

Where it all started

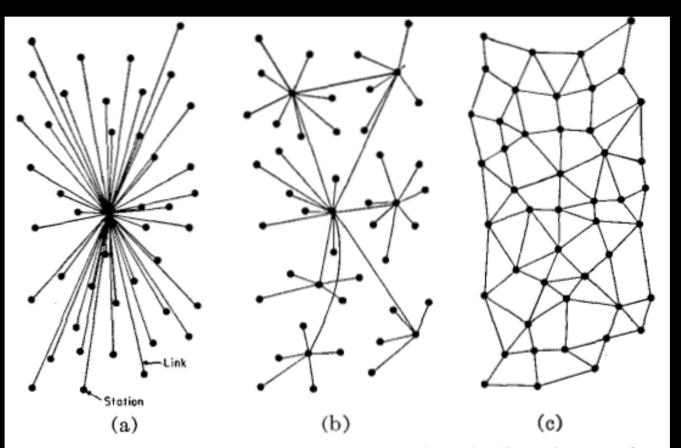


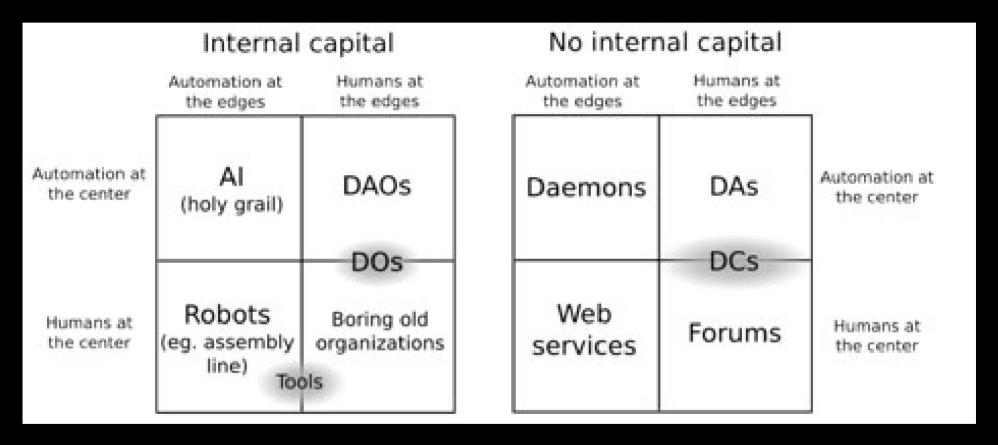
Fig. 1—(a) Centralized. (b) Decentralized. (c) Distributed networks.

Where it all started

Bitcoin – Ether

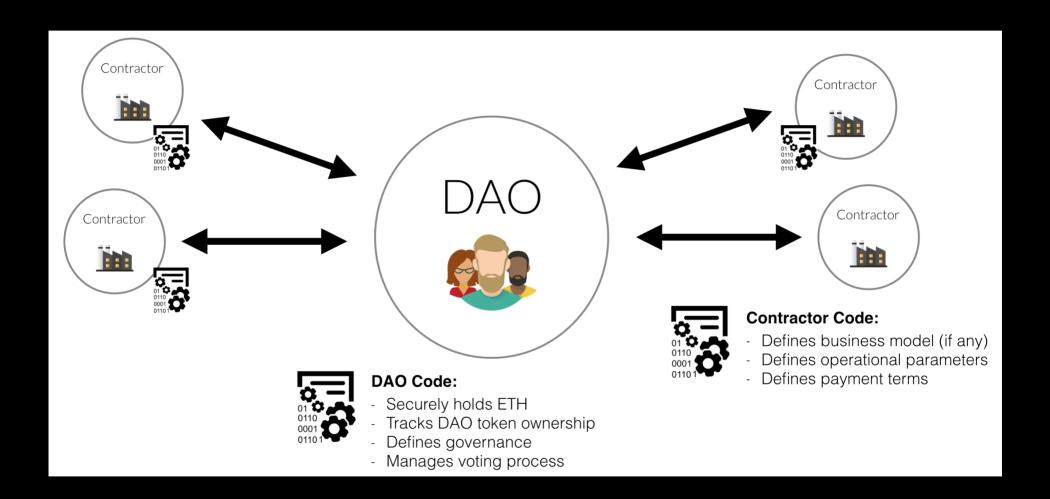
Slock.it

The DAO



Vitalik Buterin 2014

A new way to organize humans

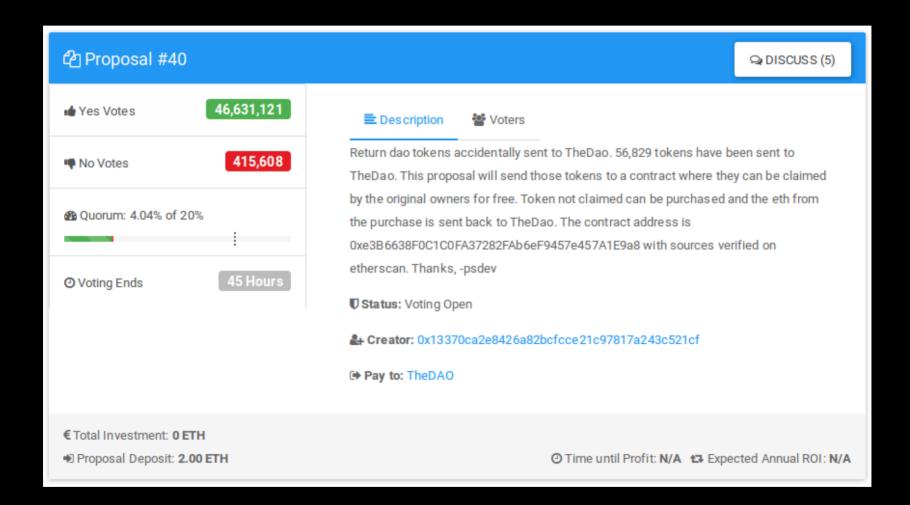


The creation phase

```
6.2. TokenCreation.
contract TokenCreationInterface {
    uint public closingTime;
    uint public minTokensToCreate;
    bool public isFueled;
    address public privateCreation;
    ManagedAccount extraBalance;
    mapping (address => uint256) weiGiven;
    function TokenCreation(uint _minTokensToCreate, uint _closingTime);
    function createTokenProxy(address _tokenHolder) returns (bool success);
    function refund();
    function divisor() returns (uint divisor);
    event FuelingToDate(uint value);
    event CreatedToken(address indexed to, uint amount);
    event Refund(address indexed to, uint value);
```

The DAO Tokens - transfer

The proposal process



The Curators

THE CURATOR WORLD-CLASS SIGNATORIES

The DAO relies on its Curator for failsafe protection and is incredibly privileged to have a high profile set of signatories. The DAO's Curator multisig holders are:



Martin Becze

JS Client Developer

Ethereum Foundation*



Aeron Buchanan Technical Advisor Ethcore*



Vitalik Buterin Inventor and Founder Ethereum Foundation*



Taylor Gerring

Director of Technology

Ethereum Foundation*







The Curators – Role

```
function changeAllowedRecipients(address _recipient, bool _allowed) noEther external returns (bool _success) {
   if (msg.sender != curator)
        throw;
   allowedRecipients[_recipient] = _allowed;
   AllowedRecipientChanged(_recipient, _allowed);
   return true;
}
```

The Curator – Soft Role

Protecting the DAO

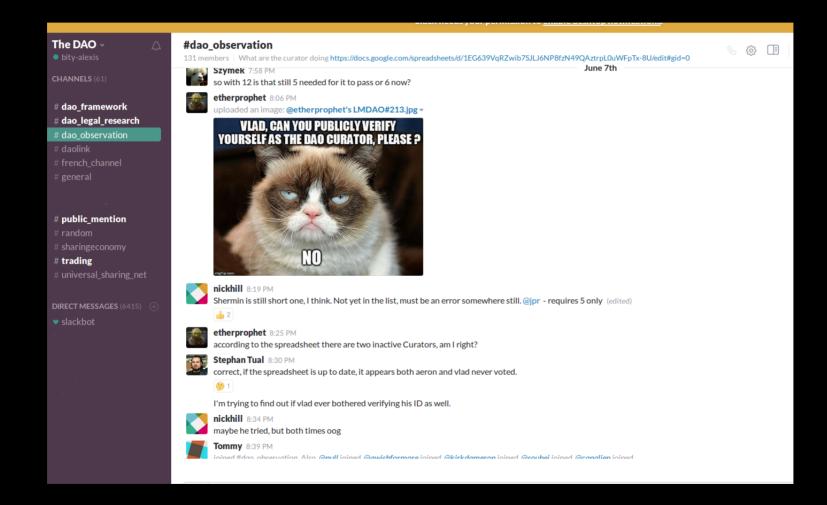
A Curator is a failsafe mechanism that indirectly prevents malicious actors from executing 51% attack. Curators do not add centralization to the DAO: they are nominated by the DAO Token Holders themselves, and can be fired at any time, for any reason. Curators curate the whitelist, the list of Contractors authorized to receive ether from the DAO. The following table shows the different responsibilities of curators and token holders

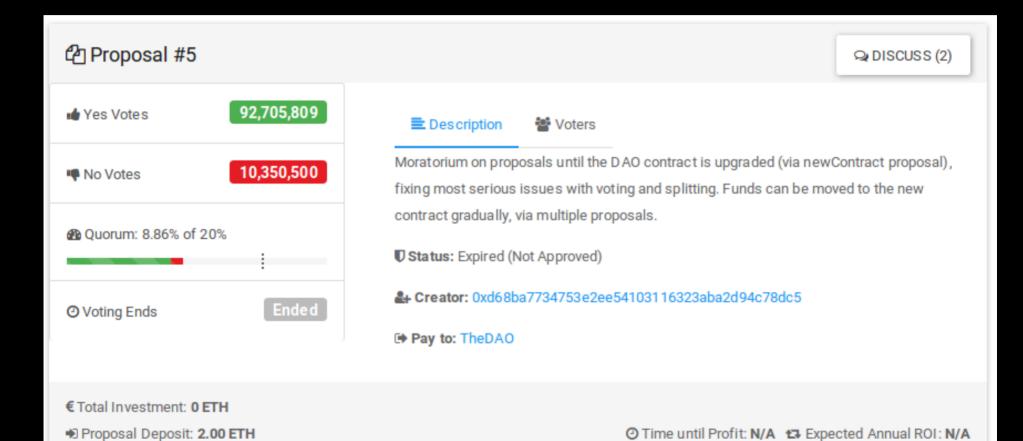
Task		Curators	Token holders
Check that the published Contract on the Ethereum blockchain matches the source code is done by comparing bytecode).	the Contractor claims to have deployed (this	~	~
Confirm that a Proposal comes from an identified person or organization. This is done by send a signed transaction with a certain set of data only known to the Curator and the a author of the Proposal.		•	~
Evaluate whether a Proposal is 'good' or not.		×	~
Audit the Proposal's smart contract code.		×	~
Provide legal advice regarding the Proposal (if any).		×	(✔)
Take an economic responsibility for the Proposal.		×	~

Governance

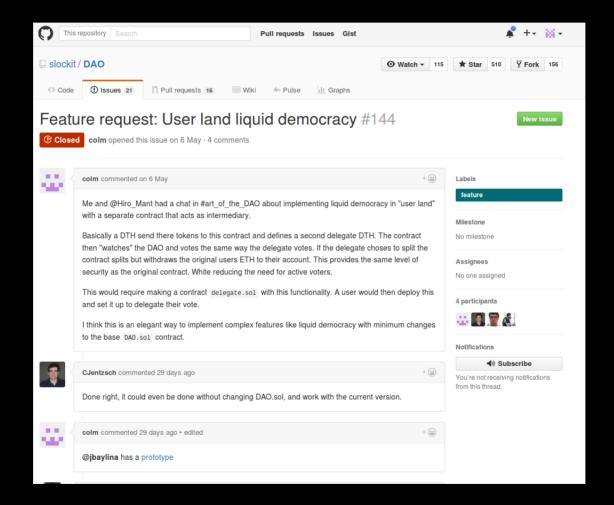
Community based
Consensus based
Transparency
Evolution, Iteration

Community based

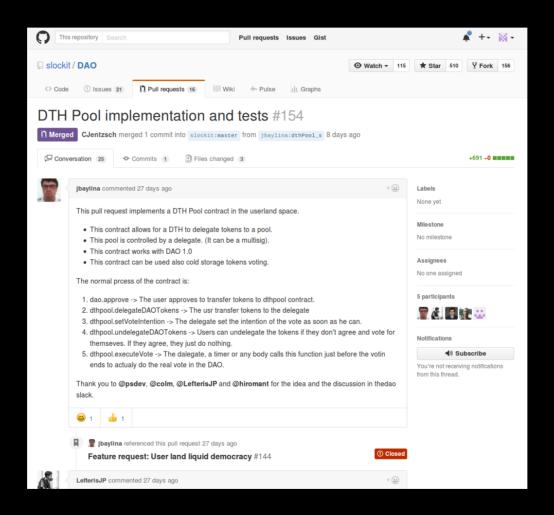




Iterative Governance



Iterative Governance

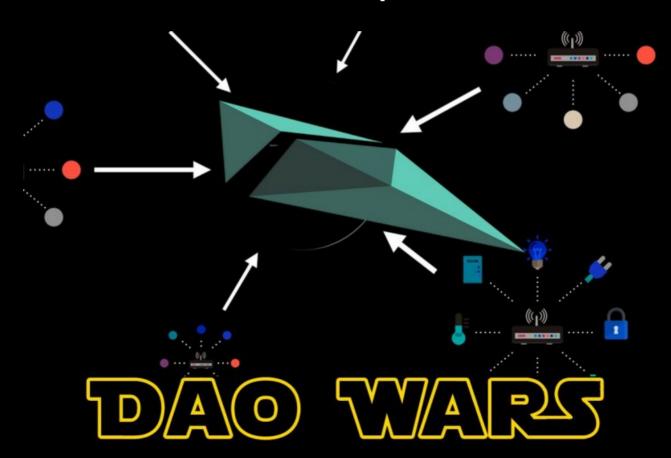


Challenges

- Security issues
- Regulatory
- Legal
- Curators role (towards a foundation)

The attack!

A recursive attack - http://vessenes.com/deconstructing-thedao-attack-a-brief-code-tour/



The response

- Quick community counterattack
- Transparency and communication
- Plan A, B and C ready in a day
- The Hard Fork and wars between parallel universes

The lessons

- Hard Fork was extreme and unique measure.
- All investors where made whole.
- Legal issues are the hardest to solve, but a mainly psychological issues.
- An open debate on immutability

What's next

- Building a DAO foundation
- Building a Decentralised exchange

DAO 2.0 is (are) coming...