

Educational Cases

The cooperative movement for a transparent industry



Decentralized Autonomous Organizations (DAOs) for an industry-wide blockchain solution

The blockchain-based DAO shows promising ways of organizing across the industry to facilitate the creation of a democratized industry-wide blockchain solution thereby harvesting the full value of blockchain technology for all actors - small to giants. This article summarizes the findings of a study that investigated how an industry-wide blockchain solution in the fashion- and textile industry should be governed. It introduces the notion of DAOs and explains its specific relevance in this context. Finally, the article outlines essential considerations for designing an industry-DAO, presenting tangible and important design categories for reference.

FACTS: What is a Decentralized Autonomous Organization (DAO)?

Decentralized Autonomous Organizations (DAOs) is a progressively evolving new concept, which makes it difficult for industry and academia to provide a uniform definition.

However, put simply a DAO is a blockchain-based system built on smart contracts, that enable a group of actors to coordinate and govern themselves towards a common goal independent from central control - in other words, it is a digitalized, democratized, and flat organization.

The most common use cases of DAOs today are developing and governing a piece of software, sharing ownership, financing new projects amongst untrusted parties, and more.





To further understand what a DAO is, we can break its meaning down into its three components.

The first, decentralized, refers to a flat hierarchy and democratic decision-making structure that is spread out amongst the participants, enabled by blockchain technology.

The second part is autonomous, meaning that DAOs operate autonomously without any central entity based on a set of defined rules and procedures listed in its smart contracts (i.e., everything is enforced by 'code is law'). Consider a rule that states a member who is inactive for more than 90 days should lose their voting rights. This activity would then automatically be enforced by the code in the agreed-upon smart contract.

Lastly, organization is where the DAO mimics that of traditional organizations in which its members share and work towards a common goal, e.g., to leverage blockchain technology in the fashion- and textile industry to reduce its climate footprint. Ultimately, DAOs share to some extent similarities with cooperatives (e.g., Arla, Coop) in their ownership structure and organizational design. However, DAOs could possibly enhance traditional cooperatives through digitalization and new effective governance mechanisms inherited from blockchain technology.

Understanding all of this can seem quite abstract. If you are interested in a specific real-world example of a DAO, this [TED talk](#) from 2022 offers a great example.

Why should we care about DAOs? Establishing a DAO in the fashion- and textile industry can help create an innovative and accessible blockchain solution and thereby accommodate the competitive necessities the industry is facing, e.g., transparency and traceability of products. Additionally, by collaborating with industry peers (including direct competitors) through the DAO, the industry has the potential to enable a multifaceted blockchain ecosystem for the industry to create new business opportunities and foster new value streams.

Some might be skeptical of DAOs due to their perceived connections with blockchain and by extension cryptocurrencies. We do not argue that a DAO will solve all issues faced by the industry - we do, however, argue that a DAO can be used to solve many of the issues that all participants of the industry are facing and hence cut costs for everyone and enable an easier to understand the market for consumers. Specifically, a DAO provides a range of benefits contrary to establishing a traditional organization, the most meaningful ones listed in the figure below.

-  **1: Facilitate trust amongst untrusted actors**
-  **2: Democratic decision making**
-  **3: Enable new complementary relations**
-  **4: Self-coordination and self-governance**
-  **5: Shared mission and vision**
-  **6: Fair share of risk and benefits**

Hitting the ground running: Design considerations for your next DAO

Our study identified seven indispensable core design categories of a DAO to govern an industry-wide blockchain solution in the fashion- and textile industry.

The seven categories are seen below, listed with a non-exhaustive set of questions for each category to help guide the design of your next DAO. However, since a DAO is only as useful as the active participation of its members it is crucial to address the design categories with the ambition of maximizing collaboration and aligning the interests of the members. The figure also illustrates that a DAO, much like any other organization, is a dynamic organism, requiring ongoing iteration and continuous effort in each of the categories.

Factbox: Getting started
Getting started working with DAOs can be cumbersome. Luckily, Aragon.org provides a user-friendly platform that allows you to launch a DAO on a no-code platform and start experimenting with your own DAO within minutes.

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