

Enterprise Blockchains & The Future Of Decentralization



WITHIN 24 HOURS

Briefing recording will be distributed



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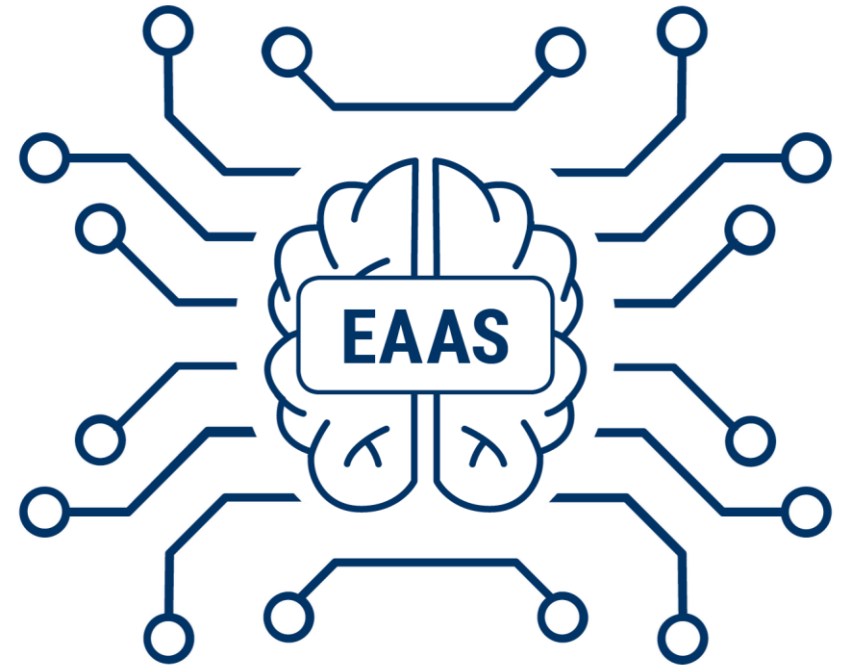
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CBIblockchain

WHO WE ARE

The technology market intelligence platform.

CB Insights software lets you predict, discuss, and communicate emerging technology trends using data in ways that are beyond human cognition. We are a leader in the Expert Automation & Augmentation Software (EAAS) space.



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NORWEST | VENTURE PARTNERS

 Riviera

SEQUOIA 

“We use CB Insights to find emerging trends and interesting companies that might signal a shift in technology or require us to reallocate resources.”



Beti Cunniff, Corporate Strategy, Microsoft



— CBINSIGHTS — COUNCILS

CBI Councils bring together experienced executives to accelerate their success through the sharing of experience-based insights that inform business decisions and help solve complex strategic, organizational, and growth challenges.

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Nick Pappageorge is an intelligence analyst at CB Insights, where he produces data-driven research on private market companies' financing, exit, and performance trends across emerging industries – specifically, industrial IoT, AR/VR, robotics, and drones.

Prior to joining CB Insights, Nick held a research role at MakerBot Industries, a 3D printing company. Nick is a graduate of Hamilton College. Most popular analyses by Nick include:

[Future Factory: How Technology Is Transforming Manufacturing](#)

[Apple Strategy Teardown](#)

[Amazon Strategy Teardown](#)

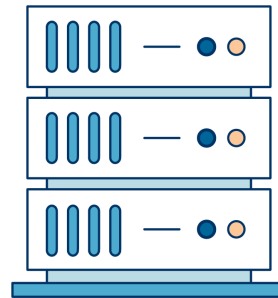
What We're Going to Cover

1



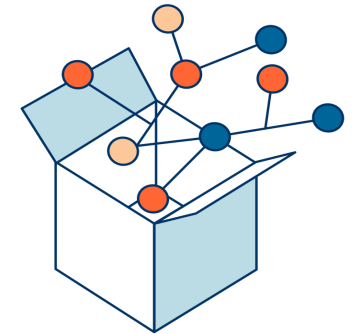
Background on the token
frenzy

2



How cryptonetworks offer a
new wave of IT services

3



The future of the
decentralized org

Background on the blockchain frenzy



In the beginning, there was Bitcoin



Bitcoin is an **online currency** that can be sent and received **peer-to-peer** by anyone in the world. With Bitcoin, **computers** – not humans – control the transfer and creation of money.

Bitcoin got involved with the wrong crowd, and banks couldn't touch it



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Customs Enforcement



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and European law enforcement agencies acting through Europol and Eurojust

in accordance with the law of European Union member states
and a protective order obtained by the United States Attorney's Office for the Southern District of New York
in coordination with the U.S. Department of Justice's Computer Crime & Intellectual Property Section
issued pursuant to 18 U.S.C. § 983(j) by the
United States District Court for the Southern District of New York



Silk Road

anonymous marketplace

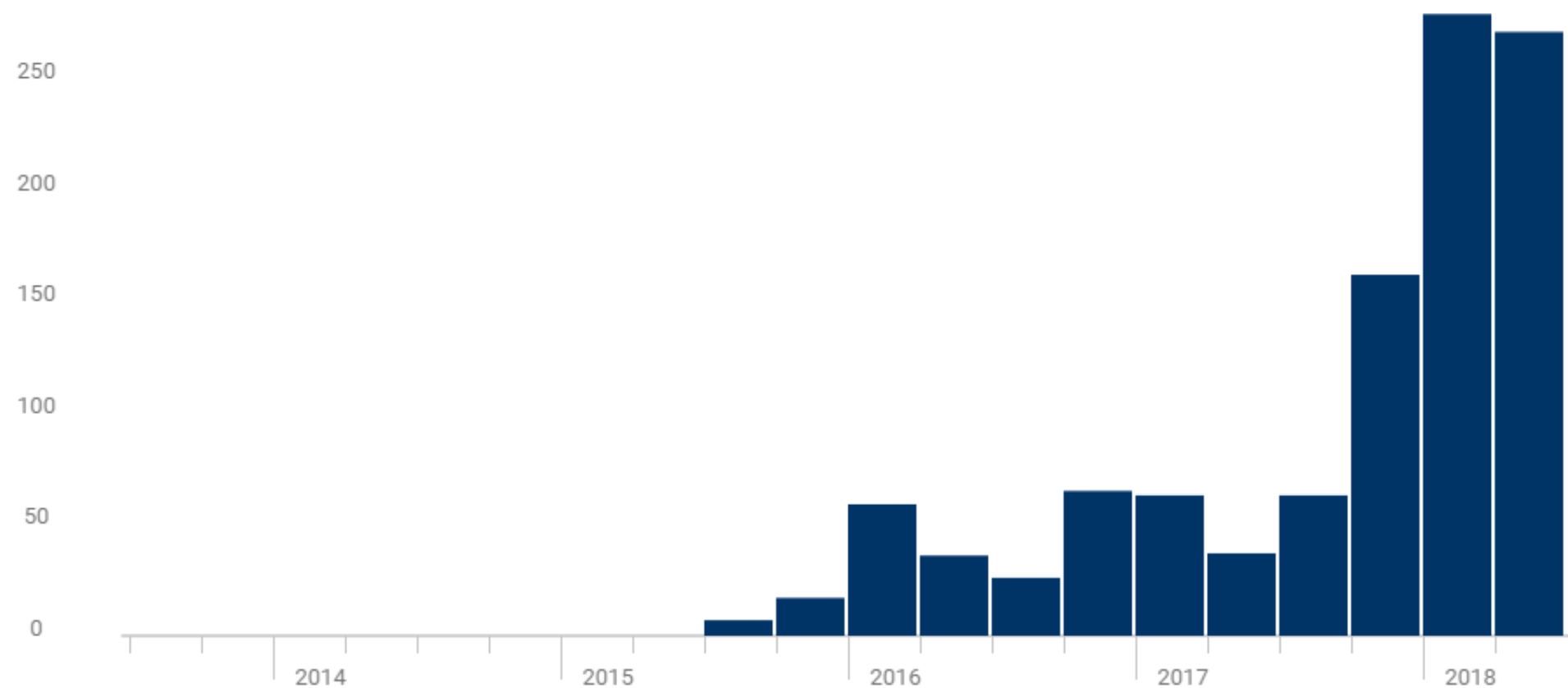
DOMESTICATING BITCOIN

A blockchain is a database where **untrusted parties** come to agreement on the state of the database, **without using a middleman.**

Everyone's jumping on the hype cycle

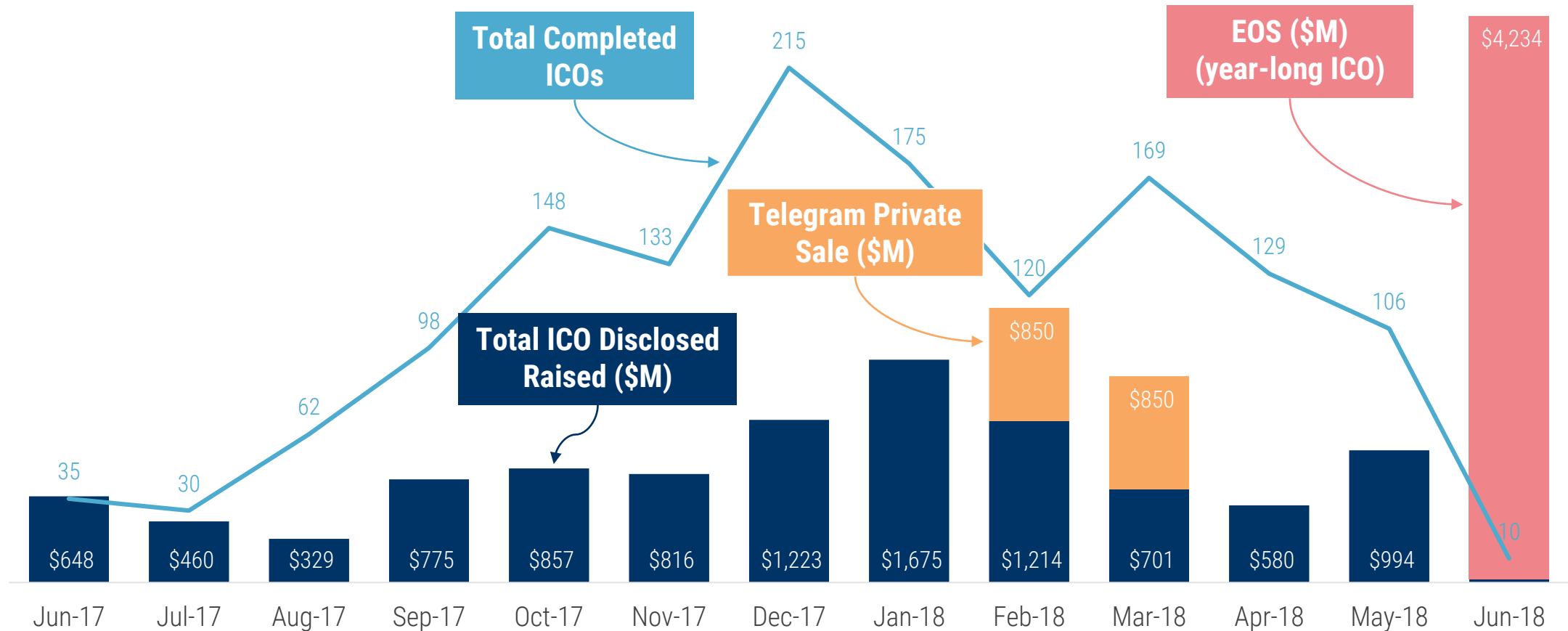
Mentions of “blockchain” on earnings calls. Q3'13 – Q2'18

Number of mentions

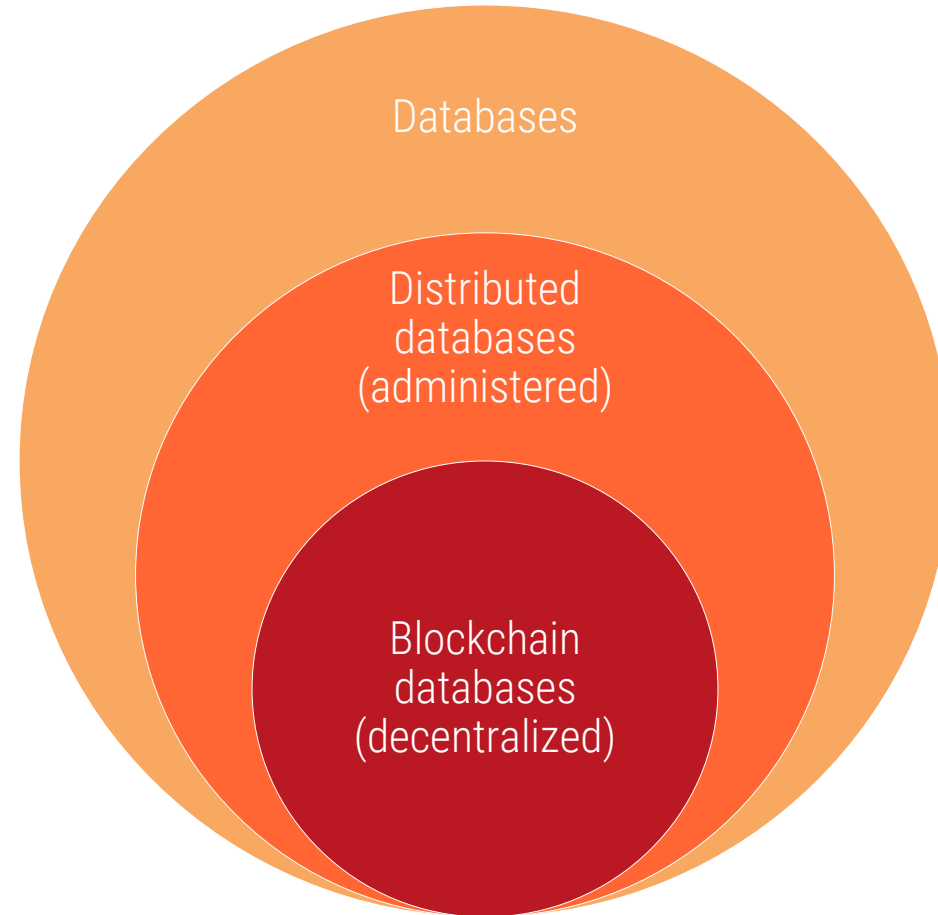


Completed ICOs raised about \$18B in one year

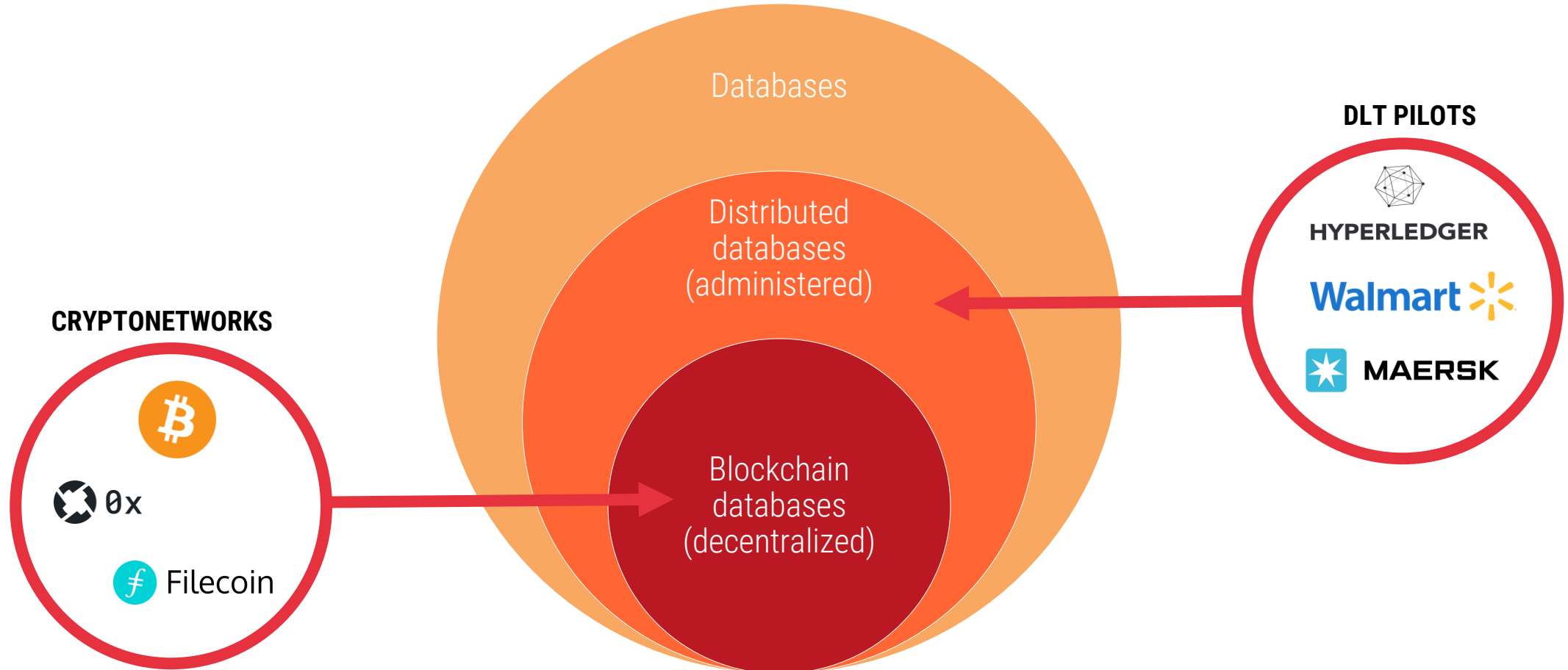
Disclosed funding of completed ICOs (and Telegram's private sale). June 2017 – June 2018 (YTD)



Blockchain is part of a broader conversation around collaborative databases



Blockchain is part of a broader conversation around collaborative databases



Amazon is getting into enterprise blockchains

desired data stream. For example, a law enforcement agency may be a customer and may desire to receive global bitcoin transactions, correlated by country, with ISP data to determine source IP addresses and shipping addresses that correlate to bitcoin addresses. The agency may not want additional available enhancements such as local bank data records. The streaming data marketplace may price this desired data out per GB (gigabyte), for example, and the agency can start running analytics on the desired data using the analysis module.

Amazon's new blockchain service competes with similar products from Oracle and IBM

- [TechCrunch](#) April 18, 2018

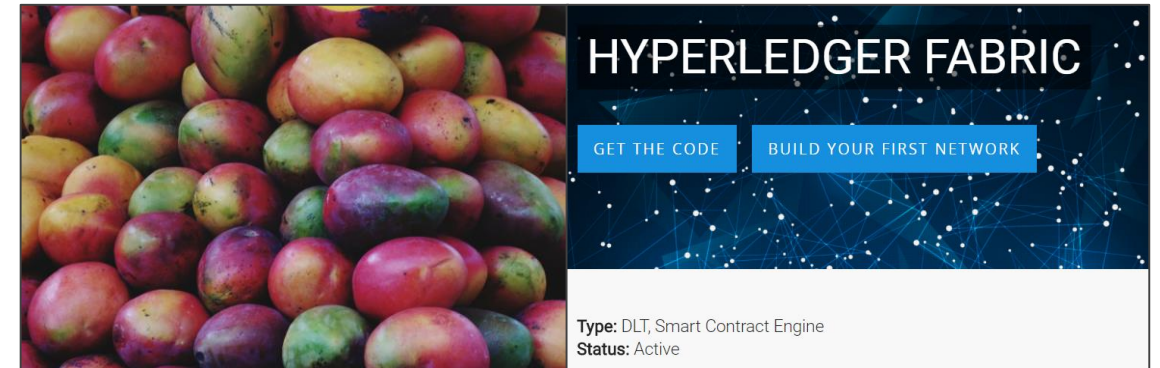
A recent Amazon patent called mentioned bitcoin as a transaction type that potential law enforcement customers could want to track on its imagined streaming platform.

The company also expanded AWS services to include enterprise blockchains.

Logistic giants are testing it out



Yet to be named, the NYC-based company will aim to help shippers, ports, customs offices, banks, and other stakeholders in global supply chains track freight and replace related paperwork with tamper-resistant digital records. Presently, shipping supply chains are bogged down by paperwork shuffled between a glut of middlemen. Documentation, when lost or delayed, causes perishable goods lying in wait to spoil.



Walmart successfully tested a pilot of Hyperledger Fabric's DLT, IBM's blockchain framework to quickly track food through the supply chain. One immediate implication is for food-borne illnesses – with DLT, it is easier to launch investigations and recall products. Walmart began using the technology in 2016 to [track how pigs from China](#) moved through the supply chain to the American table.

BiTA is uniting
big logistics and
freight players

UPS, FedEx, BNSF Railway
(owned by Berkshire
Hathaway), and Schneider
Trucking are just a few of
the big names in an
alliance to explore
blockchain technologies
in freight transport.



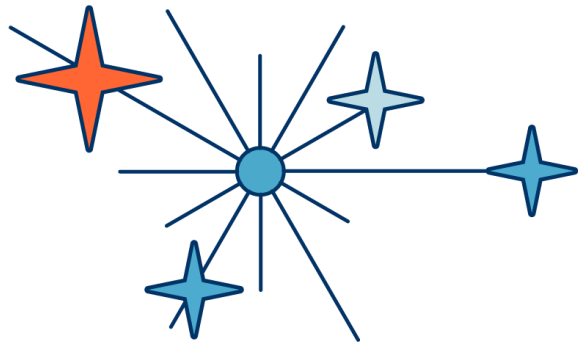
INHERENT COORDINATION PROBLEMS

“You do not quite get the benefits of trustless decentralization and seamless movement of commerce if each shipping company builds its own proprietary blockchain.”



Matt Levine, Bloomberg

Why a blockchain might not be the best fit



Consensus isn't easy

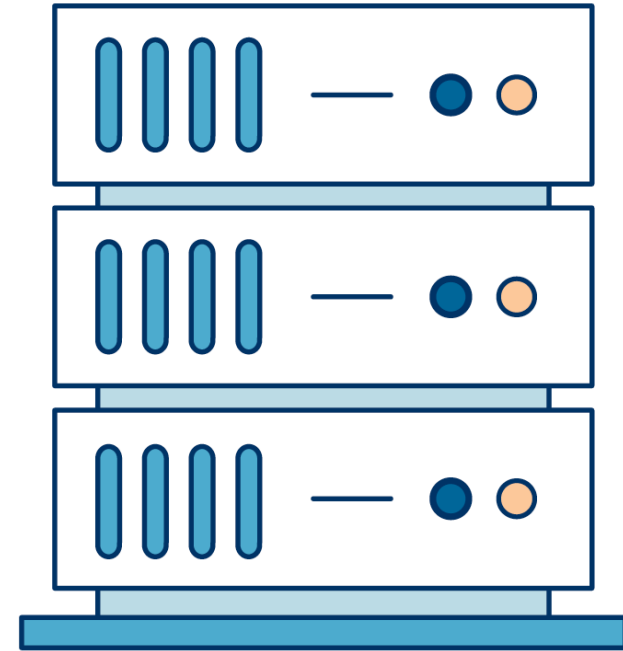


Users are **difficult to manage**



Centralization is often faster

New blockchain applications for the enterprise



Beyond finance: enterprise blockchain areas

Select non-financial areas that projects are tackling

IDENTITY

ENERGY
GRIDS

OFFICE DAPPS

SUPPLY CHAIN

I.T. STACK

INDUSTRIAL
CYBERSECURITY



Reports

Enterprise software & IT

Use cases gaining traction

IDENTITY



OFFICE DAPPS



I.T. STACK



Enterprise software & IT

Use cases gaining traction

IDENTITY



OFFICE DAPPS



I.T. STACK



Enterprise software & IT

Use cases gaining traction

IDENTITY



OFFICE DAPPS



I.T. STACK



Peer-to-peer energy trading reduces middleman fees and decentralizes power from grids – but it's a challenge to track transactions transparently and efficiently



Ledgers and blockchains in industry

Use cases gaining traction

ENERGY GRIDS



SUPPLY CHAIN



INDUSTRIAL CYBERSECURITY



Ledgers and blockchains in industry

Use cases gaining traction

ENERGY GRIDS



SUPPLY CHAIN



INDUSTRIAL CYBERSECURITY



Ledgers and blockchains in industry

Use cases gaining traction

ENERGY GRIDS



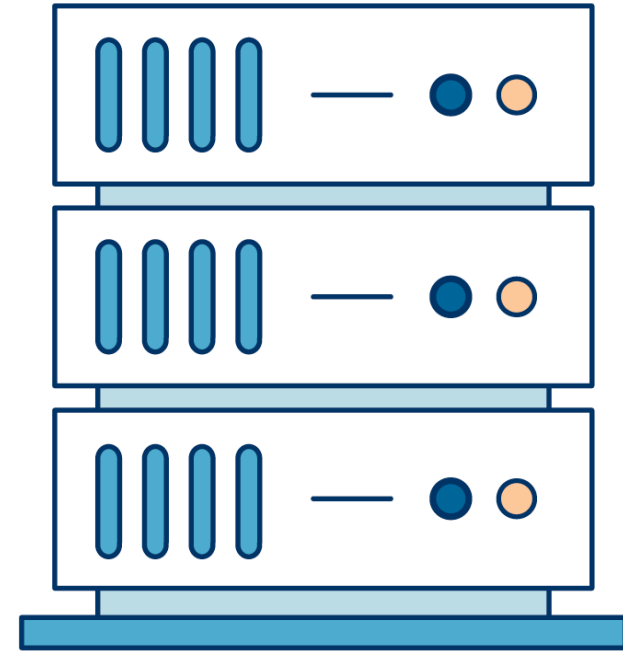
SUPPLY CHAIN



INDUSTRIAL CYBERSECURITY



How cryptonetworks offer a new wave of IT services



THE FILES ARE IN THE COMPUTER



Funding: \$3.7M of VC, \$257M via ICO

Dubbed “Airbnb for file storage,” Filecoin is a high-profile crypto project that rewards network participants for hosting files. This could help create a decentralized version of S3 from Amazon Web Services. The company behind it, [Protocol Labs](#), has garnered investment from Union Square Ventures, Naval Ravikant, and Winklevoss Capital in a venture round, and also completed a \$257M ICO in late 2017.

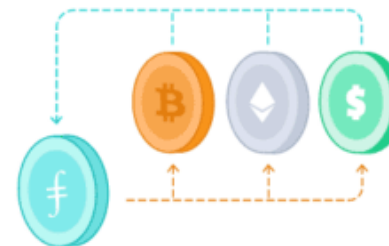
Similar tokens:

	Storj	SiaCoin
Market Cap:	\$60M	\$358M

A MASSIVE AMOUNT OF STORAGE SITS UNUSED IN DATA CENTERS AND HARD DRIVES AROUND THE WORLD.



**EARN FILECOIN FOR
HOSTING FILES**



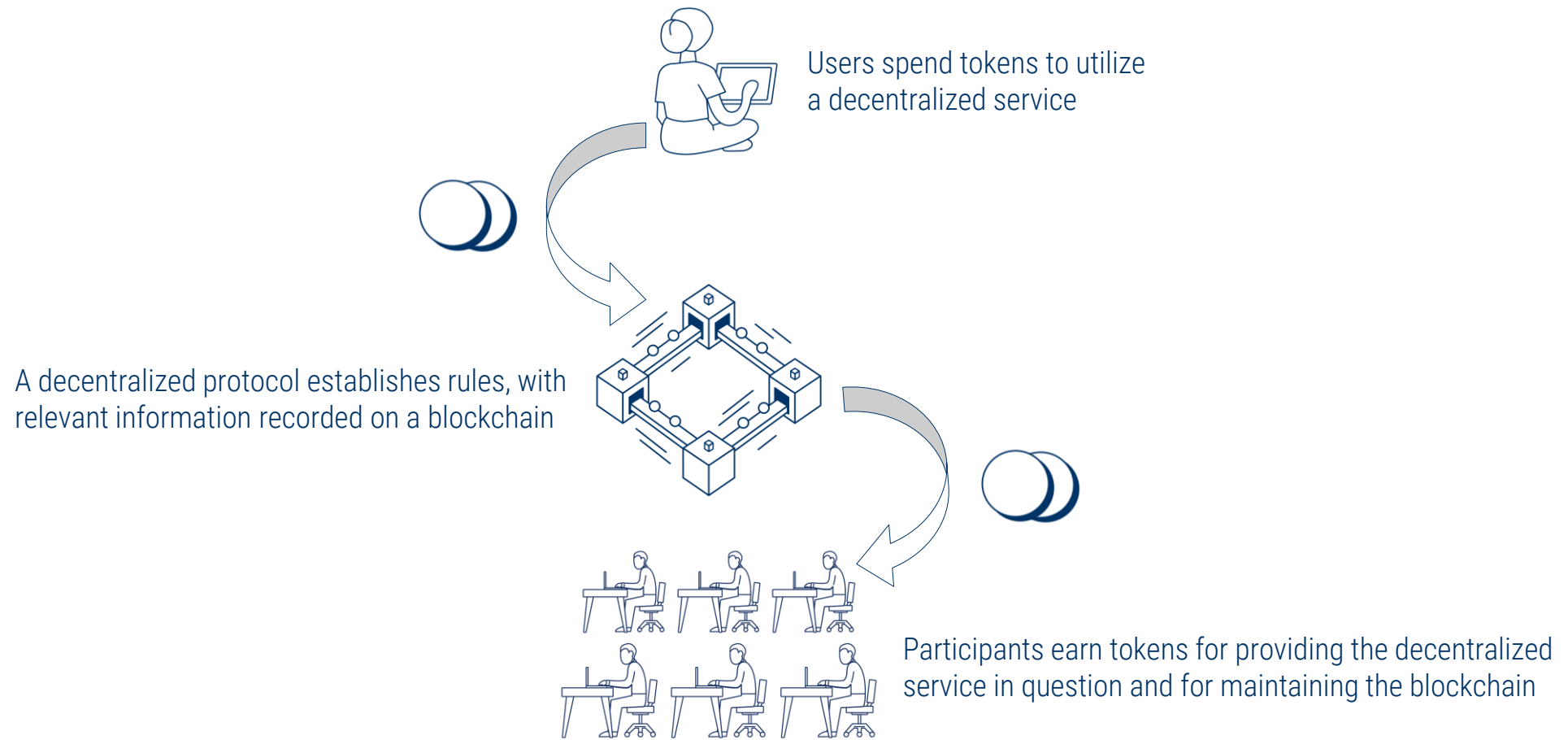
**EXCHANGE FILECOIN FOR
USD, BTC, ETH AND MORE**



**RELIABLY STORE FILES AT
HYPERCOMPETITIVE
PRICES**

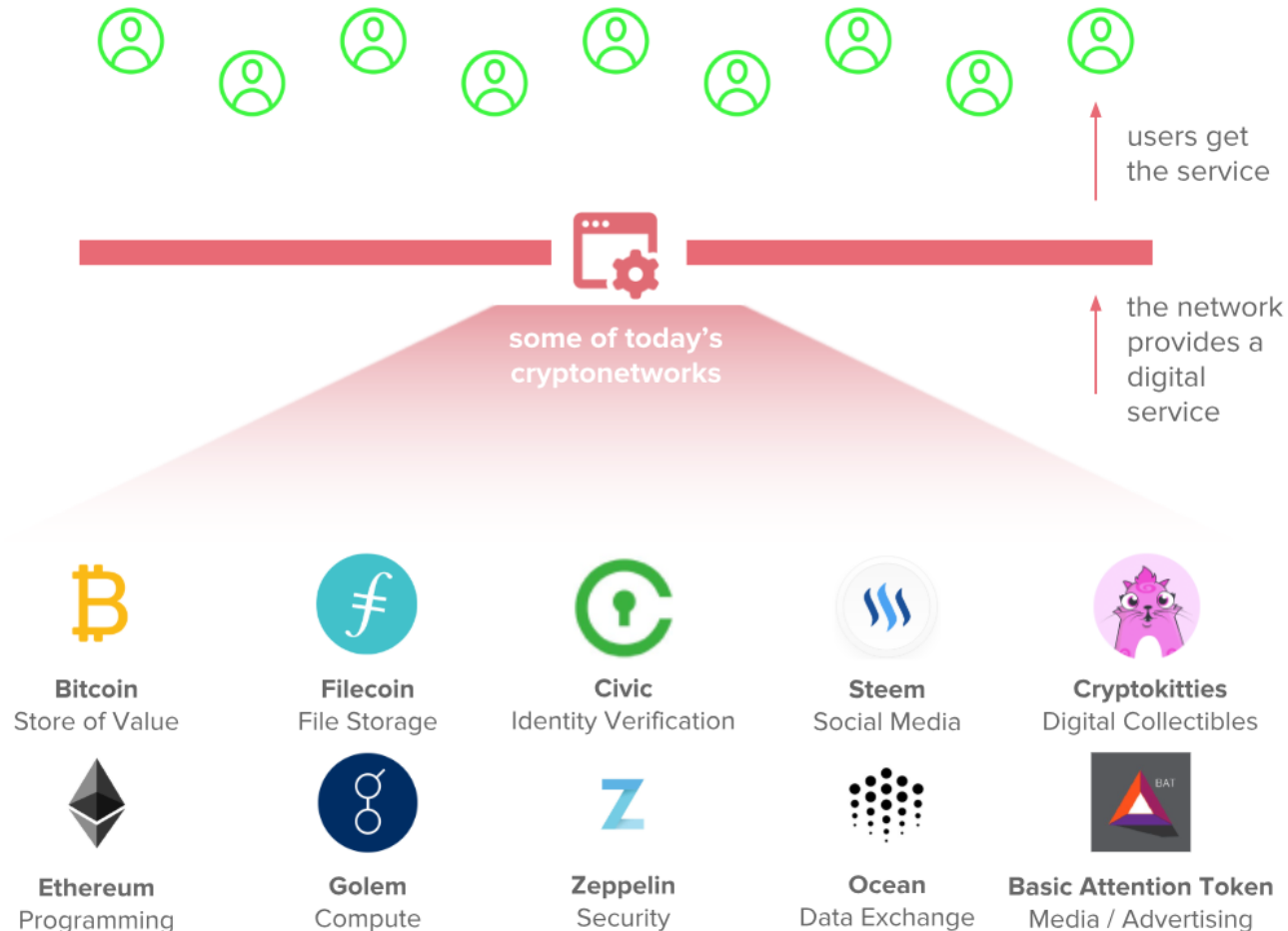
Could tokens reorganize the web?

Native tokens incentivize various stakeholders to kickstart network effects.



Cryptonetworks provide IT services and more

Tokens align network participants into a mutually-owned network that more resembles a cooperative, a trust, or a credit union than typical tech startup.



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Initial coin offerings fund teams building a new internet

ICOs provide initial funding for these decentralized token networks.

115 blockchain startups that have held big ICOs

Completed ICOs greater than or equal to \$24M. Q2'17 – Q1'18

EXCHANGES & WALLET



TRADING & INVESTMENT



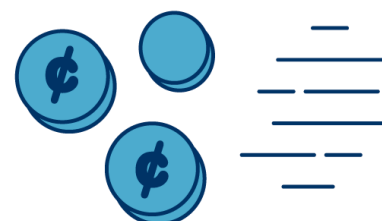
CROWDFUNDING & LENDING



PAYMENTS & BANKING



INFRASTRUCTURE & DEVELOPMENT



GAMBLING & GAMING



SUPPLY CHAIN



IDENTITY & INTERNET OF THINGS



Computing & Storage



DAO & Token Creation



Browsers & Social



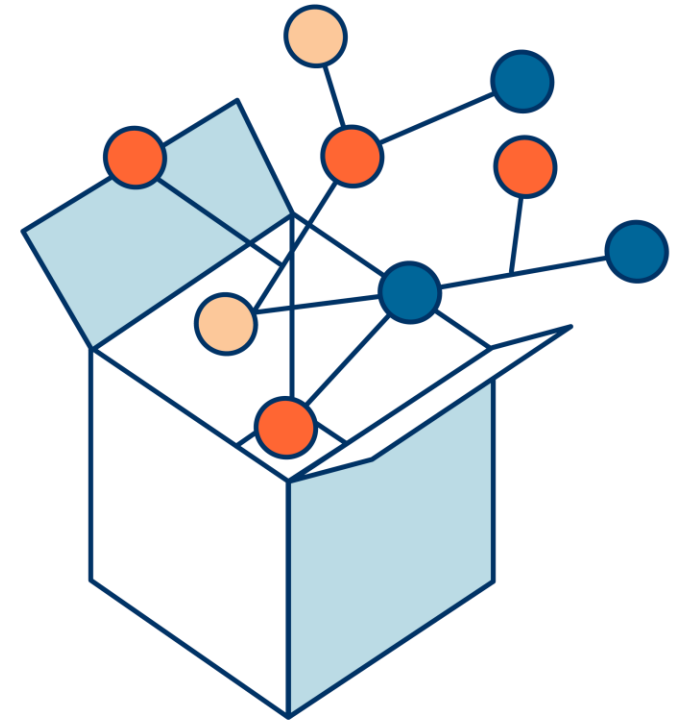
MARKETPLACES



OTHER



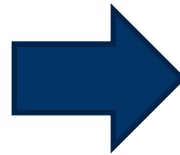
The future of the decentralized org



Unbundling valuable databases

Many companies are in the business of controlling entire databases and get to decide who sees which part of it and when

- Conversations (Twitter)
- Link sharing and commenting (Reddit)



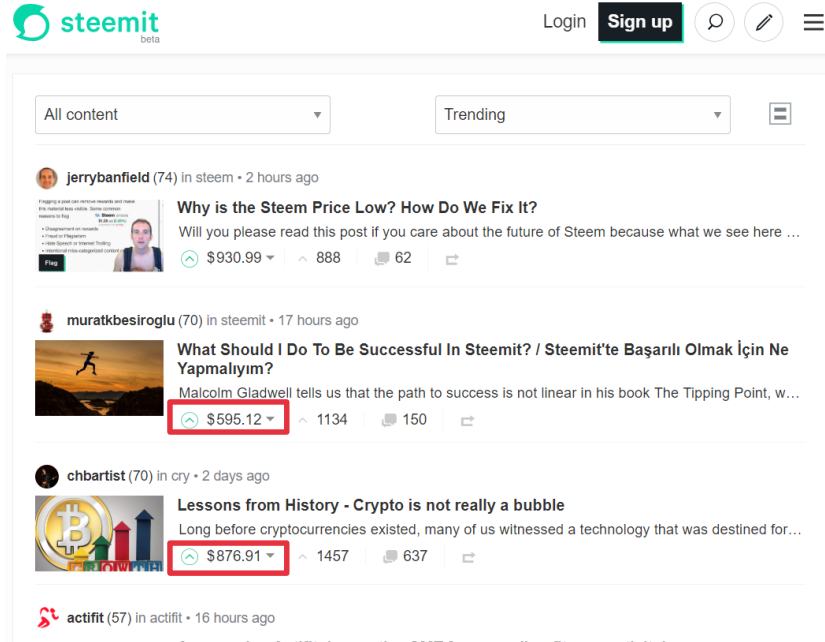
What do owner-less
version look like?

PUBLIC ATTITUDES ON TECH PLATFORMS HAS SHIFTED

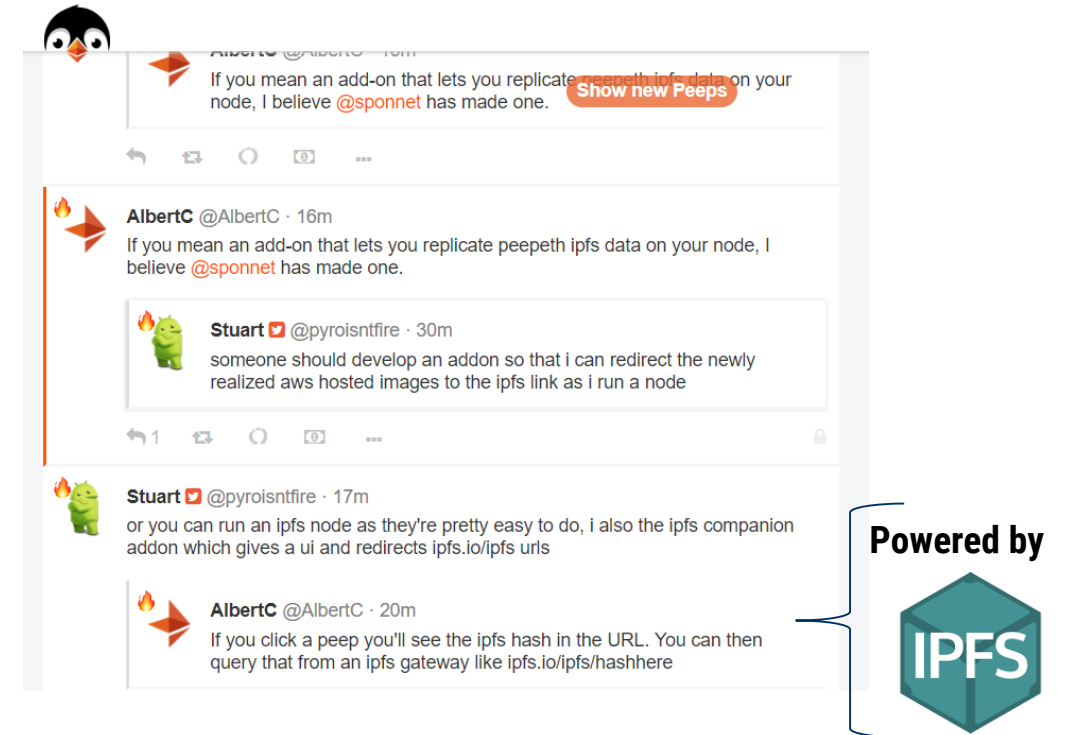
72 percent of Americans think it's
likely **social media platforms**
ensor political viewpoints

[Pew Research Center](#), 6/28/2018

Decentralizing social networks



Steemit rewards users for posting and interacting using it STEEM cryptocurrency, in a manner much like Reddit.



Peepeth is a decentralized alternative to Twitter that claims being “unstoppable and uncensorable because it runs on the Ethereum blockchain.”

THE FIRM AS CODE

“A firm is just a ‘nexus of contracts.’ Payroll contracts with employees, profit contracts with shareholders, debt contracts with lenders, delivery contracts with customers, tax contracts with the state. Blockchain-based ‘smart’ contracts will eventually reinvent the firm.”



Naval Ravikant, founder of AngelList

KICKSTARTING A DISTRIBUTED TELECOM



Funding

\$36M

Similar to bitcoin mining, Helium's cryptonetwork will let participants turn electricity into wireless coverage for IoT devices, and reward them with a network token. The company's IoT gateway validating that other gateways in the network are providing legitimate wireless connectivity.

SELECT INVESTORS

FirstMark Capital

Lean, Green Mining Machine.

The Helium Gateway is the world's first crypto miner that uses radio waves instead of power-hungry computations.

Built to power a **decentralized machine network**, the Helium Gateway introduces a fair, eco-friendly method to generate tokens.

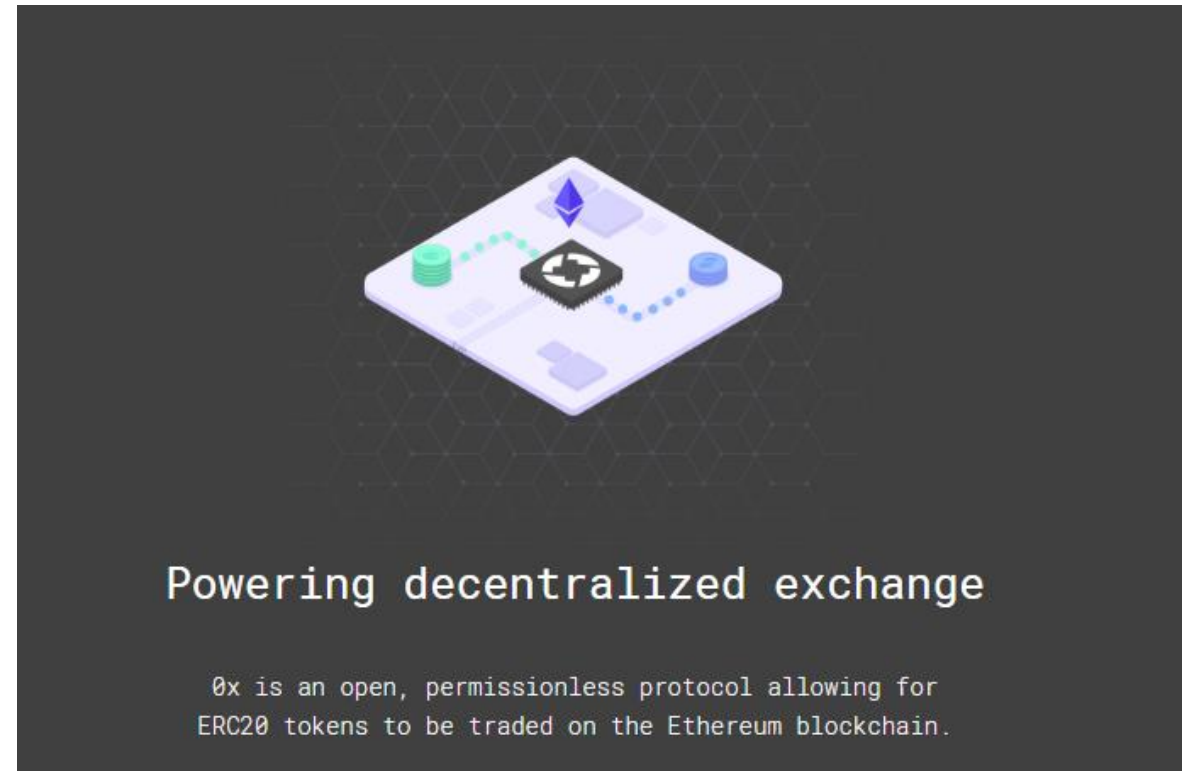
Coming Q4 2018 – Join the Waitlist



A PROTOCOL FOR DECENTRALIZING COINBASE



0x is a decentralized exchanging platform that features off-chain ordering books with on-chain settlements/transactions on the Ethereum network. 0x is open source, permissionless and free to use. Users can trade directly with a known counterparty for free or pay a relay ZRX tokens to access their liquidity pool.



DECENTRALIZING CORPORATE PARTNERSHIPS



Funding:

€9M in crowdsale

Ocean Protocol is an ecosystem for sharing data and associated services. It provides a tokenized service layer helps to unlock data sharing, particularly for AI. It is designed for scale and uses blockchain technology that allows data to be shared and sold in a safe, secure and transparent manner.

SELECT INVESTORS

Outlier Ventures



COMPANY MANAGEMENT TOOLS LIKE GOVERNANCE, PAYROLL, ACCOUNTING



Funding:

\$25M via crowdsale

Aragon is developing a decentralized enterprise management platform that effectively acts as a digital jurisdiction. The company provides tools to create and manage an entity whose capitalization, governance, fundraising, payroll, accounting and bylaws are managed by smart contracts.

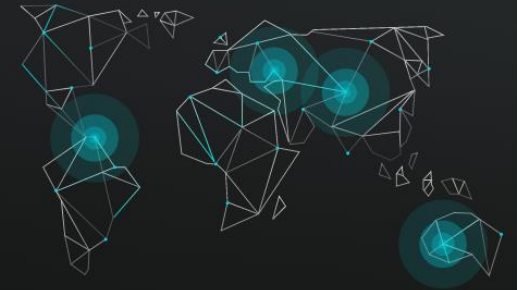
DEMOCRATIZING GOVERNANCE

The first step towards a more fair, efficient world

We are building Aragon because we believe decentralized organizations can solve the world's worst problems

Aragon is a project that aims to disintermediate the creation and maintenance of organizational structures by using blockchain technology. We want to empower people across the world to easily and securely manage their organizations. We provide the tools for anyone to become an entrepreneur and run their own organization, to take control of their own lives

By making it possible for everyone in the world to organize, we are enabling a borderless, permissionless and more efficient creation of value



CODE-IS-LAW FOR THE DAY-TO-DAY OF ORGANIZATIONS



Colony is a platform for open organizations. It imagines future companies (colonies) having its own token. And each colony codifies its internal work, voting, politics, etc. and rewards people with tokens.

Your Colony, your rules

One size does not fit all.

What works for a decentralised open source project may not be suitable for a design agency, a multinational bank, or a virtual world.

That's why Colony is modular and customisable for the needs of open organizations of all kinds.



Questions?

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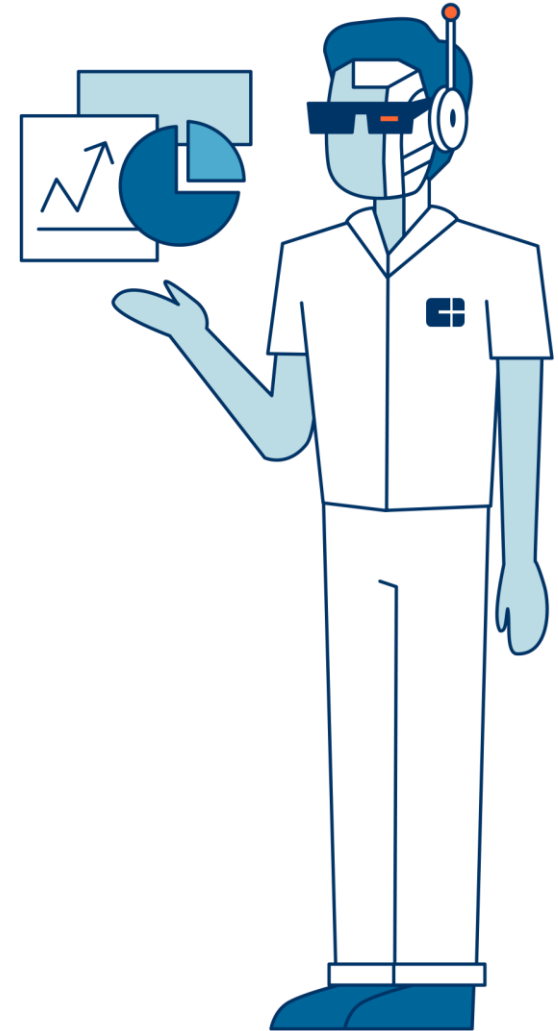
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WHERE IS ALL THIS DATA FROM?

The CB Insights platform has the underlying data included in this report

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