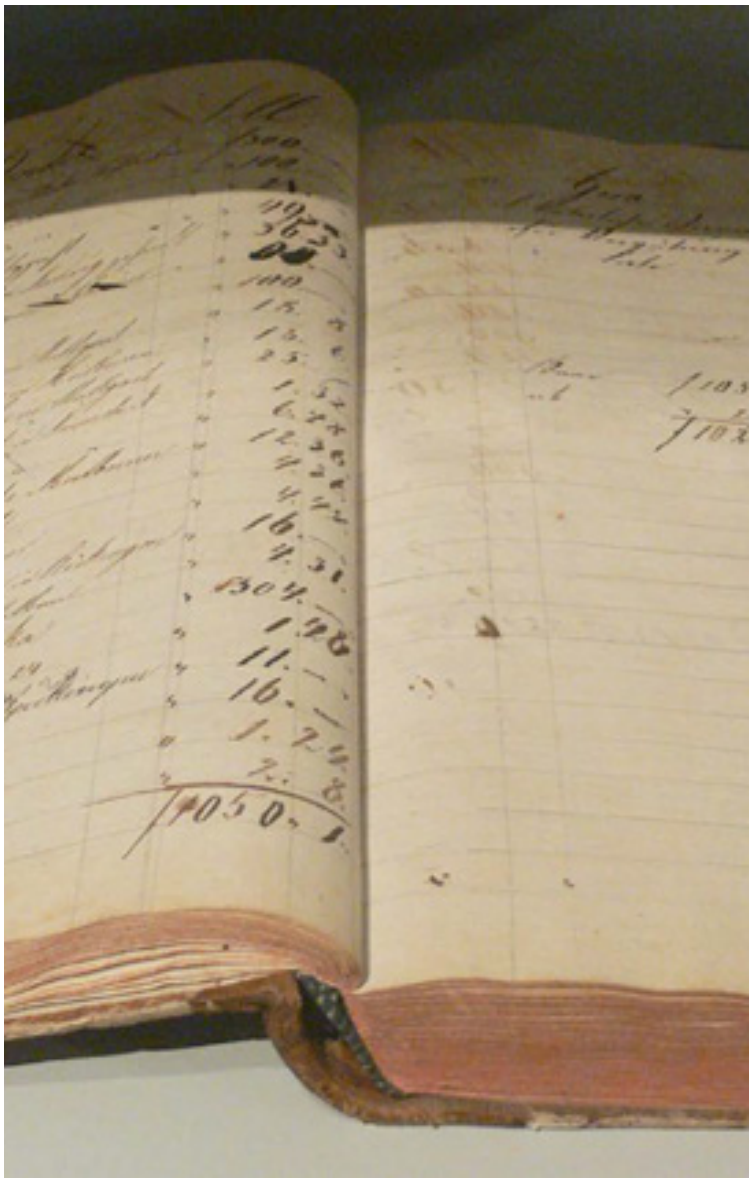
BLOCKCHAIN

Introduction for financial institutions

DOUBLE ENTRY ACCOUNTING

The oldest record of a complete double-entry system is the Messari (Italian: Treasurer's) accounts of the Republic of Genoa in 1340.



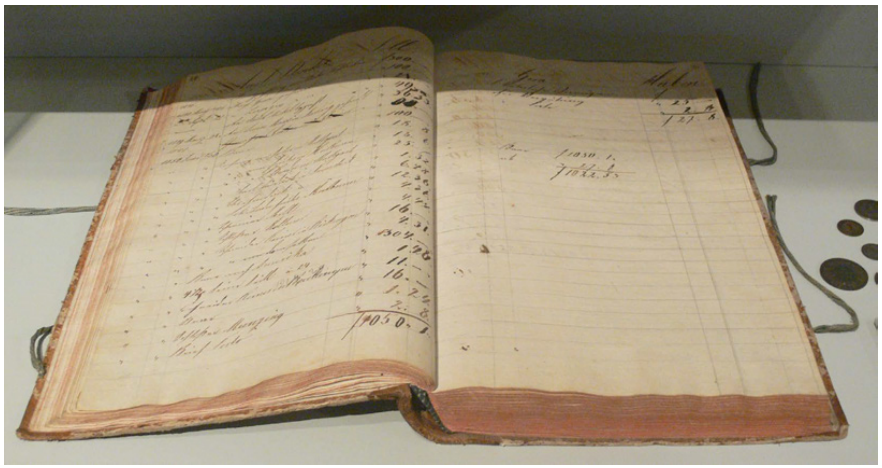
DR A/C A 100 —— CR A/C B100

Party A

Transaction is recorder

in both books

DR A/C B 100 —— CR A/C A100



Party B

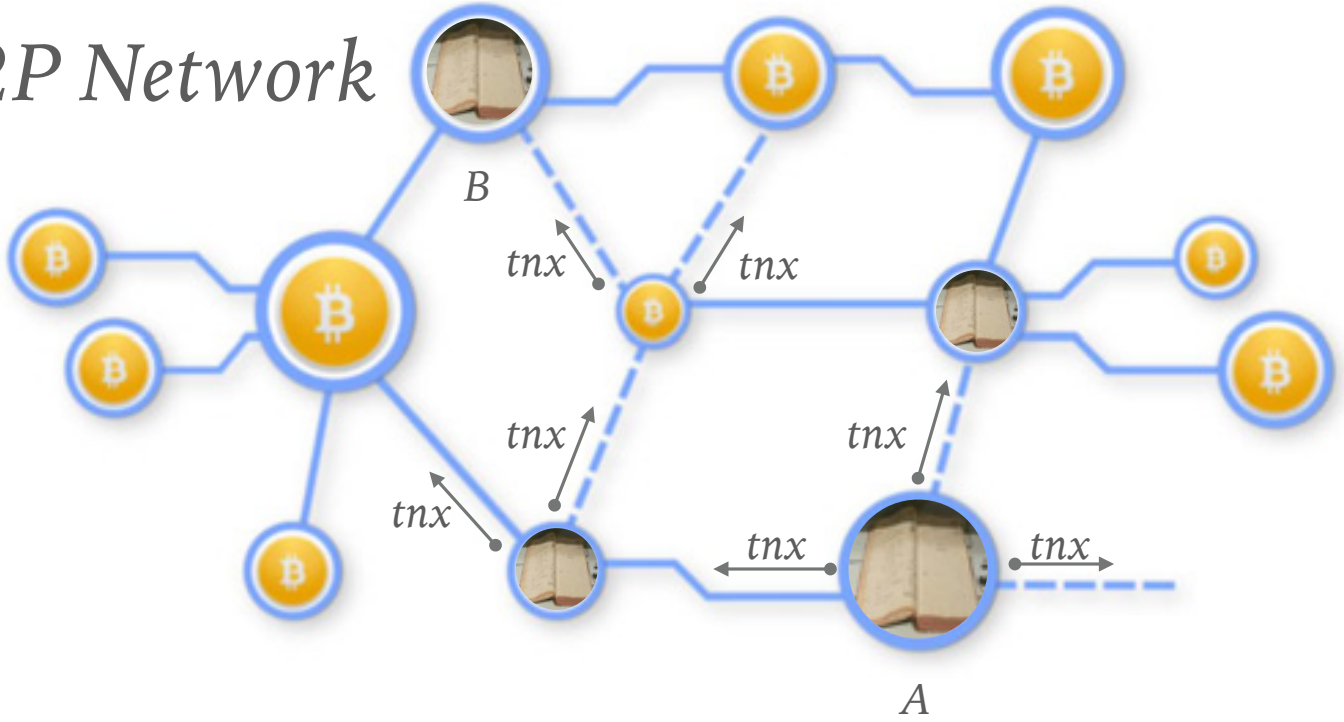
INTERNET OF MONEY

We can store and create money in Internet

BITCOIN

In January 2009, the bitcoin network came into existence after Satoshi Nakamoto mined the first ever block on the chain, known as the genesis block, for a reward of 50 bitcoins.

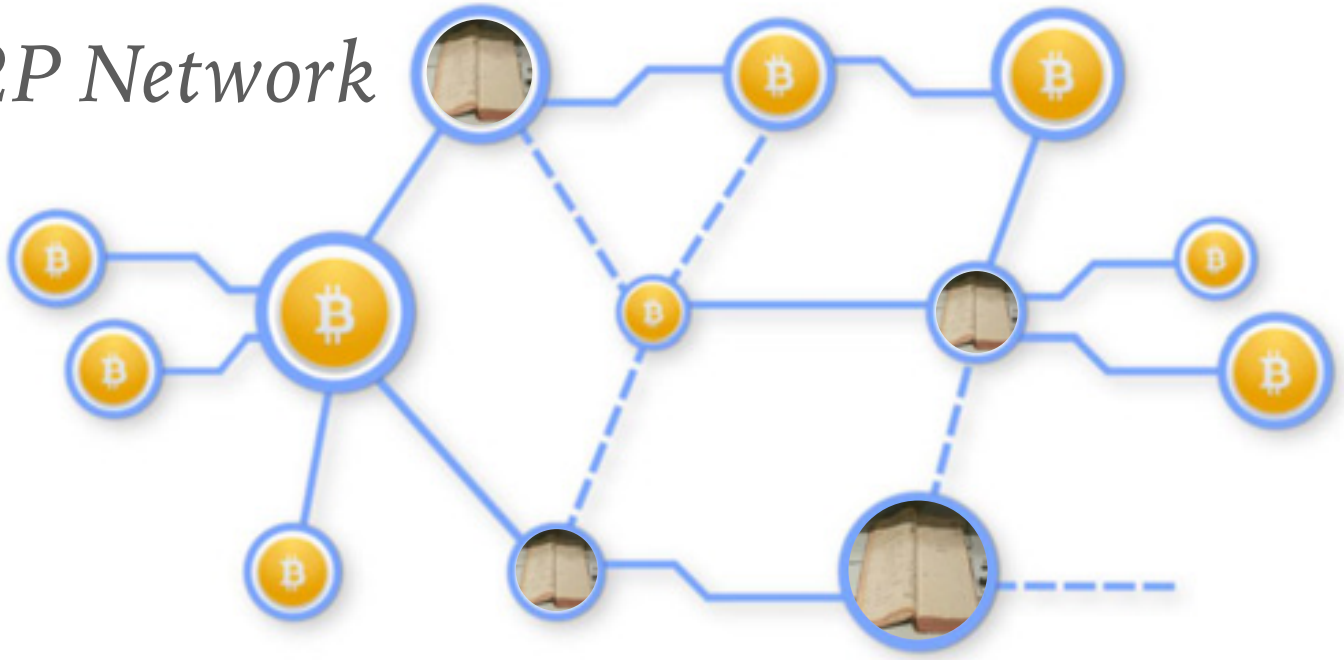
P2P Network

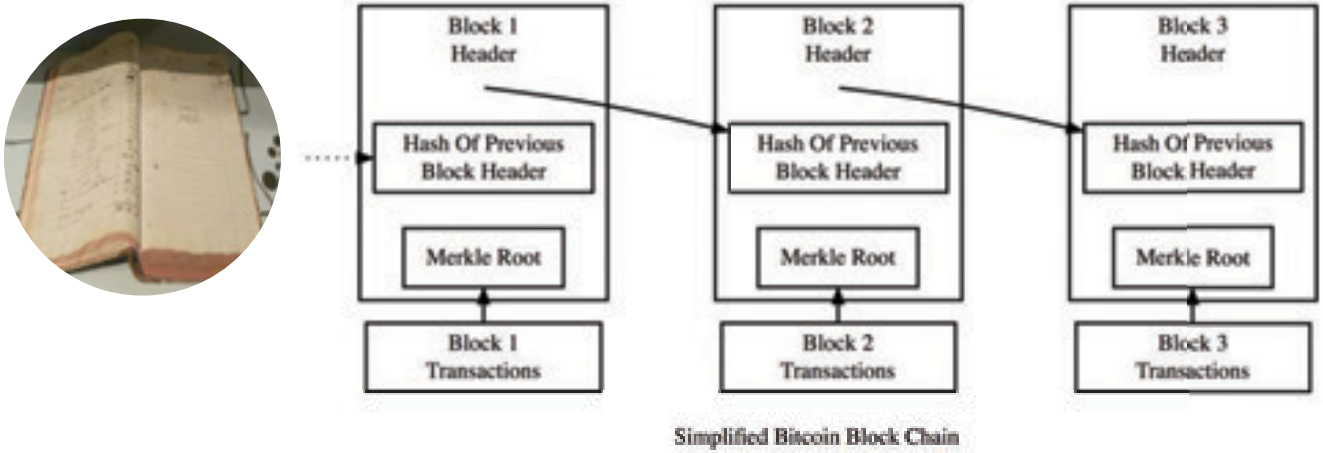


Transaction : A send B 1 BTC

Transaction propagation : ~15 sec 90%

P2P Network



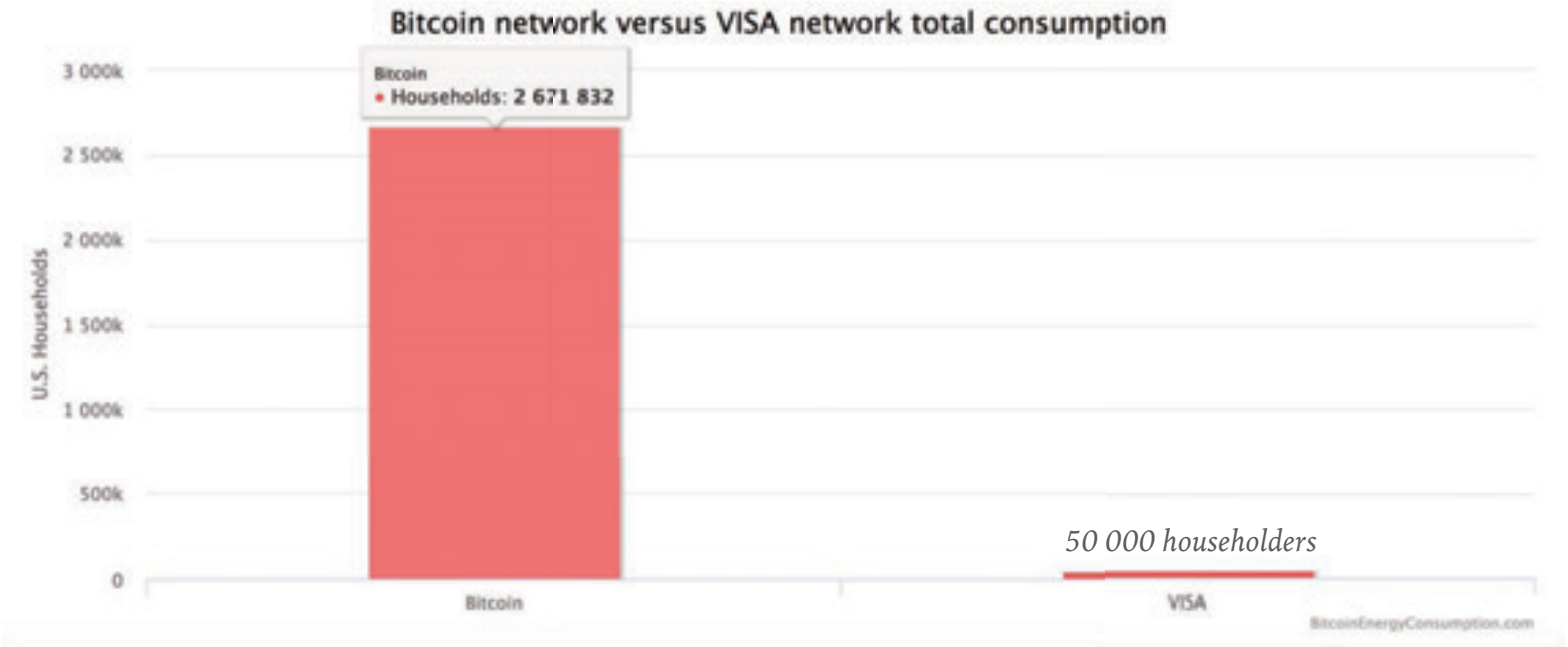


Simplified Bitcoin Block Chain

PROOF OF WORK

To prove you did some extra work to create a block, you must create a hash of the block header which does not exceed a certain value.

BITCOIN ENERGY CONSUMPTION



2,547,377 householders (2008)

Danmark

Many central banks currently investigating

- Bank of England
- MAS
- Riksbank
- …

Individual countries likely to pioneer

- South-east Asia
- Sub-Saharan Africa

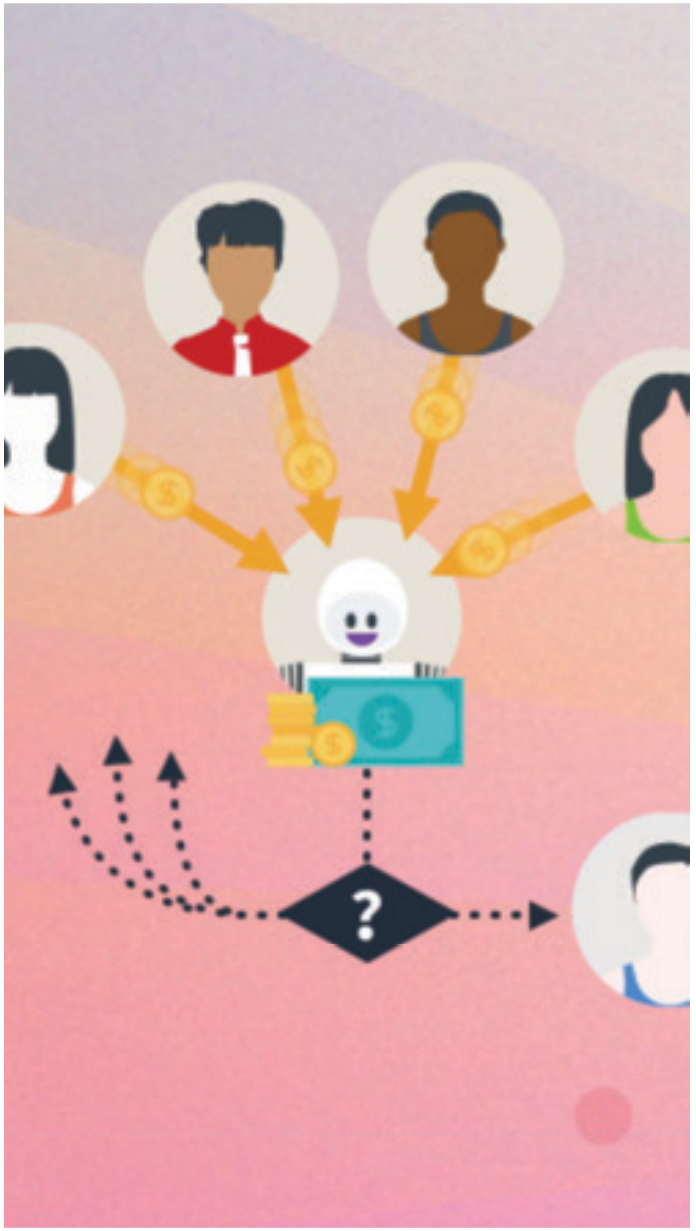
Bloc CBDCs will emerge Tokenisation of assets
Disruption of capital markets

INTERNET OF FIN. PRODUCTS

Now we can create new products without financial institutions

ETHEREUM

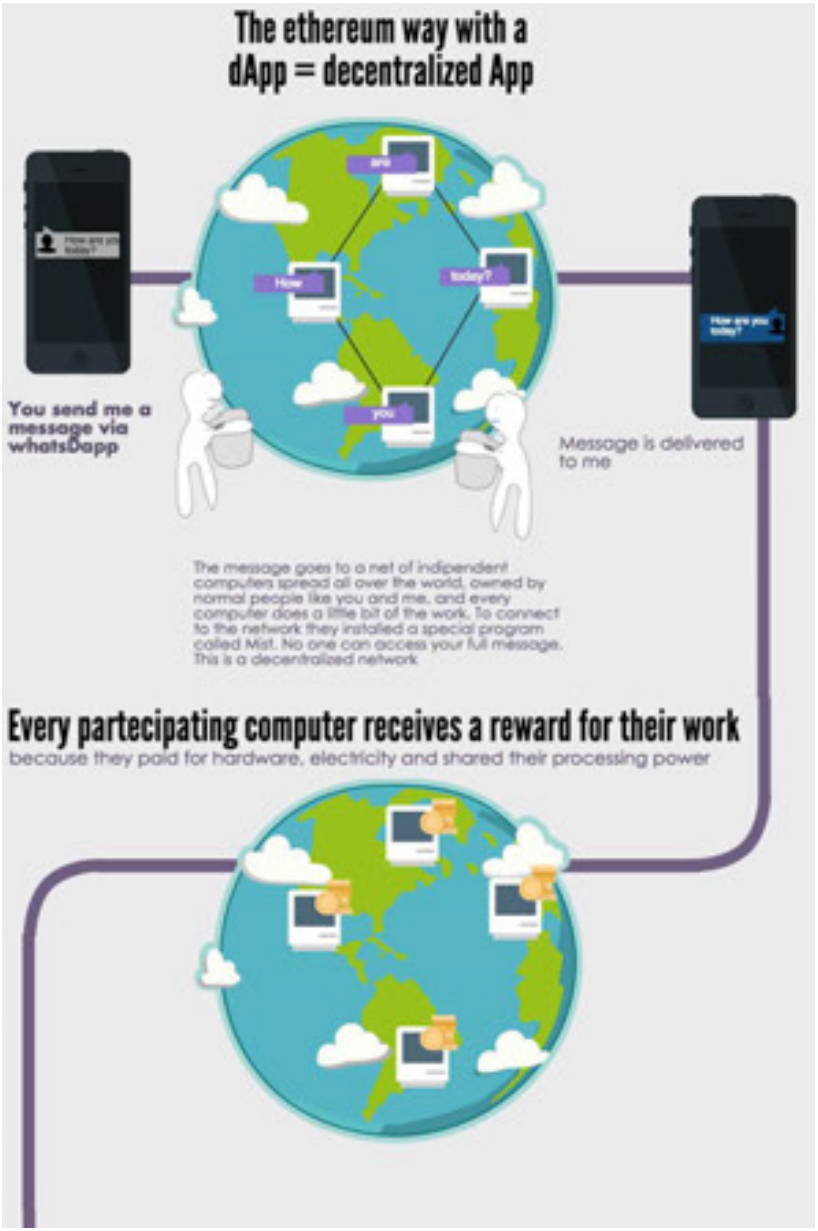
Ethereum is a decentralized platform that runs smart contracts



SMART CONTRACTS

Smart contract is NOT legal documents

It's program (code + data) stored in blockchain that can control money (cryptocurrency) in smart contract own account. Only smart contract can send money to a beneficiary (person or other smart contract)

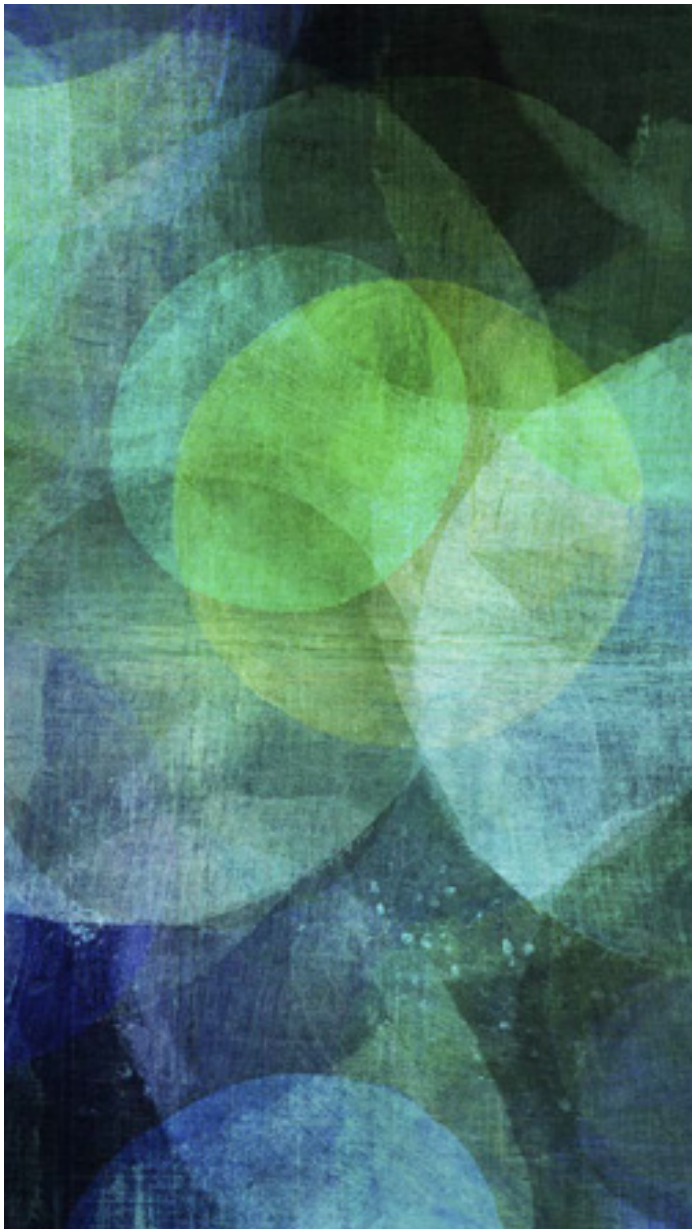


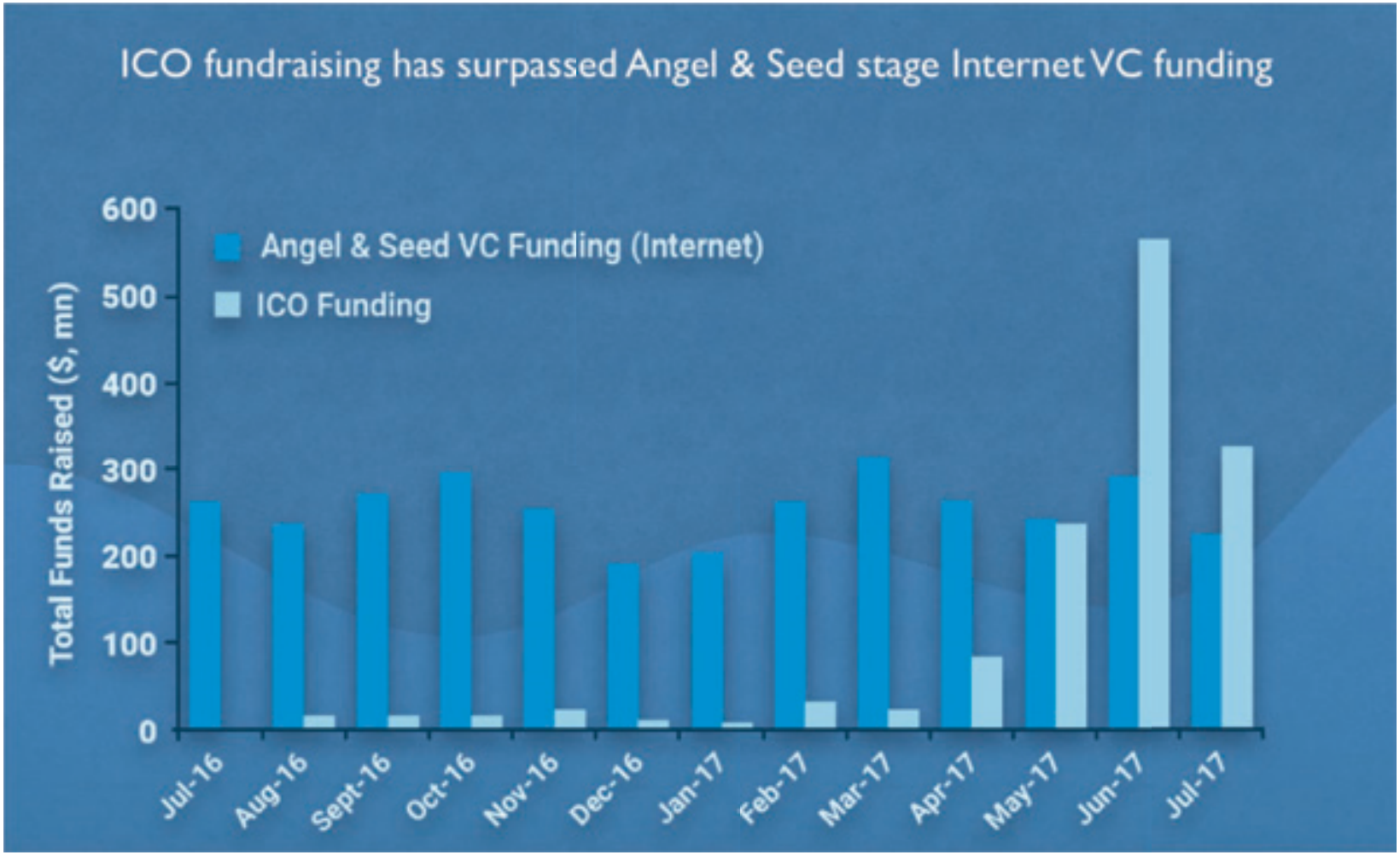
VIRTUAL MACHINE

This massive parallelisation of computing across the entire Ethereum network is not done to make computation more efficient. In fact, this process makes computation on Ethereum far **slower and more expensive** than on a traditional "computer". Rather, every Ethereum node runs the EVM in order to maintain consensus across the blockchain. Decentralized consensus gives Ethereum extreme levels of fault tolerance, ensures zero downtime, and makes data stored on the blockchain forever unchangeable and censorship-resistant.

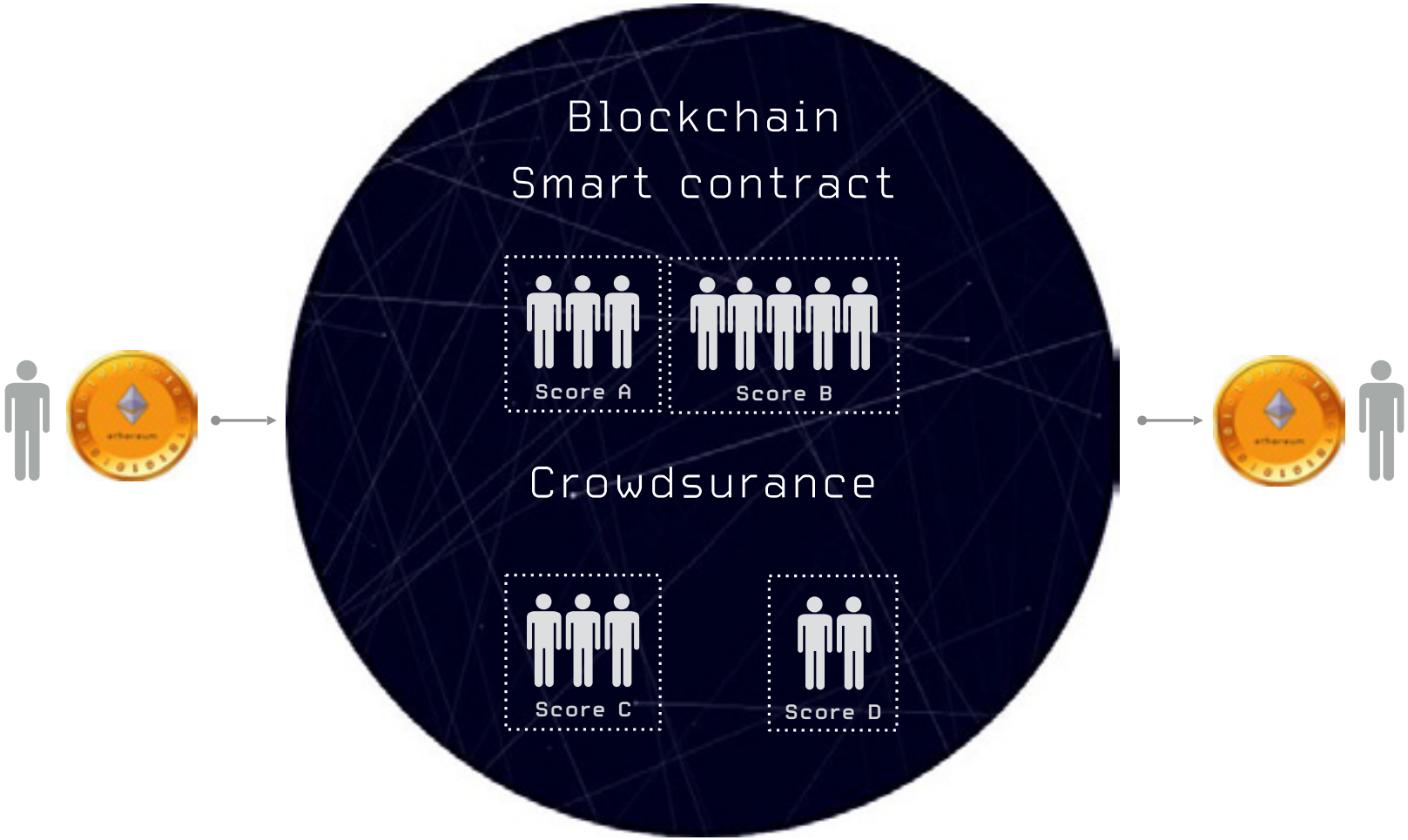
ICO

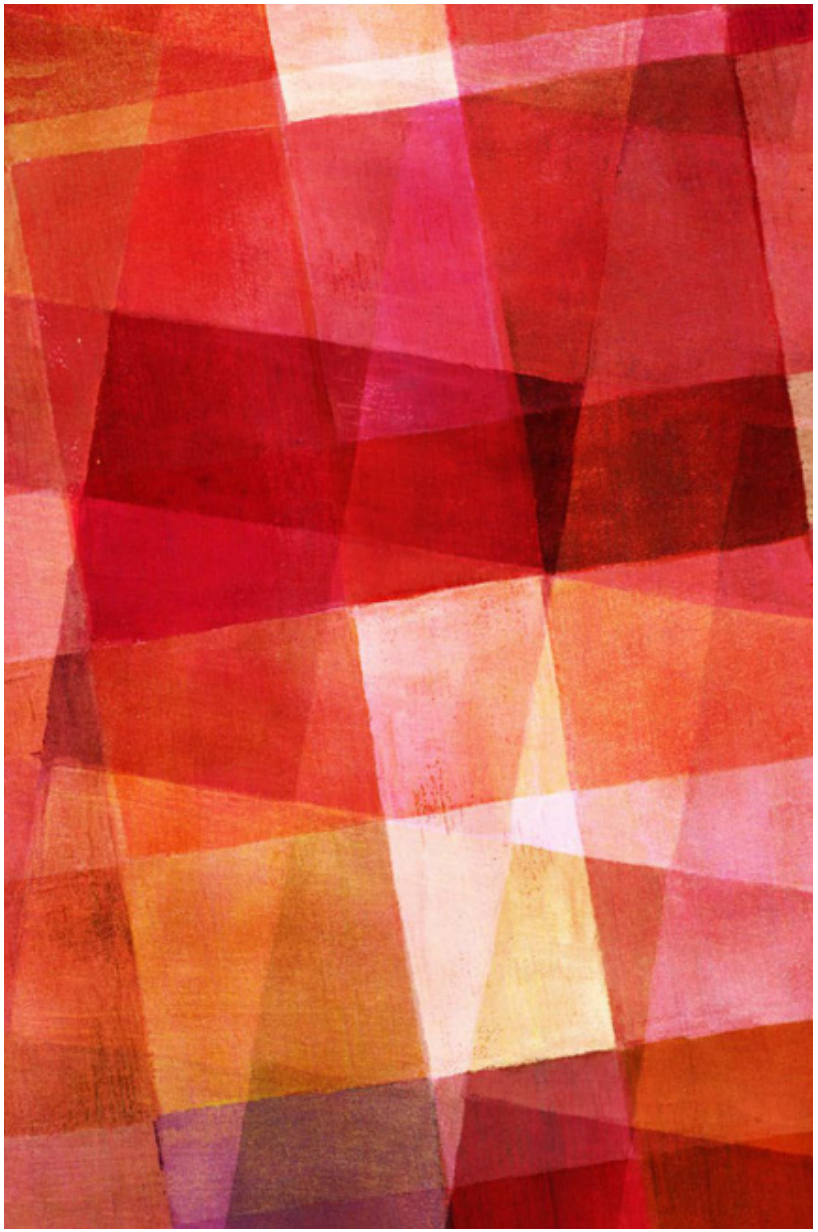
Initial coin offering




ICO fundraising has surpassed Angel & Seed stage Internet VC funding
Total Funds Raised ($, mn)
600
500
400
300
200
100
0
Angel & Seed VC Funding (Internet)
ICO Funding
Jul-16
Aug-16
Sept-16
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17
Jul-17

CROWDSURANCE





CROWDSURANCE

Compared to traditional insurance,
in crowdsurance
there are

- no insurers
- no brokers

all processes being controlled and managed by algorithms with full transparency provided by blockchain.

REGA

Le domande

servingin@rega.life