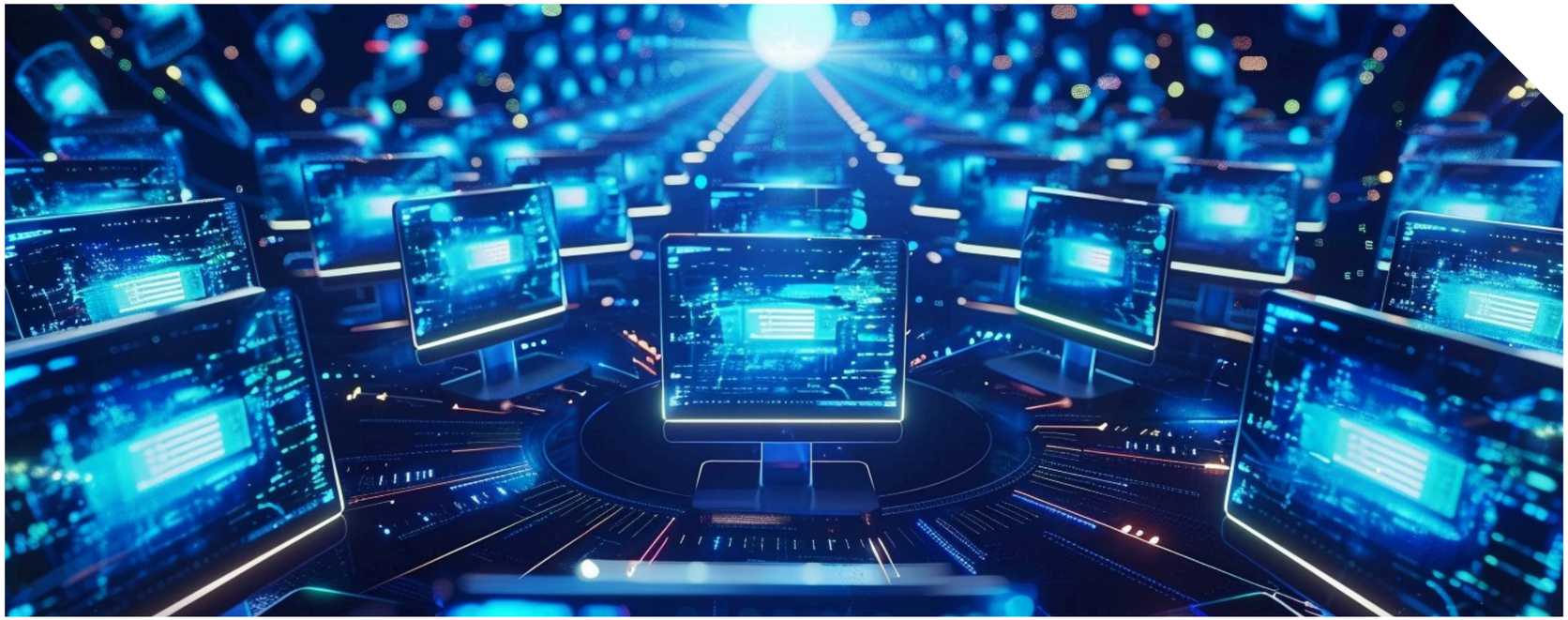


GUIDE TO DISTRIBUTED LEDGER TECHNOLOGIES

Distributed Ledger Technology (DLT) is exactly as the name suggests – a decentralised recording of transactions of assets. Unlike traditional databases, distributed ledgers do not have a central data storage point; copies of the ledger are synchronised across multiple participants of a computer network, be they companies or individuals. Transactions are secured by cryptography, are immutable and are visible to all participants.

Types of Distributed Ledger Technologies

Blockchain

The most well-known type of DLT, comprising chains of blocks containing lists of transactions. Each block is chronologically linked to the next, forming a chain.

Examples

- Bitcoin: The first blockchain, primarily used for peer-to-peer transactions.
- Ethereum: A blockchain that supports smart contracts and decentralised applications (dApps).
- Solana: Provides smart contract functionality via a proof-of-stake mechanism

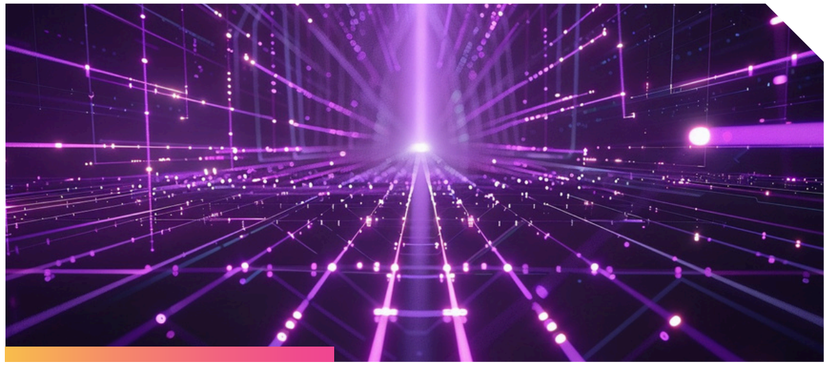
Directed Acyclic Graph (DAG)

In a DAG, transactions are linked in a graph structure rather than a chain. Each transaction can reference multiple previous transactions, creating a web of interconnected transactions.

Examples

- IOTA: Designed for the Internet of Things (IoT), allowing secure sales and trading data streams.
- Nano: A zero-fee, digital-payments protocol that facilitates instant transactions between users.

Types of Distributed Ledger Technologies



Hashgraph

Hashgraph is a DLT that uses a gossip protocol and virtual voting to achieve consensus. Nodes (participants in the network) share information on new transactions with a few other nodes, which then share the information with other nodes and so on, like a chain of gossip. Hashgraph is said to be a faster and more cost-efficient alternative to blockchain.

Examples

- Hedera Hashgraph: A public network that allows for the building of dApps, enterprise applications and record of peer-to-peer payments, as well the tokenisation of digital and RWAs at scale.

Holochain

Holochain shares many characteristics with traditional blockchains, but allows the creation of distributed applications without the need for consensus mechanisms. Each user can manage their own chain.

Examples

- Holo: The platform that provides a place for Holochain devs to host distributed applications. It also facilitates peer-to-peer interactions.