Lunch and Learn: Getting to grips with Crypto Jargon

Date: **14 May 2025**
Speaker: **Oliver Nelson-Smith, Tech Policy Manager, ICAEW**

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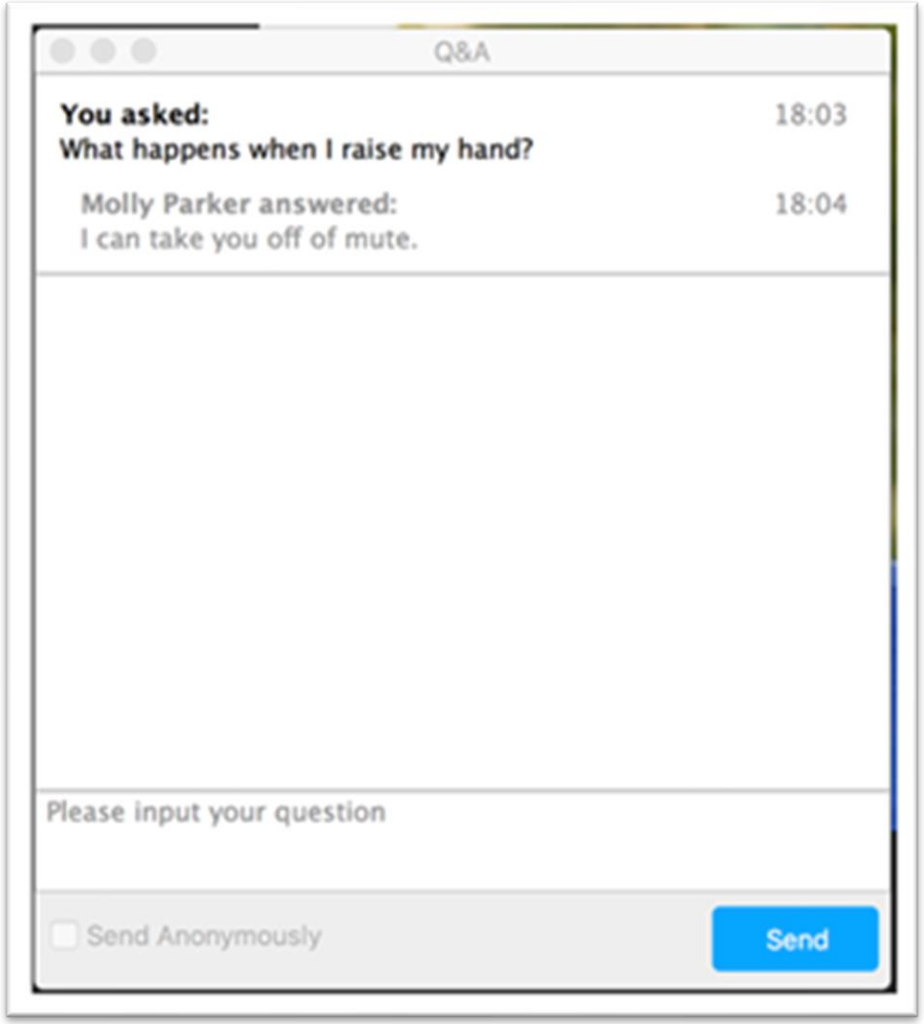
Ask a question

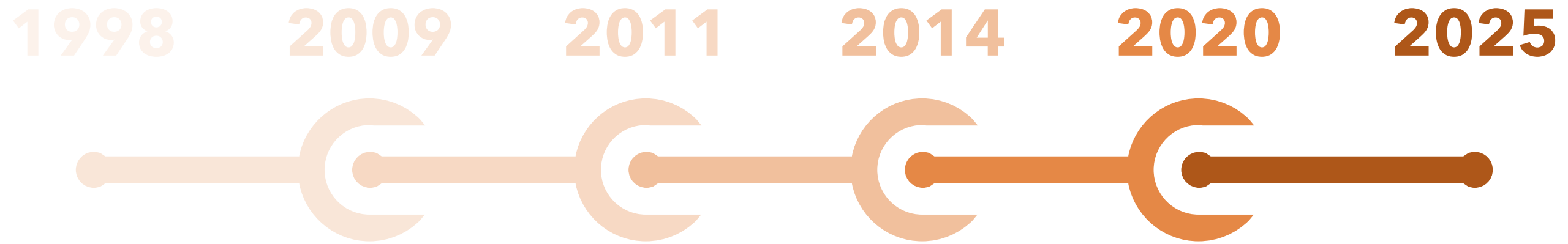


Click on the Q&A button in the bottom toolbar to open the submit question prompt.

Type in your question and click send.

Note. If you wish to ask anonymously tick the send anonymously box shown on the illustration to the left.

Quick history



Bitcoin

In 2008 'Satoshi Nakamoto' published a whitepaper on a peer-to-peer cash system which then resulted in the minting of Bitcoin in 2009.

'Altcoins'

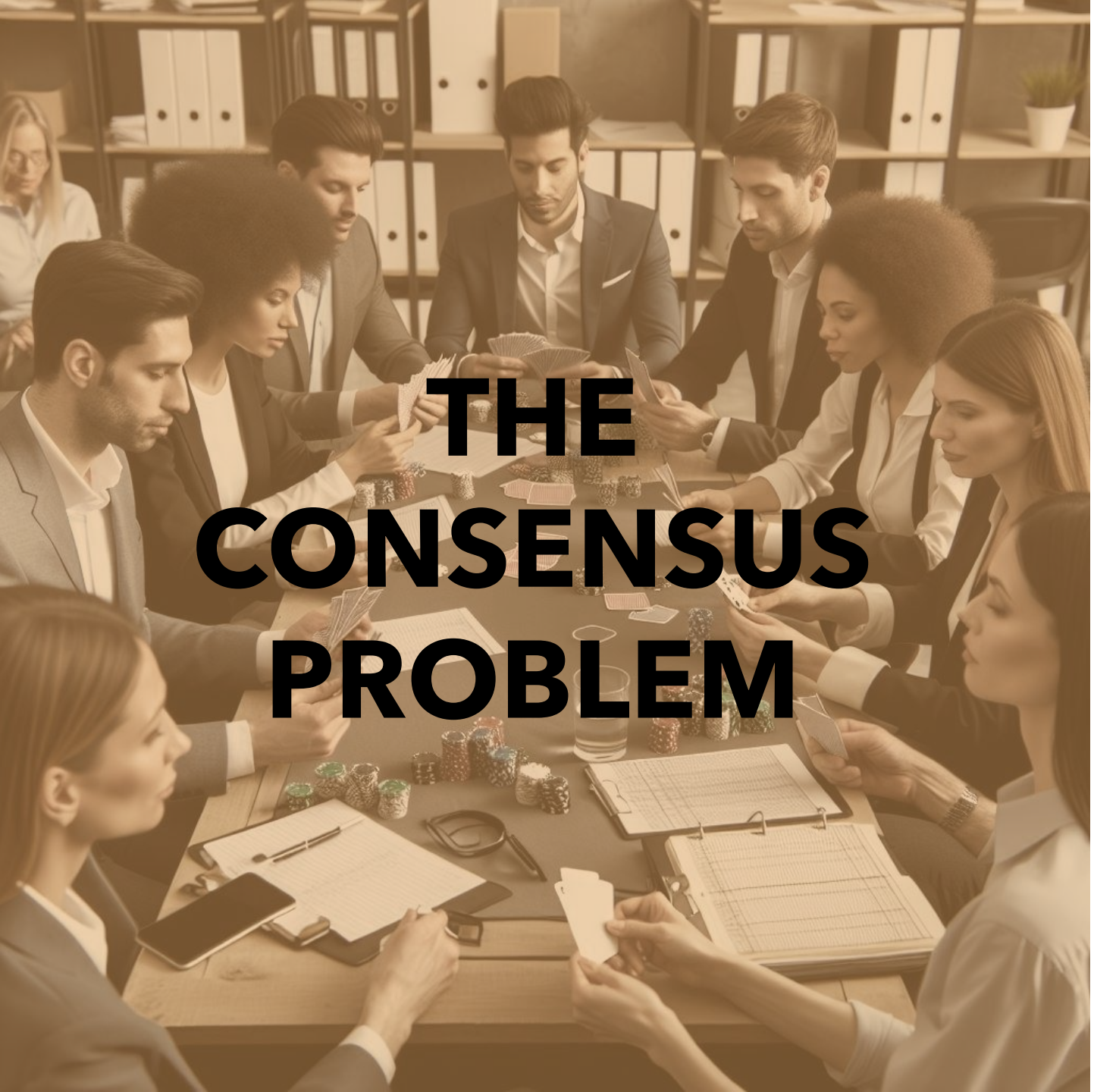
Following the increasing adoption of Bitcoin, a number of other cryptocurrencies were minted, many looking to improve on aspects of Bitcoin.

Stablecoins

With more crypto in circulation, it was apparent that the volatility of these assets made them poor alternatives to currency. Versions which were backed by assets to provide a stable value were introduced.

Sand Dollar

Digital payments and increasing uptake of cryptocurrencies pushed central banks to mint their equivalents, a 'digital cash' or Central Bank Digital Currencies starting in the Bahamas.



THE CONSENSUS PROBLEM

You are at a table playing poker, but you and the others are likely to cheat if no one is looking.

As accountants, you know that this is a problem that would need a ledger.

As the game goes on, you each keep ledgers of what transactions occur during the game. In a consortium, the trusted players keep the ledger, in private, the house.

Periodically you will check with each other to make sure that the numbers on everyones ledger adds up.

Hence, a fair game where no-one can cheat and all transactions can be seen as valid.

This is the theory behind the Bitcoin Whitepaper.

Blockchain – The foundation

"BLOCK"

Each "block" is a set of entries into a ledger that once validated gets added to an overarching master ledger.

Crucially, these cannot be changed once added to the ledger.

"CHAIN"

The chain represents the entire history of what that ledger has recorded which are permanent (at least on that chain).

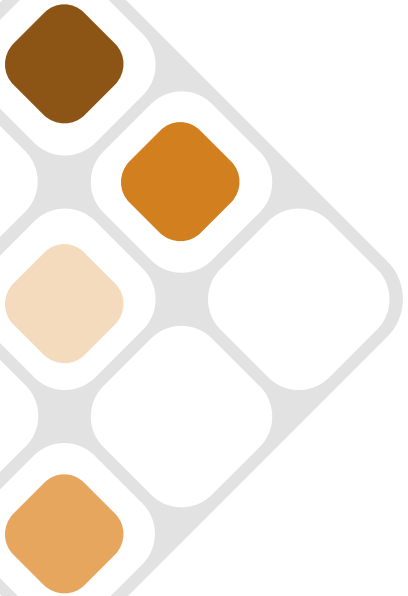
Input	• A new entry is submitted to a computer, which is part of a broader network
Validation	• The network of computers using consensus mechanisms confirms the validity of the entry
Addition	• The entry is added to a group of entries forming a "block"
Chained	•Once the block reaches the appropriate size or timeframe, it is added to the master ledger
Completion	•Only once the entry is added to the master ledger is it deemed that the entry is complete and factual.

Public

Consortium

Private

Hybrid



Public blockchains

The original cryptocurrency infrastructure, anyone can in theory participate as someone who can make entries, validate entries and store the ledger of all entries. Currently this requires a lot of computing space for some…

Consortium

The approach you would take where you do not want just anyone to participate, particularly as validators or to have full access to all entries. If our payments ran on this, would you want anyone to see all your transactions?

Private

One entity validates and holds the ledger. In some forms they will also give permission for others to participate in the infrastructure.

Hybrid

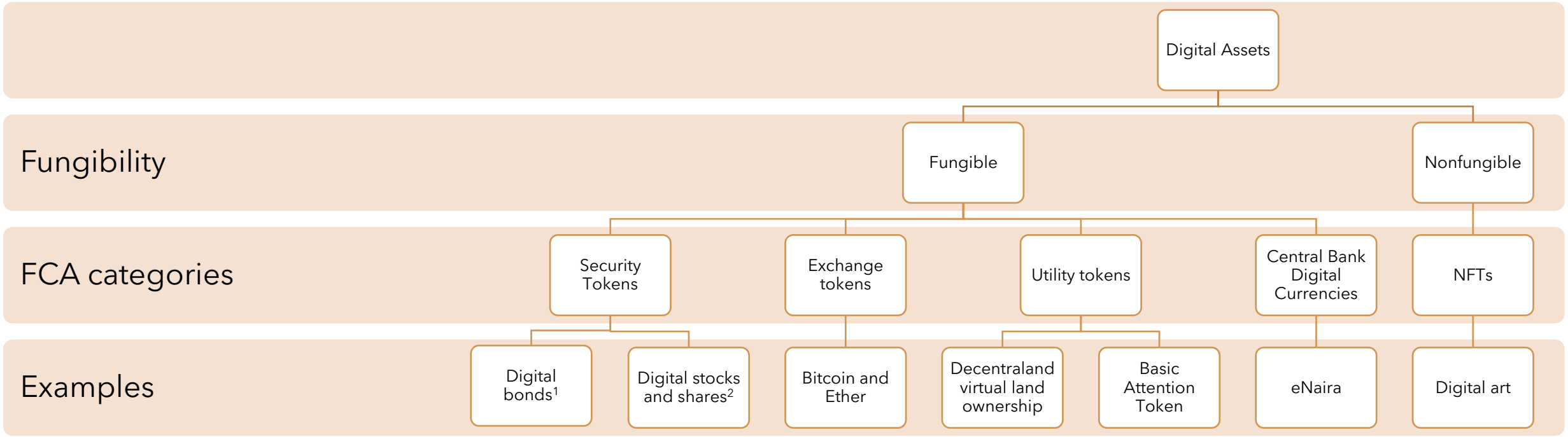
Combines elements of public and private chains, similar to access management you might have within emplyers, not all employees can access all information or systems, but there are some which everyone should have accessible.

What use cases do you think will benefit from such systems?

How are these models being used?

- Record of transactions or trades
- Tracking of good and services
- Management of microgrids or other community infrastructure
- Distributed data storage

The crypto world has a number of categories



1 – Multiple pilots have been done, but at present they are experimental hence these markets have low liquidity
2 – Also, mostly still experimental, with Private Markets leading e.g. SIX Digital Exchange and Citi have announced tokenising of private shares. For public markets HMT is running a project on Digital Securities.

What do you think the 3 biggest risks are with digital assets?

Risks to consider

- **Data input and quality** – Depending on how information is submitted into the system, it might still be open to fraudulent or false inputs. The way blockchain works makes changing these inputs require reversing the chain to that point in time.
- **Cybersecurity** – As with the above, once a hostile actor has access to the system, fraudulent transactions can be hard coded in and made very difficult to reverse.
- **Volatility** – Particularly with cryptocurrencies, their value is highly volatile, but this is also the case with some individual stocks and shares.
- **Uncertain accounting treatments** – Particularly for stablecoins, it is unclear whether these should be considered cash reserves while IFRS 9 might consider them a financial instrument. ICAEW is engaging the FCA and FRC on these points.
- **Scams and fraud** – Crypto has been rife with scams and fraud, the pseudonymous nature of these makes them attractive to criminals.

WHERE IS THIS GOING?

INSTITUTIONAL ADOPTION

Institutions increasingly hold more cryptocurrencioes to meet consumer and investor demand. Blackrock's BTC ETF holds nearly $4bn in Bitcoin.

CONSOLIDATION

The number of miners (validators) are increasingly small due to rising computational demands. Newer consensus mechanisms appear to be doing the same.

TOKENISATION

Representation of ownership and rights relating to real assets will be tokenized bringing more transparency.

SUSTAINABILITY

This increased use of blockchain will create a challenge for sustainability. Each Bitcoin transaction is equivalent to 26 days of energy use of an American household.

OTHER TECHNOLOGIES

AI networks and trading of cryptocurrencies are likely to keep volatility high, quantum computers could increase cyber risks on these networks.

ICAEW resources

Considerations for auditing cryptocurrencies

TAXguide: Taxation of cryptoassets for businesses

TAXguide: Taxation of cryptoassets for individuals

Helpsheet on FRS 102 - accounting for exchange-based tokens

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