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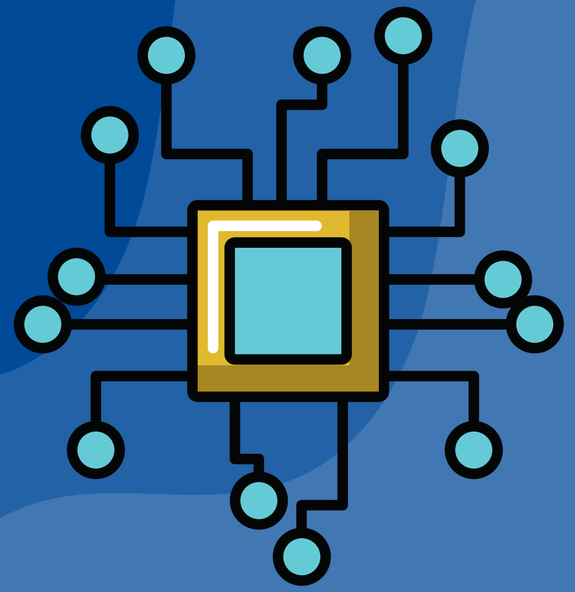
ALL ABOUT FINTECH

Web 3.0 – Terminologies



Part two of 3 part series

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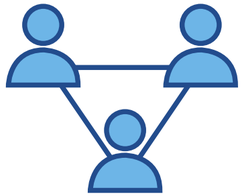
Recap: Web 3.0



WEB 3.0 ASPIRES TO CREATE AN INTERNET THAT BENEFITS EVERY USER WHO GENERATES CONTENT, NOT JUST THE OWNERS OF THE PLATFORMS ON WHICH THE CONTENT IS PUBLISHED. THIS IS BECAUSE THE SAME USER WHO PRODUCES THE CONTENT IS OR CAN BECOME A CO-OWNER OF THE PLATFORM.

Key Terminologies
A-H

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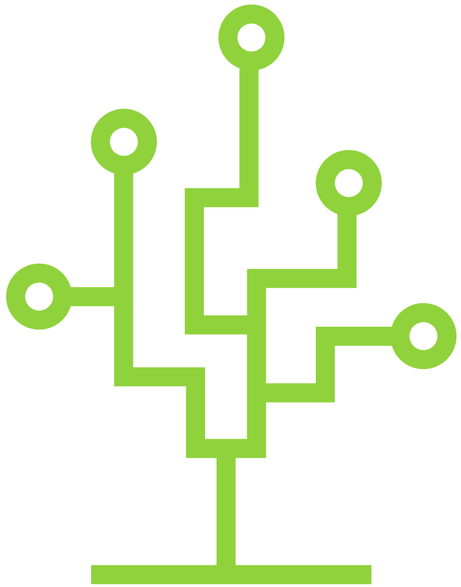
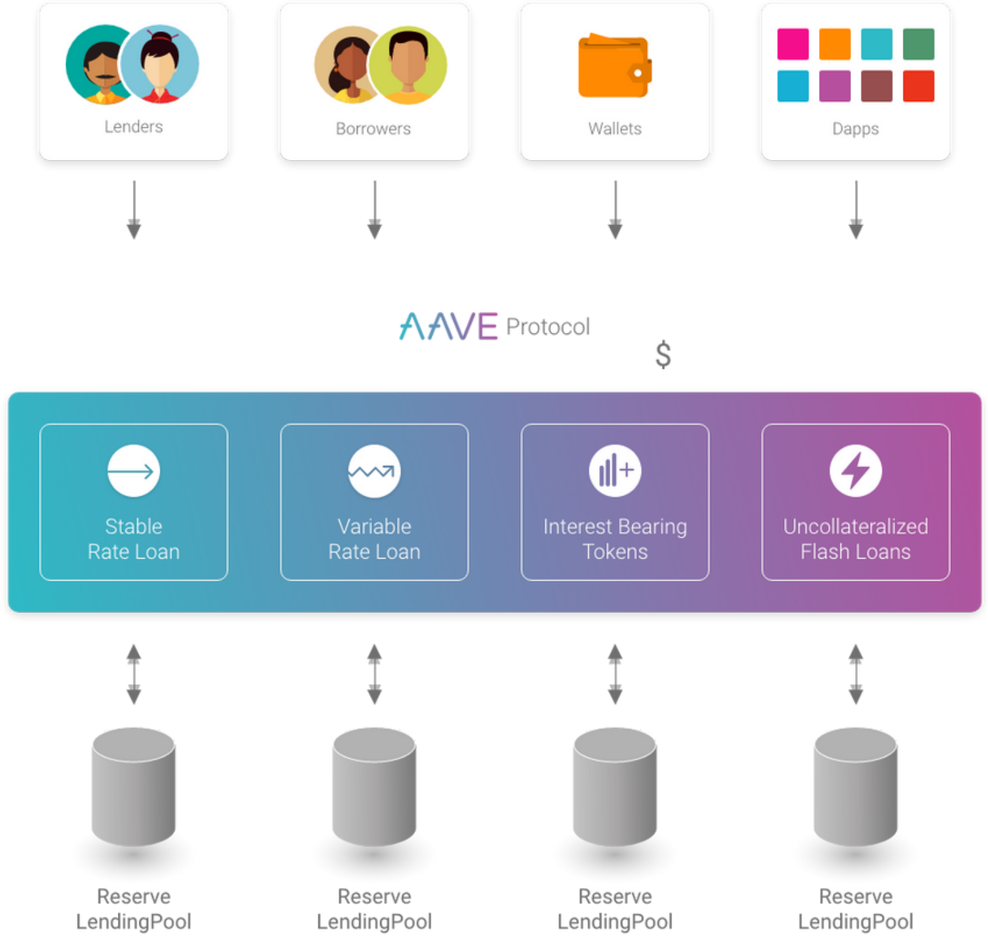
API



A software application program interface (API) is a set of routines, protocols, and tools. APIs provide all the building blocks necessary to develop a program. Then, the programmer connects them.

Decentralization and democratic data sharing are the hallmarks of APIs. Developers can expect an environment free of one particular company's restrictions, policies, or plans with Web 3.0 built on the blockchain.

AAVE



Aave is a decentralized non-custodial liquidity protocol where users can participate as depositors or borrowers.

Depositors provide liquidity to the market to earn a passive income, while borrowers are able to borrow in an overcollateralized (perpetually) or undercollateralized (one-block liquidity) fashion

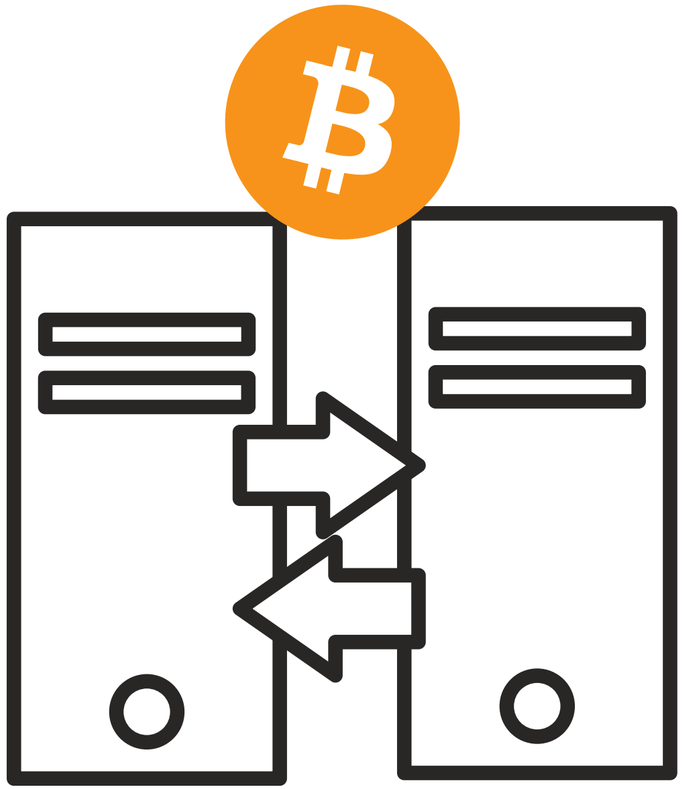
It's similar to P2P lending platform in the space of web 2.0, however without intermediaries

AUGMENTED REALITY

AR is an enhanced version of the physical world created by adding digital visual elements, sounds, or other sensory information to it.

AR and VR are different concepts. A user of AR can control their presence in reality; a user of VR is controlled by the system. With AR, you can use your smartphone, not a headset. Virtual reality can be enhanced with AR, but not the real world.

BITCOIN MINING POOLS



Bitcoin mining pools are networks of miners that work to verify transactions and complete blocks on the Bitcoin platform.

Mining Bitcoin this way is faster and perhaps more cost-effective than mining it individually. Each member of the pool receives an equal share of rewards when blocks are completed successfully.

The coordinator is expected to deduct an amount from the reward before it is distributed to other pool members.

BEP20

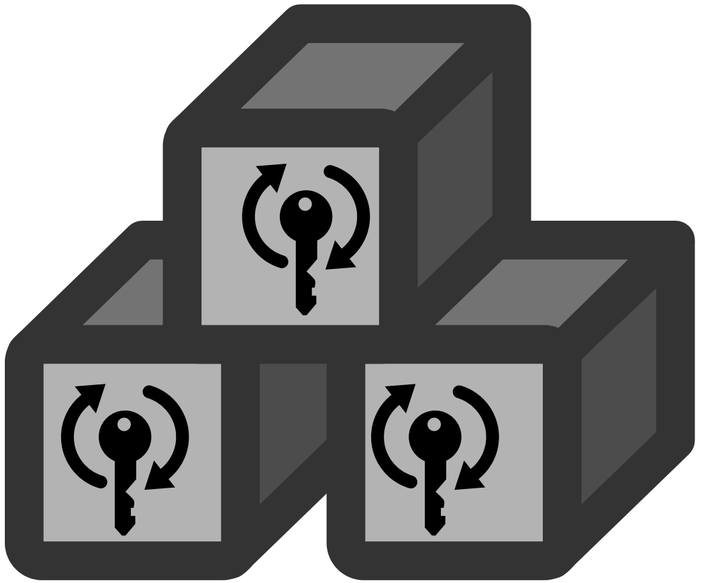
Binance Smart Chain Evolution Proposal (BEP20) is the standard for the creation of digital tokens on the Binance Smart Chain.

The BSC blockchain runs parallel to the Binance Chain, the first blockchain for a crypto exchange launched by Binance in 2019.

Tokens created on the BSC follow BEP20, which outlines how they can be created, issued, used, and by whom.

Equivalent to ERC standards of Ethereum

BLOCKS



Everyone knows about blockchain, but it's important to understand what is block.

A block is a series of transactions with a hash of the previous block. Since hashes are cryptographically derived from block data, they link together blocks (in a chain).

Hence, all subsequent hashes on the Web 3.0 blockchain would change if one change were made to any block in history, preventing fraud; as a result, all subsequent blocks would be invalidated.

In Web 3.0, these blocks will store assets, transactions, value.

CRYPTOGRAPHY

The purpose of cryptography is to develop techniques and protocols that prevent third parties from accessing and reading private messages during any communication.

A blockchain ledger cannot be secure without cryptography. On a blockchain, all transactions are recorded by using encrypted data. Each user of the platform has access to their own information and can buy and sell crypto securely using their public and private keys

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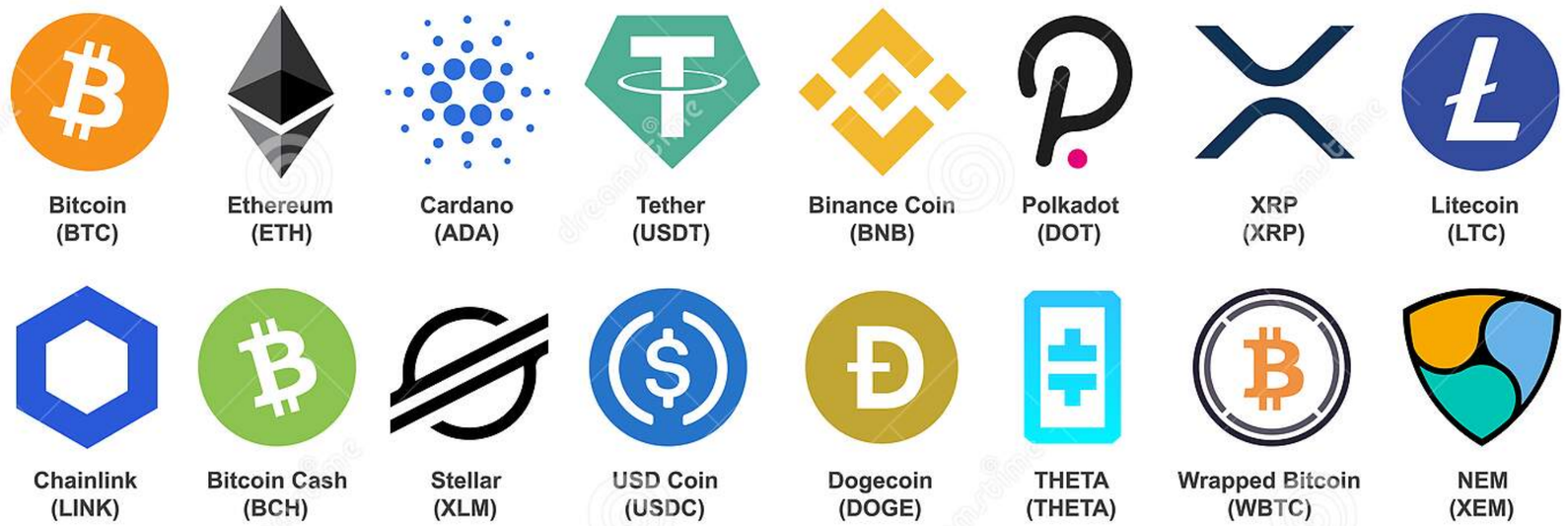
CRYTOCURRENCY

A cryptocurrency, crypto-currency, or crypto is a digital currency designed to work as a medium of exchange through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it.

Web 3.0 cryptos offer immense potential to shape the future of the internet.



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DISTRIBUTED NETWORK

Distributed networks are computer systems in which data, programs, and software are spread among multiple computers. The system can communicate complex messages between nodes (computers) and keep it reliable.

In Web 3.0, transactions between two or more parties can be secure, transparent, and based on a distributed network.

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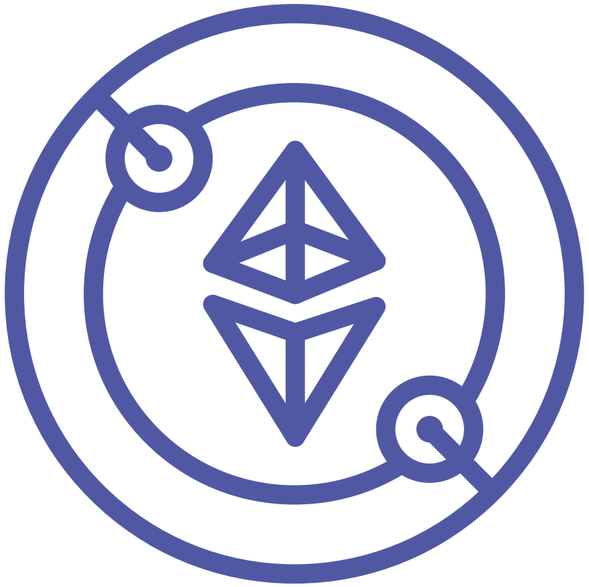
DAO

DAO stands for Decentralised Autonomous organisation

DAO was designed as an automated, decentralized organization. With a focus on open-source code and no typical management structure or board of directors, it functioned as a venture capital fund. Due to its decentralized nature, the DAO was not affiliated with any nation-state, despite using the Blockchain network.

All of the behaviour in the DAO is incentivized by a governance token, which grants holders access to exclusive events or voting power.DAO tokens allow ownership in the equity of the DAO alongside shaping up its future growth.

ETHEREUM VIRTUAL MACHINE



The Ethereum Virtual Machine (EVM) is the runtime environment for smart contracts in Ethereum.

All smart contracts and state changes on the Ethereum blockchain are executed by transactions.

The EVM handles all of the transaction processing on the Ethereum network. As with any virtual machine, the EVM creates a level of abstraction between the executing code and the executing machine (an Ethereum node)

ERC TOKENS

- ERC-20 - A standard interface for fungible (interchangeable) tokens, like voting tokens, staking tokens or virtual currencies.
- ERC-721 - A standard interface for non-fungible tokens, like a deed for artwork or a song
- ERC-777 - ERC-777 allows people to build extra functionality on top of tokens such as a mixer contract for improved transaction privacy or an emergency recover function to bail you out if you lose your private keys.
- ERC-1155 - ERC-1155 allows for more efficient trades and bundling of transactions - thus saving costs. This token standard allows for creating both utility tokens (such as $BNB or $BAT) and Non-Fungible Tokens like CryptoPunks.

FORKING

Every time a community modifies the protocol, or basic rules, of the blockchain, a fork occurs. When this happens, the chain splits - creating a second blockchain that shares all of its history with the original, but moves in a different direction.

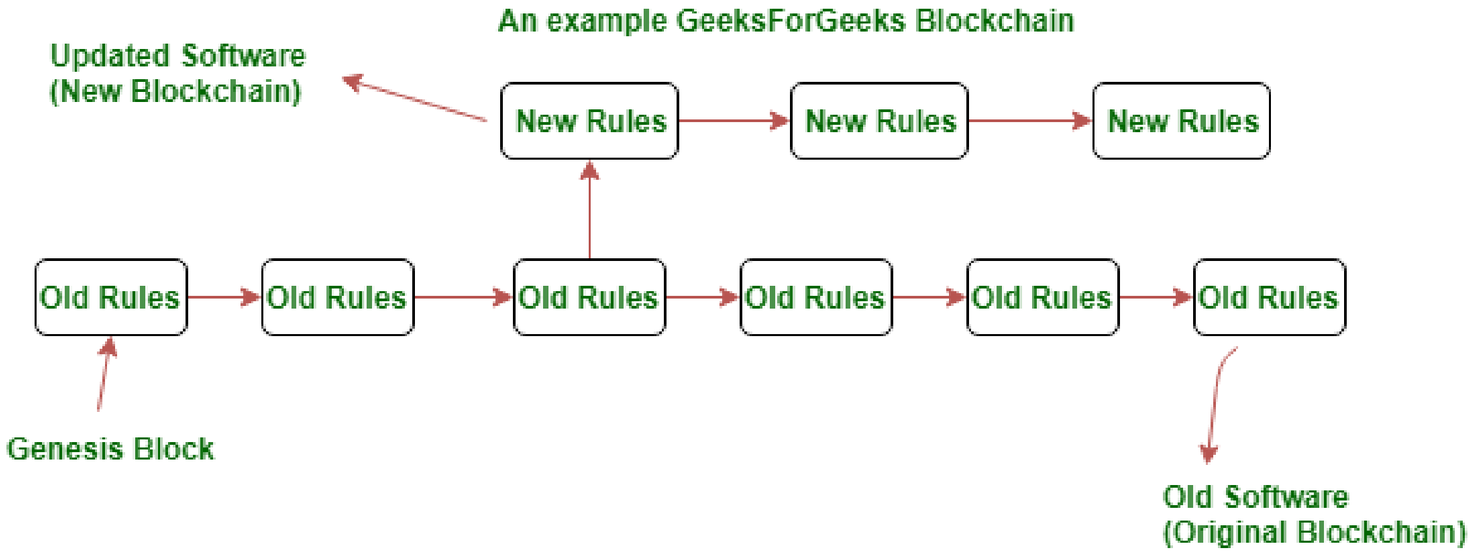


Image Source: GeekforGeeks

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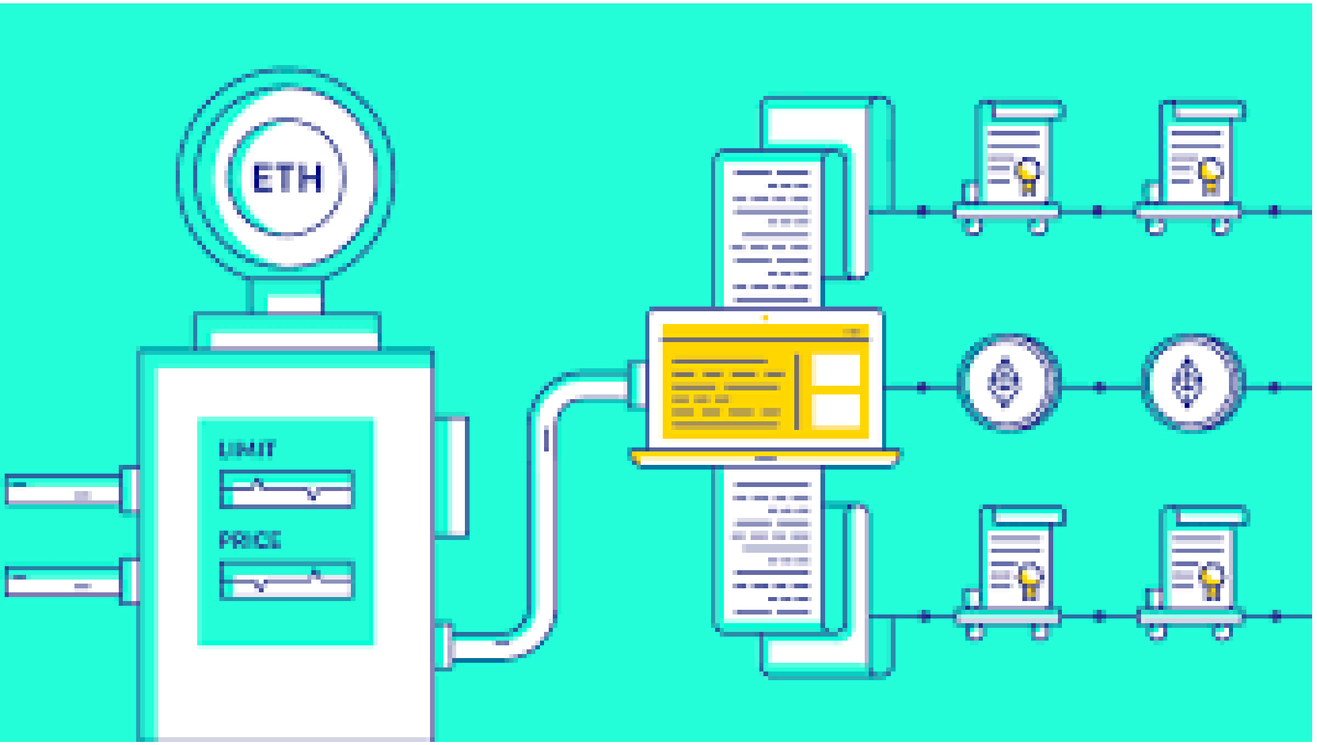
GAS



In Web 3.0, gas refers to the overhead cost associated with completing a transaction on the network.

As the price of gas in the blockchain is determined by supply and demand, miners are responsible for setting the price based on supply and demand for the computing power needed to process smart contracts and other transactions.

Since most Web 3.0 applications adopted Ethereum as their core blockchain, this is a common terminology

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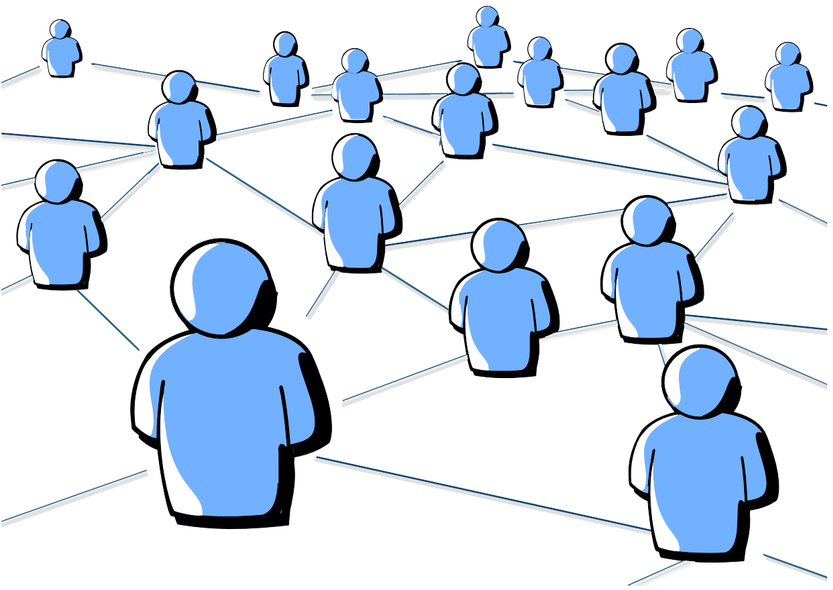
HASHGRAPH



In the world of consensus methods, hashgraphs define themselves as a data structure or algorithm, rather than a complete system, and specifically as a distributed ledger technology.

Swirlds owns the patent, and only a licensee can use it. There is, however, Hedera Hashgraph, which is a public Hashgraph network.

It combines all the features of the Hashgraph consensus algorithm with gossip about gossip and Virtual Voting to maintain connectivity and consensus.

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HARD CAP

In blockchain, a hard cap refers to the maximum number of coins that can be produced by a particular blockchain.

Hard caps prevent runaway inflation as a result of increasing demand, thereby preventing the price per unit of the currency from falling below its production costs.

Bitcoin's hard cap was set at 21 million coins, meaning there will be no more bitcoins created.

NEXT WEEK

Key Terminologies of Web 3.0: I to Z

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