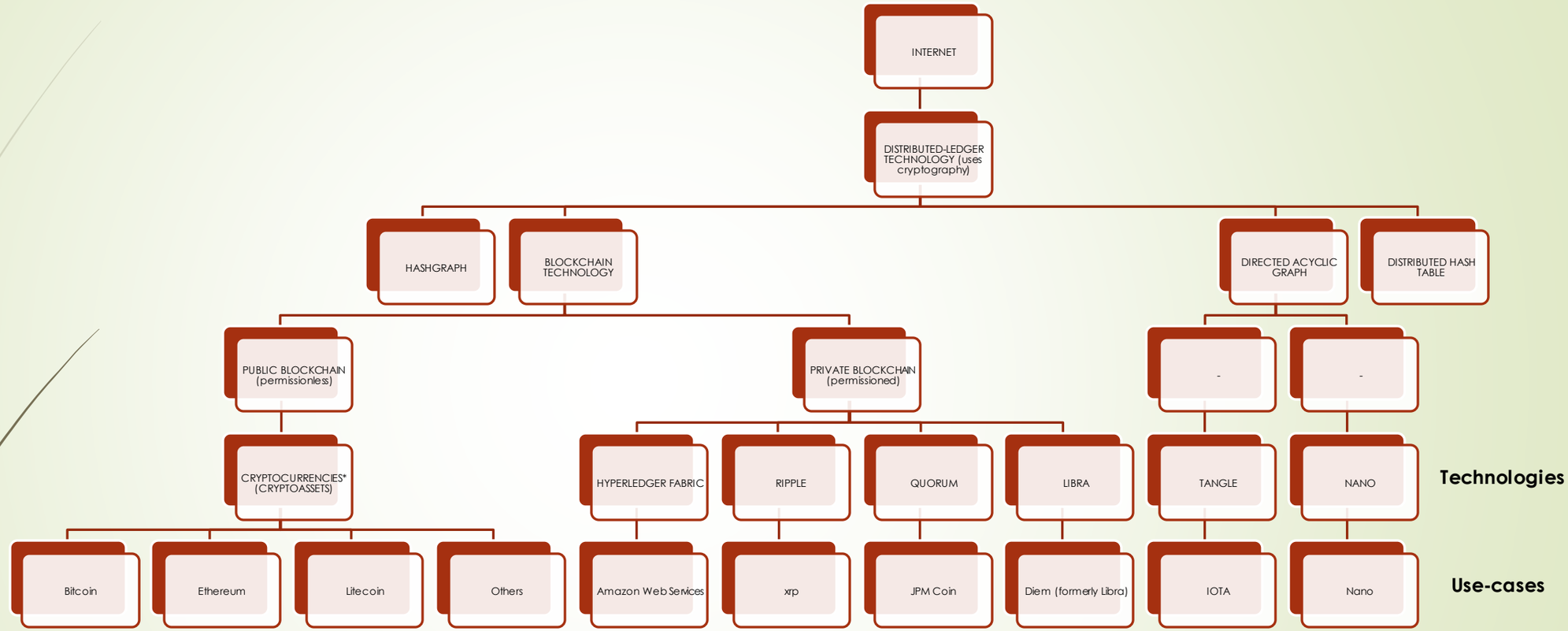
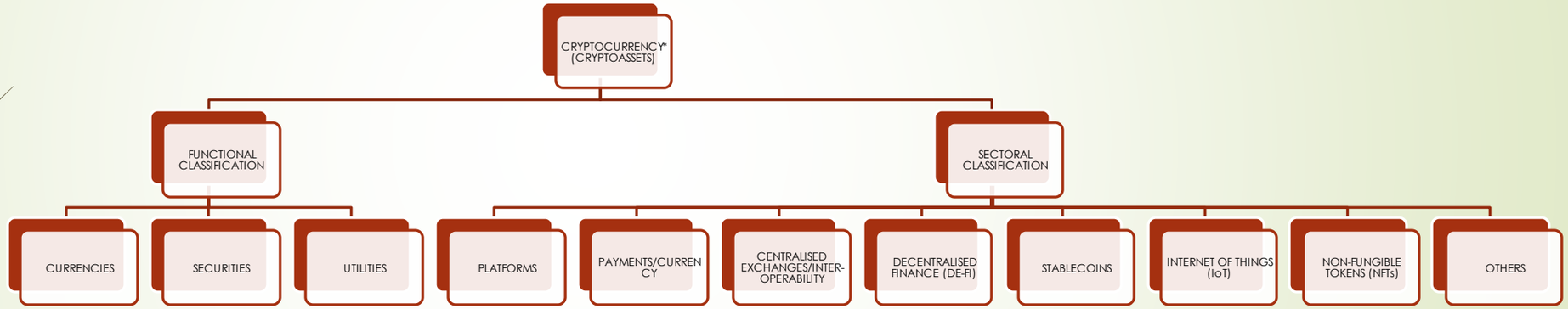
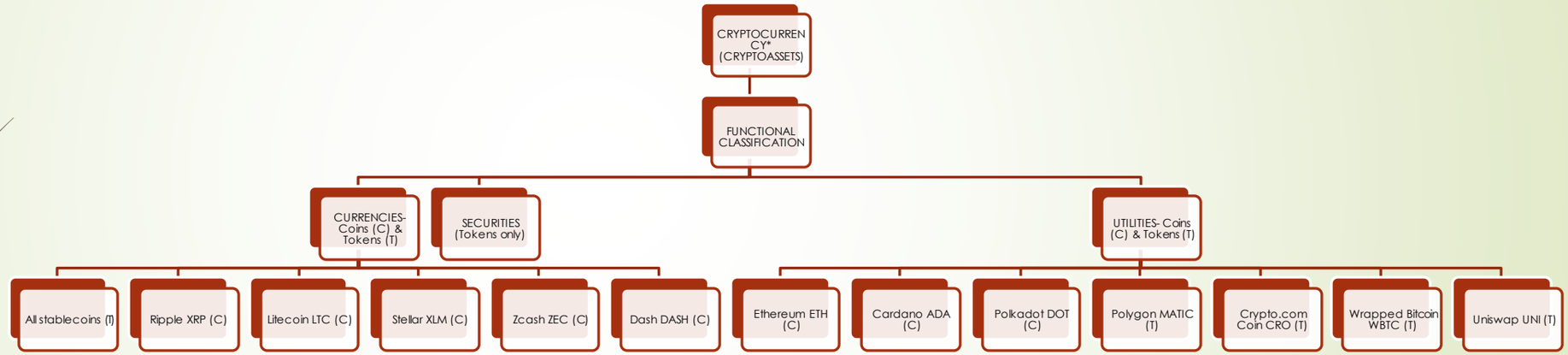
THE TAXONOMY OF BLOCKCHAIN AND CRYPTOCURRENCY





NB: The lists are by no means exhaustive



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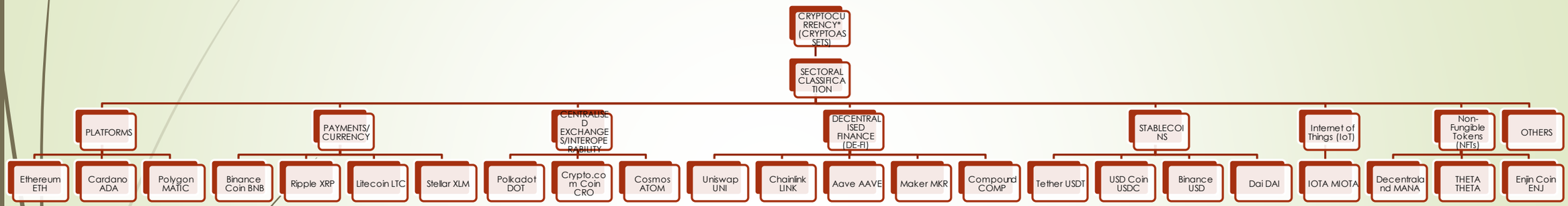

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NOTES

Blockchain technology vs Directed Acyclic Graph (DAG)

Blockchain technology is a system that acts as a distributed database where data and/or transactions are stored across different physical locations over a network of multiple interconnected computers or nodes. Each transaction is independently verified by these peer-to-peer computer networks or miners, time-stamped and added to a growing chain of data. Once recorded, the data cannot be altered.

DAG technology is an alternative system that functions almost similarly to blockchain technology without the need for blocks and miners. Thus, instead of having miners confirming transactions, DAG employs the very transactions that users make in order to confirm each other's transactions. The more the new transactions on the network, the more the available transactions to confirm previous ones. This means improved scalability.

Pros of blockchain technology

- Well-established and widely-used by cryptocurrencies like Bitcoin and Ethereum
- Transparent and unalterable, highly-secure
- Cost-effective for high-value transactions

Cons of blockchain technology

- Demanding storage and network bandwidth requirements
- Scalability issues
- Large amounts of power consumed
- High transaction fees

Pros of DAG

- Suited for microtransactions and high volumes of transactions
- Eliminates the need for mining equipment
- Fees may be reduced significantly
- Lower energy consumption

Cons of DAG

- Vulnerable to attacks where volumes of transactions are low
- Still in its infancy and has not yet achieved high levels of decentralization

Public vs private blockchain

Public blockchain is a permissionless blockchain. Anyone can join the blockchain network, meaning that they can read, write, or participate within a public blockchain. Participants on the public blockchain are typically anonymous and only identifiable as code.

On the other hand, a private blockchain is a permissioned blockchain. Permissioned networks place restrictions on who is allowed to participate on the network and in what transactions, but participants are identifiable. This type of protocol is best suited as the internal technology for an enterprise.

The four areas of distinction between the two are:

- Access: private blockchains require permission to participate on while public blockchains do not
- Degree of decentralisation: public blockchains are completely decentralised while private blockchains are less decentralised depending on the number of participants on the network

- Anonymity: participants on a public blockchain remain anonymous and are only identifiable as code while participants on a private blockchain (run by a corporation) are identifiable individuals
- Autonomy: each participant on a public blockchain acts totally independently of all other participants; participants on a private blockchain can act in collusion due to the fewer number of participants and the lack of anonymity

Coin vs Token

A coin is typically built on its own blockchain while a token will require an existing blockchain platform to operate on. Ethereum is the most common platform to create tokens, mostly due to its smart contract feature. Tokens created on the Ethereum blockchain are usually known as ERC-20 tokens.

While coins have, typically, the function of a medium of exchange or payment, tokens on the other hand are created to be used within decentralised applications (DApps) and their networks. Tokens can be either security or investment tokens on the one hand or utility tokens on the other, although there still exist rare cases of payment tokens.

*There is no generally accepted definition of the term 'cryptocurrencies' available in the regulatory space. While routine definitions of cryptocurrencies tend to regard them merely as a medium of exchange, unit of account or store of value we, at BAC(K) Ltd., regard the term 'cryptocurrency' as somewhat of a misnomer and take a much broader view of cryptocurrencies preferring the term 'cryptoassets'

For more information visit our FAQ webpage at https://www.blockchainandcryptoassetk.com/faqs

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