **NFT:** Programmable token to record the RP, Attributes and collaboration history.
- **Wallet:** Token wallet.

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HOW DOES METISDAO WORK?

MetisDAO works by DAO members building up connections, trust and conducting collaborations. An example: Alice and Bob plan to collaborate *(Alice & Bob are both MetisDAO Individual™).*

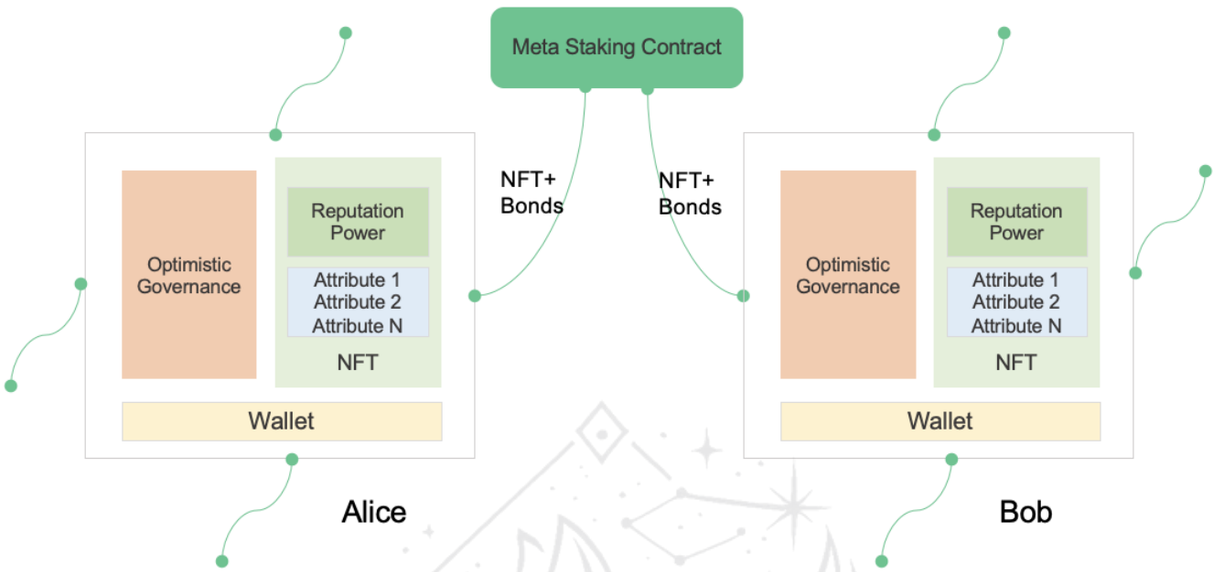


Figure 2: MetisDAO Collaboration Example

Build-up connection and trust

Alice and Bob stake their NFT and Bonds onto the Meta Staking Contract to form the collaboration connection.

MetisDAO protocol deems it best practice if minimum or no governance is involved (Optimistic Governance). By utilizing Optimistic Rollup, MetisDAO leverages the staking bonds for everyone to offer as their promise or guarantee. Alice and Bob should stake bonds into the Meta Staking Contract to establish the Meta Collaboration.

Call service or tools to collaborate

Alice and Bob can call on various on-chain toolkits and start to collaborate, which is supported by Metis Layer2 microservice framework.

The toolkits include many open source and community-curated tools, including task management, knowledge management, event management, finance, accounting, chatroom, forum, etc, which can be plugged in and updated in real time.

Collaboration completed without disputes

During the collaboration process, by default, if Alice and Bob act in accordance with their promise, their bonds will be returned automatically when the Meta Collaboration is finished; their NFT will be updated automatically to record the corresponding history of such collaboration process as well. In this scenario, no governance is needed.

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Disputes

However, if either Alice or Bob (aka “Bad Party”) defaults, the other collaborator (“Good Party”) can apply for Arbitration service right away; in the meanwhile the to-be-allocated bonds will be revoked and the Meta Staking Contract suspended. According to the arbitration result, the Bad Party’s bonds will be taken away as a penalty, and the NFT will be updated to deduct Reputation Power as well.

The revocation and arbitration mechanism of the MetisDAO protocol enables anyone (like Alice and Bob) in the world to establish a collaborative relationship with one another quickly, securely, and without permission. This mechanism is backed by MetisDAO layer2 framework.

USE CASES

From the individual-centric perspective, DAO is the backbone infrastructure to support decentralized and complex collaborations, which are the basic value creation activities in the Web3 economy.

So for any decentralized applications running on Web3, a DAO is naturally embedded in their operations and business logics, where community members collaborate to drive the growth of these applications and related businesses.

NFT PLATFORMS, DECENTRALIZED REDDIT-LIKE SOCIAL PLATFORMS, OPEN-SOURCE DEVELOPER COMMUNITIES, INFLUENCER COMMUNITIES, GAMER COMMUNITIES, FREELANCER COMMUNITIES, CROWDFUNDING, DEFI, ETC. CAN ALL RUN ON METISDAO.

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In summary, MetisDAO enables individuals to open and run their businesses on the blockchain, build up trust (with Optimistic Governance), facilitate collaborations (with on-chain tools), and open up new space for the general public to adopt blockchain at a much larger scale than before.

THE WAY AHEAD

With our layer2 technology stack and individual-centric DAO infrastructure, the Metis project hopes to create a comprehensive, sustainable and wholesome Web3 economy (not just some isolated DApps), and eventually enable Ethereum and many other blockchains in becoming the infrastructure to support multi-value creation (collaborations) that go well beyond payment and voting.

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Version 1.0

Last Revision Mar 2021

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