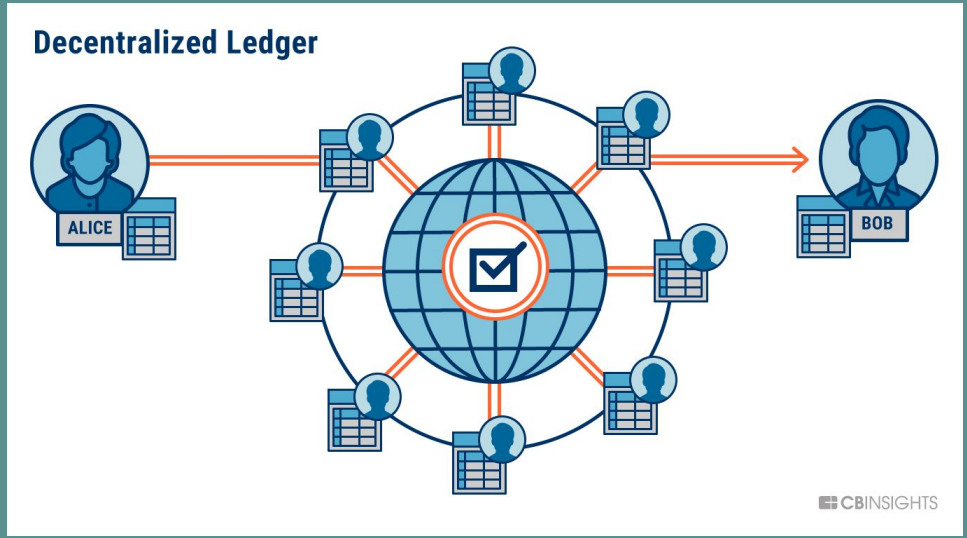
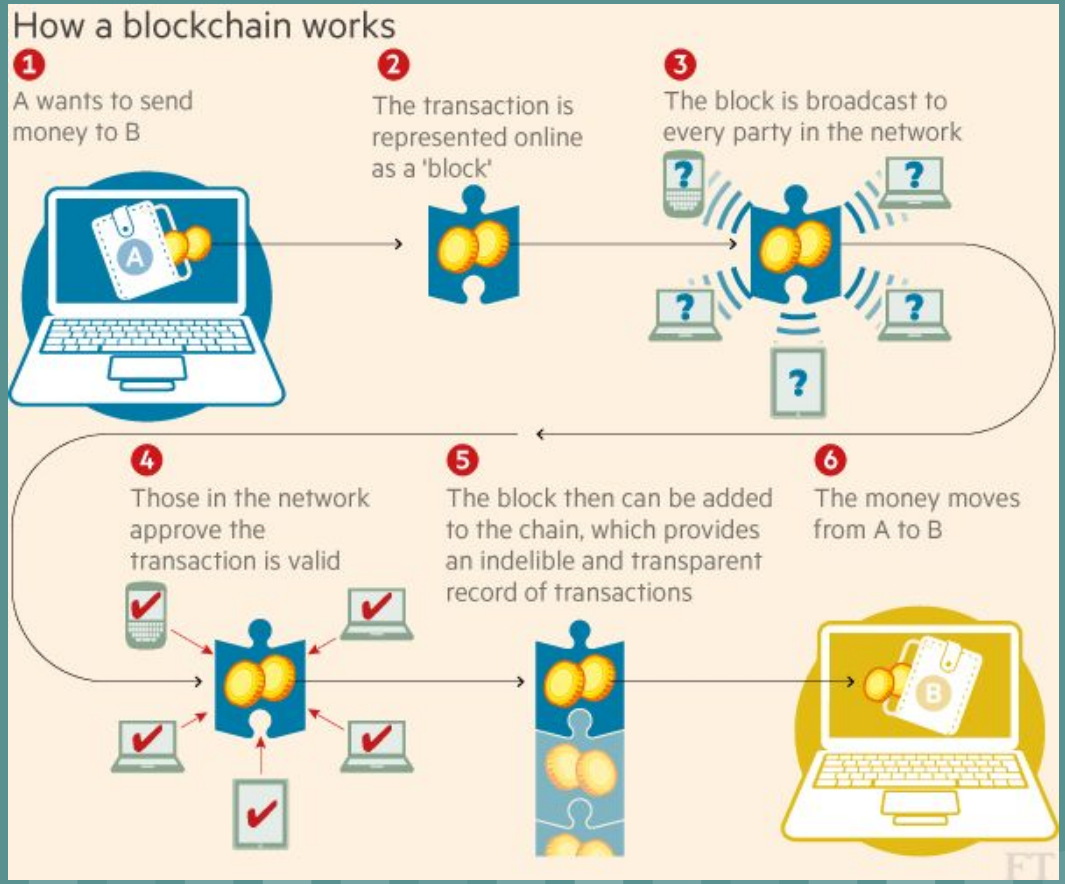
Smart Contracts

By Nicholas Nimura

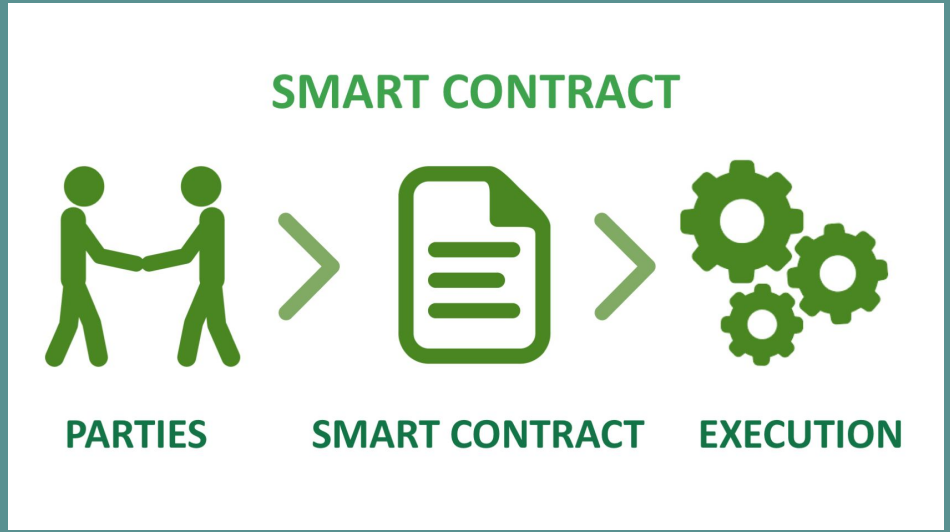
Definition of the Blockchain:
A system in which a record of transactions made in bitcoin or another cryptocurrency are maintained across several computers that are linked in a peer to peer network.



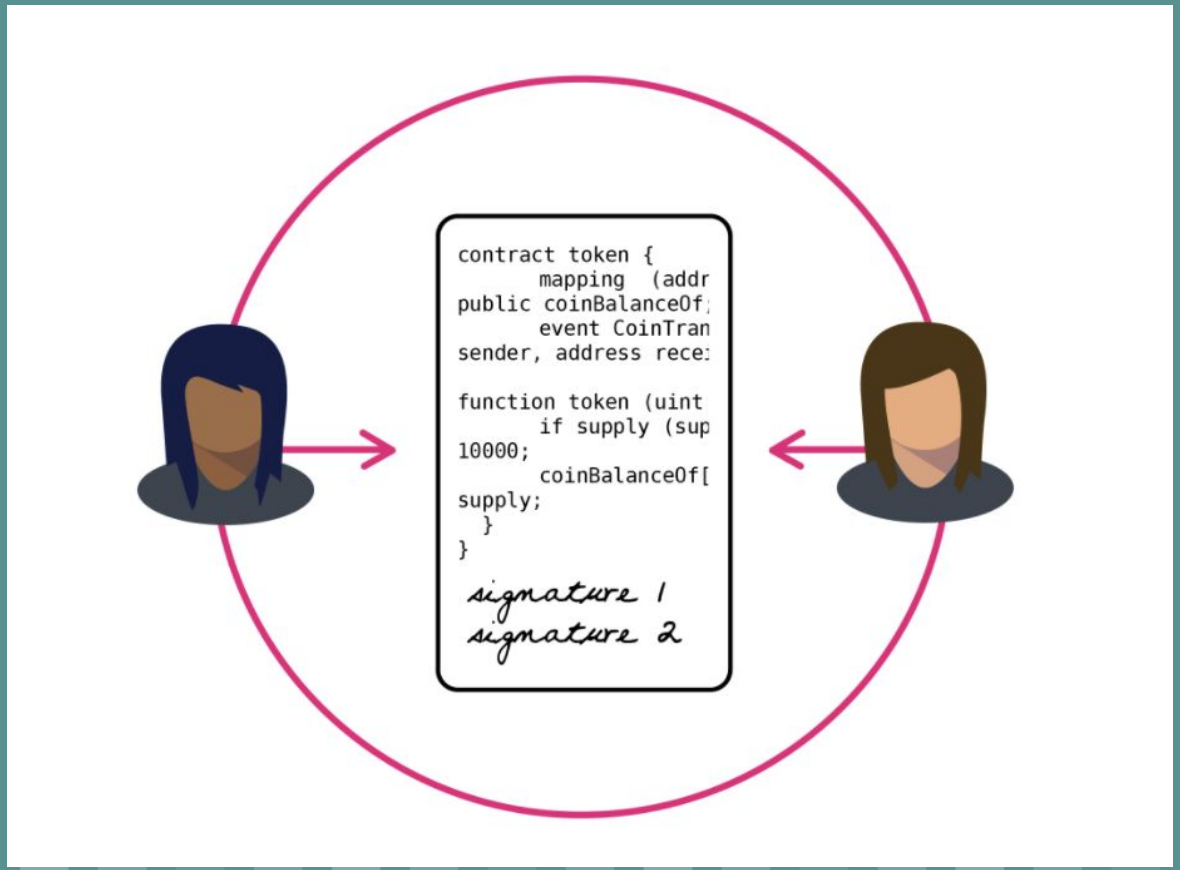

How a blockchain works
1
A wants to send money to B
2
The transaction is represented online as a 'block'
3
The block is broadcast to every party in the network
4
Those in the network approve the transaction is valid
5
The block then can be added to the chain, which provides an indelible and transparent record of transactions
6
The money moves from A to B
A
B
?
FT

Properties of Smart Contracts:

- Terms executed automatically upon completion
- Immutable once created on the block chain
- Distributed to all on the network



- Smart contracts enforced automatically by a predetermined algorithm forgoing the need for legal proceedings.
- Enforced on a state level, not federal.
- Ancillary smart contracts compliment smart contracts to make them more legally binding

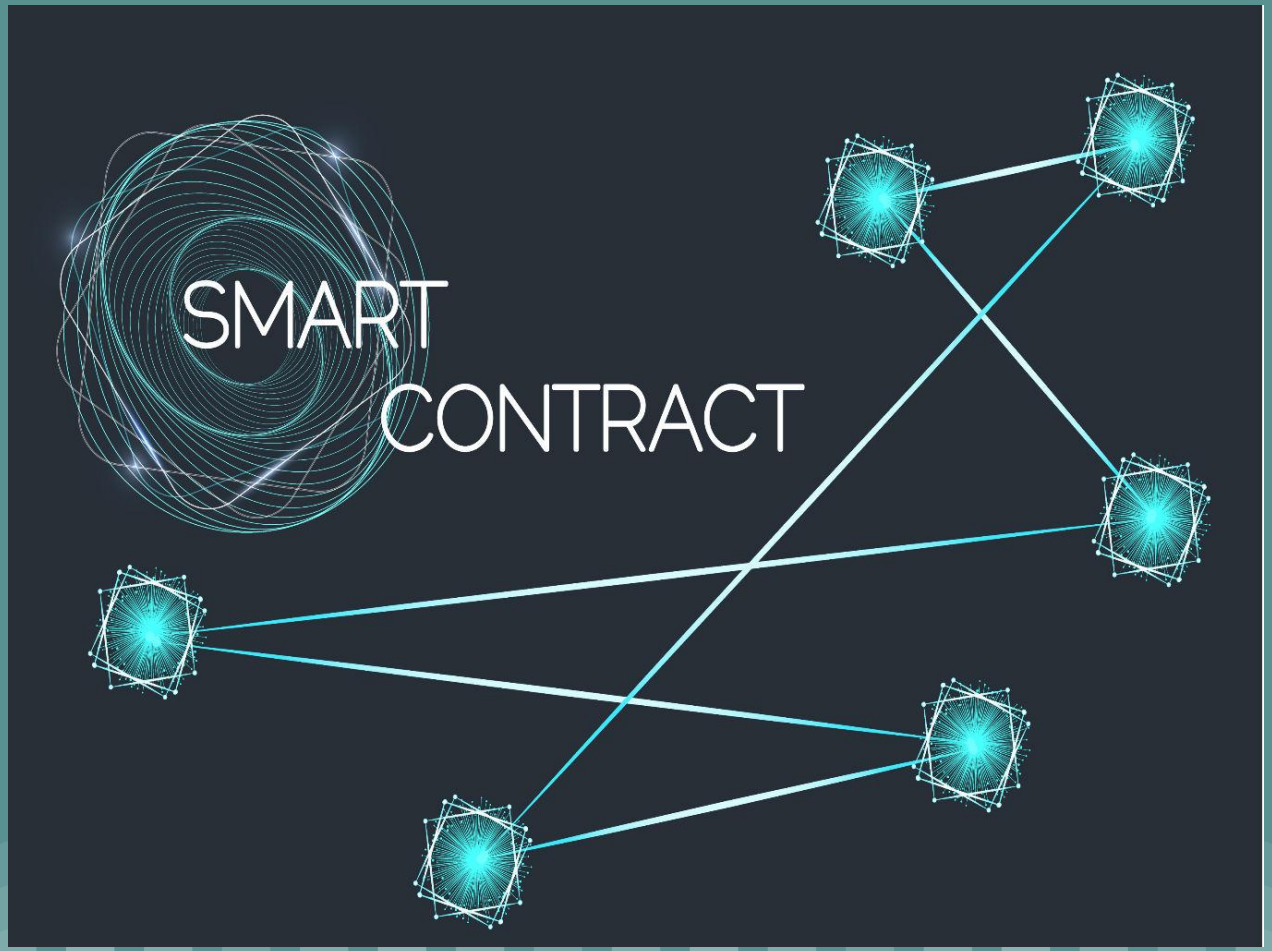

contract token {
mapping (addr
public coinBalanceOf;
event CoinTran
sender, address rece:
function token (uint
if supply (sup
10000;
coinBalanceOf[
supply;
}
}
signature 1
signature 2

Disadvantages of Smart Contracts

- Unable to adapt contract to changes due to its immutable nature.
- Badly written code can lead to theft

1.) Trust
2.) Fraud Reduction
3.) Easy to access Public Records
4.) Cost Efficient

1.) Unable to be changed once created
2.) Bad coding can lead to theft


SMART
CONTRACT