Counting Votes: Examining Quorum Alternatives for Governance

Background

This is post

is intended to (eventually) be a proposal for Manifold's on-chain voting regime. This analysis compares the traditional quorum

based voting systems to alternatives.

This document is to be revised, it is unfinished (both in content and in prose!). I am posting this here so that members of the community can better participate if they so wish.

This is meant to be informative and not a formal proposal. In part, we would like to put effort into better aligning governance procedures with the larger community.

Motivation

TODO

Specification

Describing the apparatus that governance entails and covers, this is an 'abstraction'

Axiom: Institutions are defined as stable patterns for regulating human behavior.

In an opt-in organization like a DAO, a constitution serves as a contract for participation—by participating, one implicitly or explicitly agrees to abide by the organization's constitution. By regulating decision-making in an organization, constitutions help us set the rules for how we make rules, modify existing institutions, and even design new institutions. Good constitutions help institutions adapt to new circumstances, new memberships, and even new code (e.g. if any underlying smart contracts are changed).

Components of an Institution, its Constitution and Technological Infrastructure/Tools

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Defining Patterns

We use the term "pattern" meaning relevant to our protocol, and "anti-pattern" to represent a more subjective interpretation or one that is hard to automate to determine should it be included or not.

Patterns

Proposals that addresses a problem that has not been defined Proposals that addresses a problem that no longer exists The Proposals addresses more than one problem Proposals that has no stated purpose The language of the Proposals is vague or complex Proposals is unable to achieve its stated goal

Additionally, you should include clearly defined, unbiased For and Against options along with a poll to gauge sentiment.

Borda Voting

In this method, points are assigned to candidates based on their ranking; 1 point for last choice, 2 points for second-to-last choice, and so on. The point values for all ballots are totaled, and the candidate with the largest point total is the winner.

Borda count is sometimes described as a consensus-based voting system, since it can sometimes choose a more broadly

acceptable option over the one with majority support. <u>Borda Count violates the Majority Criterion which also means it automatically violates the Condorcet Criterion as well.</u> [Lipman, David Voting Theory]

Pros vs. Cons of a Borda Voting System

- The Borda count satisfies the <u>monotonicity criterion</u>, the <u>consistency criterion</u>, the <u>participation criterion</u>, the <u>resolvability criterion</u>, the <u>plurality criterion</u> (trivially), <u>reversal symmetry</u>, and the <u>Condorcet loser criterion</u>
- The Borda count does not satisfy the <u>Condorcet criterion</u>, the <u>independence of irrelevant alternatives</u> criterion, the <u>independence of clones criterion</u>, the <u>later-no-harm criterion</u>, or the <u>majority criterion</u>.

Summary

· Migrate away from the alleged

' Quorum ' based governance

• Adopt a Borda/Borda style voting mechanism for resolving governance proposals/disputes

Definitions

Definition; Necessary Condition

A condition A is said to be necessary for a condition B, if (and only if) the falsity (/nonexistence /non-occurrence) [as the case may be] of A guarantees (or brings about) the falsity (/nonexistence /non-occurrence) of B.**

Definition; Sufficient Condition

Definition: A condition A is said to be sufficient for a condition B, if (and only if) the truth (/existence /occurrence) [as the case may be] of A guarantees (or brings about) the truth (/existence /occurrence) of B.