

BLOCKCHAINS & CRYPTO

WHAT IS A BLOCKCHAIN?

Blockchains are public ledgers that everyone can access, but data can only be updated by the data owners. Instead of the data residing on a single centralized server, this information is copied across thousands of computers worldwide. Thus, blockchains are ledgers secured by cryptography and distributed around a network. Data is grouped into blocks that are made permanent after a set time interval. The consecutive “chain” of every block ever finalized makes up a blockchain.

REAL WORLD USE CASE

Blockchain technology can be used for a number of things: logistics, digital identity/security, financial instruments, all while helping users maintain personal data privacy and ownership.

FUN FACT!

Blockchain technology makes ethical, fair trade coffee closer to reality. Tagging each bag of coffee with an RFID chip and tracking them on a blockchain creates an increased level of trust and transparency amongst all parties involved.

WHAT IS CRYPTOCURRENCY?

Cryptocurrency is a digital store of value which allows users to buy and sell goods and services without third parties such as credit card companies. Cryptographic technology secures these currencies against counterfeit, and allows them to exist without a central authority. Cryptocurrencies can be referred to as tokens or coins.

REAL WORLD USE CASE

Cryptocurrencies allow people around the world to send value quickly with low fees. Before cryptocurrencies came into use, international transfers took up to a week and cost up to 50 USD. A bitcoin transaction usually takes about 10 minutes and costs between 5 and 10 USD.

FUN FACT!

You can have a blockchain WITHOUT cryptocurrency, but you CAN'T have cryptocurrency without a blockchain! Think of it like this: you can have the internet without email but not email without the internet.

WHAT'S THE DIFFERENCE?



Blockchains serve as the base technology that allows **cryptocurrencies** to exist.

Blockchains and cryptocurrency go hand in hand, and crypto is often a necessity if trying to transact on a blockchain. But without the blockchain, we would not have a means for these transactions to be recorded and transferred.

TAKING BACK YOUR DIGITAL IDENTITY

Popular search engines and social media websites treat your data as a commodity. Data is aggregated in a central repository that becomes a target for hacking. Blockchain systems can distribute and secure this data, giving users control over their data and identity.

TRANSPARENCY AND ACCOUNTABILITY

Everything on a blockchain is permanently recorded, making it the perfect tool for compliance and assurance. Each computer running the blockchains software has a copy of the cryptographic ledger, which makes it impossible to change the record without taking over the network.

AVOIDING INTERMEDIARIES

By transacting peer-to-peer, unnecessary third parties can be minimized, saving both producers and consumers money and minimizing fees when sending money abroad.