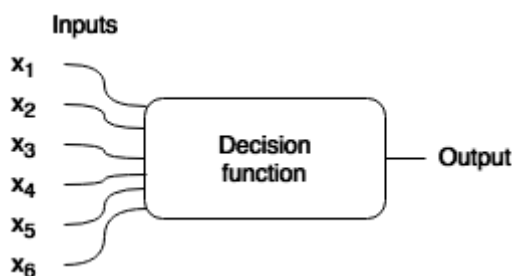


Informal specifications for DGO main service

Telegram: @ProTonInc

What is Blockchain Governance?

To start off, we need to describe more clearly what the process of "blockchain governance" is. Generally speaking, there are two informal models of governance, that I will call the "decision function" view of governance and the "coordination" view of governance. The decision function view treats governance as a function, where the inputs are the wishes of various legitimate stakeholders (senators, the president, property owners, shareholders, voters, etc) and the output is the decision.



The decision function view is often useful as an approximation, but it clearly frays very easily around the edges: people often can and do break the law and get away with it, sometimes rules are ambiguous, and sometimes revolutions happen - and all three of these possibilities are, at least sometimes, a good thing. And often even behavior inside the system is shaped by incentives created by the possibility of acting outside the system, and this once again is at least sometimes a good thing.

The coordination model of governance, in contrast, sees governance as something that exists in layers. The bottom layer is, in the real world, the laws of physics themselves (as a geopolitical realist would say, guns and bombs), and in the blockchain space we can abstract a bit further and say that it is each individual's ability to run whatever software they want in their capacity as a user, miner, stakeholder, validator or whatever other kind of agent a blockchain protocol allows them to be. The bottom layer is always the ultimate deciding layer; if, for example, all Bitcoin users wake up one day and decides to edit their clients' source code and replace the entire code with an Ethereum client that listens to balances of a particular ERC20 token contract, then that means that that ERC20 token is bitcoin. The bottom layer's ultimate governing power cannot be stopped, but the actions that people take on this layer can be influenced by the layers above it.

The second (and crucially important) layer is coordination institutions. The purpose of a coordination institution is to create focal points around how and when individuals should act

in order to better coordinate behavior. There are many situations, both in blockchain governance and in real life, where if you act in a certain way alone, you are likely to get nowhere (or worse), but if everyone acts together a desired result can be achieved.

	A	B
A	(5, 5)	(0, 0)
B	(0, 0)	(5, 5)

Types of Governance

1. Off chain

On-chain vs. off-chain governance refers to whether the means of decision making are on the blockchain or off the blockchain. Actors that coordinate through meetings and online chats are examples of off-chain governance, while actual changes still need to be implemented in client software and cause a fork to come into effect (see case studies later). In almost all cases, there is some combination of on- and off-chain mechanisms employed. The possibility to fork is also one of the most crucial properties of public blockchains as it always provides a group of stakeholders for the ability to exit, if they were unsuccessful in voicing their values and viewpoints. Thus, social consensus is in the end the deciding factor in blockchain governance. Most protocols have chosen rather centralized governance processes where only entities with credible threats of forking have clear influence. Ultimately, contentious forks represent the greatest threat to the stability of blockchains, and they are especially problematic for protocols encouraging experimentation on layer 2. Proposal systems In multiple cases there are (semi-)formalized proposal systems such as BIPs (Bitcoin Improvement Proposals) in order to suggest changes to the protocol that are conducted off-chain. However, the discussion around formal and informal proposals is shaped in various channels ranging from dedicated forums to social media platforms and exclusive conferences and meetings. Resource/fund allocation The overarching theme of governance that is also touched by changes in rulesets/protocols/company bylaws is the allocation of scarce resources. Crypto networks often instantiate a foundation or other legal entity, which is responsible for allocating a budget that has been raised for furthering the network and its goals. Besides non-profit foundations there can also be for-profit companies that can generate revenue by acting as service providers to the network, hold a share of the token supply and work to make its value increase or provide auxiliary services. Decision making is regulated by the legal set-up and leadership in the respective organizations, which is more or

less centralized. Often grant programs fund initiatives that should improve the protocol and solve R&D or implementation challenges.

2. On chain

On-chain governance refers to stakeholders influencing a protocol's parameters through signaling that is recorded on the blockchain. Usually, a tightly coupled mechanism is assumed so that agreed upon decisions are automatically enforced through the blockchain. Both the protocol itself as well as entities built on top can be governed by an on-chain mechanism – the rules are enforced by the blockchain.

On-chain proposal system Besides off-chain proposal systems, proposals could be formally made on-chain, and then voted upon (or created and stored off-chain with hashing proposals on-chain, in order to have an immutable audit chain but save on-chain resources). Voting Various kinds of voting systems could be implemented on-chain, while there are challenges in the details. Token holder voting (1 token 1 vote) / Plutocracy / Shareholder Value Maximization Token holder voting (1t1v) is relatively simple to implement in a decentralized setting and thus currently the dominant approach among on-chain governance systems. The main criticism is the inherent plutocracy – the rule of the wealthy (and thus also the threat of being captured by potentially hostile, external, wealthy entities). It is akin to shareholder-value maximizing corporate governance, which one could argue leads to stakeholders which have skin-in-the-game being incentivized to act in proper diligence to represent their stake. Probably, this is only viable if there is a more democratically governed meta-system in which the system in question operates and through which it is being constrained, that takes into account market failures such as external effects (such as regulation by a well functioning state). 1 person 1 vote A widely known principle in democracies – 1 person 1 vote – can be implemented in various settings, the simplest of which is direct democracy. The biggest challenge for implementation is that it requires an identity system (confirming someone is a unique person). So far there has not been a fully sybil resistant and decentralized identity system. Potentially, one has to accept trade-offs to some extent. Related to this, Glen Weigl has argued that as long as blockchains formalize ownership but not identity, it will always be anti-democratic, but plutocratic. Liquid democracy Liquid democracy describes a system in which voters can delegate their votes to experts, potentially only in certain domains and vote if a certain case or domain is of particular interest. It is particularly well suited for a blockchain-based system, as delegations can be programmed in a fine-grained fashion. One can imagine various settings including previously mentioned 1 token 1 vote delegation, but also 1 person 1 vote. All in all, the approach is an attempt to merge the best of direct and representative democracy. Quadratic voting Quadratic voting also requires identity, as it assigns a certain vote budget to a voter, which can be allocated to different domains or elections depending on subjective importance. Crucially, the more someone allocates to one domain, the more expensive a vote becomes (quadratically). This is especially interesting in alleviating some drawbacks in traditional voting systems, such as a certain disregard for minorities. A minority that particularly values a specific policy can assign a higher weight to it and make it count more against a majority that might not put the same emphasis on the same policy. Reputation based voting Votes could also be counted according to some quantified measure of reputation that a voter can build up according to some ruleset (see evaluative infrastructures). This has the dual effect of governing actors towards a shared goal, as they are incentivized to build up reputation (as on average actors value influence over projects they value), while granting them governance power over the properties of the shared goal, protocol or other aspects of a project. Such reputation systems could be

multidimensional, taking into account expertise in different domains. While a great potential is to assign knowledgeable and motivated community members more weight and thus improve the quality of governance outcomes, the system is prone to concentration of power in a technocratic elite with the time, knowledge and reputation to vote and decide on policy change. An interesting spin on reputation systems in a wider sense are the pagerank inspired evaluative mechanisms for open-source software by Oscoin as well as SourceCred (value creation is measured by how much software depends on a contributor or a piece of software and assigns reputation scores - see evaluative infrastructure; as a next step there is a vision for a token that is distributed to projects and individuals depending on the score). A controversial aspect is how and if it is feasible and necessary to include open-source work in a wider sense beyond pure code commits, which are however harder to measure objectively through dependencies. Voting issues Caplan observes that voters' democracies rarely have incentives to consider their thoughts thoroughly. This stems from rational ignorance, as most policy decisions don't have immediate impact on the welfare of most voters. Thus, voters are often apathetic. However, if voters have explicit economic value at stake, it has been shown that votes are carried out even against certain biases. It is generally accepted that voting in secret is important in order to maintain individual sovereignty and resistance to bribery. However, in electronic voting it is easier for bribery to be observed and smart contracts can easily automate and enforce bribery attacks. Attackers can simply post an open offer to anyone who votes in his favor. Later, Daian suggested permission-less, bribery resistant mechanisms: Users can be provided with a secret channel that lets users defect from a briber without anyone being able to tell, using "complete knowledge" proofs to make sure there is no trusted execution environment (such as Intel SGX) or secure multi-party-computation (MPC) preventing channel use. Thus, bribery is not effective, as one can always take a bribe and then still vote otherwise. Voter information & manipulation Even if voters are fully honest and willing to exert the necessary effort (cognitive cost) to consider alternatives, their behavior is highly influenced by the information they are presented. Independent media has been historically a crucial public good for functioning democracies. In recent years, however, voter manipulation on social media has reached increasing scale. (see Cambridge Analytica) Possible solutions are novel approaches to news curation, also potentially on decentralized platforms (such as Relevant) as well as traditional approaches of funding independent quality journalism. Specifically in the context of crypto-economic systems, there have been tools suggested that simulate the consequences of certain policy decisions in order to provide automated decision support systems for voters. It is especially important that the code and data powering those tools is open source, to enable anyone to critically assess the underlying assumptions of the simulation in question. On-chain budget allocation Various mechanisms for budget allocation can be implemented on-chain as smart contracts that enforce compliance. The previously mentioned voting mechanisms can be integral parts of such. Grant DAOs A phenomenon that has gained traction is DAOs forming around certain goals that are related to furthering the mission of cryptonetworks. The term DAO will be used as it is the acronym that has gained more widespread momentum in practice, even though the level to which projects are autonomous is blurry (and decentralized organizations DOs or decentralized collaborative organizations DCOs could fit better). One could argue autonomy is meant in the sense that an automated objective function such as the Bitcoin PoW mechanism coordinates the organization. On the other hand, autonomy could reflect the extent to which a set of humans that vote on issues, are autonomous from actors that are outside of the group or the extent to which code used by a group to coordinate themselves runs autonomously from third parties. A couple of them or the frameworks they depend on will be elaborated on in the case study section below. In general, donators that can include private individuals, companies or

foundations pool funds that are then allocated according to the DAO member's votes. Quadratic funding mechanism Rooted in quadratic voting, quadratic funding is a proposal to allow (near) optimal provision of a decentralized, self-organizing ecosystem of public goods (such as open-source software that makes up blockchain protocols). An entity/entities put up a budget to be allocated towards public good initiatives (e.g. projects that enhance Ethereum). The budget could be funded through sources such as donations, token sales or continuous token issuance towards that specified purpose. The common budget will be allocated according to the square of the sum of the square roots of contributions per person (additional donations towards a specific project) received. Again, like in quadratic voting, the mechanism relies on reliable identity as the idea is that many small contributions are matched to a larger extent than few large contributions. In the extreme case of 1 large contribution, one can assume that only this one entity derives utility from the project (private good), while many individual contributions show that many individuals derive utility (tending more towards a public good). While similar issues like elaborated on in voting such as manipulation or collusion could be problematic, first experiments (Bitcoin grants) have been quite positive, with changes in the formula implemented though (attempting to reduce the impact of collusion)

Internal governance through six main categories of tools

Modularization: As the number of participants grows projects are split into modules. Division of roles: Bundles of tasks are associated with differentiated access to project files (e.g. developer vs. committer who can vs. cannot commit code to the main branch).

Delegation of decision-making: Centralized (e.g. Linus Torvald, founder of the famous Linux operating system, personally deciding upon all changes to experimental version) vs. decentralized (committers or developers in a given module to take these decisions).

Training and indoctrination / values-based selection: At e.g. Debian (operating system, based on the Linux Kernel - "fork of Linux"), to become a developer (with commit privileges) one had to succeed a three-step application process with an existing developer (prove identity by having cryptographic key signed face-to-face, prove their knowledge of and adherence to OSS philosophy, and demonstrate technical competences).

Formalization: Mailing lists and newsgroup archives for discussions. Tools like Bugzilla standardized bug reporting and raising issues for discussion. Versioning systems and platforms work together simultaneously on the code-tree and keep track of all changes (Git and Github).

Autocracy/democracy: Autocracy in Linux; Linus Torvalds started the project and has remained leader ever since. On the other hand, democratic processes for electing leadership have been introduced in Debian (Project Leader elected annually by developers).

Collaborative community governance through an agency lens

Agency relationships in collaborative communities entail three distinct multiple agency structures: commons, team production, and brokering. These are governed by four main categories of mechanisms:

- 1) Mutual monitoring, enabling self-regulation and peer-based control (e.g. community members checking each other's code contributions or nodes in Bitcoin mutually monitoring network state)
- 2) member selection, regulating admission to the community (see earlier, technical fitness as well as value alignment)
- 3) values and rules, guiding member action and collaboration (see culture earlier)
- 4) property rights and incentives, regulating rights to community resources and distribution of rewards (see software licensing in general OSS and property rights of network resources through token distribution discussed earlier). The governance mechanisms mitigate the sources of agency problems (information asymmetry and differing interests) in different ways. The extent of mutual monitoring is decreased depending on the strictness of member selection (alternative modes of quality control). Community performance is contingent upon values, rules, incentives, and their enforcement. In case of lacking these, agency problems and the risk of failure are exacerbated.

DAOs as distributed innovation systems

The following table summarizes the case studies, following the classifications of distributed innovation systems. As argued before, they demonstrate the decentralized infrastructure (L1 DAOs), as well as can be based upon decentralized infrastructure (L2 DAOs) in order to avoid the problems inherent with platform monopolies.

	Interfaces	Participatory architectures	Evaluative infrastructures
Bitcoin	Bitcoin dev mailing list, forums, conferences, meetups, wallets/clients	Proof-of-work, BIP process, Github repo	Token rewards (mining)/decentralized ledger state
Ethereum	All-core devs calls, Ethereum magicians, forums, conferences, meetups, wallets/clients	Proof-of-work, EIP process, Github repo, community DAOs	Token rewards (mining, quadratic funding)/decentralized ledger state

Decred	Politeia voting interface, forums, conferences, meetups, wallets/clients	Proof-of-work, Proof-of-stake, Politeia governance & funding, Github repo, Decred Change Proposals (DCPs)	Token rewards & penalties (PoW mining, PoS validating, Politeia funding)/decentralized ledger state
Tezos	Tezos Agora forum & voting interface, conferences, meetups, wallets/clients	Proof-of-stake, formal on-chain governance process, Github repo	Token rewards & penalties (PoS validation)/decentralized ledger state
Cosmos	Cross-chain communication, forums, conferences, meetups, wallets/clients	Proof-of-stake, formal on-chain, Github repo	Token rewards & penalties (PoS validation)/decentralized ledger state
Polkadot	Cross-chain communication, forums, conferences, meetups, wallets/clients	Proof-of-stake, formal on-chain governance process, Github repo	Token rewards & penalties (PoS validation) /decentralized ledger state
Aragon	Governance interface, forums, wallets/clients	Proof-of-stake, jurors in game theoretical court system (staking), on-chain governance	Token rewards (PoS, jurors)/decentralized ledger state, grants
DAOstack	Governance interface, forums, wallets/clients	Prediction market (proposal filtering), reputation voting (decision-making)	Token rewards - monetary (prediction market) & reputational (community voting)
Colony	Governance interface, forums, wallets/clients	Reputation mining (layer 2 - PoS), Metacolony system governance, domain-task based reputation hierarchy	Token rewards - monetary (PoS, metacolony profit) & reputational (peer feedback/voting, decaying reputation)

Moloch	Voting interface/wallet, calls, chat groups, meetups/conferences, linked Delaware LLC structure in e.g. MetaCartel interact with off-chain assets	On-chain proposal & voting system, rage-quit to exit, replicate & adapt through forks	Value of stake, off-chain reputation
MakerDAO	Risk Governance Calls, voting interface, forums, price oracles/feeds, wallets	price oracles/feeds, wallets Formal on-chain governance, keeper incentives	Token rewards & penalties on decentralized ledger (e.g. liquidations)
Nexus Mutual	Web app for using, participating & governing, governance calls, legally linked UK mutual for limited liability	Formal on-chain governance, risk & claims assessment through staking	Stake for risk & claims assessment; token rewards & penalties on decentralized ledger
Compound	Web app for using, participating & governing, forums	Formal on-chain governance, ability to program c tokens, lending/borrowing, norms around community discussion	Token rewards (liquidity mining), interest rate & liquidation models

Governance in layers

As elaborated on in previous chapters, governance is multi-faceted as well as made up by several layers, of which the three most important ones, that are in the direct realm of DAOs, are summarized in the following table.

	Governance by the infrastructure / objective function	Governance of the infrastructure	Soft governance: culture / values / memes
Bitcoin	Proof-of-work rewards to create p2p ledger/money	Relatively unformalized off-chain - core devs make code proposals - semi formalized BIP process (Blockstream devs are quite dominant), full-nodes & miners need to adopt, UASF set precedent for fullnodes in strong position - miners follow full-nodes); history of upgrades through soft-forks, hard-forked Bitcoin chains such as Bitcoin cash and derivatives started new, distinct chains/DAOs	Strong libertarian value-system valuing decentralization above all else that is heavily influenced by Austrian Economics; disinflationary monetary policy - which is deemed sound money, token holder value maximization (more and more shifted from p2p cash objective function)
Ethereum	Proof-of-work rewards to create p2p smart contract platform	Relatively unformalized off-chain (exc. small on-chain gas-limit adj.) - semi formalized EIP process, all core-devs calls, miners & fullnodes need to adopt/opt-in to	Freedom, openness, decentralization, transparency, stakeholder value maximization, developer technocracy, avoid capture (hostile takeover - deemed more likely with formalized & on-chain systems), immutability - internet jurisdiction (less emphasis than

		changes; history of upgrades through hard-forks, remaining Ethereum - trade-mark owned by Eth foundation; forked-off distinct chain -> Ethereum classic, remaining unaltered after DAO hack	EthClassic after DAOhack), beauty in subtraction, "Eth is money" faction (leaning towards token-value maximization), no contentious hard-forks, Don't Break the Protocol, Keep Crypto Law Legal, innovative in the short-term, stable in the long-term
Decred	Proof-of-work & Proof-of-stake rewards to create p2p ledger/money	On-chain (ticket holder voting, tight coupling of protocol updates) & off-chain (meetings, conferences, politeia for natural language proposals - anchored on-chain)	protocol updates) & off-chain (meetings, conferences, politeia for natural language proposals - anchored on-chain) Autonomous currency, token-holder value maximization - while avoiding stake centralization through PoW component, more corporate governance than national governance ("governing a digital commodity, not society")
Tezos	Proof-of-work rewards to create p2p smart contract platform	On-chain (liquid token-democracy) & off-chain (forums, conferences, etc.)	Conservative evolution (continuous, scheduled update process with 80% supermajority), security (formal verification, emphasis on testing), more corporate governance than national governance, liquid democracy
Cosmos	Proof-of-stake rewards to create hub enabling the internet of independent blockchains/ interoperability	On-chain (liquid token-democracy) & off-chain (forums, conferences, etc.)	Ecosystem of independent - sovereign but collaborating zones/chains/entities, internet of blockchains

Polkadot	Proof-of-stake rewards to create hub enabling the internet of independent blockchains/ interoperability	On-chain (direct token-democracy) & off-chain (forums, conferences, etc.)	Ecosystem of purpose-built - interoperable chains that share security, more progressive bias towards change (dynamic quorum biasing), ultimate control with token holders, representative elements
Aragon	DAO/dappframework; PoS based Aragon chain based on Cosmos SDK; fee- & staking-based internetnative court system	Aragon network L1 DAO: On-chain (direct token democracy/transi tioning to new governance model with constitution interpreted by Aragon court to protect minority stakeholders in tokenvotings) & off-chain (forums, conferences etc.,)	Freedom & sovereignty, censorship-resistant digital organizations, collaboration, modularity Individual communities using the framework have their own distinct values & culture.
DAOstack	DAO/dappframework; OS for collective intelligence/scaling decentralized decision making - prediction market-based proposal filtering, reputation based decision-making	Genesis DAO (first DAO created using DAOstack, with a mission to advance the DAOstack project and ecosystem): On-chain (direct reputation democracy) & offchain (forums, conferences etc.,)	Collaboration, collective intelligence, scaling decentralized decision-making, resilience Individual communities using the framework have their own distinct values & culture.
Colony	DAO/dappframework; layer 2 scaling for reputation systems	On-chain (direct reputation-democ racy) & off-chain (forums, conferences etc.,)	Collaboration, hive mind - bio-mimicry, meritocracy - influence through high-quality work (focus on recency - decaying reputation),

			avoid friction of voting - independent decision-making at the edges Individual communities using the framework have their own distinct values & culture.
Moloch	DAO for fund allocation such as grants	On-chain (direct token-democracy) & off-chain (forums, conferences etc.,)	Moloch: god of coordination failures - urge for internalizing external effects to maximize societal wealth, simplicity to constrain attack vectors, permissioned access based on value - furthering Ethereum, voice or exit through rage-quit
MakerDAO	Risk parameter-based credit facility & stable-coin	On-chain (liquid token-democracy & representative) & offchain (forums, conferences, etc.)	Most decentralized stable-coin, stability, scientific risk management, token holder value maximization, incentive alignment
Nexus Mutual	Risk parameter & staking-based risk sharing pool (insurance fund)	On-chain (liquid token-democracy & representative) & off-chain (forums, conferences, etc.)	Risk pooling as well as risk reduction through incentives, transparency, pragmatic decentralization - representation by board but ultimate control with tokenholders, digital cooperative (scaling a UK mutual internationally)

Compound	Risk parameter-based lending & borrowing facility incl. native token issuance to users (liquidity mining)	On-chain (liquid token-democracy) & off-chain (forums, conferences, etc.)	Thorough community discussion, questions, analysis & auditing of proposals
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What's going on with decentralized Governance

Right now decentralized governance is at hype. An example of that were such tokens as: \$MTA, \$FEW, \$SUSHI, \$SWERVE

Unfortunately, all of these projects suffered from the negative reaction from society because first insiders were potentially getting profit at the expense of others. That is these projects were trivially using a Ponzi scheme. Since then very valuable lessons have been taken out and a long way has been gone to eradicate these problems.

Let's consider the options:

\$CRV

Despite some suspenseful drama in the governance, voting power in the DAO (reCRV token) has immensely improved ever since. Before very few people could have the whole control over a certain project, now the quorum-based voting will eliminate this problem. The one thing to be taken out from this occurred issue is that distribution of power is very important no matter what token distribution you are working with. If skewed distribution is inevitable, some other form of voting is a necessity, for example quadratic voting might come handy.

\$DXD

Giving governance to many different people was successfully done by establishing DAO. Some Gnosis products (e.g DutchX and Mesa) were entrusted to the DAO. After raising some funds, DAO issued the \$DXD token. One thing to note, there is still not long term alignment of the DAO even though the DXdao was given OWL and GEN tokens. Unconditional entitlement helped to some extent. However, still power was not given to \$DXD token holders which would lead to another problem. Right now the DAO is looking into ways of giving them that power.

\$UNI

After some success, Uniswap hit some obstacles. One of the most important was a very high \$UNI threshold that was required to make proposals to Uniswap. Right now only Binance has adequate power to do that. This made it possible for groups to create \$UNI pools that makes it possible for others to create and submit their proposals. Time will tell if this is actually a good idea and will help solve the problems. One weird thing is that they issued the tokens at launch and not according to the vesting schedule that have been outlined in their intro

documentation. Finally, they have stated that team members cannot participate in the governance of their protocols, which is very strange. It would be nice to have clear communication by the team.

\$RARI

Rarible launched their \$RARI token earlier this year, and has grown a lot because of it.

Token snapshotting wasn't included in the ERC-20 contract, which most likely means that in order to obtain voting power, token holders should lock tokens in their future DAO.

This isn't a problem for most projects. However, with Rarible it would be preferable to do so*. Including snapshot would allow teams a much smoother UX for token holders come the time for governance.

*This information was obtained through discussions with the Rarible team members, who were kind enough to include this point in this article

Takeaways:

Ensure the right functionality is in your ERC-20 before launching! Snapshot is likely at the top of the list.

\$DORG

dOrg is a dev cooperative that launched on the DAOstack platform in 2019. In 2020, changes to the DAO parameters made it impossible to upgrade the DAO moving forward. Fortunately, the team simply had to launch a new DAO, transfer funds, and check to ensure clients weren't making payments to the old DAO address.

Takeaways:

Changing DAO parameters is risky. Although DAO protocols like DAOstack have added security measures for these types of proposals (longer voting time, higher proposal staking requirement), there are still risks and caution is advised.

\$YAM

\$YAM helped kickstart a rush of token farming in Aug-Sept 2020. \$YAM allowed farming of tokens by providing fluidity to certain Uniswap pairs. The \$YAMS that were farmed have an elastic token supply mechanic identical to Ampleforth, but a percentage of positive rebases is being directed to a community-governed DAO.

A bug was unfortunately found shortly after the start of rebasing, making it impossible to pass proposals in the DAO. This locked the community-governed funds in the DAO forever. This type of governance bug is pretty specific and it highlights one of the issues with purely quorum-based token voting.

Takeaways:

If you decide to use quorum-based voting, choose your parameters carefully.

There are many governance mechanisms being experimented with, such as conviction voting, holographic consensus, quadratic voting, among others, that may be better suited parameters for quorum-based voting.

Free TON problems:

1. Proposal can be submitted an unlimited number of times since it is free, which is not entirely proper. For example, at other types of DAO paid placement is tracked, and it is objectively more logical and correct.

In order to prevent spam attacks, creating proposals or submitting an application for participation in the competition must be paid. As the significance of the network effect increases, the likelihood of spam attacks increases.

There are 4 types of submissions:

Type 1 - creating a competition

Type 2 - submitting an application for participation in the competition

Type 3 - partnership proposal

Type 4 - organizational proposal

We will consider submission of an application for

- creating a competition in the amount of 100 tons;
- submission of an application for participation in the competition from 10 and above;
- partnership proposal from 500 tons and above;
- organizational proposal

from 10 and above (the price may vary depending on the value of the award).

2. The next problem is the fact that the jury can vote from two or more accounts at the same time, which is not objective at all.

If you bind one IP address with a specific geolocation to one key (this data should be kept private without disclosing it to third parties), then this would significantly solve this problem.

3. And one more problem is the mistakes made by the Jury. That is, if the jury maliciously or accidentally makes a mistake, then he has no opportunity to correct it.

The solution may be that a mechanism for changing the assessment in a certain time window was provided.

Also, another mechanism for solving the problem will be judges tracking one after another.

Conclusions

In the end, social consensus is what defines a cryptonetwork. The option to fork is the most crucial instrument of last resort to force decision-makers to take stakeholders into account, while effective governance gathers maximum stakeholder voice in order to avoid exit. Coordination mechanisms that allow for coordinated switching to a new fork are important to make the threat of a fork realistic. A default setting of not to update, as in loosely coupled off-chain governance creates a coordination flag towards stability, important for base-layer institutions. 107 As network effects exist, there are strong benefits to remain unified instead of splitting communities. As a result, if values and objectives amongst communities are similar enough to agree on common protocol parameters, there is considerable value to be created by preventing factions to split. Thus, value can be maximized if decision-making processes enable finding common ground. Designing good interfaces and participatory infrastructures that enable the aggregation of viewpoints of diverse stakeholder bases are of utmost importance. Also, effectively filtering through proposals and gauging community sentiment before resources are spent to develop an upgrade that might not be adopted are crucial.

Several important factors are not taken into account in the current FreeTon governance scheme: preventing spam attacks, possibility of preventing and correcting jury mistakes.

The following proposal provides good solutions to these problems. In any case, this topic should not be ended with this proposal; it must be continued during the entire duration of the DGO subgovernance.