

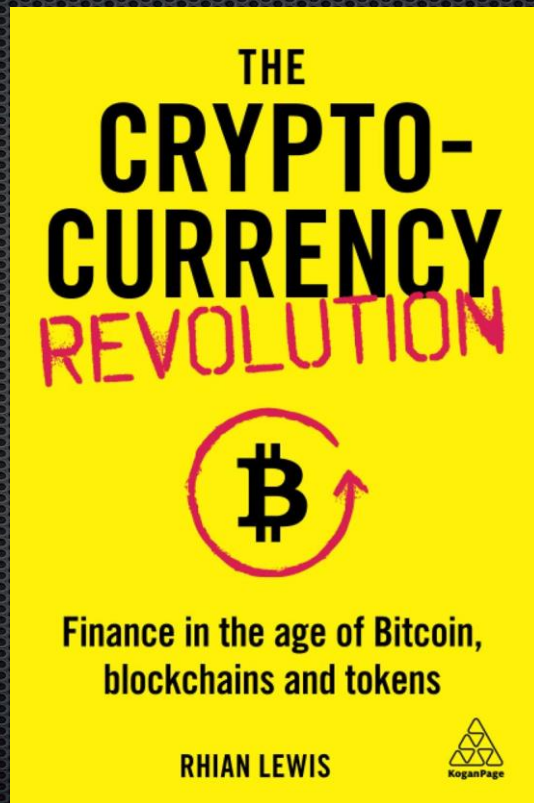
Blockchains are not worth the performance trade-off...

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...except when they are!

Who am I?

- Ruby on Rails Developer at Unboxed
- AWS-certified Solutions Architect
- Dabbler in smart contracts
- Entrepreneur
- and author of *The Cryptocurrency Revolution*



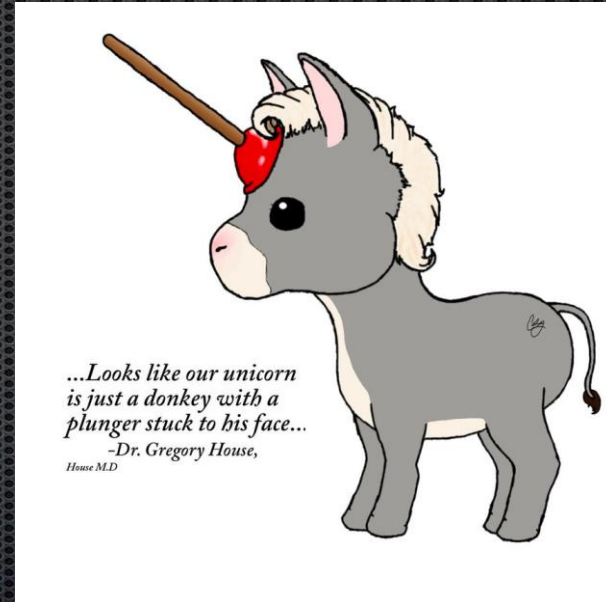
Blockchains are a magic technology that can do anything!

- . They are cheap
- . They are fast
- . They have unlimited storage
- . They can solve the world's problems
- . And bring world peace



The last slide was a lie!

- They are slow
- They are expensive
- You can't really store very much on them
- And in most cases a traditional database would do the job better



So what is all the fuss about?

The 1000-foot view

- . Data structure that uses cryptography to timestamp transactions and bundle them together so they cannot be reordered or deleted
- . In other words, an append-only ledger
- . Their USP is that they are distributed: in other words, everyone sees the same source of truth
- . May be public (like Bitcoin) or permissioned (like Corda)



What is so special about Bitcoin?



... and Ethereum?

What does a smart contract actually do?

- Not smart and not a contract (code is not law... yet!)
- Executes code on multiple nodes in response to certain conditions
- For example, a fall in asset price can trigger a payout to multiple parties
- Allows transactions to be executed without intermediaries (THIS IS THE IMPORTANT PART)



Who is using this technology?

The key USP is trust!

- . None of these organisations are using blockchains in isolation
- . The technology frees them of hundreds of pages of legal agreements around firewalls, security, escrow systems
- . If you want a shared source of truth that everyone can trust, there is nothing that can do this like a distributed ledger solution

Public or private?

- . Banks originally took the view of 'Blockchain, not Bitcoin'
- . Reaching agreement over consortium systems can be difficult
- . BUT public networks are very slow
- . Information has to be stored in many different places - and the same for code execution

Scaling solutions

- Increasingly, public networks are seen as a base settlement layer, with transactions bundled and attached as side chains or layer 2
- This is work in development, on both Bitcoin and Ethereum
- Other chains promise to solve these problems natively, but they are not battle-tested

Thank you! Questions?