



Z Nation



Overview of the governance system design and architecture

- Inspired by complex biological systems (ex. neural networks, insect colonies, fungi) that effectively integrate decentralized features, we are designing a governance process that enables distributed and self-executing decision-making (voting).
- We focused on decision-making/voting because for an effective decentralized system, it is the fundamental mechanism for organizing, advancing ideas, and checking abuses of power.
- Utilizing Blockchain wallet and smart contracts, this system of governance can support communities and organizations of a few members up to even millions of members (within local nodes) and can facilitate growth and governance based on the size of entity and number of decisions being made.
- Creates a more active, participatory, and critical social environment.



Definitions:

- ZAP - Z Nation Smart Contract used for voting
- ZWallet - What ZAPs run on for each individual participating in Z Nation
- Board (Maintainers) - the group of core members that builds out and maintains the code and underlying system
- Caucus Board - automatically opened discussion board to discuss ZAPs (voting proposals)



The basis of the governance process

- We want to evenly distribute authority and power to everyone in a group. This includes power to speak up and to make decisions within an organization or community.
- There are no inherent advantages given to anyone in the proposal process. All proposals are judged based on content (how well it can be defended, cost, etc.)
- Therefore, the power of an individual's decision is not based on their position or role within the organization, but how well they can come up with a substantive proposal, contribute to innovation, and better lead within organizations.
- We also provide true anonymity as an option for those who feel it would be dangerous to speak.



Governance | Overview

- Smart contract proposal submission
- Decision tree
- Vote with Blockchain wallets
- Caucus/discussion before vote
- Threshold
- Stakeholders (voting by stake)



The features of the system

- Identity is proven by any means a group permits (i.e. SSN, iris-scanning, employee ID)
- Privacy is maintained by
 - Anonymity is optional for every action using ZenHide (actos can choose to make anonymous proposal or voting)
- Whether and how to implement proxy voting can be specified by the company
 - Blockchain technology enables verified proxy voting. Non-security issue with the unique keys.
 - Smart Contracts enable republicanism (voting for a delegate)
 - Linked automatic proxy voting, (e.g. if Jane votes A, Liz votes A).
- The ballot structure is a decision tree (where questions, choices are decided on by the network) and future contracts can be stemmed based on previous decisions.



FEATURES



Features | Submit Policy Proposals

- The initial ZAP is submitted to the ledger
 - Questions and choices are to be decided upon after submission
 - The contract can be submitted to and enacted to specified local groups
- ZAP will not be voted upon unless a quadratic voting approval threshold is met or exceeded (can be chosen by the person doing the proposal)
 - An approval rate of 10% in the relevant group is required for hearing
 - An approval rate of 51% in the relevant group is required for execution



Multiple-step Decision Making

You can create a multiple step decision tree to make a final decision.

- You create multiple self-executing smart contracts.
- If voter does not vote in 1, they are excluded from the next smart contract vote, etc.
- Only those who vote in all steps, decide final decision.



Features | Decision Tree, Splitting

You can create a ZAP where both options are executed (A and B).

- Enacted after previous smart contract decisions have been filled out with questions, choices, and have been voted on
- Group splitting is executed automatically and new smart contracts are created based on what choice nodes took

(e.g., ordering dinner for a group. Thai noodles or burritos)



Features | Local Groups

- Can distribute policy proposals to specific group (proximity)
- New secure Caucus Board (message board for every local group)



Reasoning | Extra Features

- Consistently value contributors are rewarded, consistent bad actors are penalized based on decisions
- Rewards and punishments can be determined by node.
- Polling: if someone wants an opinion w/in a certain time frame and want only 10% of network to respond, the system will ping a person, if they don't respond, it will be forwarded to another person.



Reasoning | Voting

- We found that voting and decision-making is an essential and core function of any group that may be organizing for multitude of reasons (i.e. for business, for civic engagement, for fundraising, for co-op living, etc.).
- It is better than other forms of governance (such as representative democracy); here we are moving toward liquid democracy (direct representation).
- Blockchain enables more efficient, decentralized decision-making powered by technology
- Extremely hierarchical entities with many layers of governance (ex. IBM with nth layers of leadership) lose immediacy in implementing core values according to real needs. Nodes/participants all participate to ensure entity as a whole reflects needs and collective values of participants.
- Further, contrasting from communist government, our voting system adds a level of accountability for individuals through smart contracts. So, decision-making is not just based on trust of the collective, but can depend on the knowledge and opinions of individuals. It codifies laws without infringing on individual independence.
- Our greatest strengths are realigning the center of governance to the individual and empowering him or her to speak up and act.



Potential Challenges

- Bad actors:
 - quadratic voting. Also, someone else can submit a proposal to fork or to vote the bad actor out.
- Reward altruism: Reward or ding for individual behavior (reputation).
- Tyranny of the majority:
 - Possible solution: minority groups form, create proposal, vote, approve, then submit to Maintainers for consideration (bc they would never be able to get a majority vote).
- Abuse of power:
 - What happens when power coalaces around a few individuals
- How to incentivize voting activity in a sustainable way.
- Laïcité: Hyper-secularization. How to address important, unique and personal identities of individuals in an anonymous space. How to preserve the self in a public space. How to address cultural changes in the blockchain.



Whether and how the governance process would be enforced and integrated

- Create intent/constitution for the governance structure. Social onboarding. Social Contract.
- Who is legally responsible for the outcome of the decisions?
- Here, we believe and recommend an alternate corporate structure for blockchain corporations as imperative to protecting decision-making of companies like ours, that feature distributed, decentralized decision-making.
 - States such as Wyoming have also recognized the need for alternate structures for blockchain companies.
- If in the current landscape, we rely on legal principles such as Business Judgment Rule and Constituency statutes (for certain states) to protect important decisions made by company
- What is the check on proposals and local groups?
 - Put punishment w/in the Smart Contract. Injunction or Civil penalty. Restitution. Criminal.



Prototype



Prototype Framework | Proposal (elections, recall, decision-making)

1. Submit proposal for new hire / smart contract is created and submitted to ledger
2. New message board is created with job description and candidate info
3. Call for choices in the field / ask the whole company for opinions on these fields
 - a. List of candidates
 - b. Beginning date is set
 - c. Salary
4. Voting begins
5. Passes threshold vote and contract is approved



Prototype Framework | Microdecisions

1. List of candidates is called up
 - a. List of candidates are selected
 - b. Candidates are voted on
 - c. Top candidate is chosen
2. Beginning date is called up
 - a. List of potential dates are selected
 - b. Dates are voted on
 - c. Date is approved
3. Salary is called up
 - a. List of potential salaries are selected
 - b. Salary is voted on
 - c. Salary is approved



Prototype Framework | Zap Execution

1. A team of ZenCash engineers need another engineer on their team. They write a new proposal as a smart contract and share it to their entire company after discussing who they need. They need 10% of the entire company's eligible voters to vote on the proposal (not necessarily support it). They also add a deadline for the proposal.
2. The proposal has info detailing what they need. In its first iteration decisions have already been made:
 - a. We want to hire Amy. Includes info about Amy in the proposal.
 - b. She starts on April 4, 2018
 - c. She will be paid 10 BTC every year
3. People will vote on this proposal. If they disagree with any of the terms, they can create their own fork (i.e. another group believe Yusuf to be a better hire). These proposals are also voted on.
4. At the end of the deadline, if they do not get 10% company participation on their fork, the proposal fails. It also fails if they do not get a majority (51% or more) 'yes' vote on their fork of the proposal. If these conditions are met, the smart contract executes and Amy is hired under their conditions.



Vision | Mission Statement

We want to bring people together more directly. We want to create an alternative form of community and livelihood that addresses the is more personally fulfilling and less stressful than late-stage capitalism. Built upon a truly democratic framework and inspired by biomimicry, authority will be relieved of its violent nature to force conformity. Using Zaps, we give people solvency and power to define their own lives and to live according to what they believe in. We realize that eventually our model will be touched by regulation, and we agree that having a completely unregulated space can be more dangerous than productive. We just need to direct the governing bodies governing us to also become decentralized. We realize that anything revolutionary will be targeted by the status quo that profits from maintaining the order, but by providing people a platform to speak and act, hopefully society will be able to shift peacefully towards individual autonomy. At the very least, we are paving the way for the future.