



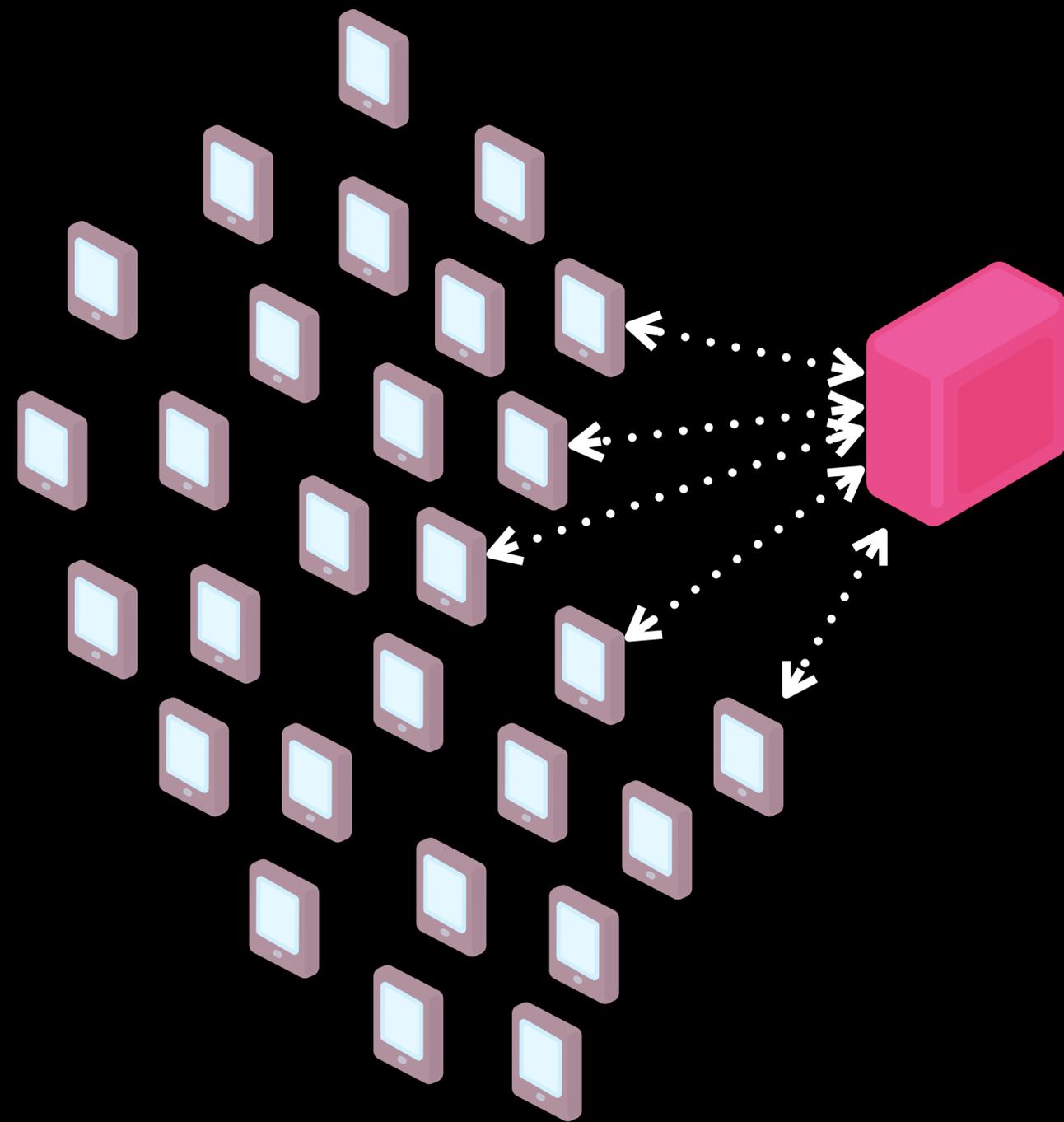
# Blockchains para uma internet mais descentralizada

## **Mist, um browser para Ethereum**

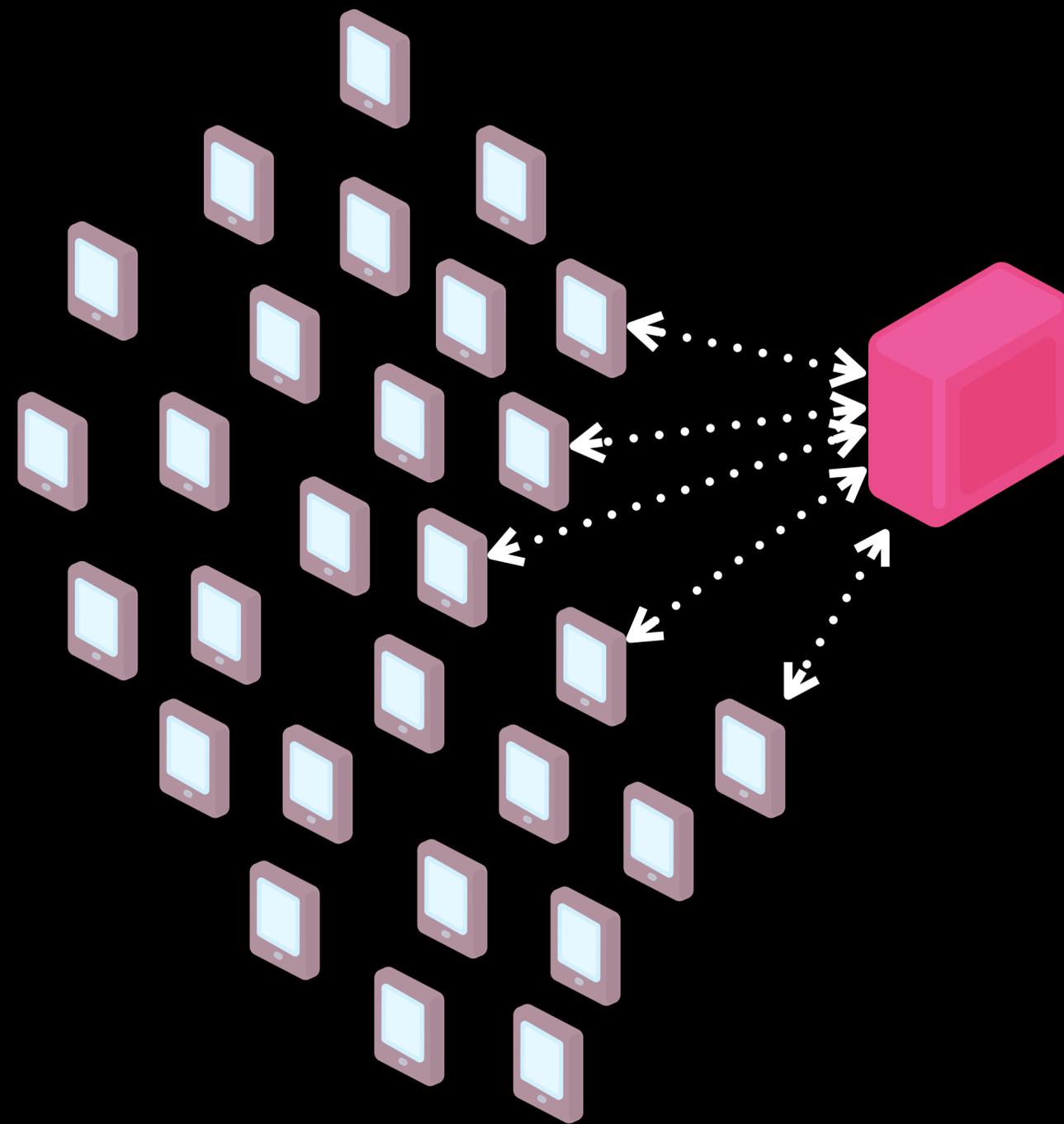
Alex Van de Sande

[avsa@ethereum.org](mailto:avsa@ethereum.org)

ethereum



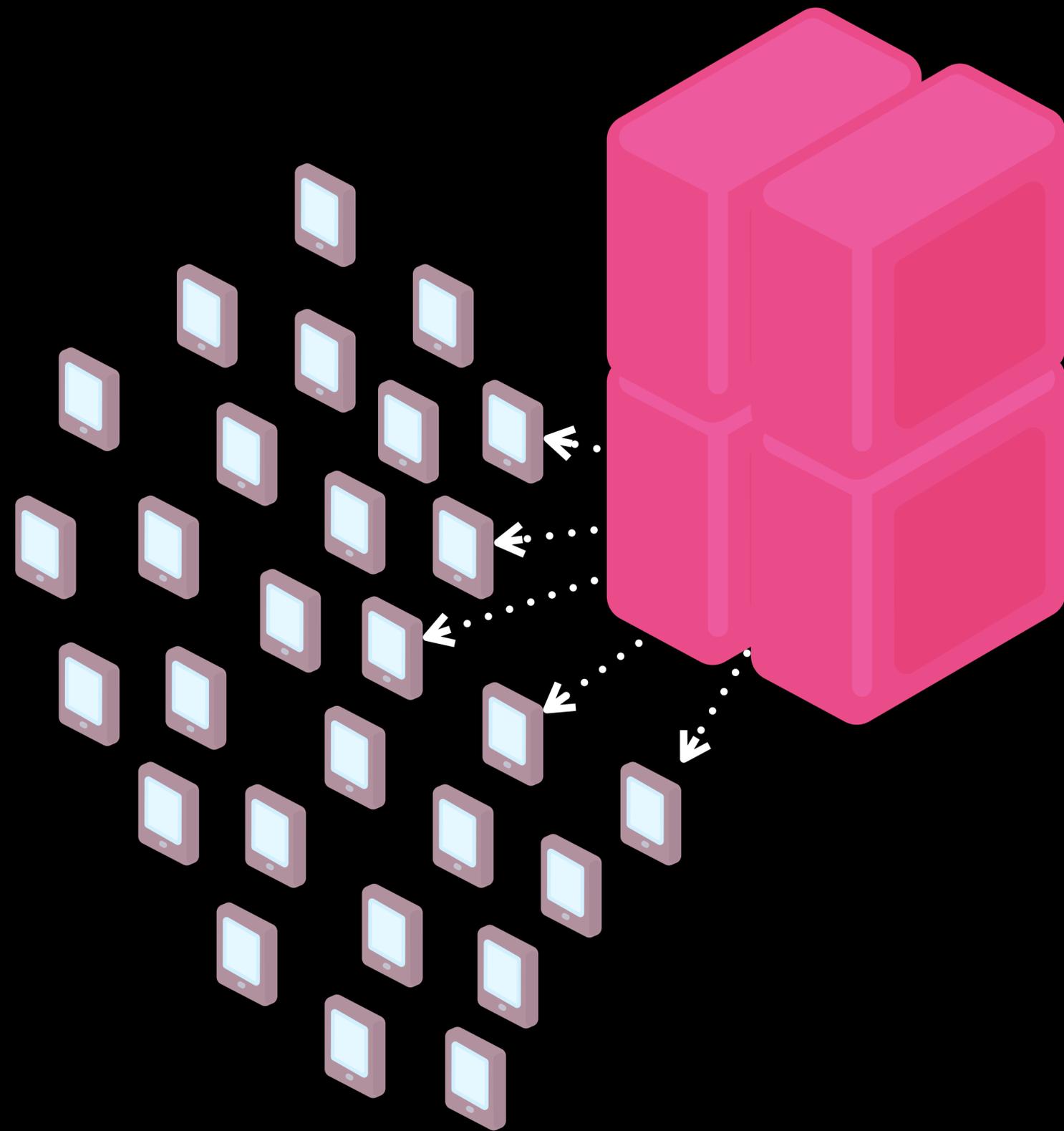
O Problema



Cenário 1

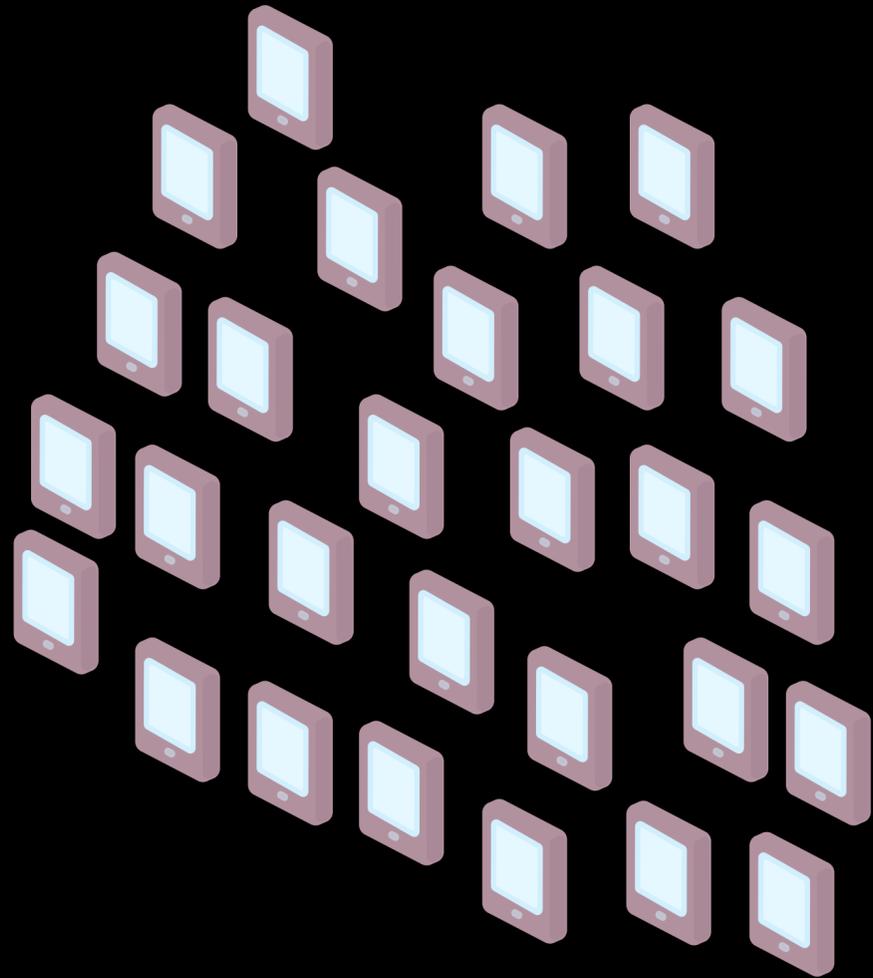
## Falha catastrófica

- Perdemos um pouco da história da internet
- Usuários são abandonados
- Um bom serviço prestado é perdido



## Cenário 2: **Investimento**

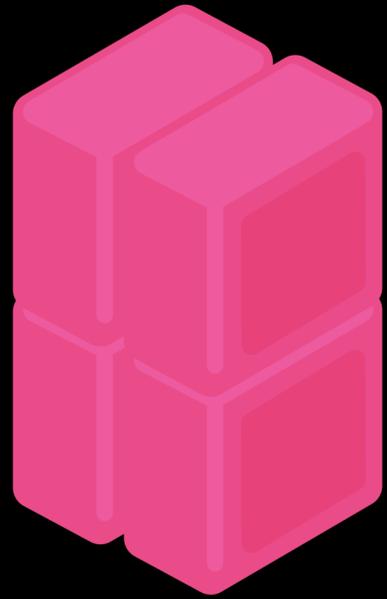
- Alguém precisa pagar por isso
- Atenção é a moeda mais fácil de ser usada
- O projeto passa a servir shareholders e publicitários



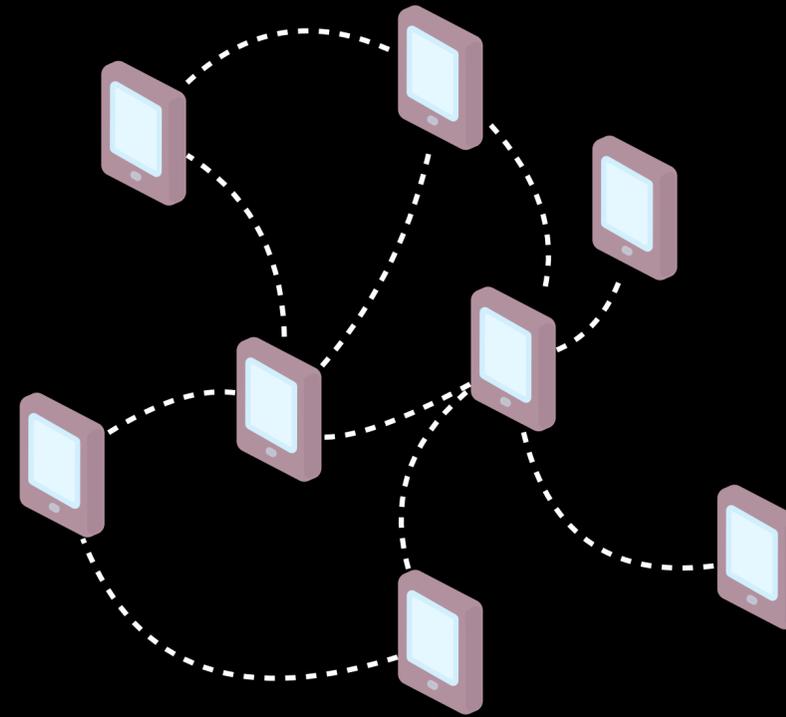
- Te mostra uma tela bonitinha



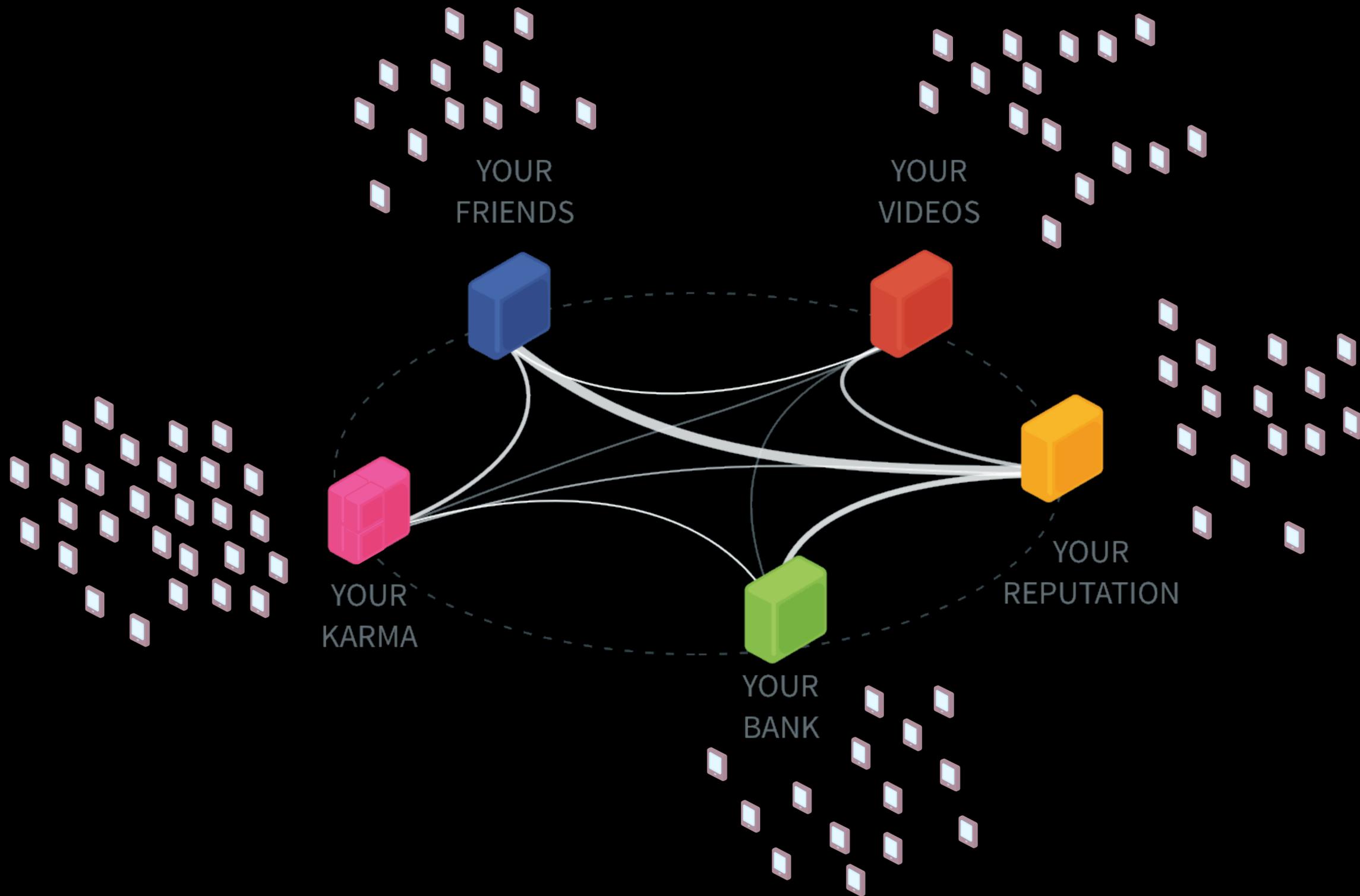
- Carrega o conteúdo
- Mantém dados privados seguros
- Conecta os usuários
- Coordena e resolve conflitos

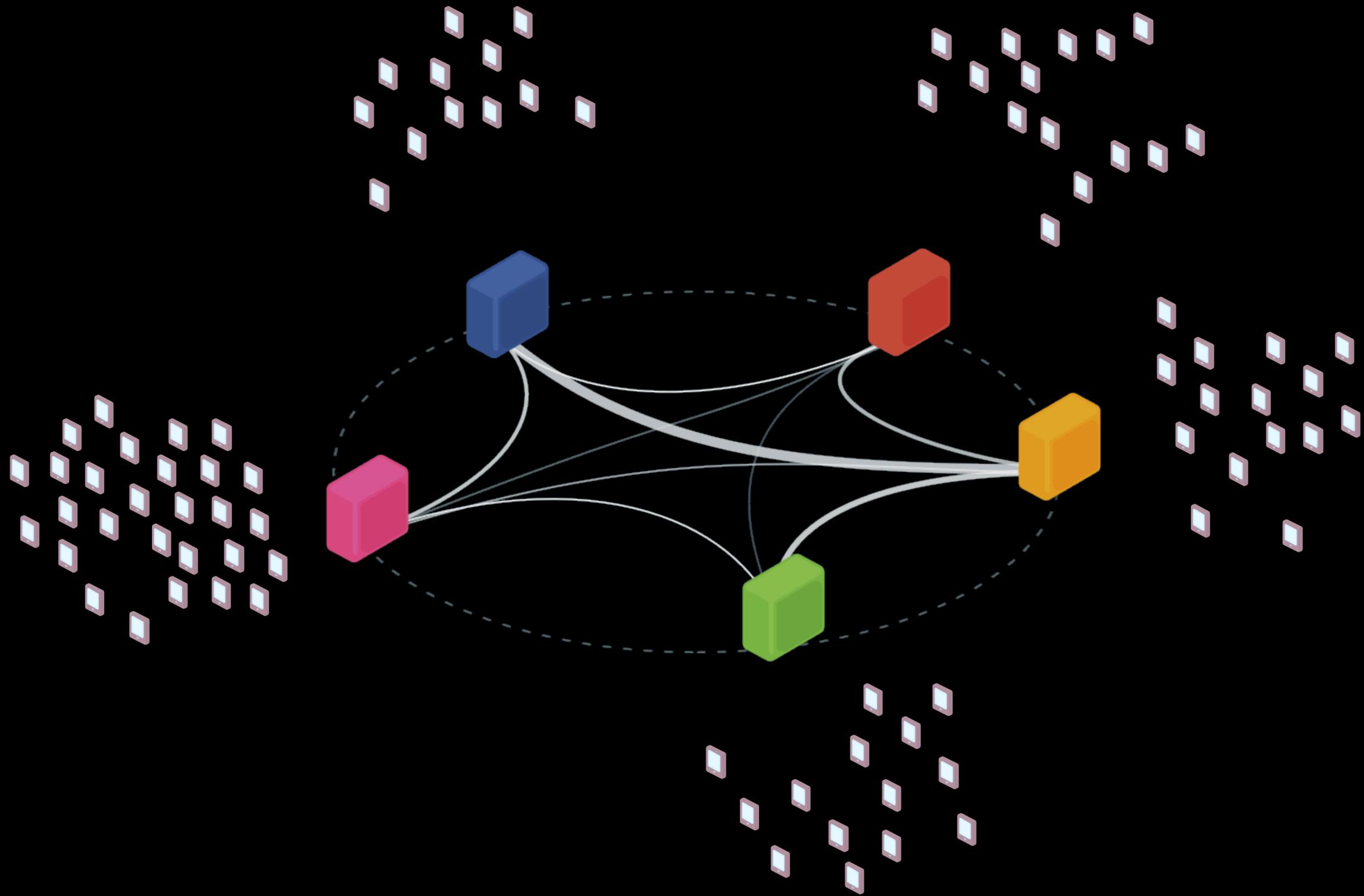


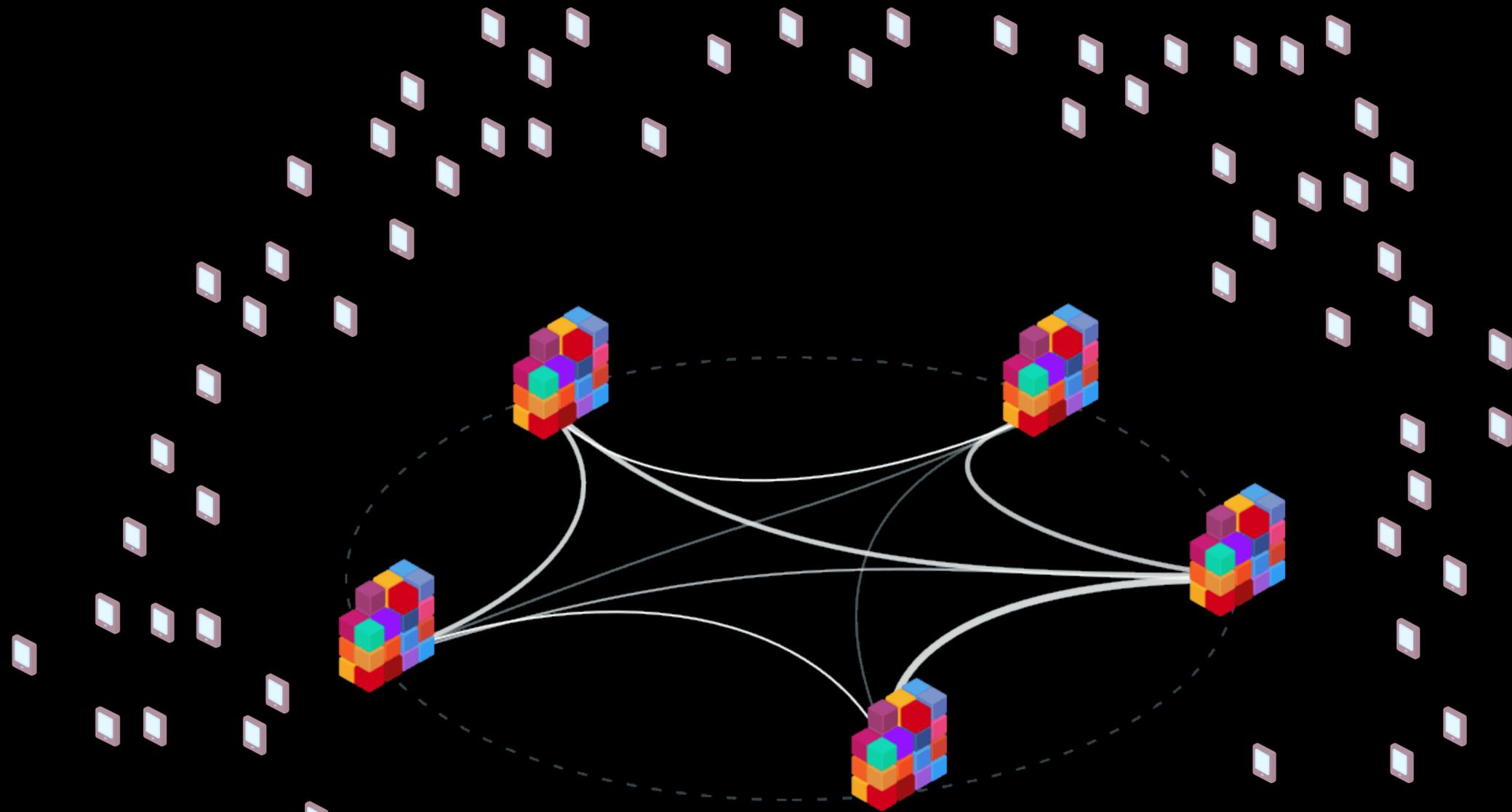
- Carrega o conteúdo
- Mantém dados privados seguros
- Conecta os usuários
- Coordena e resolve conflitos



**Bit torrent**  
**Criptografia Ponta a Ponta**  
**Mesh Networking**  
**Blockchains**







Consenso Global = **Blockchains**

Arquivos = **Swarm**



Quem é a mãe desse bebê?



BLOCKCHAIN = **CONSENSO**

# ALGORITMO DE CONSENSO

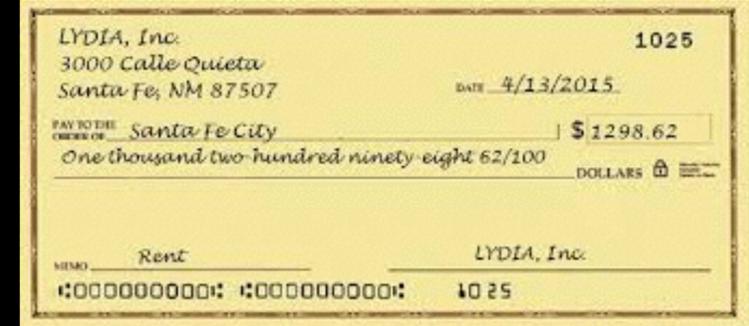
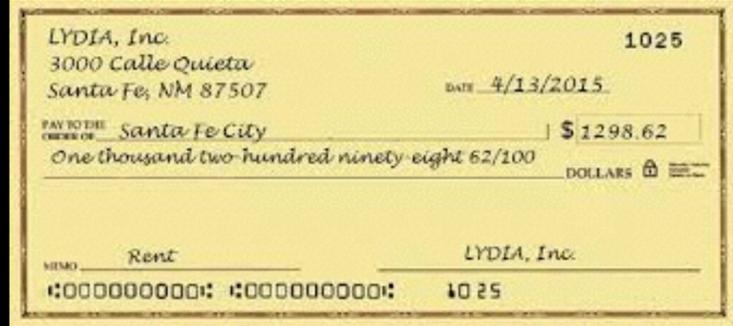


Conjunto de regras para  
sincronizar ou resolver  
conflitos entre partes  
discordantes



Quem é dono desse nome?

CONSENSO



Qual desses cheques terá fundo?

CONSENSO



Quando vamos tomar a Bastilha?

CONSENSO

## CONSENSO = VERDADE UNIFICADA DISTRIBUIDA

Quem está certo nessa disputa?

Quem é dono disso?

Quem chegou primeiro?

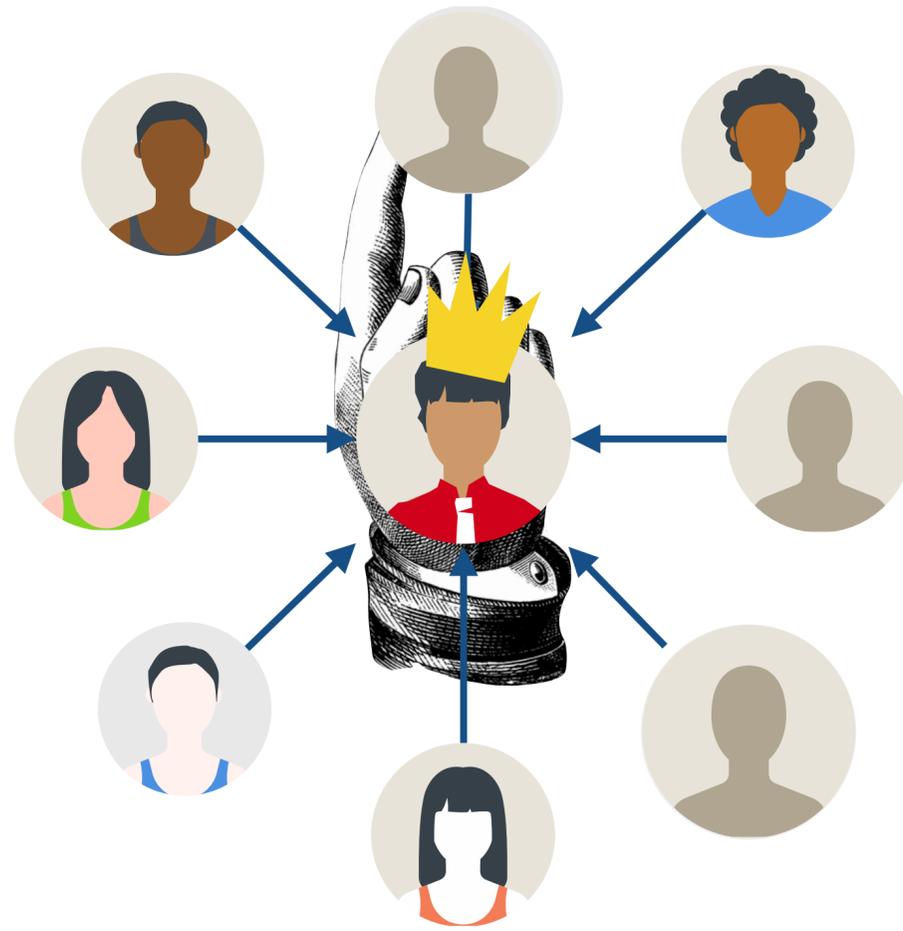
Qual meu número de identidade?

Onde será minha seção?

Onde vai esse dinheiro?

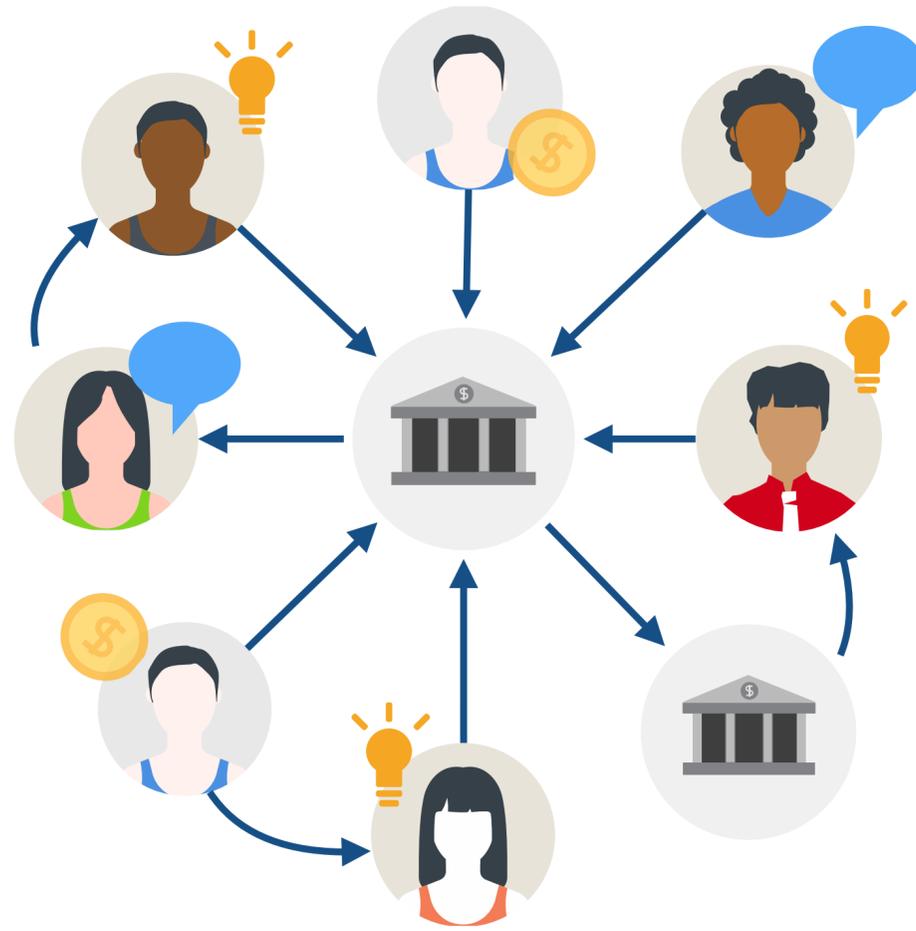
Quando será o evento?



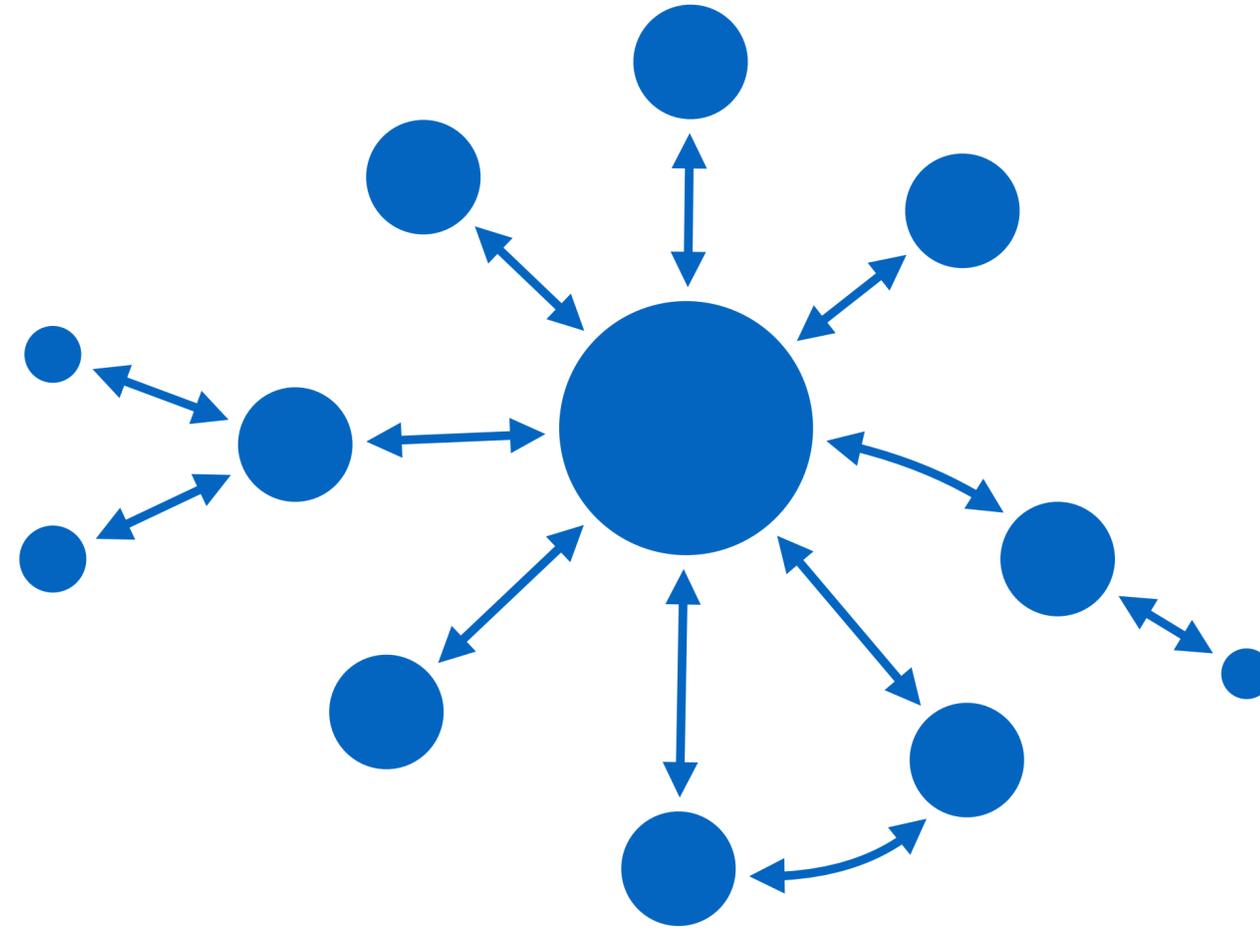


Consenso

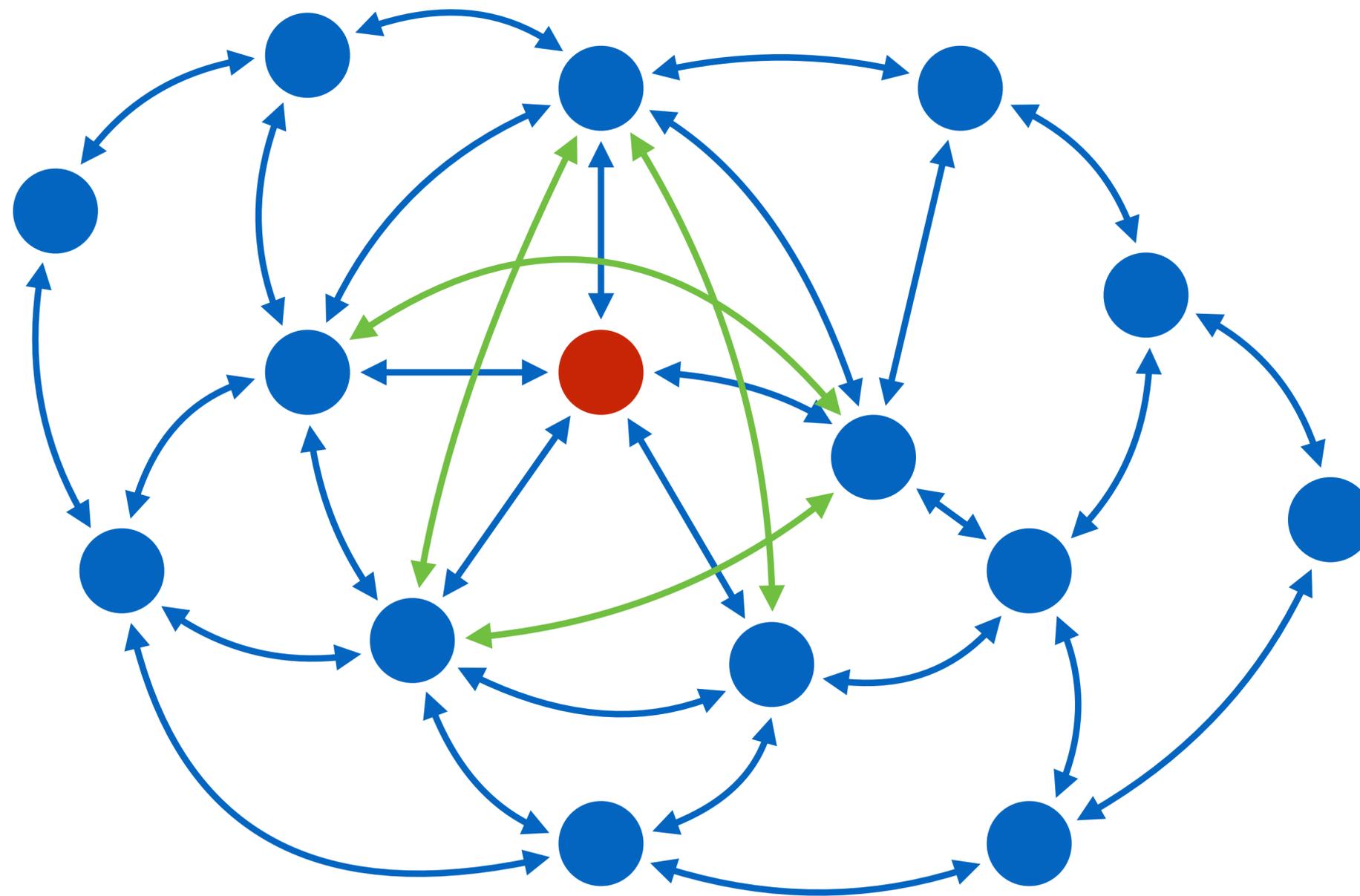
**Coordinador central**



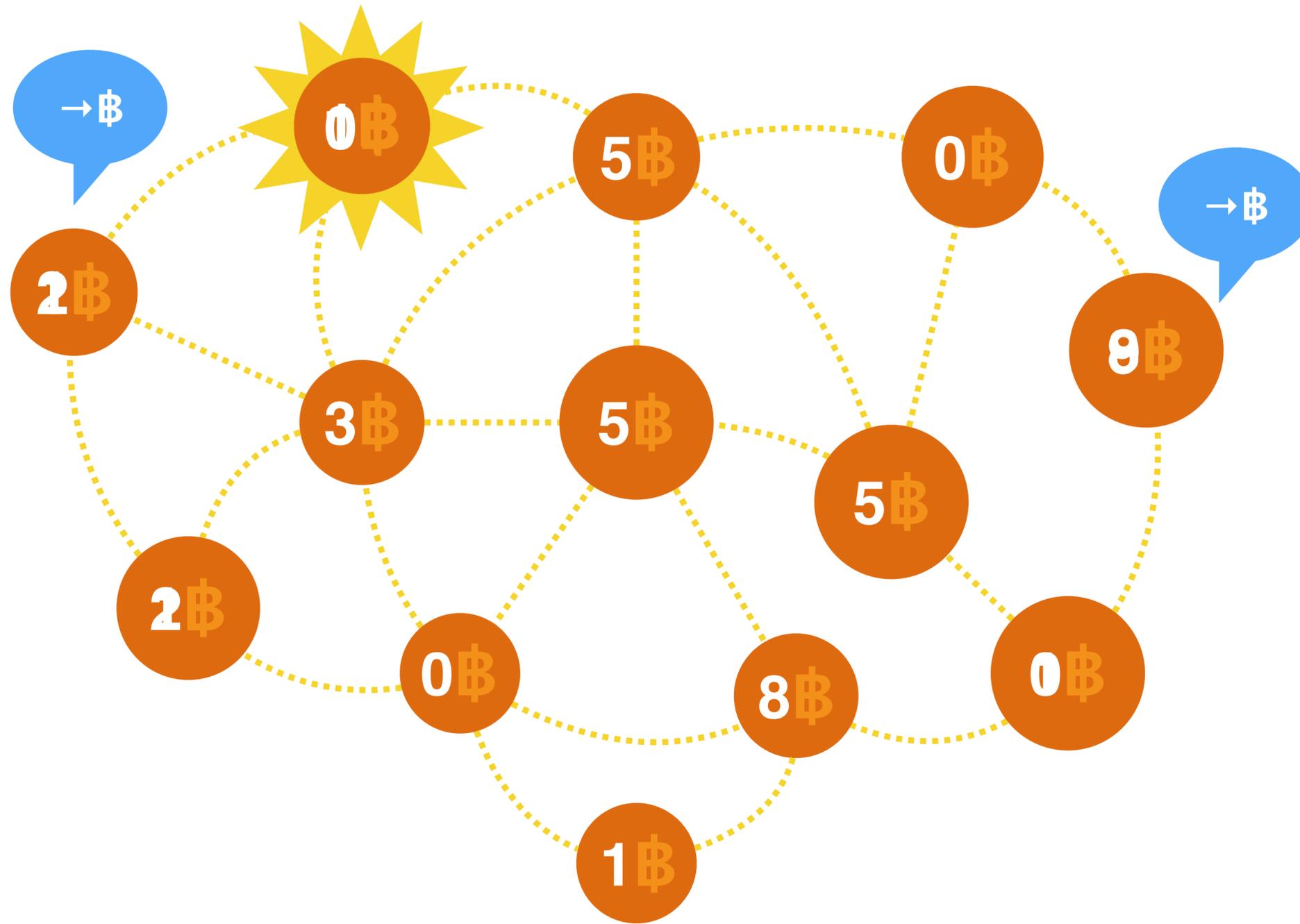
Grandes Instituições



Centralização



Descentralização



**Bitcoin**  
(Blockchain)

Demonstração

Ethereum Wallet
wallet.ethereum.org > account > 0xdc9974d8d61ebb673b1d132e0b767f4e38fba057
CONNECT 

 WALLETS
 SEND

CONTRACTS 
BALANCE

7,510.69 ETHER



## Alice

🔍 0xDC9974d8D61EBb673b1D132E0b767f4e38FBA057

5,143.595762980217527719 ETHER

 Transfer Ether & Tokens
  
 Copy address
  
 Show QR-Code

 **Donut Coin**
5 

**NOTE**

Accounts can't display incoming transactions, but hold and send ether. To see incoming transactions [create a wallet contract](#) to store ether.

LATEST TRANSACTIONS

Filter transactions

Jul 21	<p><b>Contract Execution</b></p> <p> Alice →  Pot</p>	-0.00 <span style="font-size: 14px;">ETHER</span>	
Jul 21	<p><b>Contract Execution</b></p> <p> Alice →  Pot</p>	-1.00 <span style="font-size: 14px;">ETHER</span>	

 1,618,884
 10
 21s

Test-net

- BROWSE**
- ETHEREUM WALLET**  
7,510.69 ETH
- Wallets
  - Send
  - Alice 5,143...
  - Bob 1,302...
  - Eve 1,064...

State of the Dapps
263d622a546065072a2467e3f6716e95c0f82daa3c4d9f10aacb7309bafb6417
CONNECT 

# STATE OF THE DAPPS



289 dapps listed
Sort: Updated 

<p><b>Transaction Relay</b></p> <p><b>iuri matias</b> Enables transactions fees to be paid in any EIP20 token</p> <p>apache </p> <p>Working Prototype    2016-09-04</p>	<p><b>Crystal Mines</b></p> <p><b>Yampi</b> Win Ether by upgrading and working in your mine.</p> <p>GPL </p> <p>Live    2016-09-04</p>	<p><b>Melonport</b></p> <p><b>Reto Trinkler, Mona El Isa</b> A portal to decentralised asset management</p> <p>MIT  </p> <p>Work In Progress    2016-09-02</p>	<p><b>FlightAssure</b></p> <p><b>Ai-London</b> Ultra Short Term Life Assurance</p> <p>Concept    2016-09-02</p>
<p><b>COAKT</b></p> <p><b>Nick Barba, Kevin Kriss</b> Raise more than money</p> <p>Work In Progress    2016-09-01</p>	<p><b>War On Ether</b></p> <p><b>Kobi Gurkan</b> Programmable bots fighting for land</p> <p>Working Prototype    2016-08-31</p>	<p><b>PredictionToken</b></p> <p><b>Etherboost</b> PredictionToken mints prediction market tokens</p> <p>None </p> <p>Live    2016-08-24</p>	<p><b>Reputation Manager</b></p> <p><b>James Sangalli</b> A reputation management service using ethereum and btc relay</p> <p>MIT </p> <p>Work In Progress    2016-08-24</p>
<p><b>OpenRep</b></p> <p><b>James Sangalli</b> A feedback based reputation system using ethereum smart contracts and BtcRelay.</p>	<p><b>Pray4Prey</b></p> <p><b>Julia Altenried, Stefan Hoeller</b> Win Ether with your fishes swimming on the Ethereum blockchain.</p>	<p><b>Cetas</b></p> <p><b>Algorithmix</b> Adaptive data intelligence ( Digital Identity Management   KYC &amp; AML   Financial Scoring )</p>	<p><b>Ethereum Lottery</b></p> <p><b>iFA</b> Ethereum Lottery </p>

- BROWSE**
- State of the Dapps
  - Augur | Decentralized..
  - Digix Global
  - BoardRoom | Blockc...
  - freemyvunk
  - See All

**ETHEREUM WALLET**  
7,510.69 ETH

1,618,884  10  38s

Test-net

**BROWSE**

- Stake Voice
- State of the Dapps
- Augur | Decentralized..
- Digix Global
- BoardRoom | Blockc...
- See All

**ETHEREUM WALLET**  
7,510.69 ETH

1,618,885 10 54s

Test-net

Stake Voice bzz ▶ 263d6...b6417 ▶ CONNECT

0xdc9974d8d61... localhost:32200...

You are sharing your identity with **Stake Voice**. This allows the app to see any public information, including balances connected to it.

- Account 10  
0xaf55a04ade6645f676f50e45cde7c90f75fab99
- Account 7  
0xdc9974d8d61ebb673b1d132e0b767f4e38fba057
- Main account (Etherbase)  
0x5f8f68a0d1cbc75f6ef764a44619277092c32df0

Pin app to the sidebar

CANCEL AUTHORIZE

Click here to add an account on Mist

create any  
ers can voice  
ments are not  
ion of those

**BROWSE**

- State of the Dapps
- Stake Voice
- Augur | Decentralized..
- Digix Global
- BoardRoom | Blockc...
- See All

**ETHEREUM WALLET**  
7,510.69 ETH

**STAKE VOICE**

- Main Page
- Dvorak keyboards ar...
- Game of Thrones is b...
- Nutella is overrated
- Nutella is the new bl...
- See All

1,618,888 10 24s

Test-net

### Execute contract

0xdc99...a057  $\xrightarrow{0.00 \text{ ETHER}}$  vote  $\rightarrow$  0x47ab...973c

You are about to execute a function on a contract. This might involve transfer of value.

**PARAMETERS** [SHOW RAW DATA](#)

- 1 **0x5bb9ff535c0e42b5ca9f1484fe9019bde537dc38...** Bytes (32 bits)
- 2 **YES**  Boolean

Estimated fee consumption	0.0005097 ether (25,485 gas)
Provide maximum fee	0.0025097 ether ( <u>125,485</u> gas)
Gas price	0.02 ether per million gas

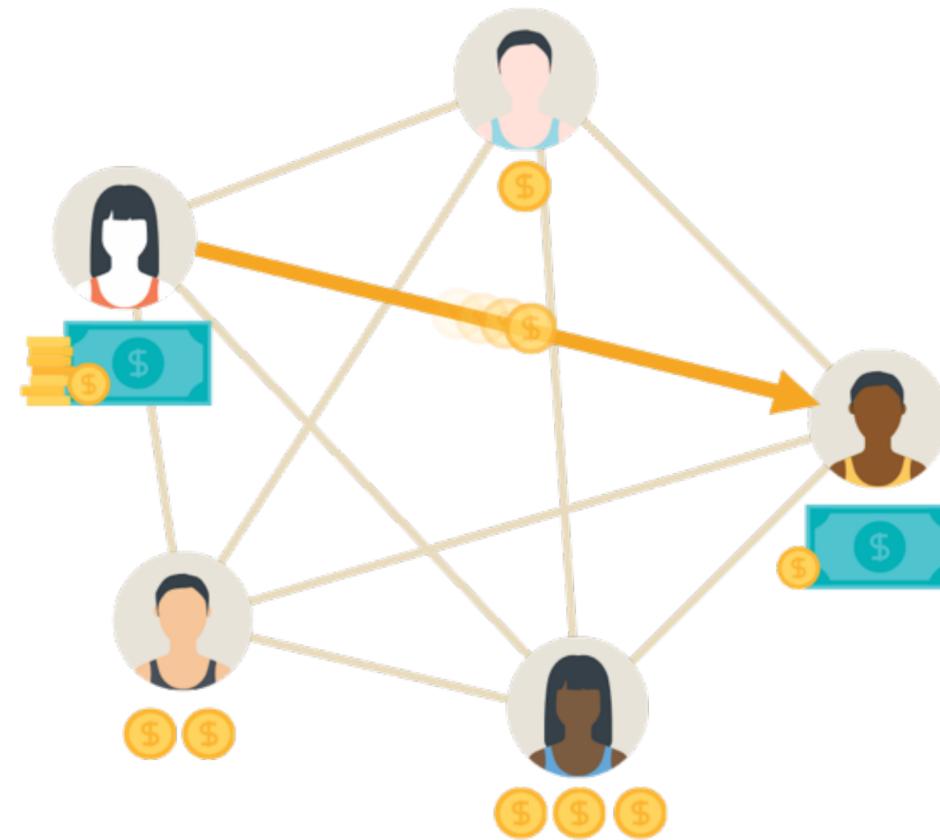
Enter password to confirm the transaction

[CANCEL](#) [SEND TRANSACTION](#)

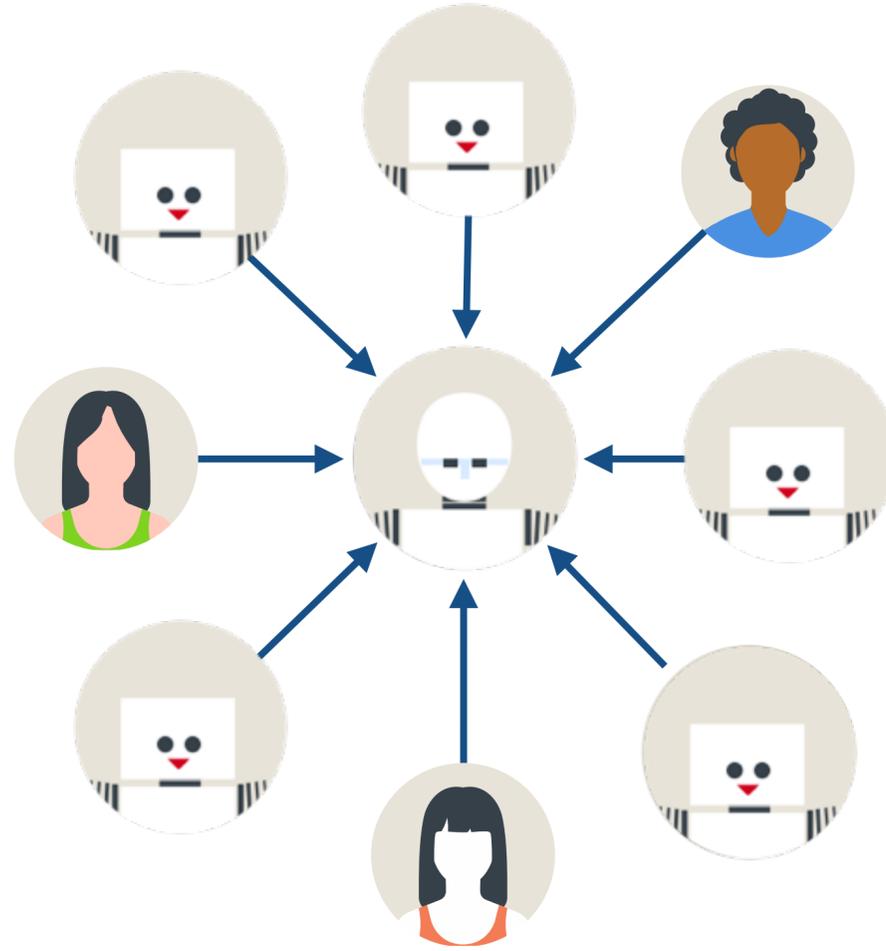
han%20Star%20Wars

## Star Wars

ee



Faça seu próprio banco

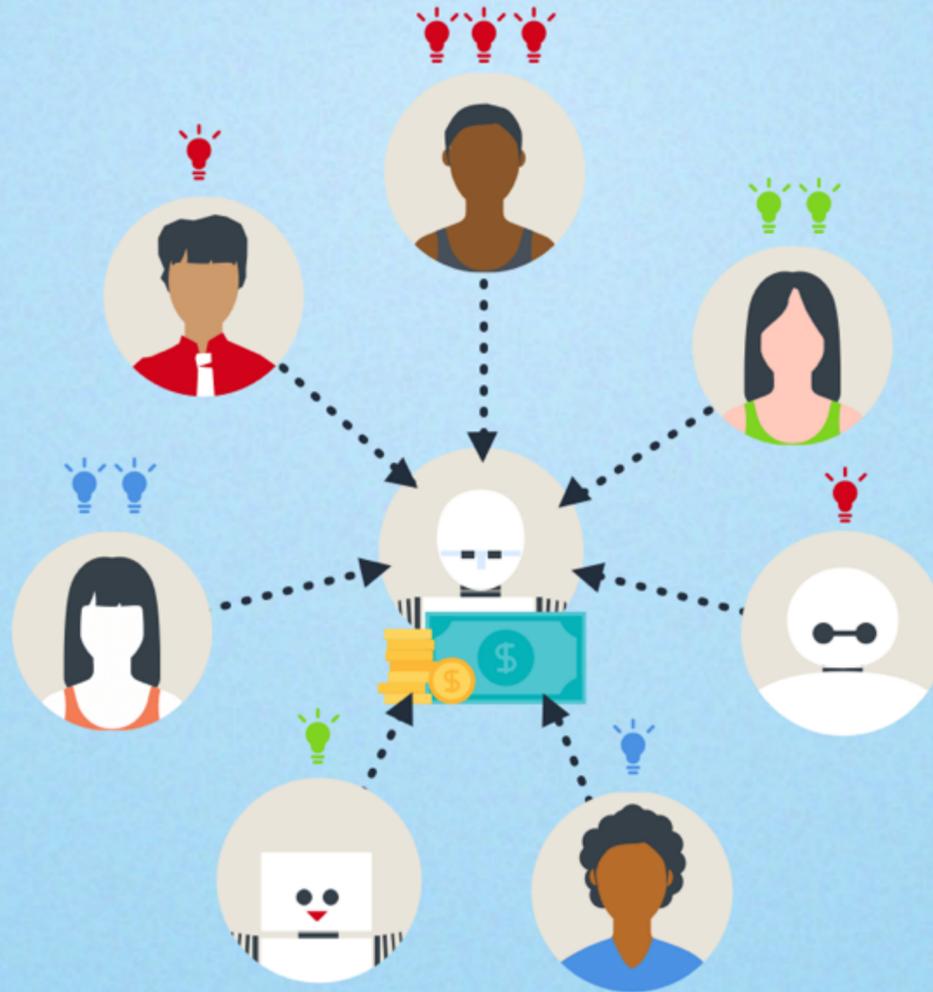


AutoAnotações pontes estruturadas

rol de criação

# Assets físicos em um mundo digital





COLONY



# Tokens como medida

Mercado de previsões, social media, etc





“Democracy  
of things”

**IBM SAMSUNG**

Block.it

Blockchainfirst

A M I S



A internet deveria ser como estradas, não ferrovias



devcon two

- ✓ A internet pode ser descentralizada
- ✓ Blockchains são um algoritmo de consenso
- ✓ Ethereum é uma plataforma de apps em blockchain
- ✓ Mist é um browser para essas apps

**ethereum.org**

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ethereum