Shithole Crypto

An overview of Bitcoins and the impending BlockChain disruption

Cal Poly

Winning team HackMit
Worked with Dr. Kerbs
Won award from WA
Economic Commission
Startups
Collaborate with everyone

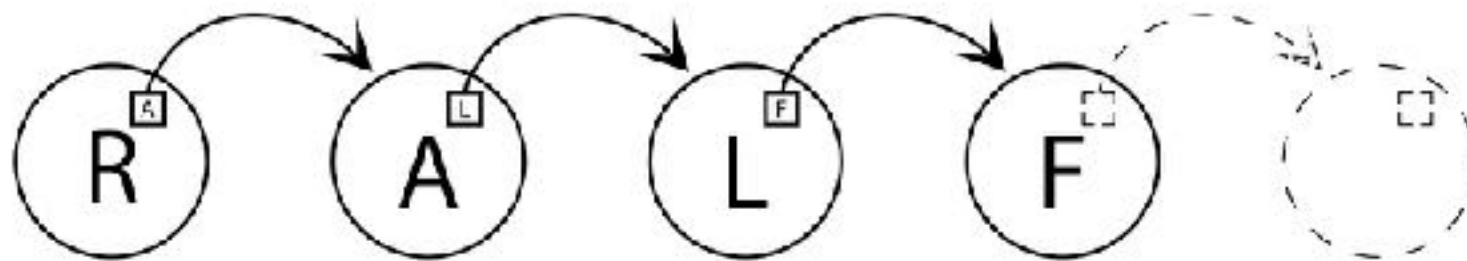JPL

Worked with Chief Engineer
Flown to other NASA center
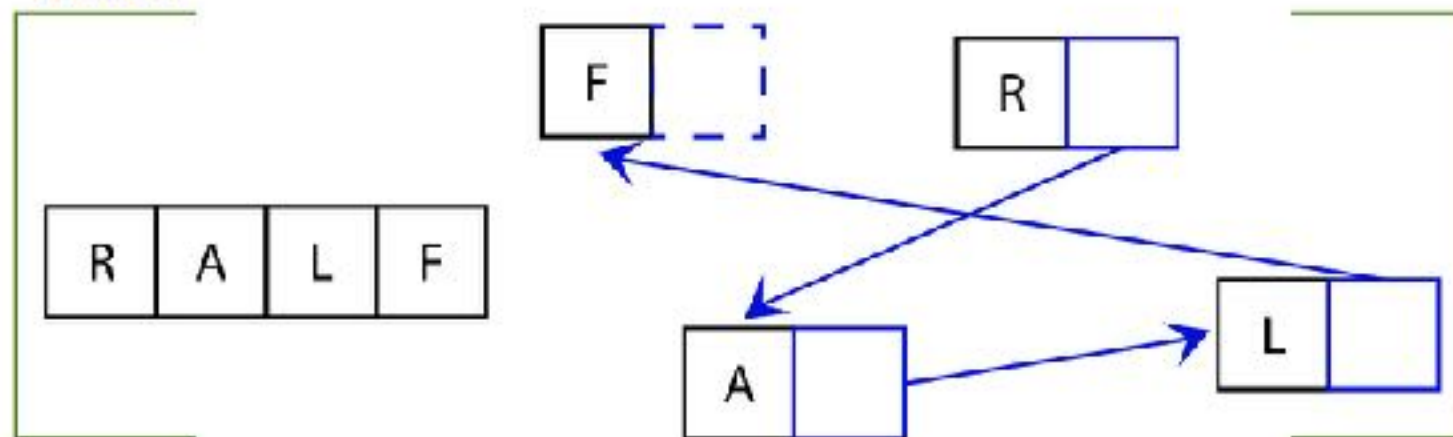Class B software
Space Agencies Worldwide
Worked on over 5 Missions
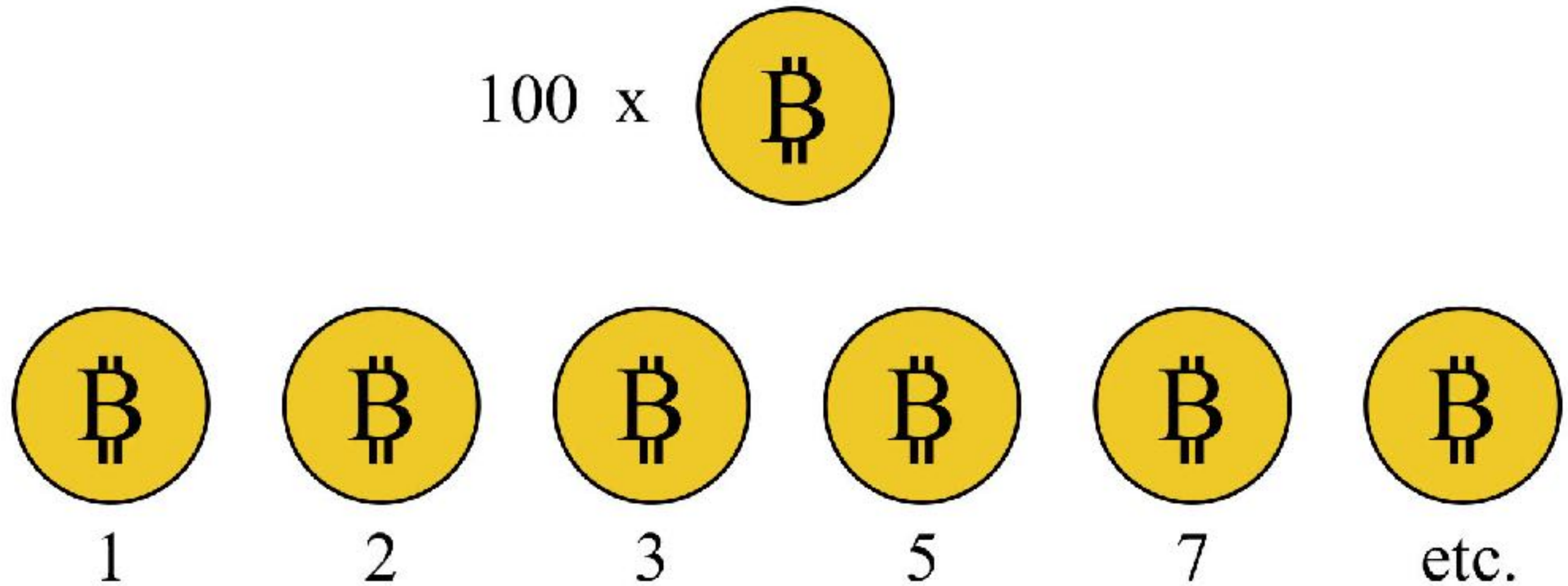Got an Award and an Intern

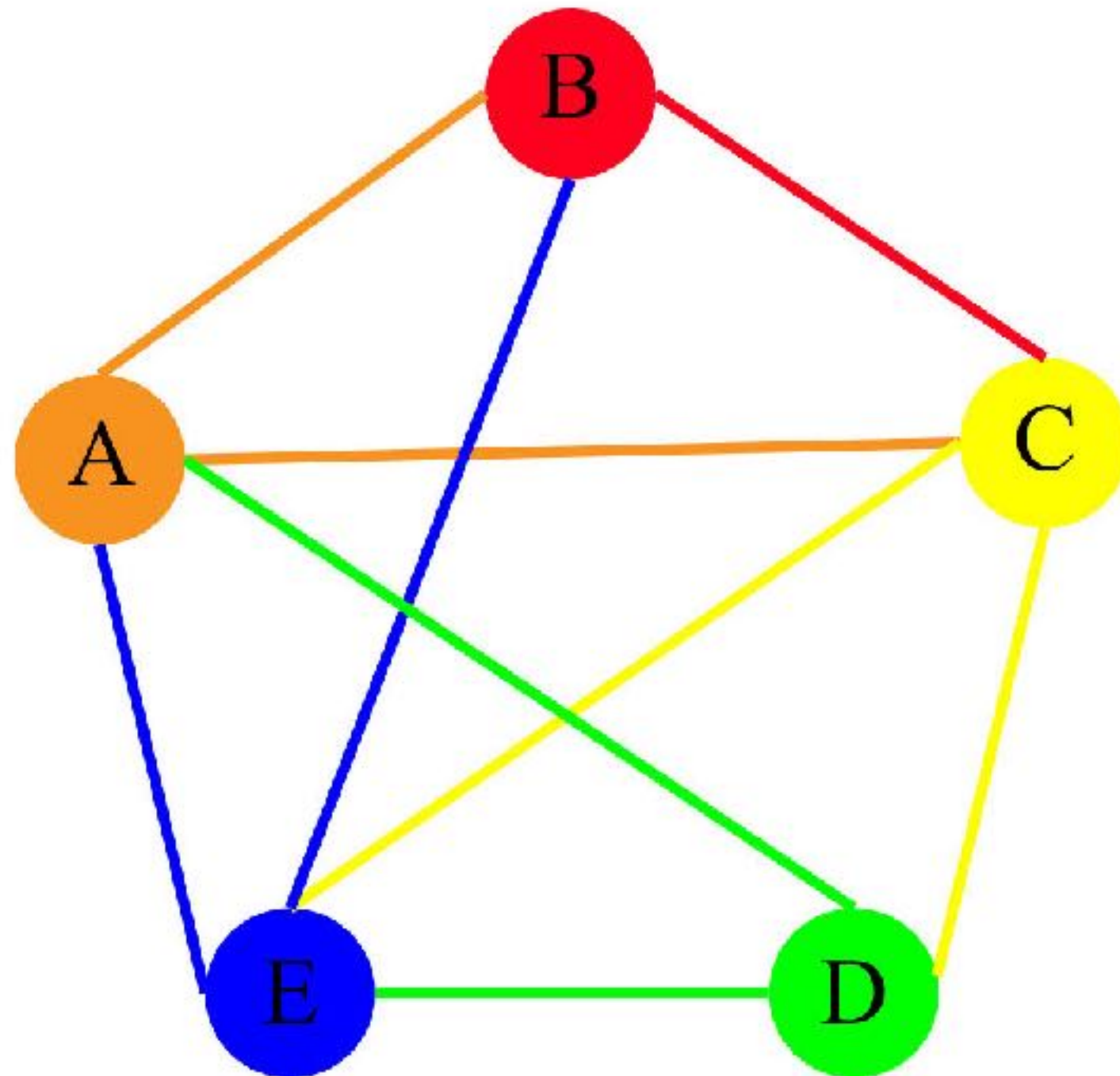How Data is Stored

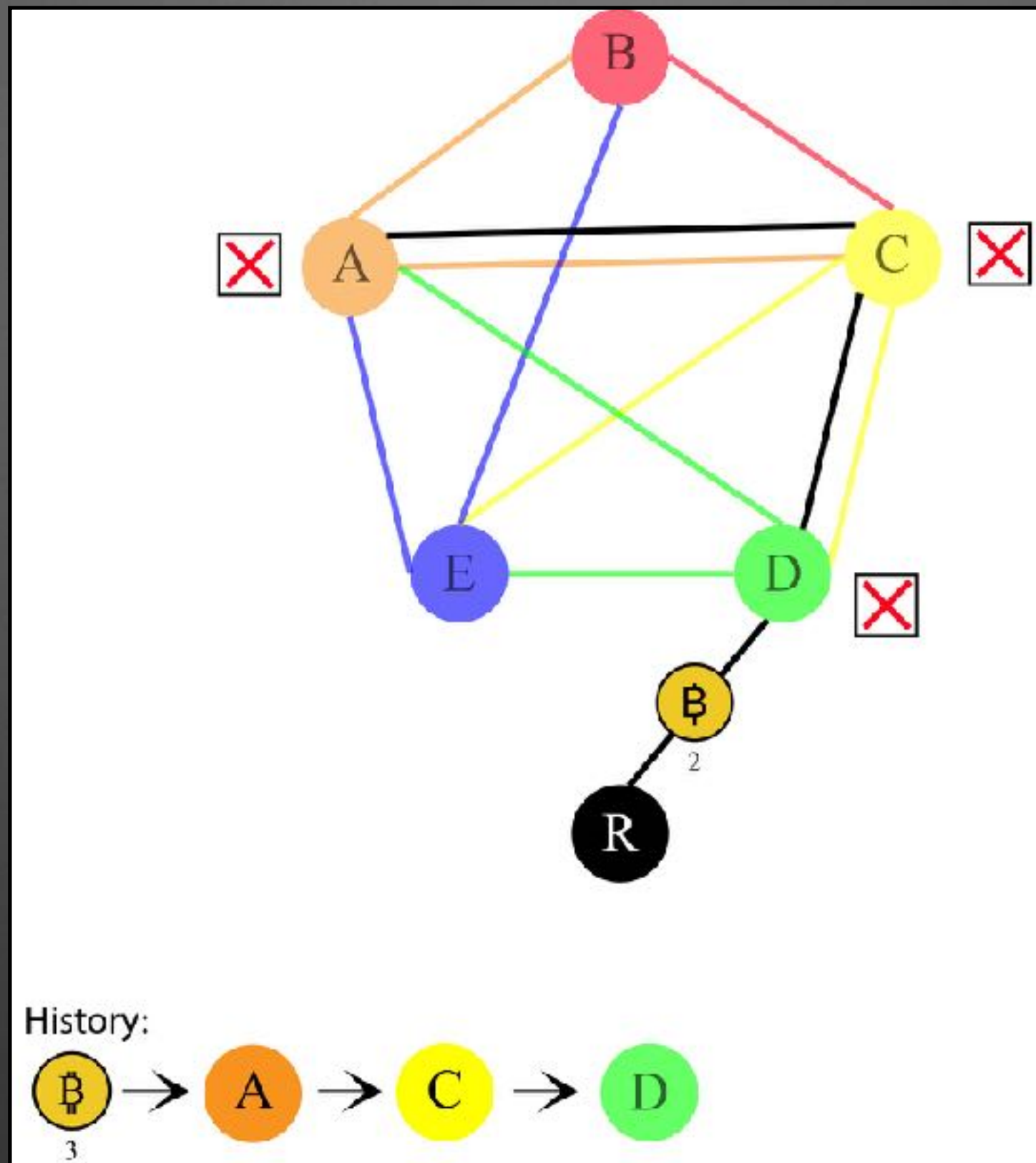| R | A | L | F | $+0$ |
| S | B | M | G | $+1$ |
| T | ? | ? | ? | $+(2 \times 3 - 4)$ |

Substitution Cipher Example

Bitcoins - Finite amount of coins
Each Coin has a unique serial - for our example we are going by prime numbers

BlockChain, A Network of peer to peers who EACH have the same public ledger
Transactions are performed by the group and verified by the group

Node: R trying to trick the BlockChain
1.) by creating next coin, by duplicating existing coin, by saying coin is his

BlockChain

- Finite Set of currency

- Minted at constant rate (inflation protection)

- Built in transfer system (only thing banks really do)

- No main authority, control group (No middle man)

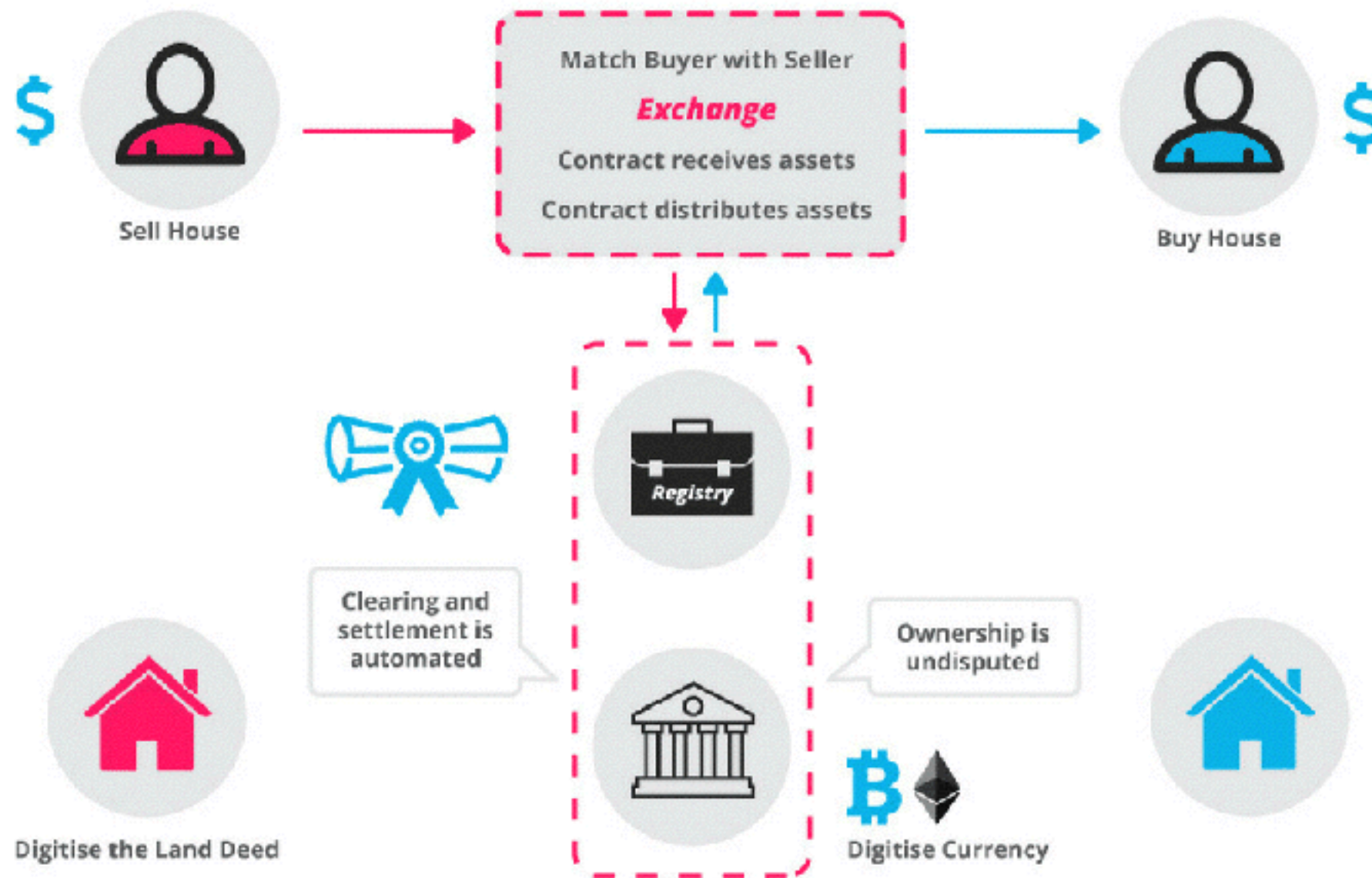- Redistribution of wealth system (verification system)
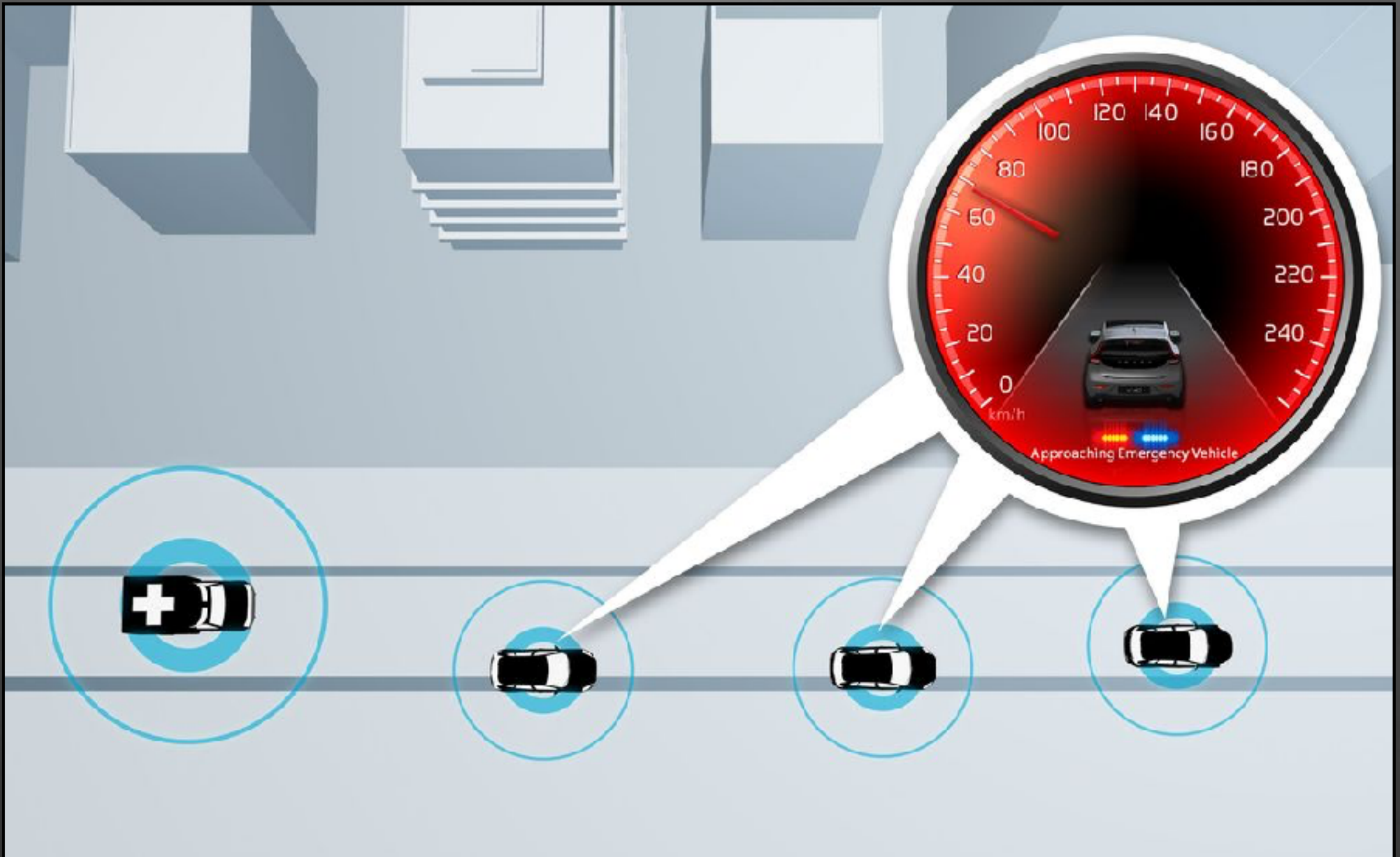
But Why Bitcoins?

Disruptions

- The Internet -> E-mail, Websites

- Iphone -> App Store, Portable Internet (4G)

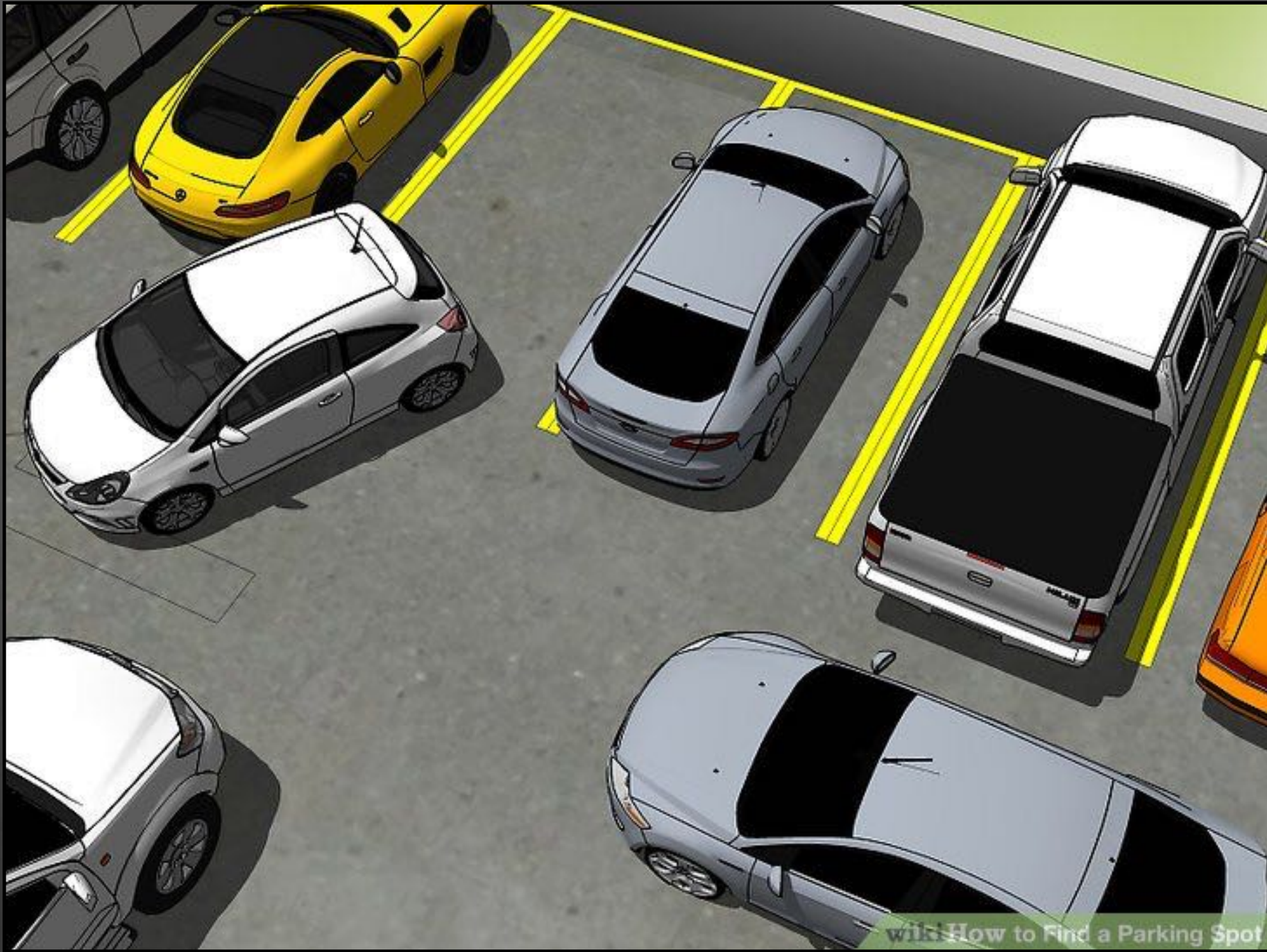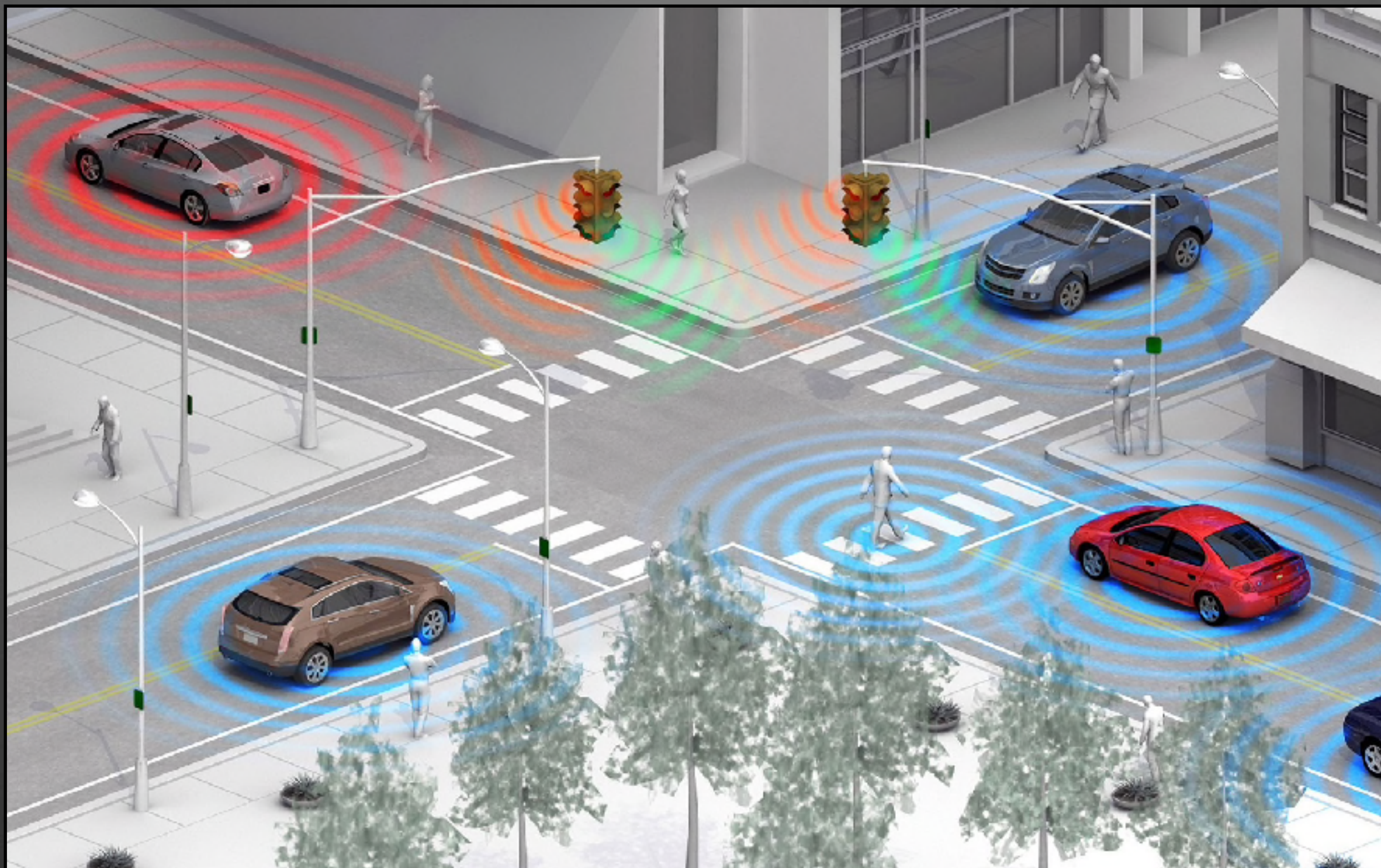- BlockChain -> Automated World, Decentralized Internet, ???

!Smart Contracts!
Don't forget Internet of Things!

Smart Cars
Assist Each Other for Safty

Smart Cars
Tell You About Open Parking Spots

Smart Cars
Smart intersections

Local Networks
Emergency in area without a Network?

How 1,600 People Went Missing from Our Public Lands Without a Trace

Jon Billman

Mar 13, 2017

When 18-year-old Joe Keller vanished from a dude ranch in Colorado's Rio Grande National Forest, he joined the ranks of those missing on public land. No official tally exists, but their numbers are growing. And when an initial search turns up nothing, who'll keep looking?

Local Networks
Solving More Difficult Problems

Local Networks
Drones Filling the Void!

Military Drones
Future Applications?

QA