BLOCKCHAIN IN PROPERTY

PUNCAK TEGAP SDN BHD

Internet, Cloud, Big Data, AI, Blockchain

What is blockchain?

A suite of distributed ledger technologies that can be programmed to record and track anything of value.

that can be programmed to record and track anything of value,

What can blockchain do?

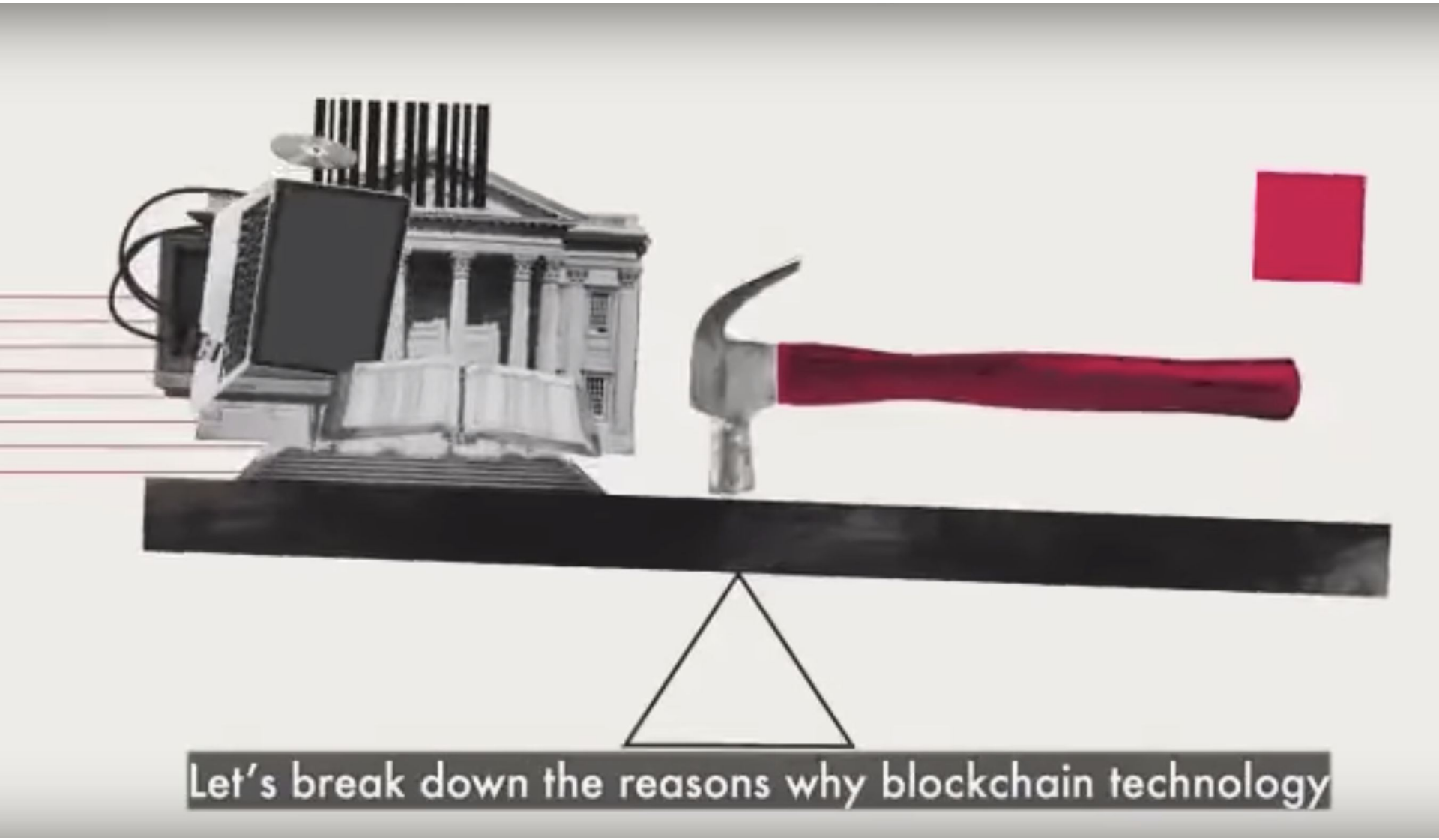
Financial Transactions

Medical Records

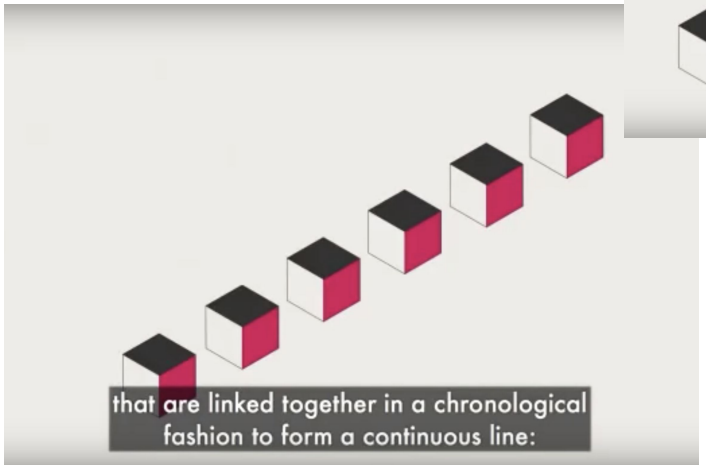
Land Titles

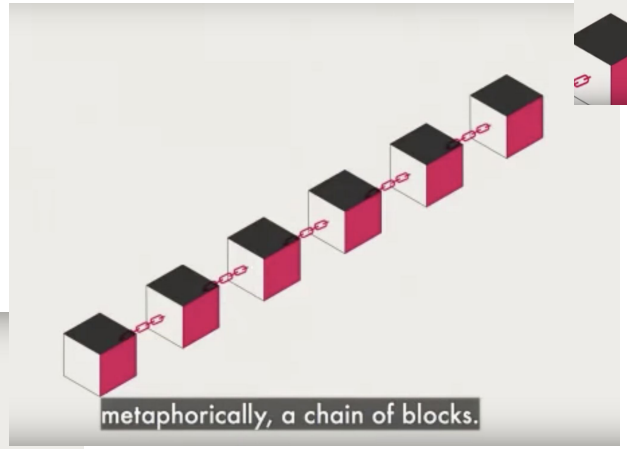
or even land titles.

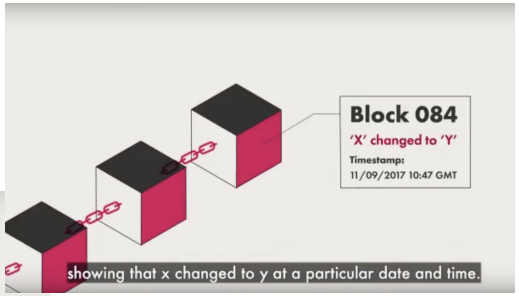
Why blockchain technology revolutionised?



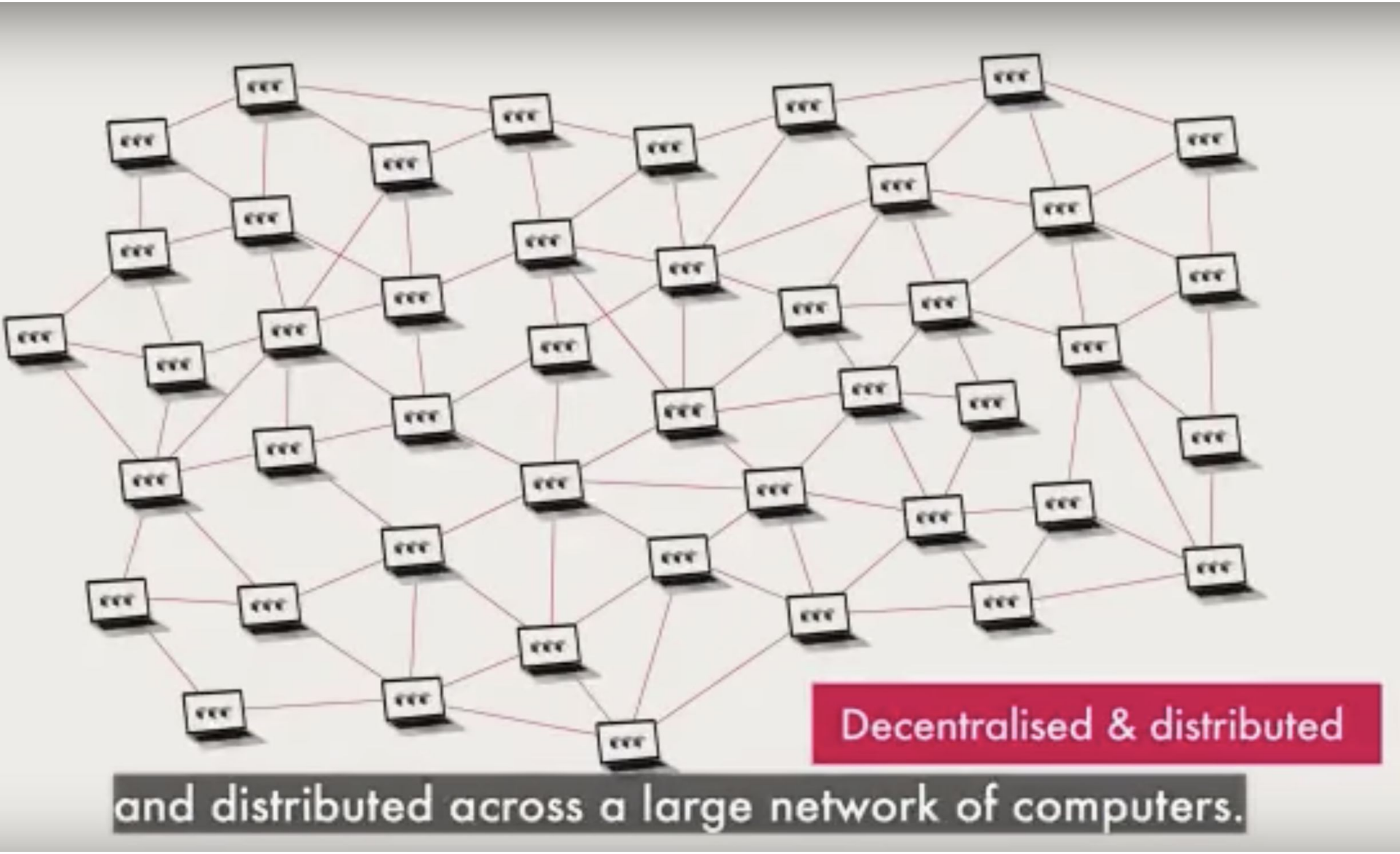
1. The way it tracks and stores data







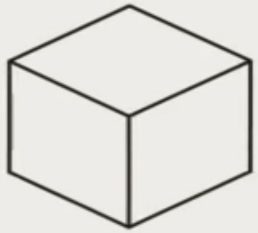
Blockchain is Decentralised and Distributed



How to add a new block?

1

A cryptographic puzzle must be solved, thus creating the block.



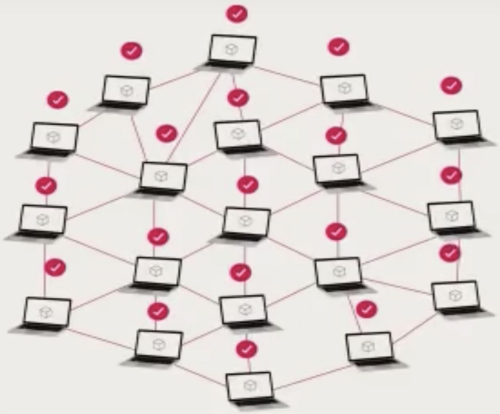
2

The computer that solves the puzzle shares the solution to all the other computers on the network.

shares the solution to all of the other computers on the network,

3

The network verifies the proof-of-work.



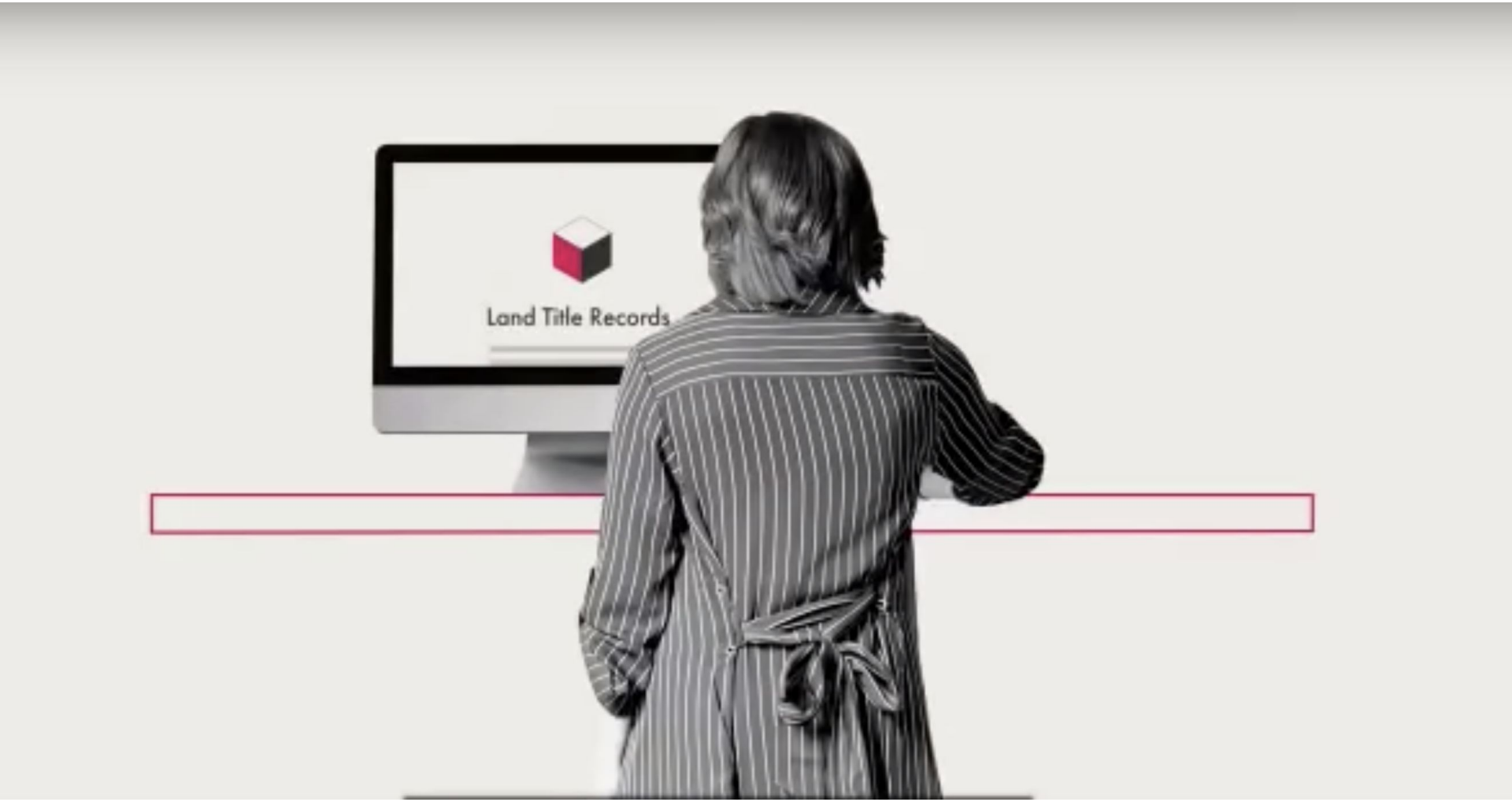
The network will then verify this proof-of-work and,

2. It creates trust in the data

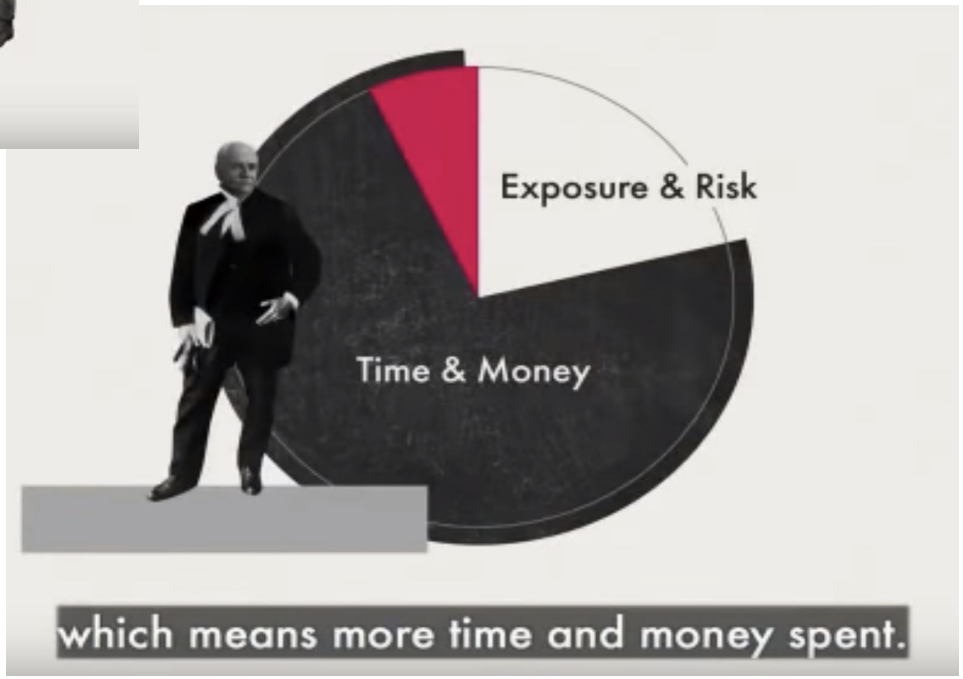
- A cryptographic puzzle must be solved.
- The solution, or proof-of-work, is shared with all the computers on the network.
- The network verifies the proof-of-work.

if correct, the block will be added to the chain.

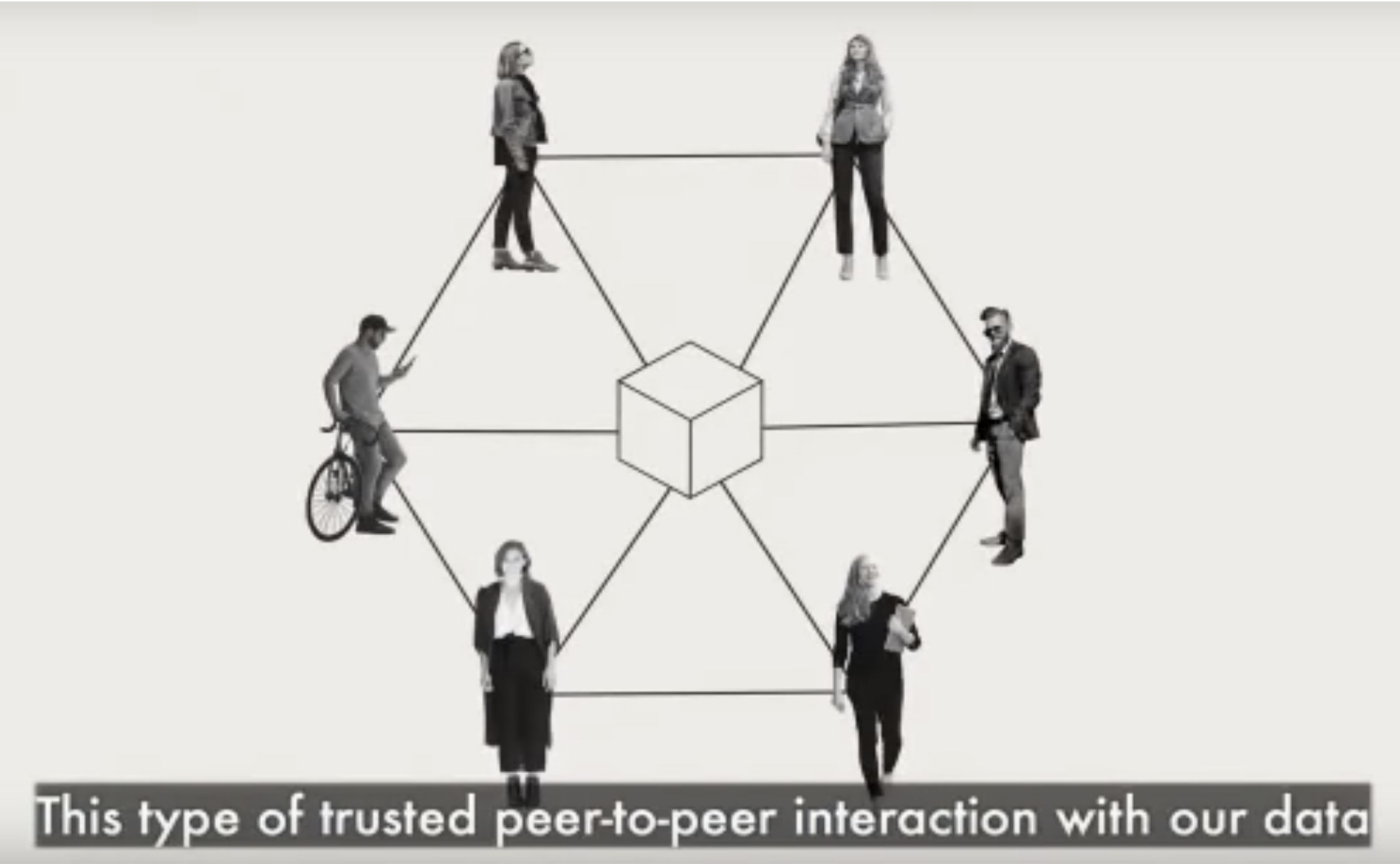
Trusted and real time data on blockchain to avoid dispute



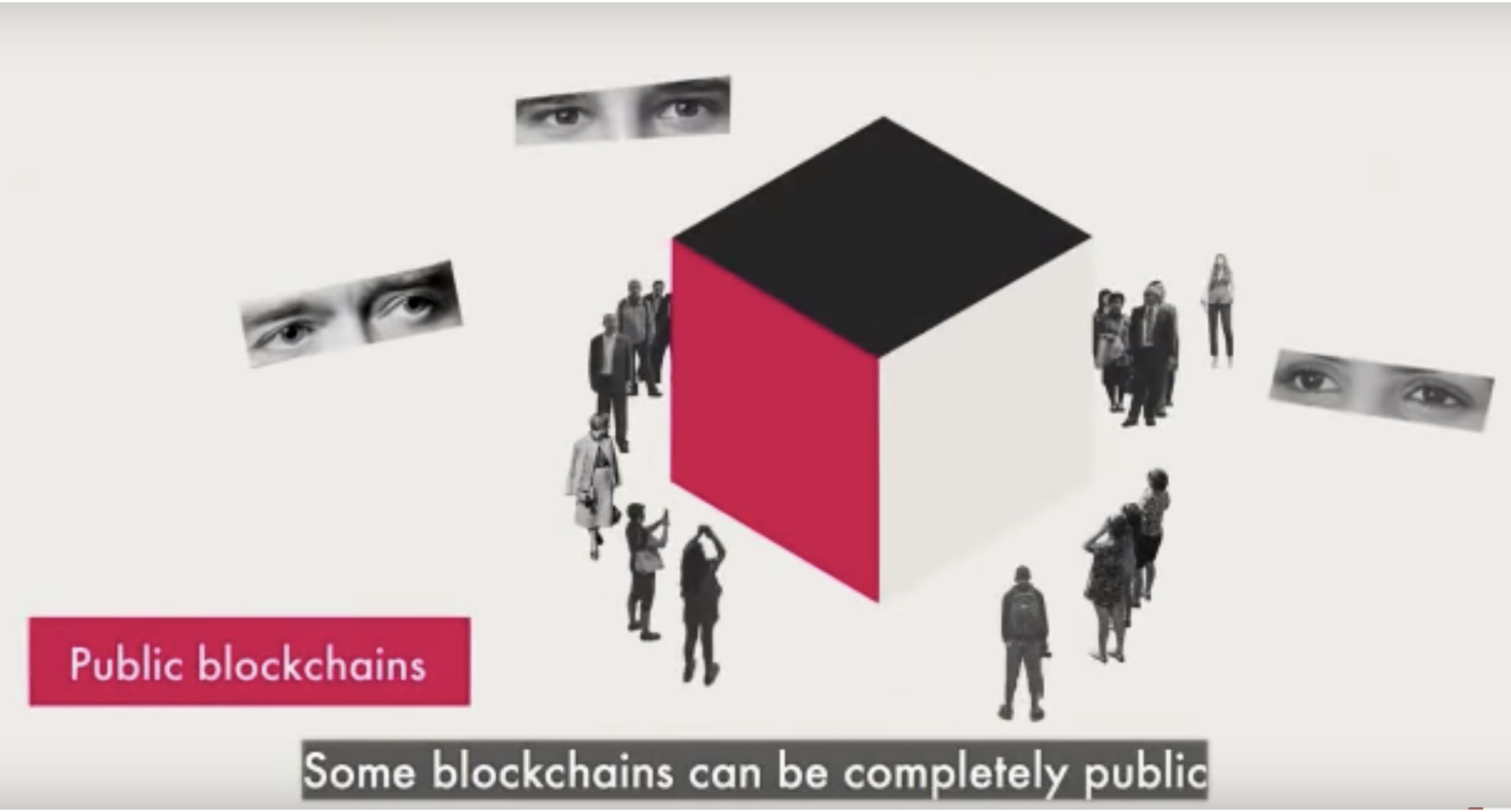
3. No more intermediaries



Blockchain creates a trusted P2P network

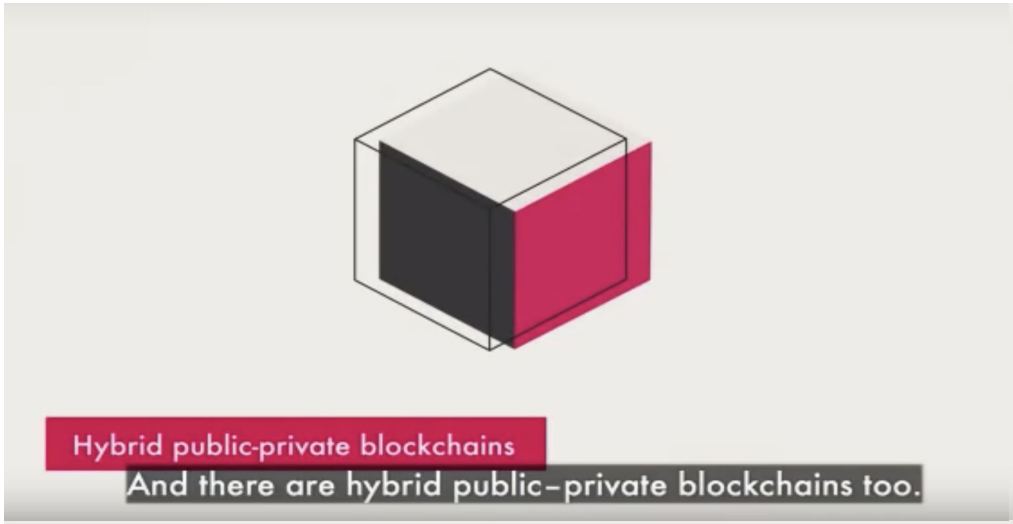


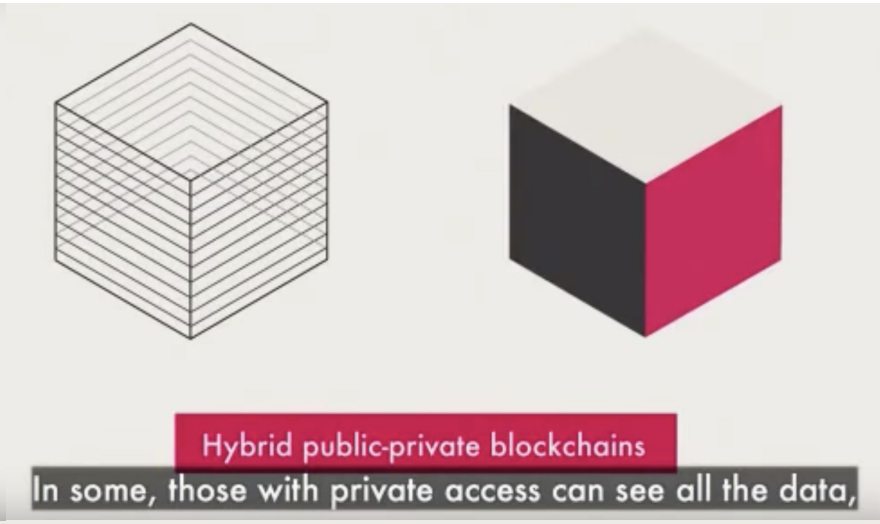
Type of Blockchain - Public Blockchain

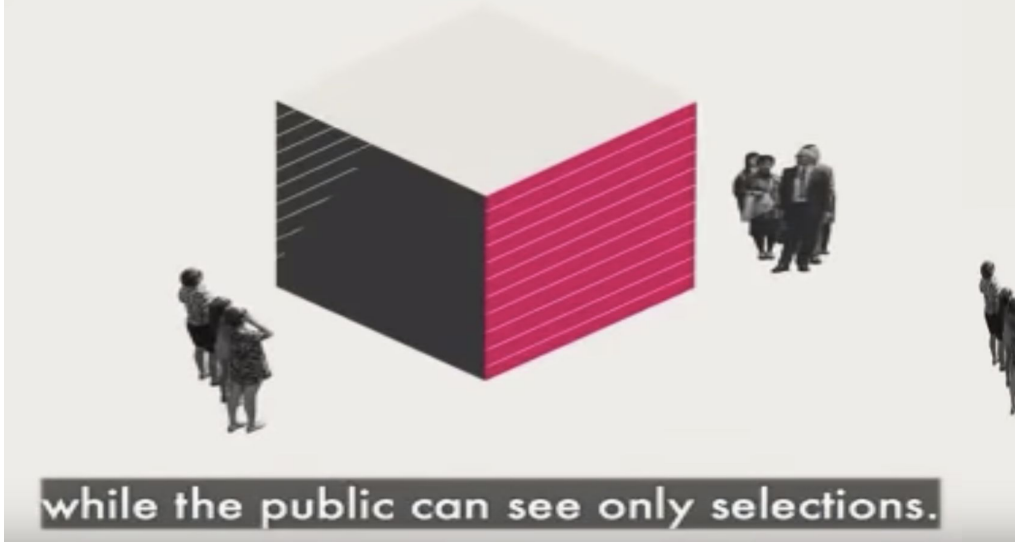


Private Blockchain

Hybrid public-private Blockchain

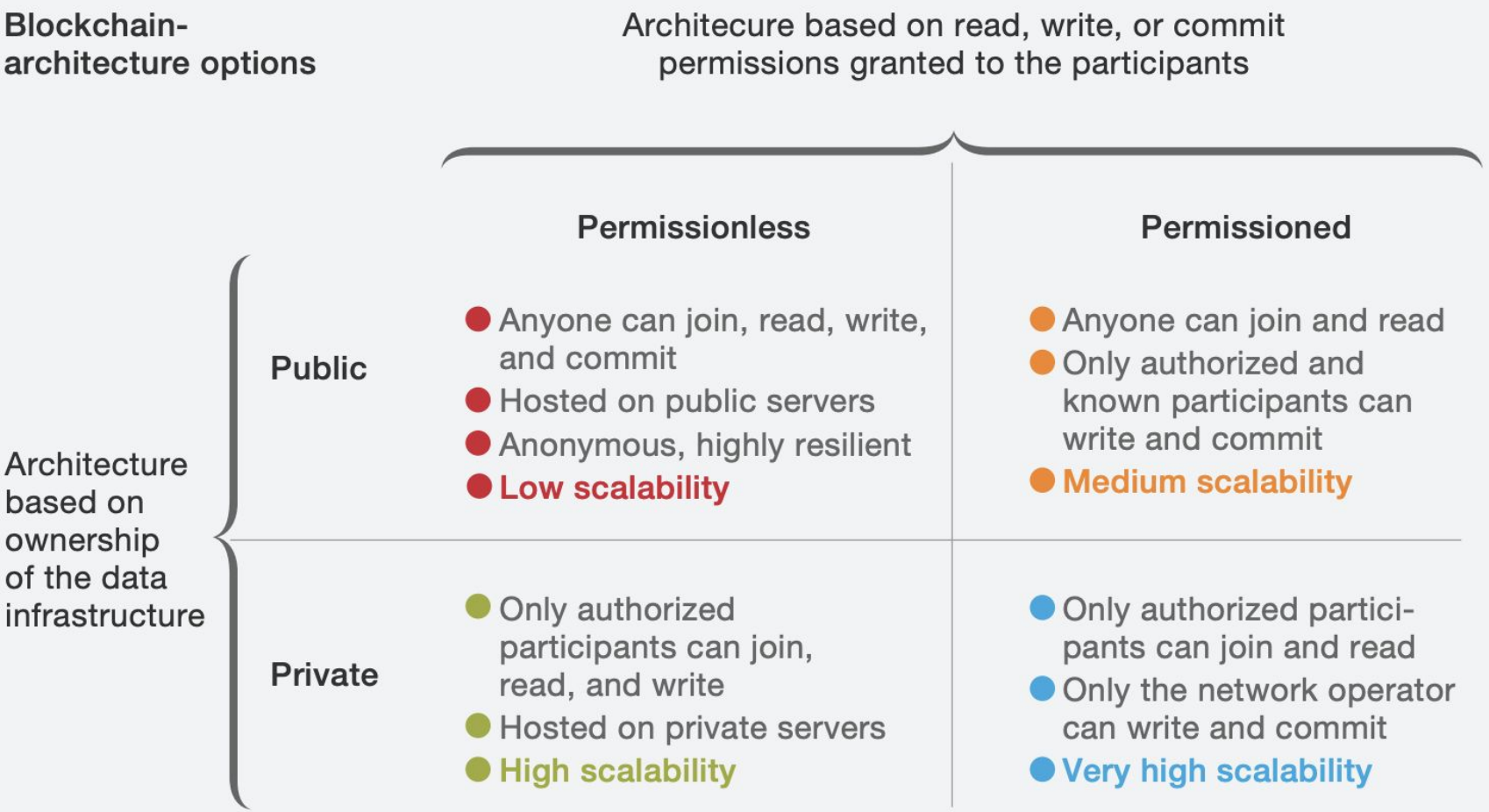




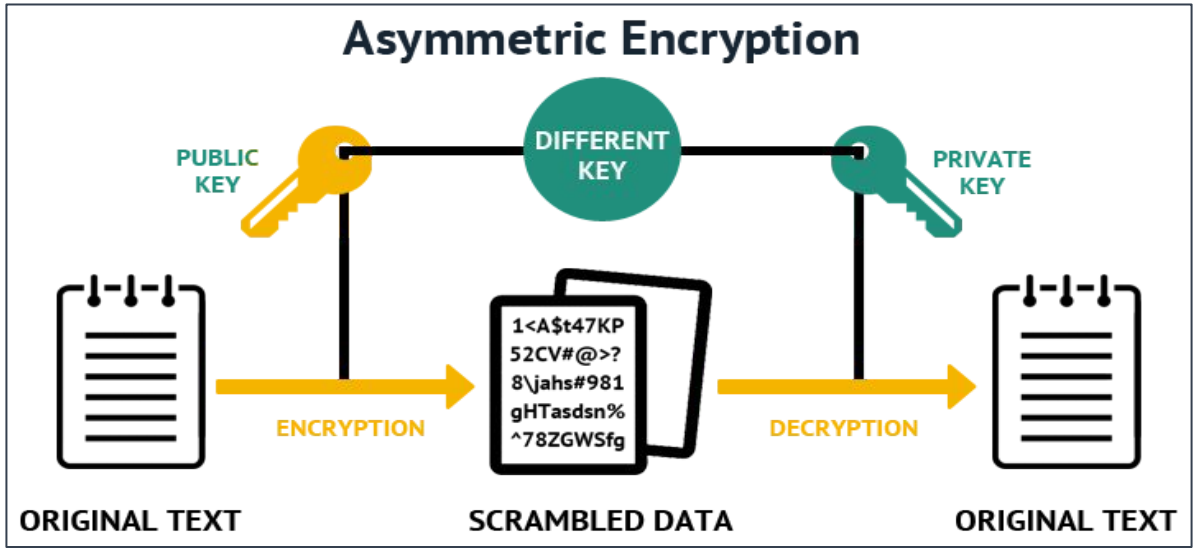


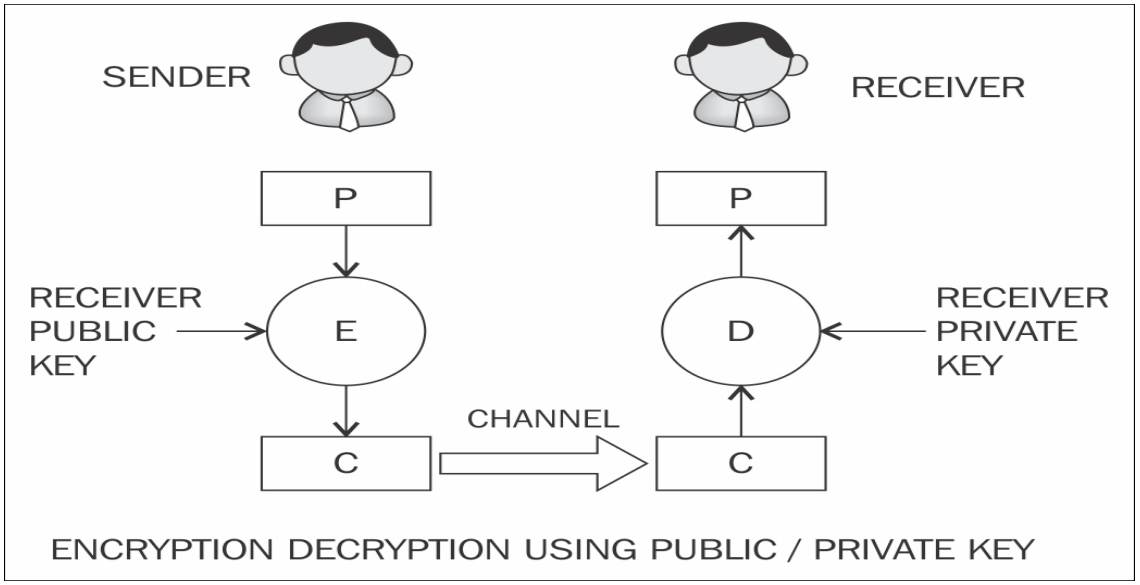
Blockchain architecture options

Most commercial blockchain will use private, permissioned architecture to optimize network openness and scalability.

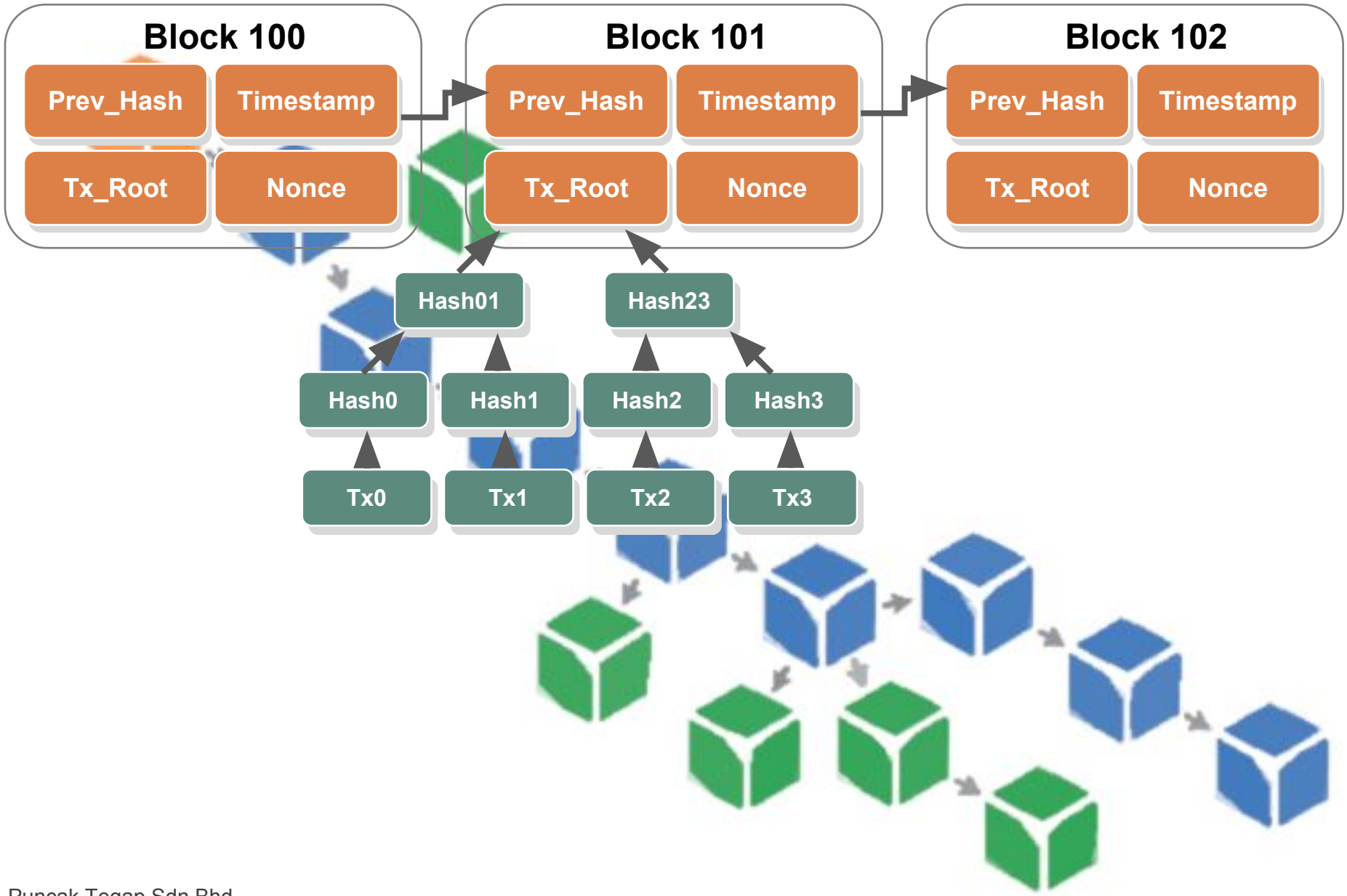


Underlying Technology - Cryptographic





Underlying Technology – Hash Functions

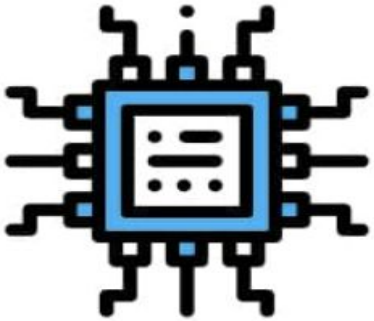


The technology that will replace lawyers

1

Smart Contracts are **written as code** and committed to the blockchain. The code and conditions in the contract are **publicly available** on the ledger.

2



When an event outlined in the contract is triggered, like an expiration date or an asset's target price is reached-- the **code executes**.

3

Regulators can watch contract activity on the blockchain to **understand the market** while still **maintaining the privacy** of individual actors.

Blockchain Land Registry - Sweden

Land registration process in Sweden

- 11 steps accelerated, 10 steps removed
- Time to complete reduces from 4 months to 4 days
- Less risk of manipulation, fraud and errors
- Only a fraction of the paper documentation needed

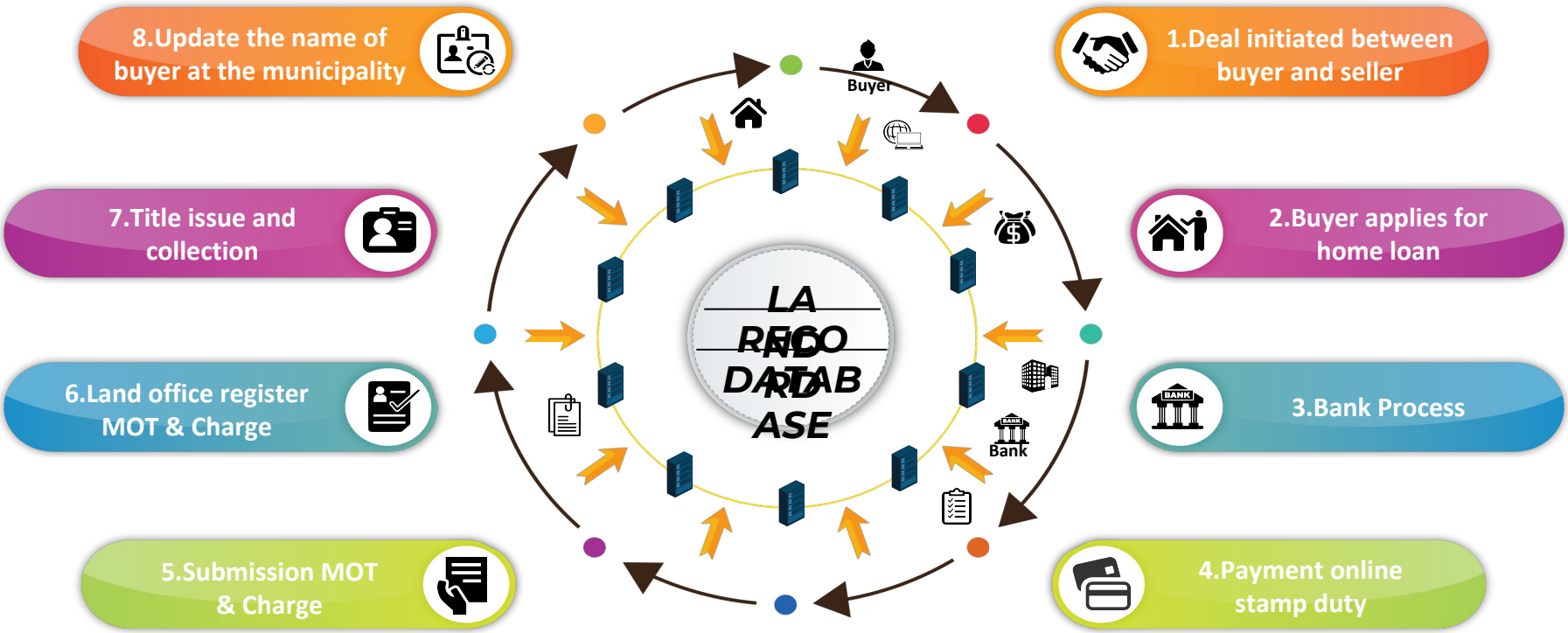
Blockchain Land Registry – Republic of Georgia

Successful Use Case: Land Title Republic of Georgia

Blockchain Land Registry

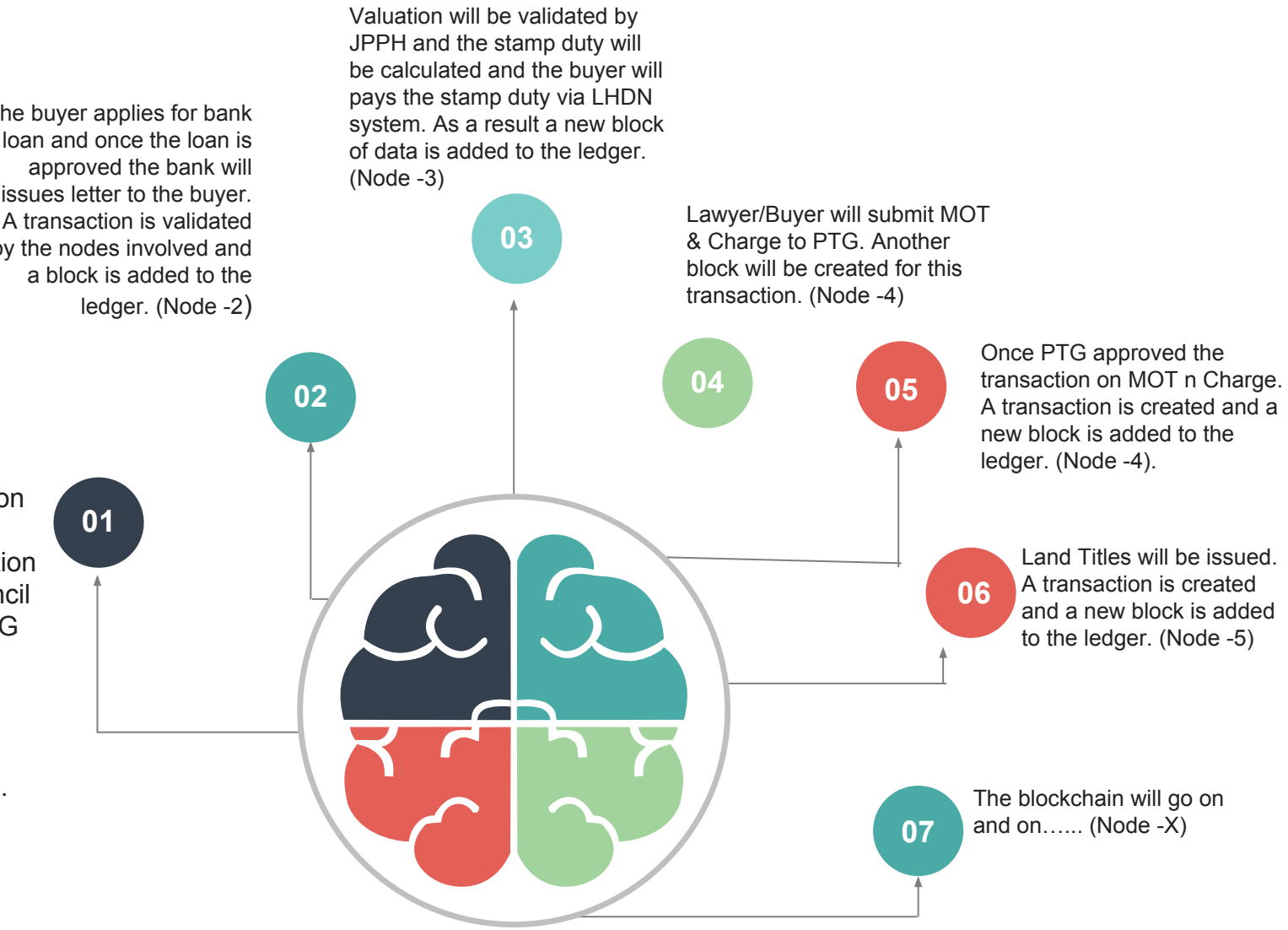
Blockchain enabled the Republic of Georgia to provide its citizens with a digital certificate of their assets, supported with cryptographical proof published to the Bitcoin Blockchain.

Blockchain Land Registry - eTanah



* Hybrid Public-Private Blockchain Architecture

Land records process in blockchain



Challenges in implementing blockchain

Being new technique, there are very few less proof of concepts available. This could be the first blockchain initiative in the government sector.

Lack of specialised expertise in blockchain development.

Its immutable nature make it hard to modify anything at later stage. This nature will create fear in the minds of the users and they tend to continue with the existing computer system.

Cost of set-up of massive network for the implementation of blockchain requires high initial costs. The establishment of a network with high bandwidth the maintain the nodes is a big task

There are no regulatory standards that govern application across jurisdiction. There are no regulations on how the blockchain transactions should be written and no standard interfacing between systems from different agencies.


I'm Imogen Heap, and this is
why I'm releasing my music
on the blockchain...
TED