

Blockchain, Smart Contracts, Privacy, Scalability and the WEB 3.0



ethereum



Fabian Vogelsteller



Ethereum Wallet



Mist Browser



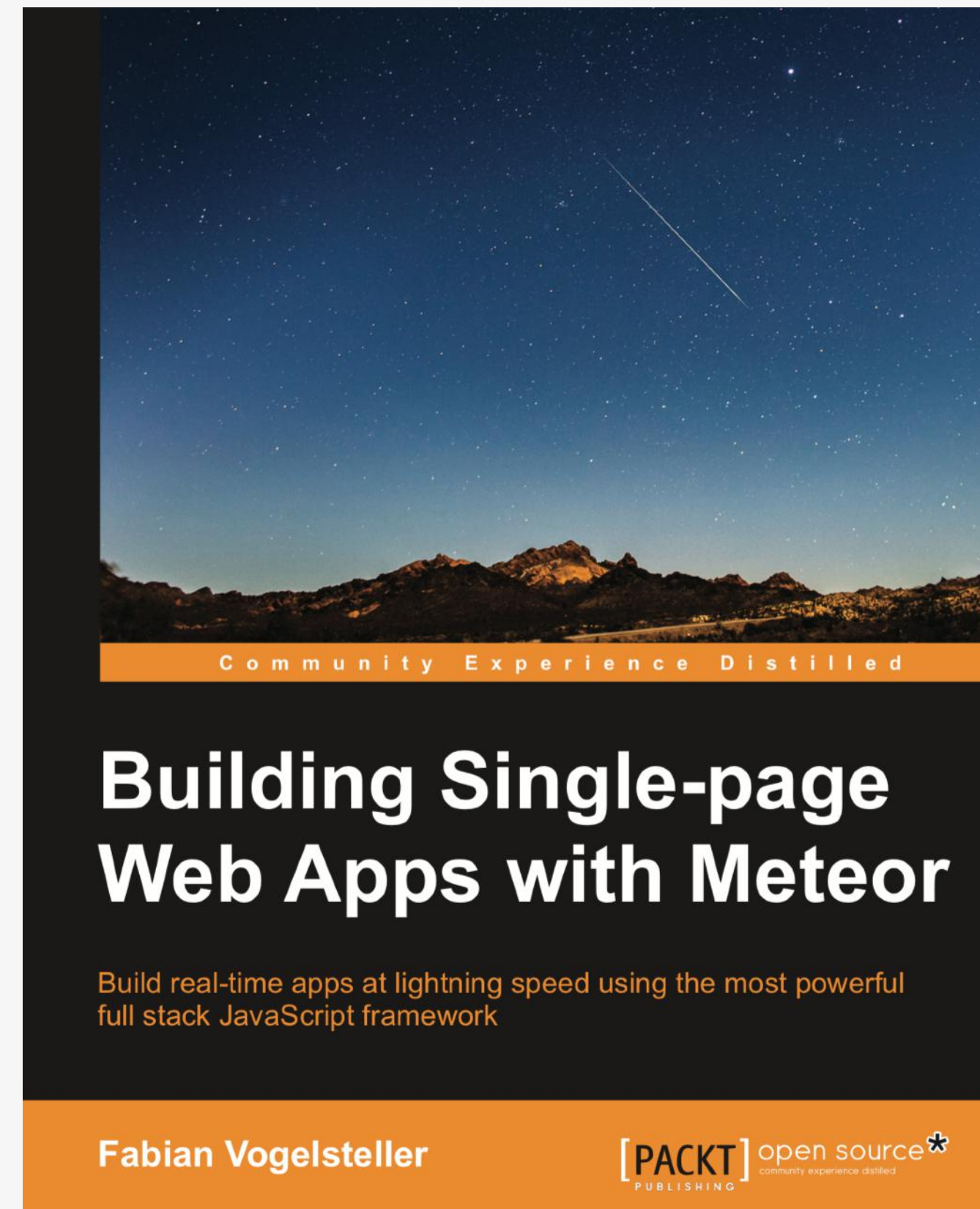
web3.js



Flat File CMS

Other Open Source libraries...





Fabian Vogelsteller, Web3.js and Mist Developer, Ethereum
@feindura
<http://frozeman.de/blog>



What is a Blockchain?





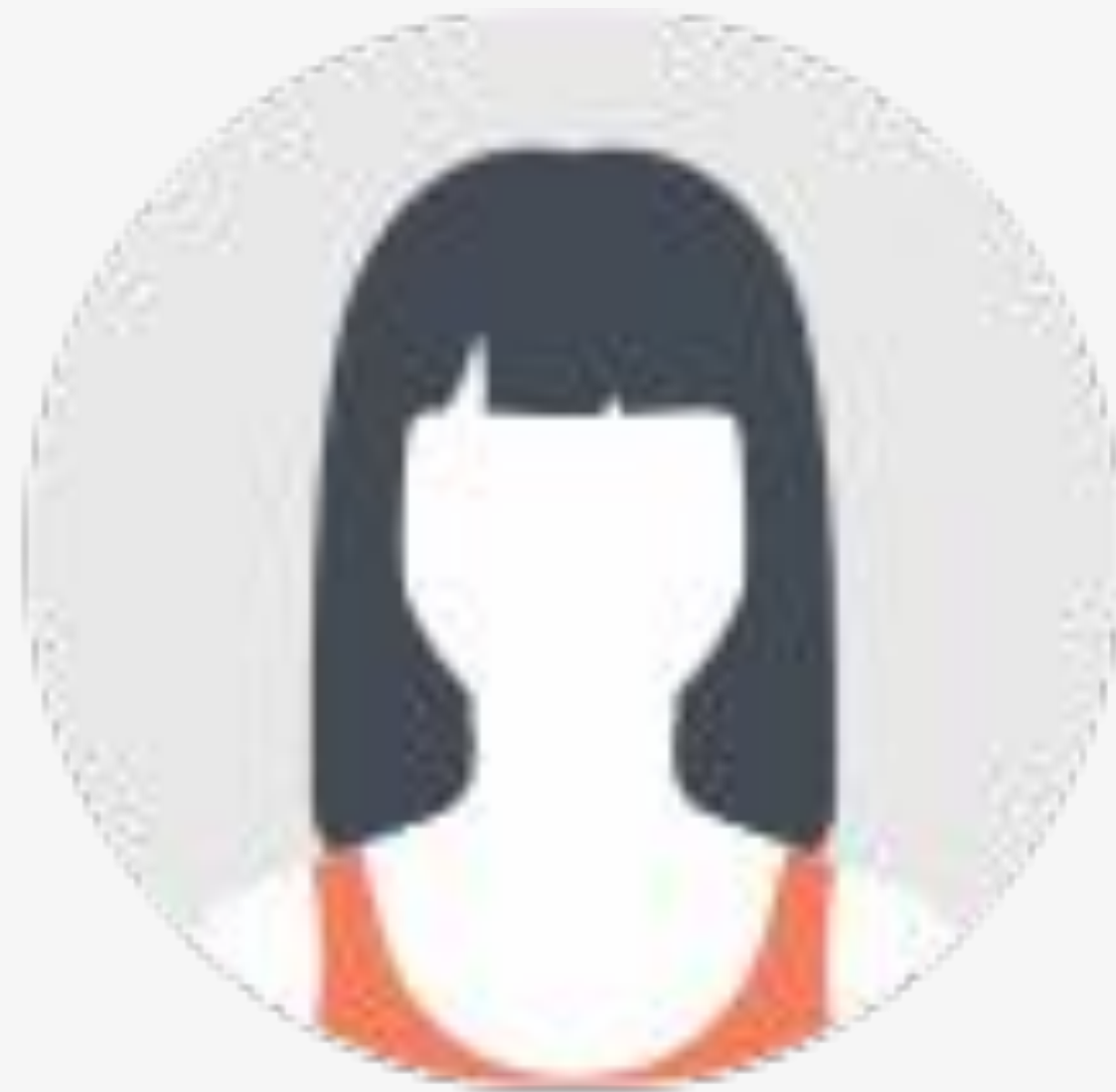
Fabian Vogelsteller, Web3.js and Mist Developer, Ethereum
@feindura
<http://frozeman.de/blog>





Fabian Vogelsteller, Web3.js and Mist Developer, Ethereum
@feindura
<http://frozeman.de/blog>





Elvis Presley



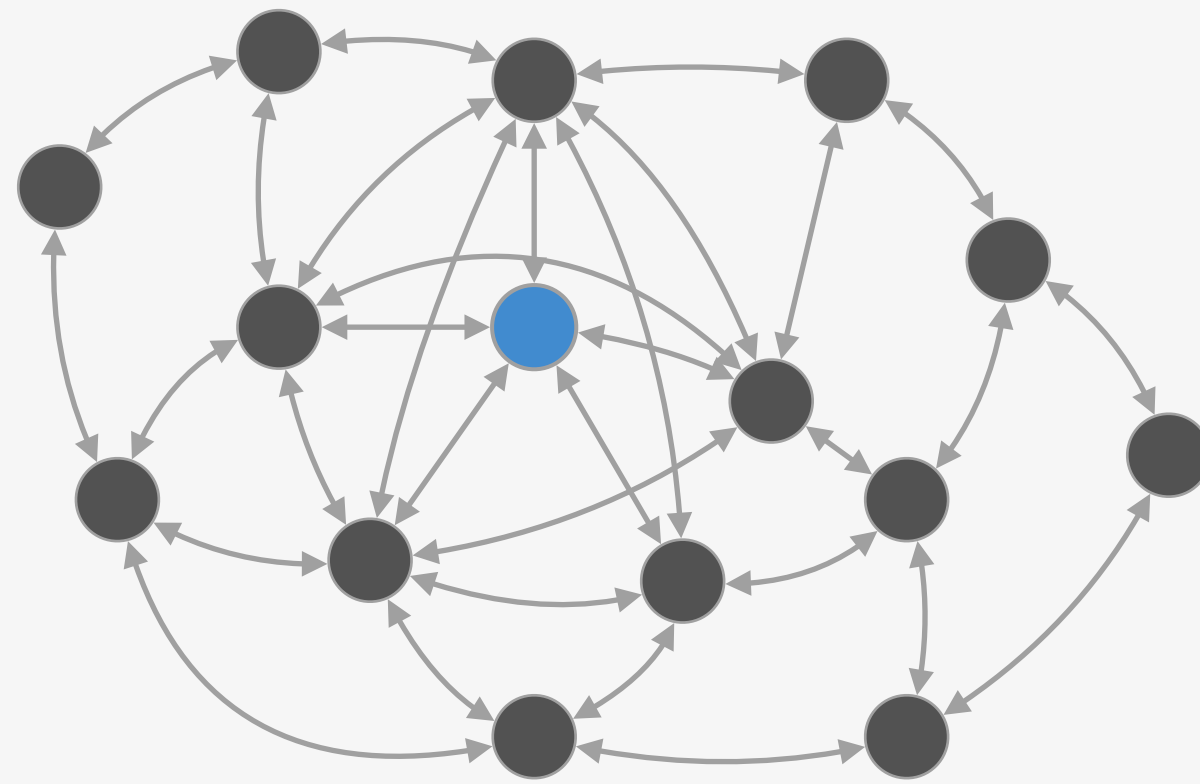
Fabian Vogelsteller, Web3.js and Mist Developer, Ethereum
@feindura
<http://frozeman.de/blog>



Decentral

Immutable

Verified



+



+



Peer2Peer

Consensus
Algorithm

Signatures



What are Smart Contracts?



Trust is good...



**“I will pay you
that money in Februar”**



Automation is better!



```
if date === 01-02-2017  
then wallet.send(tom, 100)
```



Ether is the fuel and the spam protection

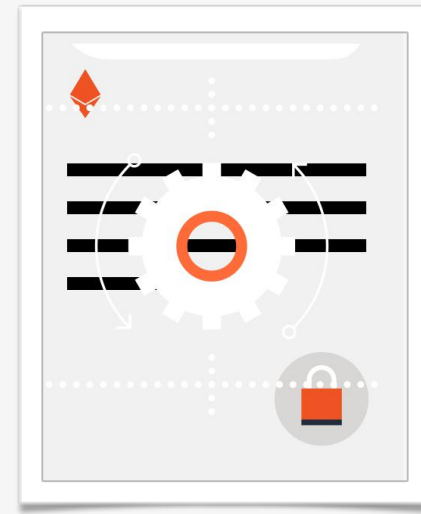



```
1 pragma solidity 0.4.8;
2
3 contract SimpleStorage {
4     string storedData;
5
6     function set(string x) {
7         storedData = x;
8     }
9
10    function get() constant returns (string) {
11        return storedData;
12    }
13 }
```



What becomes possible?

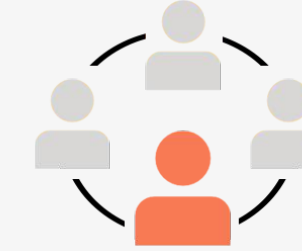




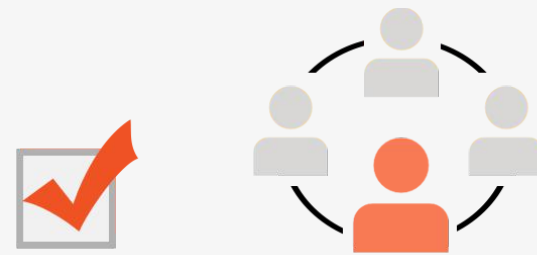
Industry 4.0



Supply chain



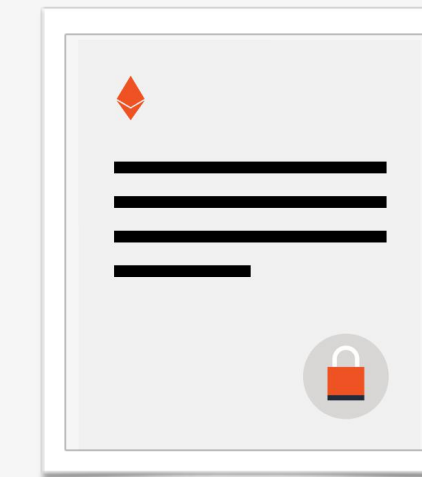
Digital identity



Micropayments
through payment channels



Nano **Paywalls**



Machines can **own money**
Selfdriving cars
Autonomous Drones



Where are we now?



Global Commodore computer,
which doesn't scale with more nodes!
(currently)

0xFF454353FDD543C



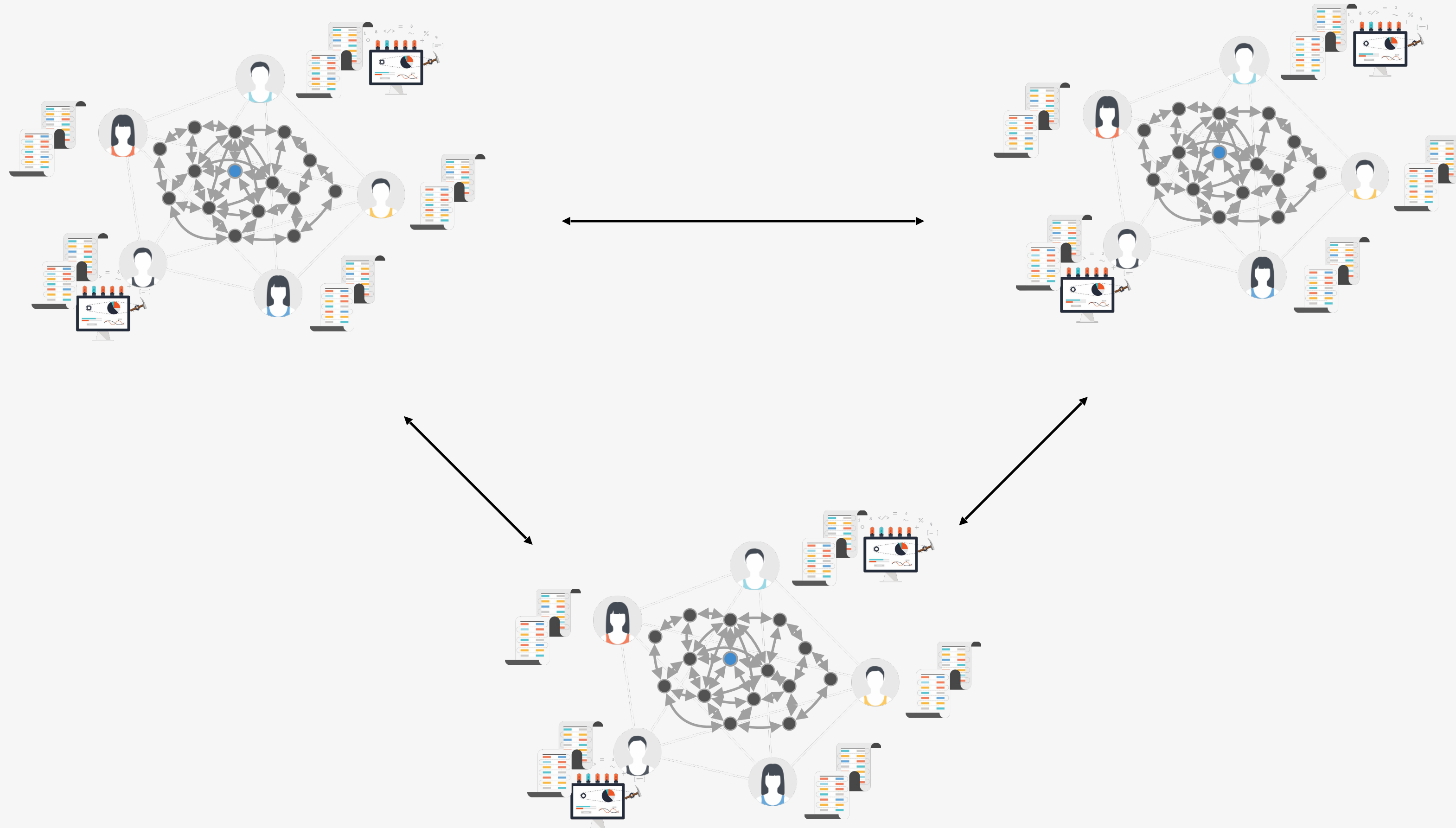
But it creates a **un-cheatable Platform**:
Solves the trust issue between parties!



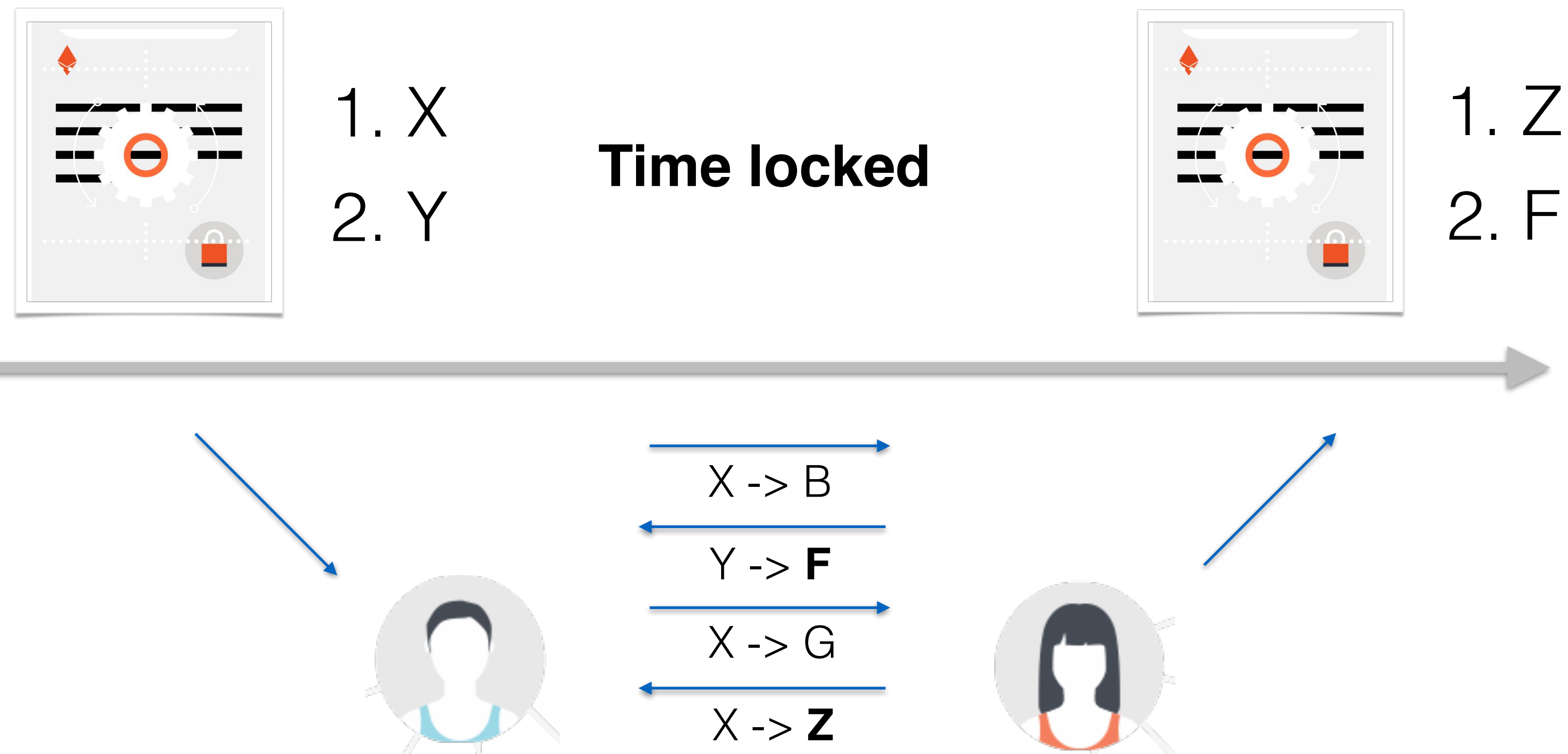
Scalability



Consensus Sharding



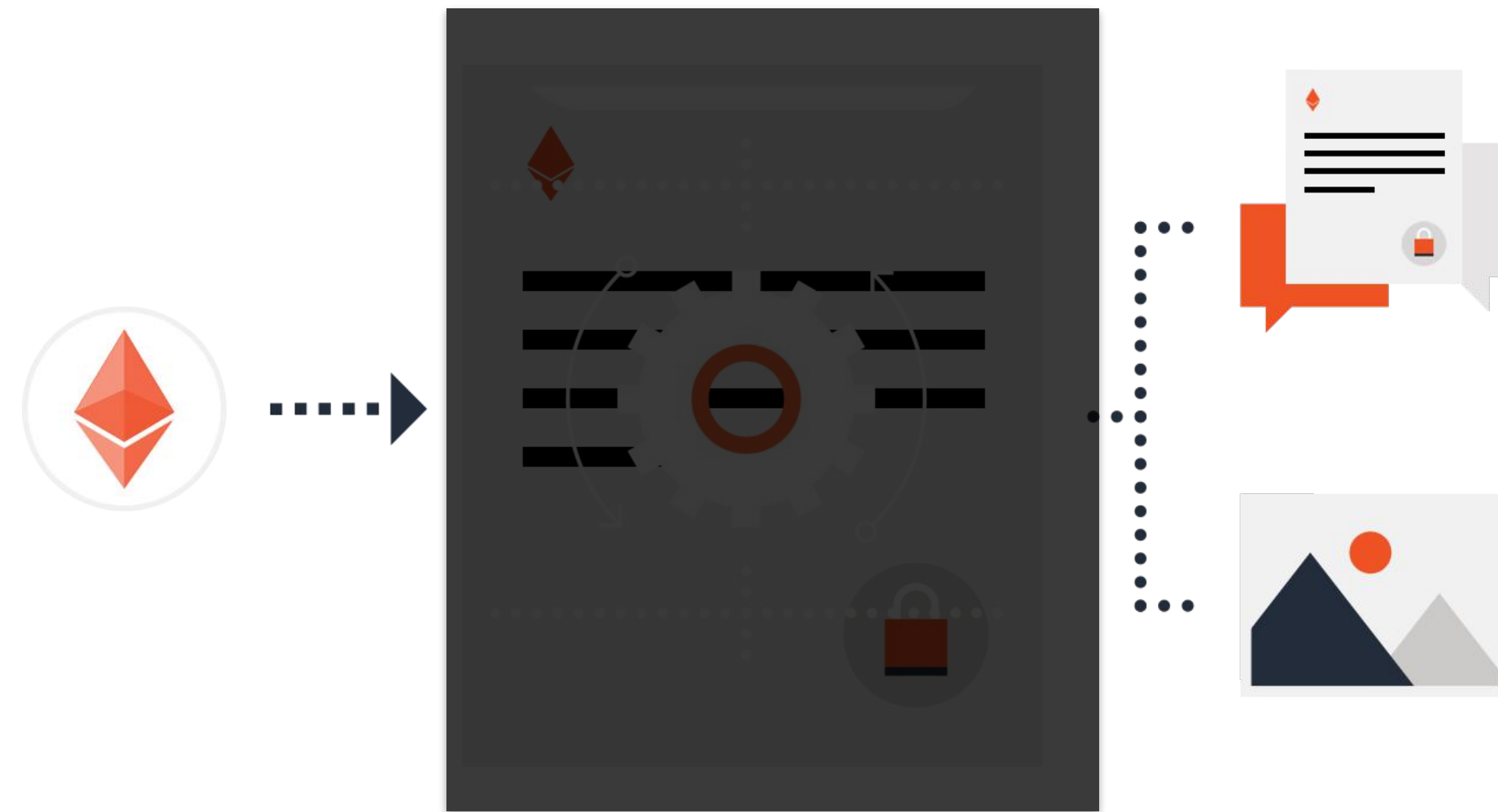
State channels



Privacy

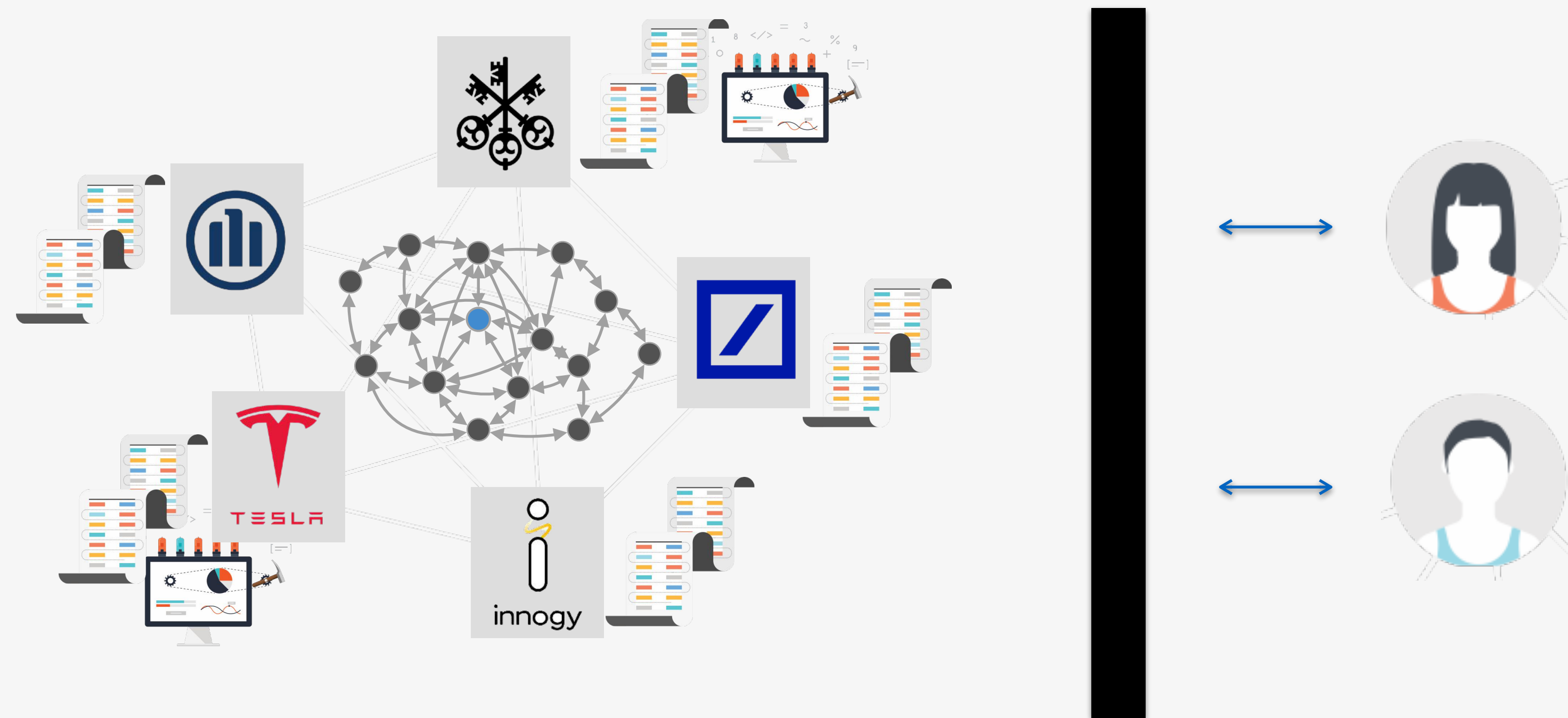


Zero knowledge proofs



Consortium chain

API/Permissioned Light client



Trustless

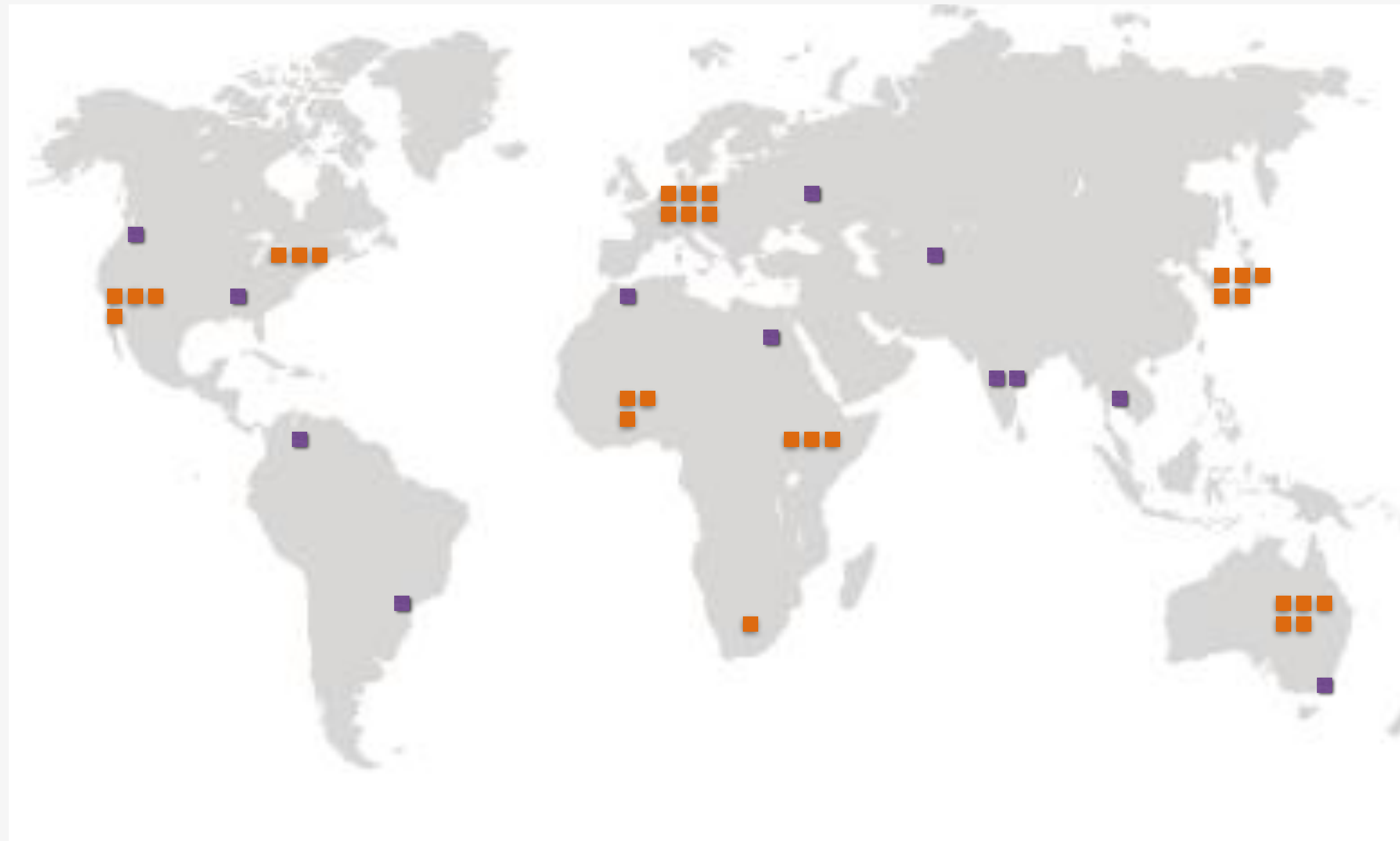
Trust required



The Internet of Blockchains

Fabian Vogelsteller, Web3.js and Mist Developer, Ethereum
@feindura
<http://frozeman.de/blog>





The future with Blockchains is the internet of ownership!



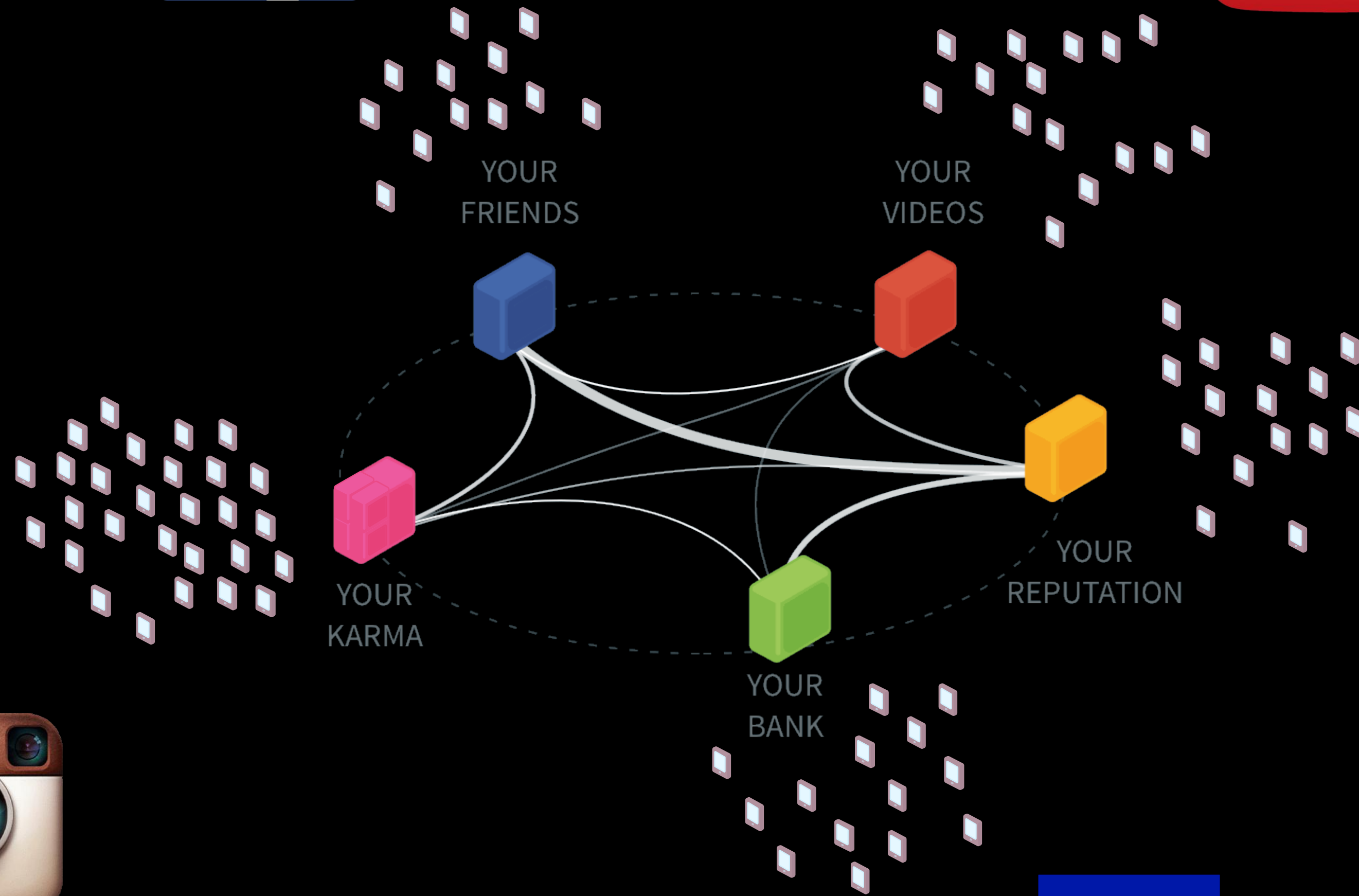
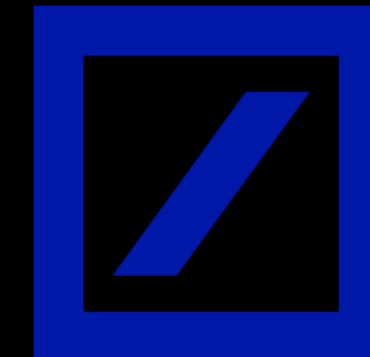
Decentralized server-less applications

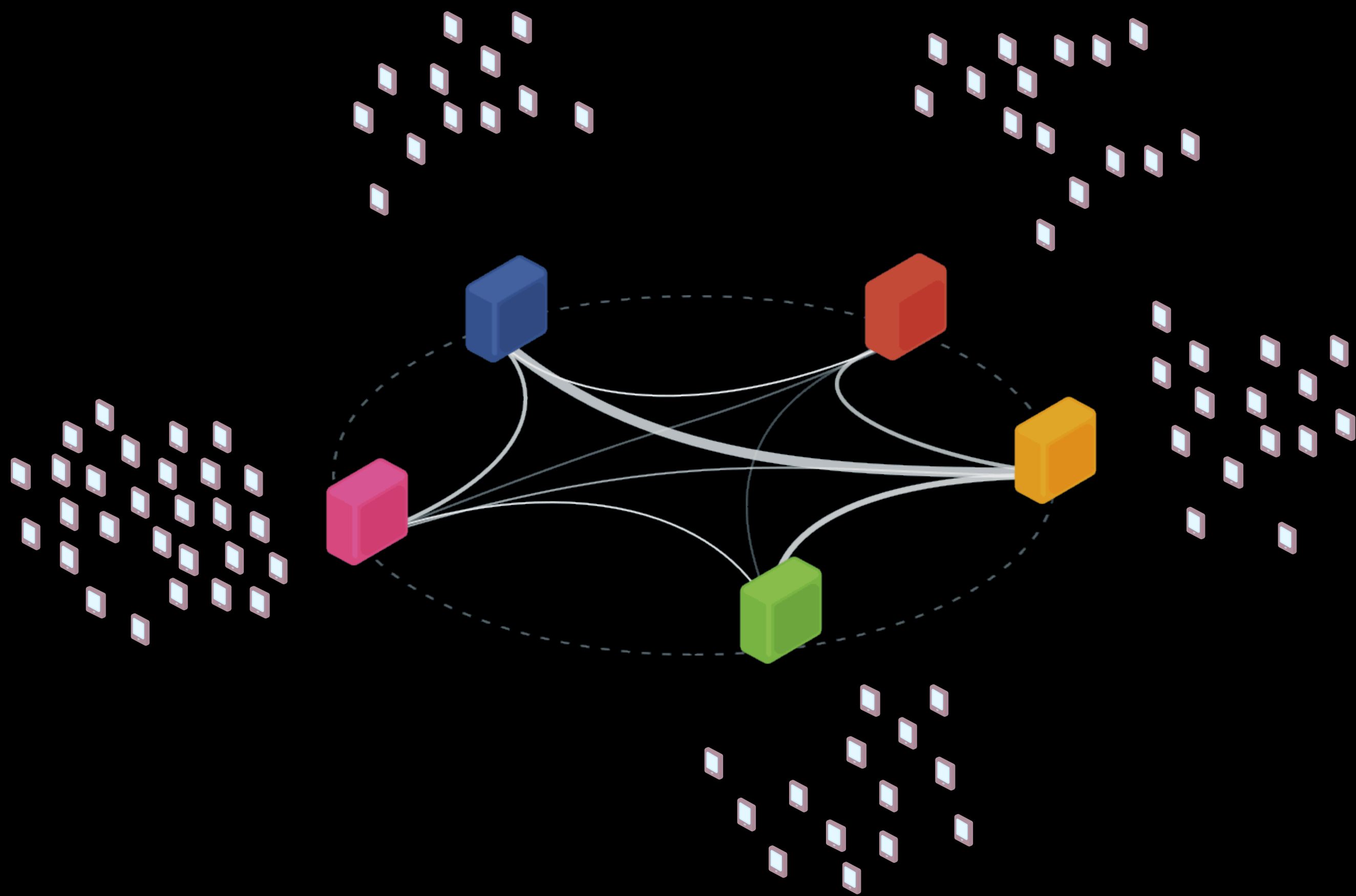
Censorship resistant

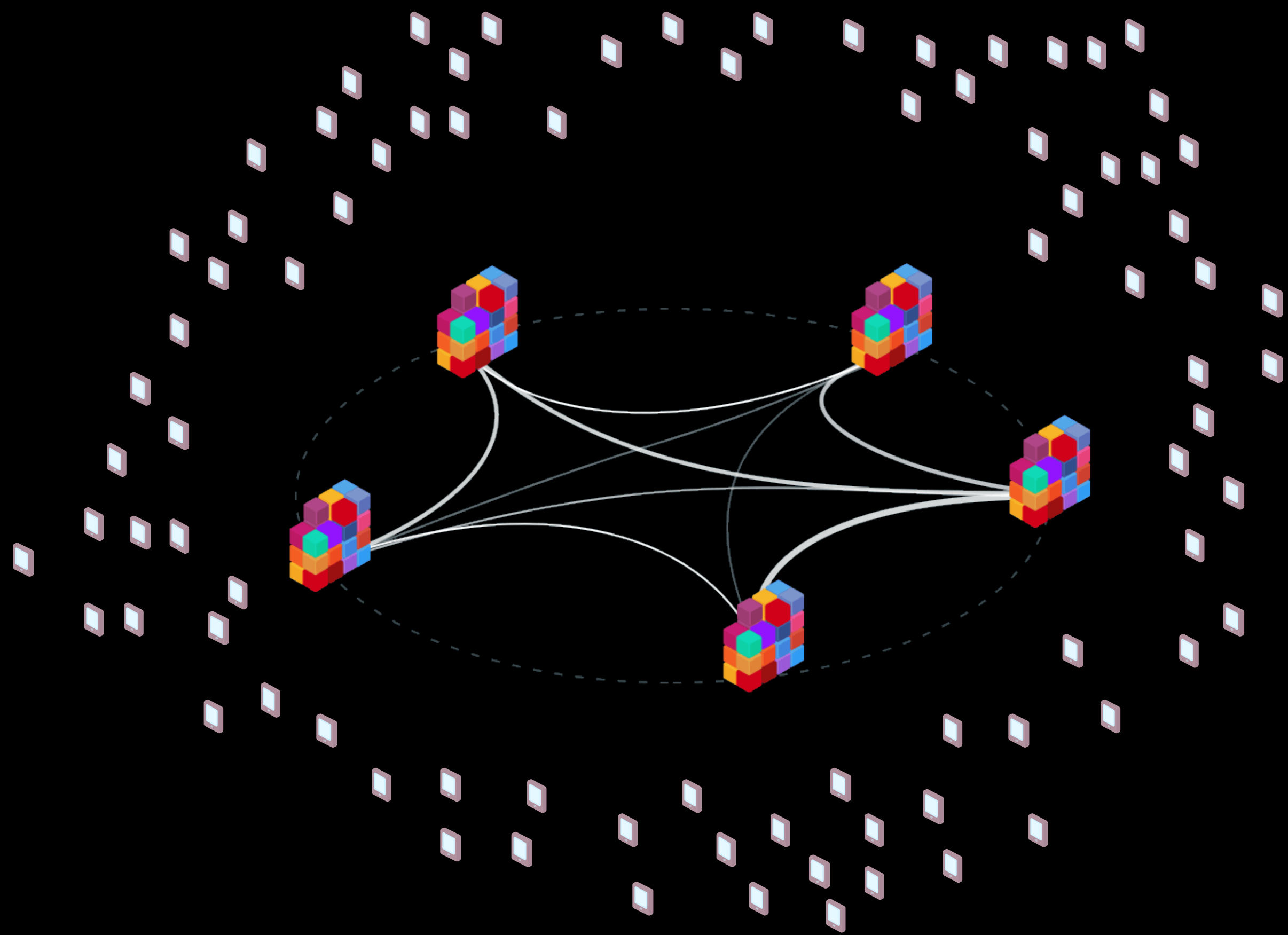
Can outlive their developer team

Protocol, not an app, interfaces can be replaced









BROWSE

State of the Dapps

Google

GitHub - ConsenSys/...

dappstore.io

Error 400

See All...

ETHEREUM WALLET

Pending Confirmation!

-2,060

2

59%

State of the Dapps

http://dapps.ethercasts.com

CONNECT

STATE OF THE DAPPS

Q Search

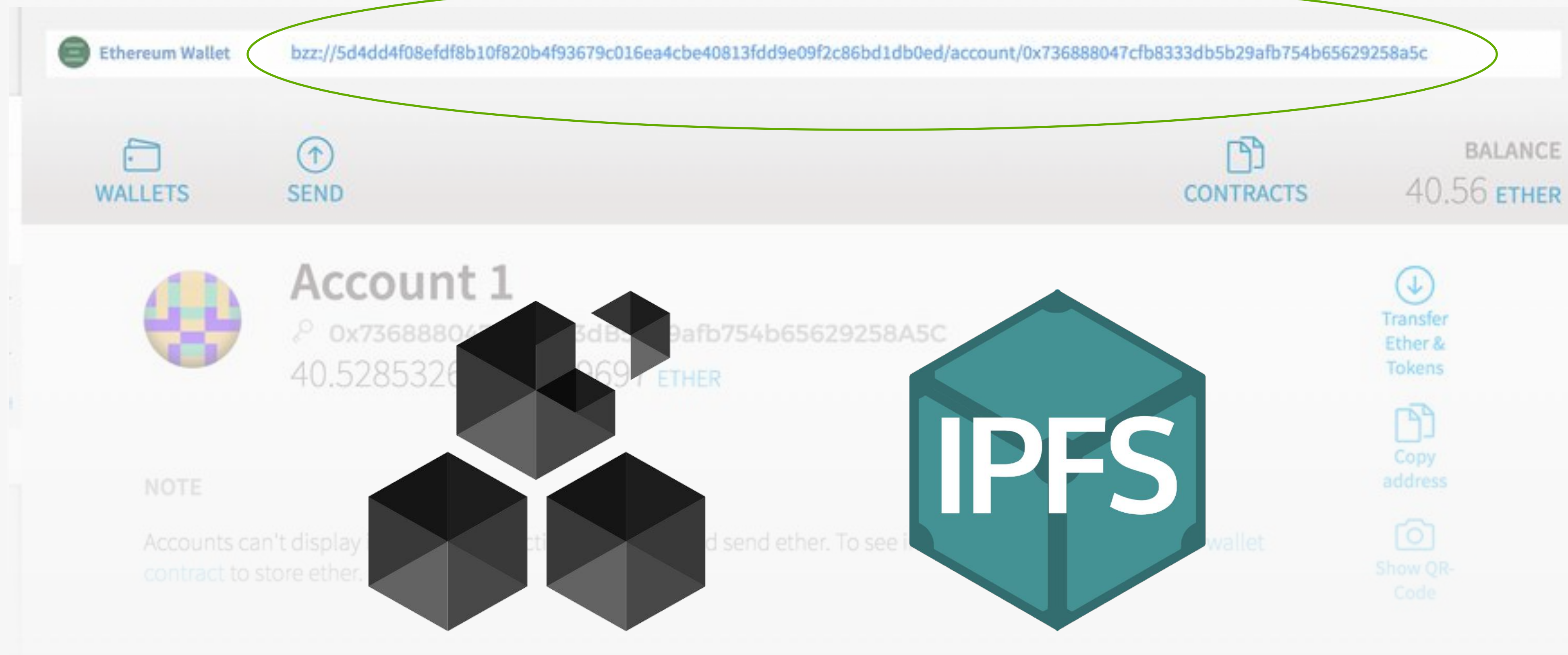
i

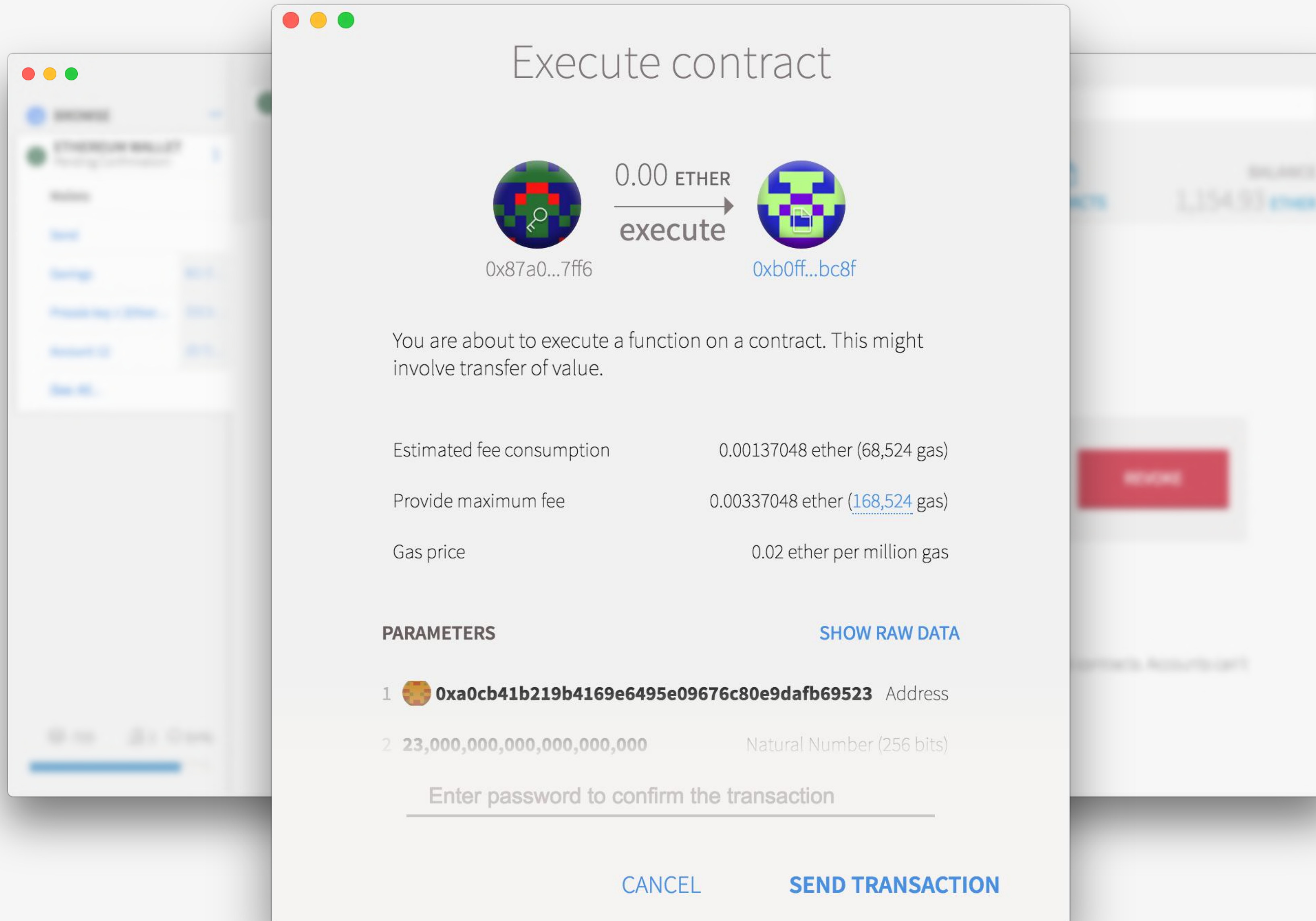
350 dapps listed

Sort: Updated

<div>AuctionHouse</div> <div>Doug Petkanics, Eric Tang</div> <div>Auction platform for non-fungible on-chain assets.</div> <div><div>MIT</div><div></div><div></div></div> <div>Working Prototype</div> <div>2017-02-10</div>	<div>FirstBlood.io</div> <div>Joe & Zack</div> <div>A decentralized eSports reward platform.</div> <div><div></div><div></div><div></div></div> <div>Work In Progress</div> <div>2017-02-08</div>	<div>Etheroll</div> <div>James Britt</div> <div>Ether dice game casino / gamble ether</div> <div><div></div><div>proprietary</div><div></div><div></div></div> <div>Working Prototype</div> <div>2017-02-08</div>	<div>Blockjack</div> <div>Voltaireth + WhySo3rious</div> <div>The first Blackjack Gambling Game on the Blockchain</div> <div><div></div></div> <div>Live</div> <div>2017-02-08</div>
<div>Flight Delays Suck</div> <div>Christoph Mussenbrock</div> <div>Get indemnification if your plane is late</div> <div><div></div></div> <div>Working Prototype</div> <div>2017-02-08</div>	<div>Maker Market</div> <div>MakerDAO</div> <div>User interface for Maker Market contracts</div> <div><div></div><div></div><div></div><div></div><div></div></div> <div>Live</div> <div>2017-02-08</div>	<div>Lending Circles</div> <div>WeTrust</div> <div>Rotating Savings and Credit on the Blockchain</div> <div><div></div><div>open</div><div></div><div></div></div> <div>Working Prototype</div> <div>2017-02-06</div>	<div>Ethlance</div> <div>Matus Lestan</div> <div>Decentralized Job Market Platform</div> <div><div></div><div>GPL</div><div></div></div> <div>Live</div> <div>2017-02-05</div>









COLONY



Fabian Vogelsteller, Web3.js and Mist Developer, Ethereum
@feindura
<http://frozeman.de/blog>

