



BLOCKCHAIN Technology

Blockchain

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AGENDA

- Blockchain – what is it?
 - History
 - **How Does a Blockchain Work?**
 - **Benefits of Blockchain Technology**
 - Types of blockchain network
 - Types of network
 - Smart contracts
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Blockchain

- A blockchain is a **distributed database that is shared among the nodes of a computer network**. As a database, a blockchain stores information electronically in digital format.

A blockchain is a growing list of data blocks that are linked together.



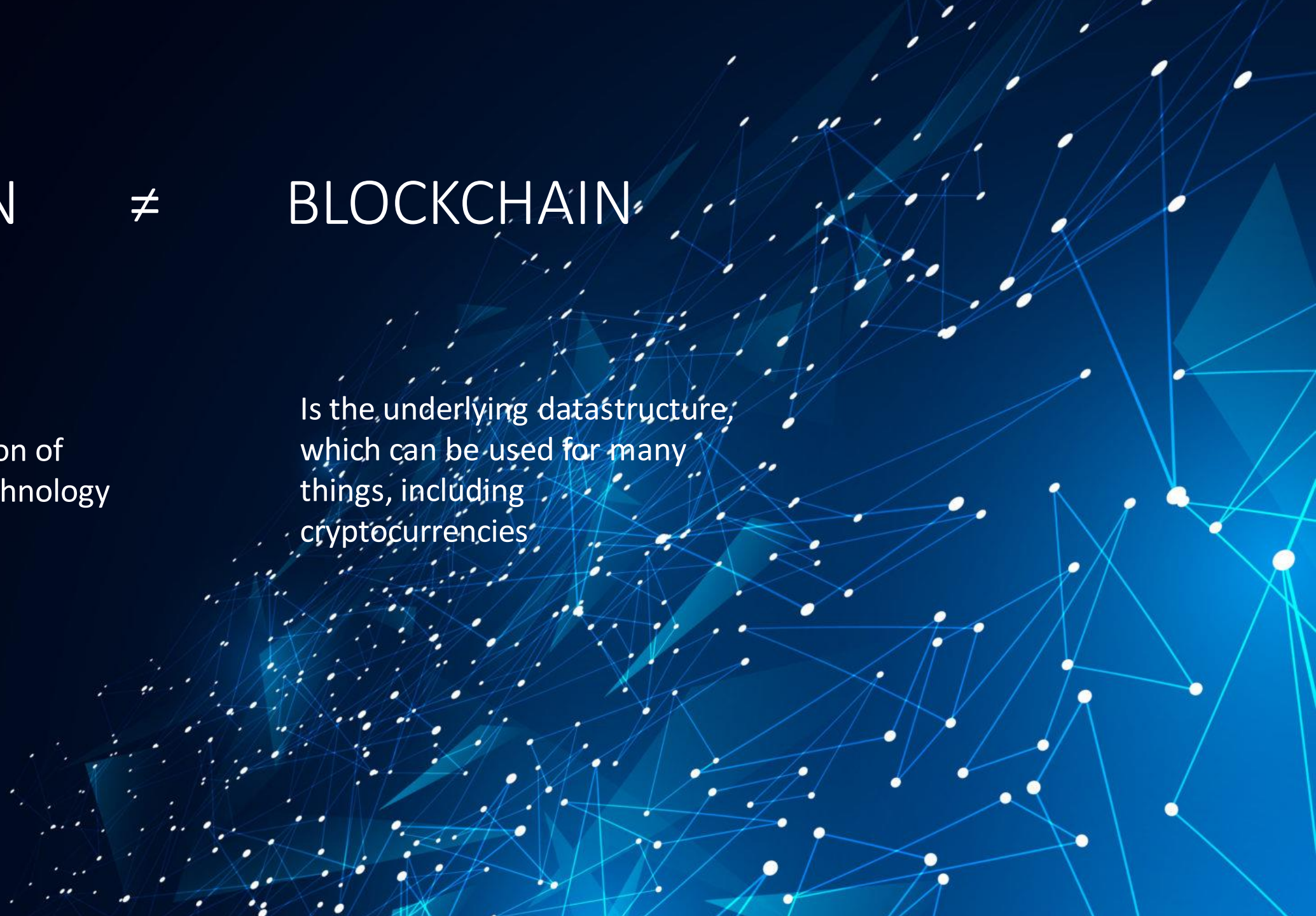
History

- first introduced in the white paper of Bitcoin in 2009..
- Right now, Bitcoin is on its way to implementing a lightning network and other advanced features.

BITCOIN \neq BLOCKCHAIN

Is an application of
blockchain technology

Is the underlying datastructure,
which can be used for many
things, including
cryptocurrencies



How Does a Blockchain Work?

- it is a peer-to-peer network



Benefits of Blockchain Technology

- faster settlement compared to traditional methods
- secure



Types of blockchain network

- **Public vs Private**
- public blockchain network is permissionless
- private blockchain is permissioned one

Types of network

- **Centralized vs Decentralized vs Distributed Network:**

- Centralized: All the nodes come under a single authority
- Decentralized: There is no centralized authority and everyone can take part in the network.
- Distributed: Independent nodes interact with each other. Also, each node is interconnected.

Smart contract

- similar to a legal document
- the contracts use public ledger for storage purposes

How do Smart Contract Work?

- Smart contracts work between two parties.



Advantage of Smart Contracts?

- total transparency
- no paperwork
- total transparency
- Trustworthiness
- guaranteed outcomes

Smart Contracts Use Cases

- trading activities
- supply chains
- copyright protection
- real estate market
- government voting



Disadvantages of Smart Contracts

- Error
- Confidentiality
- rouge contracts.

•THANK YOU

