

(ALMOST) EVERYTHING YOU NEED TO KNOW ABOUT BLOCKCHAIN

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Background

- Former banker
- Former securities trader
- Early innovator for Fintech in Australia
- Blockchain advisor to several countries including, Bermuda, Antigua and Mauritius
- Blockchain Advisor to OECD

THE BEGINNING

The 2008 financial crisis caused a lot of people to lose trust in banks as trusted third parties. Many questioned whether banks were the best guardians of the global financial system. Bad investment decisions by major banks had proved catastrophic, with rippling consequences.

Bitcoin — also proposed in 2008 — presented something of an alternative.

WHAT IS BLOCKCHAIN?

Blockchain technology offers a way for untrusted parties to reach agreement (consensus) on a common digital history.

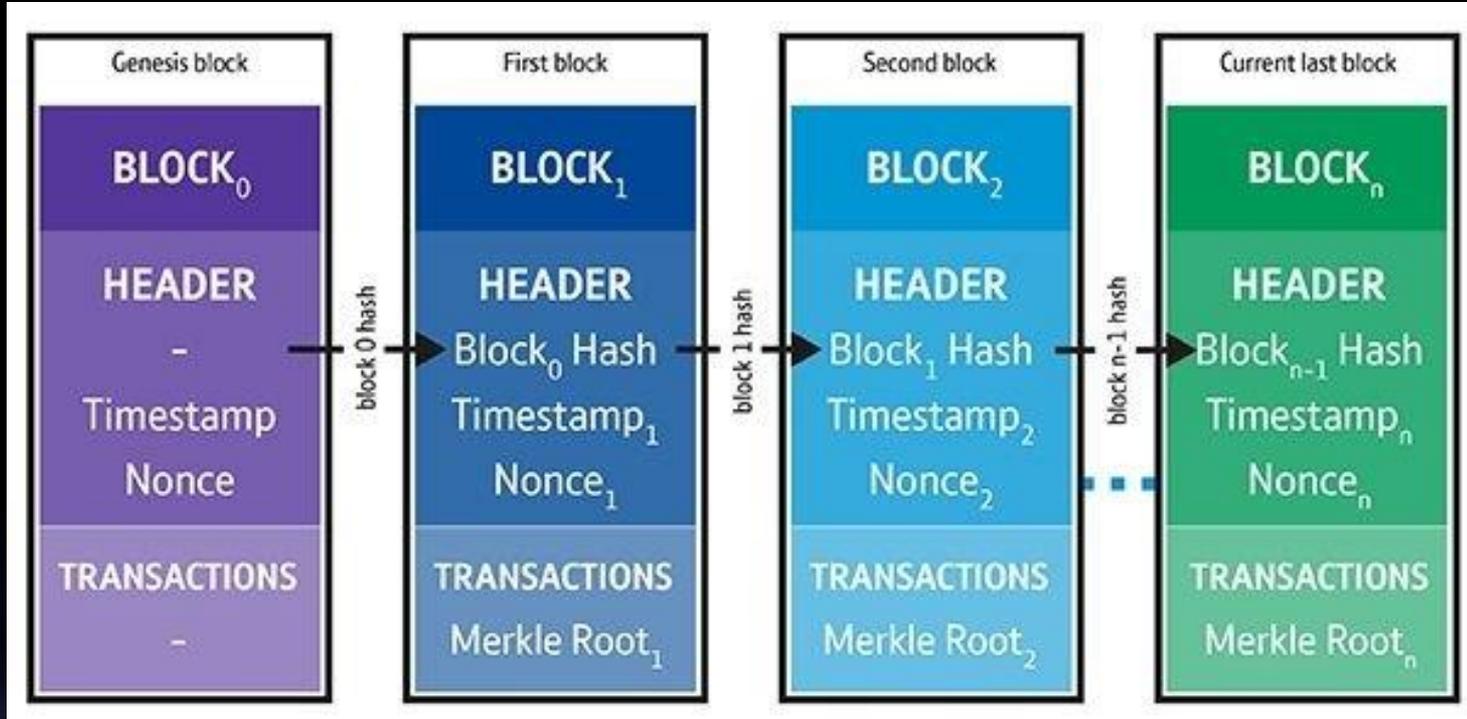
A common digital history is important because digital assets and transactions are in theory easily faked and/or duplicated. Blockchain technology solves this problem without using a trusted intermediary.

WHAT IS BLOCKCHAIN?

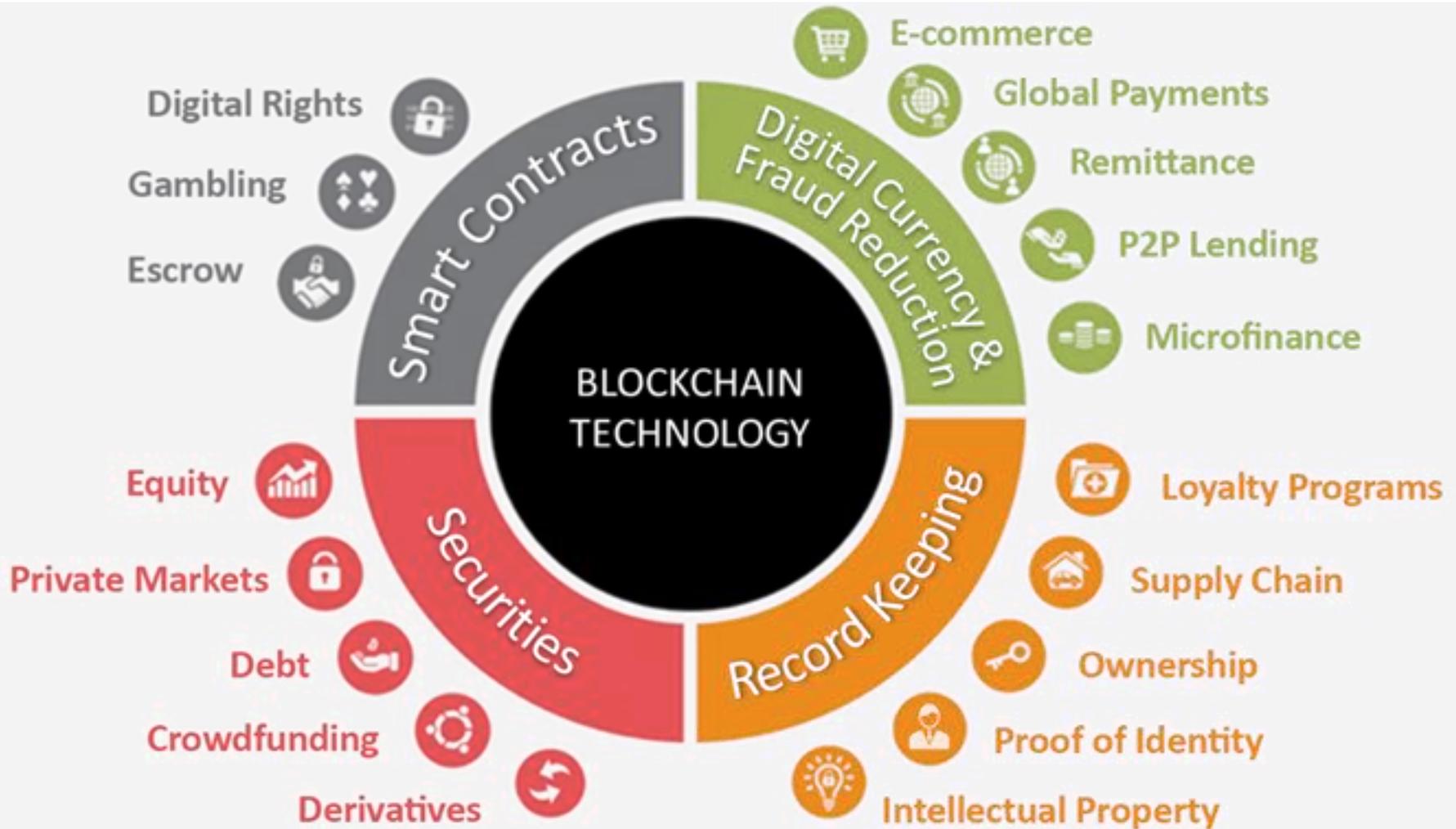
Decentralized Ledger



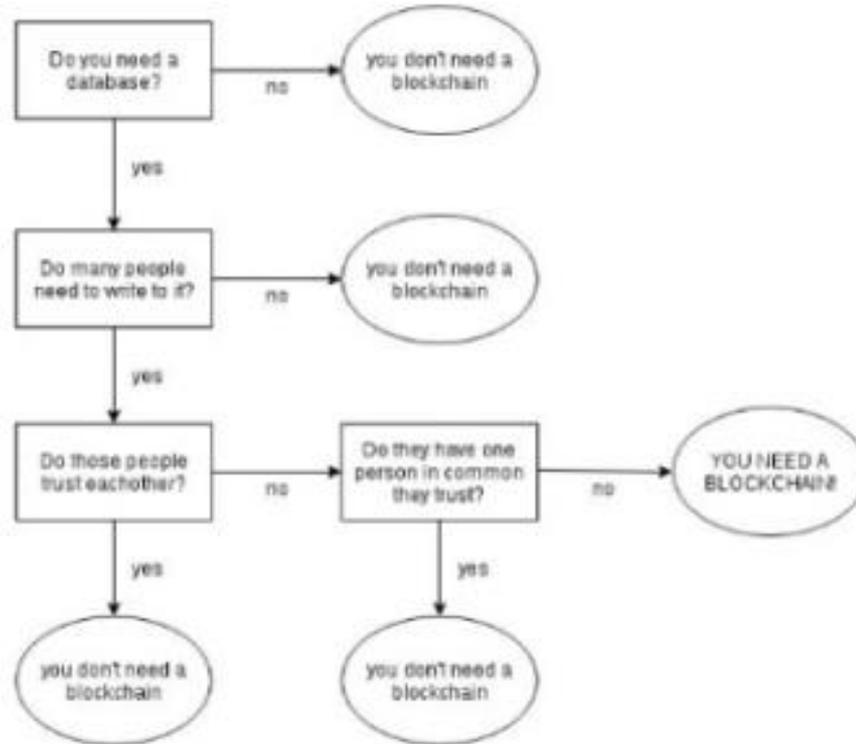
Blockchain



Great use cases for Blockchain



DO YOU NEED IT?



COINS VS. TOKENS

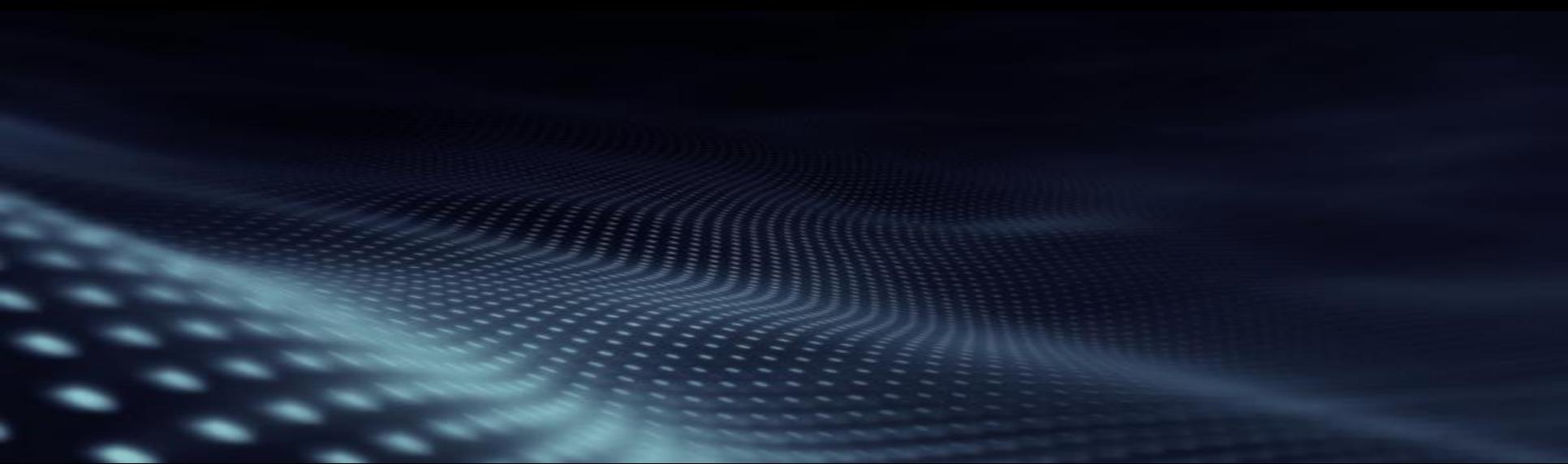


ALTCOINS VS. TOKENS

- Altcoins simply refers to coins that are an alternative to Bitcoin. The majority of altcoins are a variant (fork) of Bitcoin, built using Bitcoin's open-sourced, original protocol with changes to its underlying codes, therefore conceiving an entirely new coin with a different set of features.
- There are other altcoins that aren't derived from Bitcoin's open-source protocol. Rather, they have created their own Blockchain and protocol that supports their native currency.
- Examples of these coins include Ethereum and Ripple

ALTCOINS VS. TOKENS

Tokens are a representation of a particular asset or utility, that usually resides on top of another blockchain (eg. Ethereum). Tokens can represent basically any assets that are fungible and tradeable, from commodities to loyalty points to even other cryptocurrencies.



ICO's

Tokens are created and distributed to the public through an Initial Coin Offering (ICO), which is a means of crowdfunding, through the release of a new cryptocurrency or token to fund project development. It is similar to an Initial Public Offering (IPO) for stocks.

Regulations and policies around ICOs are the most controversial and contested.

Bermuda's ICO Regulation's (the first in the world) take an approach of enhanced disclosure in offering documents, investor protection mechanisms and severe penalties for non-compliance.

How is crypto traded?

- Traded on private exchanges
- Usually traded in pairs ie: USD/BTC or BTC/ETH
- Highly volatile at the moment
- Largely unregulated at the moment
- Easy to put FIAT in, hard to move FIAT out

CYRPTOCURRENCIES

Guidance:

- Consider Cryptocurrencies as being a sub-category of Digital Assets.
- Cryptocurrencies, unlike fiat currencies, are not legal tender
- Cryptocurrencies have “value” since they are exchangeable for other things having value, thereby showing characteristics akin to physical commodities such as grain or precious metals.
- Consider a Digital Asset including a Cryptocurrency as being a store of value.

CYRPTOCURRENCIES

Guidance:

Digital Asset should, however, exclude:

- any transaction in which a business, as part of an affinity or reward programme, grants value which cannot be exchanged for legal tender, bank credit or any Digital Asset; or
- a digital representation of value issued for use within an online gaming platform.

THE CHALLENGE OF GLOBAL REGULATIONS

- Legacy institutions under threat
- Customer Protection vs. Investor Protection
- Citizen Data Privacy not harmonised (EU vs. US)
- Small nations are leading the charge
- Countries like U.S. have both Federal and State laws to consider and revise

THE IMPORTANCE OF KYC/AML/ATF

Blockchain and strong cryptography enable multi-stakeholder use cases that simply weren't technologically possible even a few years ago, and KYC/AML/ATF presents new exciting opportunities to revisit and uphold the original intent to curb bad actors and improve the protocol.

FIRST MOVERS IN DIGITAL ASSET REGULATIONS

- Australia
- Bermuda
- Malta
- Mauritius
- Singapore

10 things to consider

1. Is the regulatory approach principles-based or rule-based?
2. Are the regulations FinTech specific or generic?
3. Is the approach light-touch or heavy-handed?
4. Is there clear accountability and coordination across regulatory bodies, or is the system fragmented with overlapping responsibilities?
5. Is the process simple, quick and inexpensive or complex, time consuming and expensive?
6. Are regulators supportive or repressive of innovation and start-ups?
7. Are regulators collaborative with industry or uncooperative and overly legalistic?
8. Is there a regulatory sandbox offering in place or not?
9. Do the regulators have a dedicated FinTech team with specific expertise or not?
10. What specific initiatives or regulations have been already introduced to promote the FinTech sector?

IMF

“Instead of adopting the currency of another country – such as the US dollar – some of these economies might see a growing use of virtual currencies. Call it dollarization 2.0.”

“So in many ways, virtual currencies might just give existing currencies and monetary policy a run for their money.”

“The best response by central bankers is to continue running effective monetary policy while being open to fresh ideas and new demands, as economies evolve.”

World Bank

- *“We at the World Bank Group have had to admit that we’re not keeping up with the latest developments and we’re not doing it in a way that would help our clients take advantage of the great things that are coming out,”*
- *“We think distributed ledger [technology] has real potential and we issued the first blockchain bond in August where we created, allocated, transferred, and managed the entire bond through blockchain technology.”*
- *“Blockchain can help us leapfrog generations of bad practice” which would contrarily “take forever in terms of reducing corruption.”*

OECD

- *"Policymakers do need to focus on how to ensure that the new technologies operate in the most socially-useful way.*
- *That is, it should be possible to make use of a new technology to facilitate the medium-of-exchange transporter and ledger functions and increase competition in financial services, while eliminating the 'anonymity' problems [of certain cryptocurrencies]."*

DTC – DIGITAL TRADE COIN

Technology now makes it possible to form specialized global currency systems that previously would not have had sufficient scale, trust or political stability to compete. That is why a natural next step is for the little guys—such as emerging economies or large numbers of individual citizens to band together to form alternatives to central banks.

DTC – DIGITAL TRADE COIN

- Massachusetts Institute of Technology is working on creating a digital currency suitable for large-scale transactional purposes
 - anchored at all times to a basket of real-world assets such as crops, energy or minerals. Doing so will help stabilize its value and make it easier for the public to trust it.
 - The core idea is that a broadly useful currency needs both human trust and efficient trade systems.
- Tradecoin can allow alliances of small nations, businesses, commercial traders, credit unions or even farmers to put together enough assets to back a large, liquid currency that would potentially be as trustworthy and at least as efficient as the national currencies used by the World Bank and the International Monetary Fund.
- By design, the principles behind currencies such as Tradecoin are fundamentally different from cryptocurrencies like Bitcoin, which are not backed by real-world assets and do not involve alliances. Tradecoin can also avoid the energy-intensive process of mining.

WHERE IS ALL THIS HEADING?

- Countries are rapidly creating regulations
- KYC/AML/ATF are core requirements
- Audit and Compliance standards are forming
- It is becoming mainstream

“IT’S WHEN, NOT IF”