ETHEREUM IN THE ENTERPRISE ENVIRONMENT

INCREASE AGILITY, REDUCE RISK, AND LOWER COSTS

Do blockchains have a role in the private environment?

On the shoulders of giants

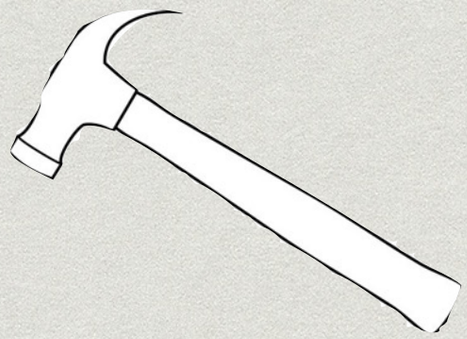
- Blockchains are culmination of prior work
  - Merkel hash trees **(data)**
  - Distributed hash tables **(network)**
  - Proof-of-work **(lottery)**

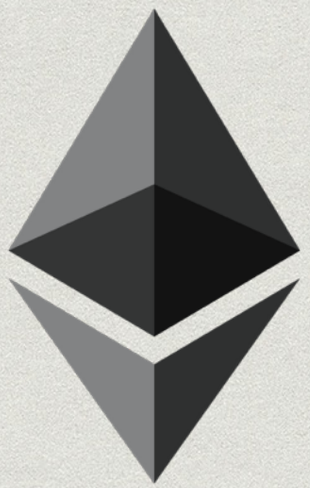
But what does it do?

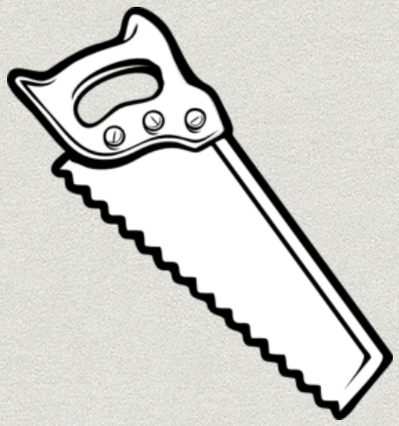
What are blockchains, do we even know?

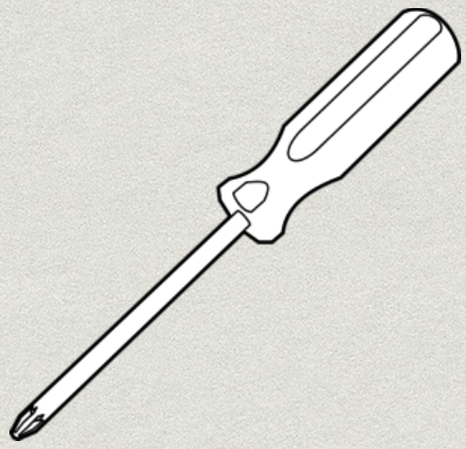
Blockchains are a tool

- Will not replace all other tools
- May join arsenal of other solutions
- Properties of blockchains dictate use case
  - Bitcoins good at value transfer
  - Ethereum good at trusted computation





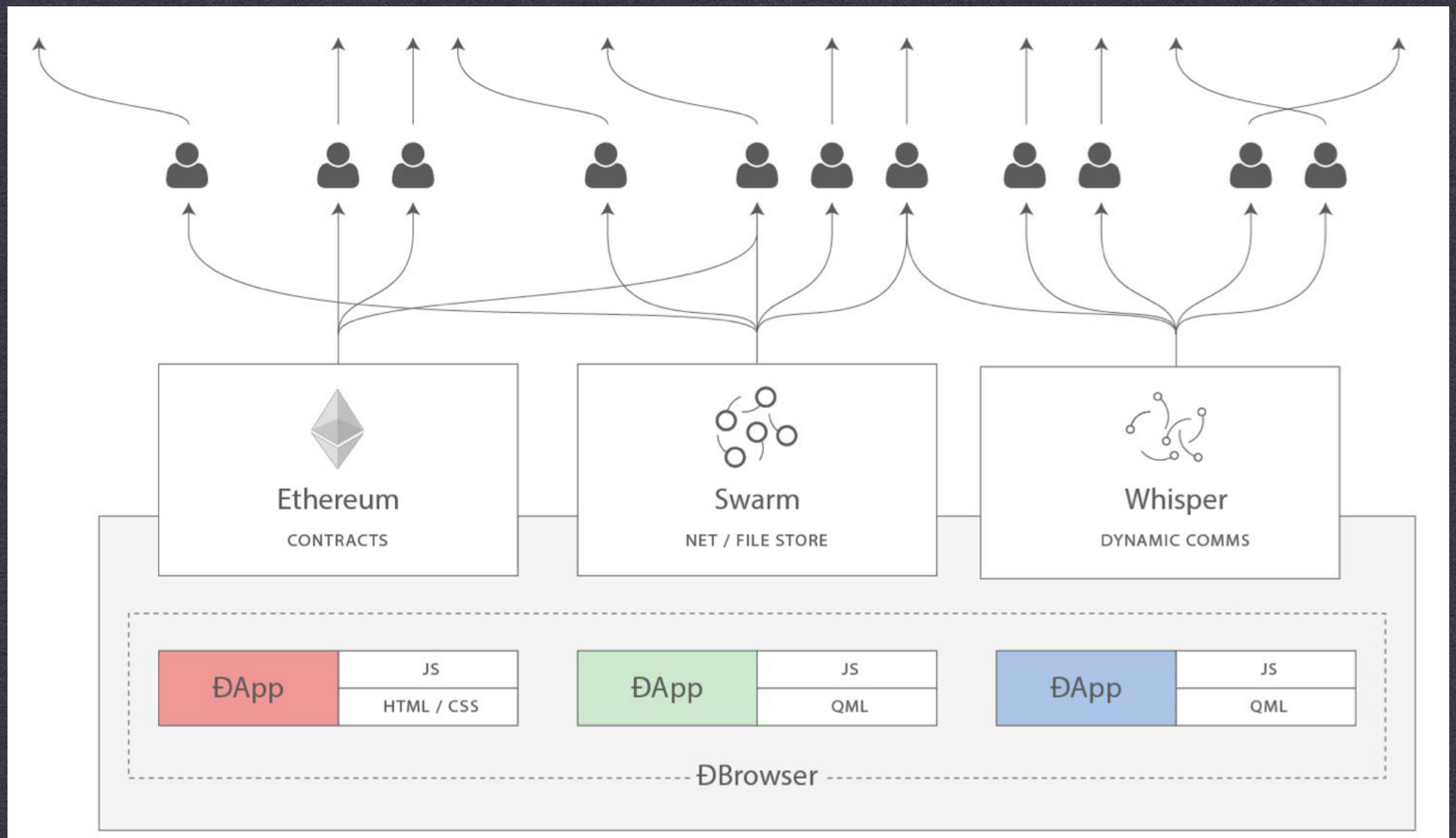




Blockchains excel at coordination.

WEB3

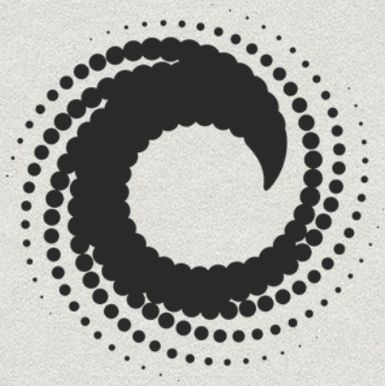
AS A SUITE OF TOOLS



As a networked database

- Code as data
- Automatic synchronisation
- Fault tolerance
- Identity for free
- Cryptographically secured & validated

ECDS… LMNOP?



- Properties of cryptography
  - data confidentiality
  - data integrity
  - authentication
  - non-repudiation
- Ease of web development

Benefits

- Shared code means consistent & predictable execution
- Append-only database is cryptographically verified and cannot be tampered with, even by sysadmins
- Automatic & low-cost distribution using P2P technology

Questions?

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