EXPLAINER

Bitcoin

#BITCOIN

#BLOCKCHAIN

#COINDESK

#BITPAY

Bitcoin is a peer-to-peer currency that relies on a network of computing power to create, distribute, and verify transactions without the need for a central authority (e.g. a bank).

Bitcoin enables:

Fast peer-to-peer transactions

Funds received are available for spending within minutes.

Worldwide payments

Bitcoin is entirely network-based, bypassing national borders and currencies.

Low processing fees

Lack of a third-party intermediary means the only cost to using Bitcoin is electricity from computer usage.

Bitcoin in business



An online platform enabling businesses and individuals to store and spend Bitcoins.



A leading source of Bitcoin and Blockchain news, research, and market data.

How does Bitcoin work?

Distributed, peer-to-peer network

Running on a Blockchain distributed ledger platform, Bitcoin transactions directly link buyers to sellers without the need for third-party intermediation. All participants in the Bitcoin network have access to an ever-expanding public record of all transactions occurring in the network.

Proof-of-work authentication

Bitcoins are sent from one participant's cryptographic address to another and are signed by the sender's private key to ensure authenticity. Each payment transaction is broadcast to the network and included in the blockchain so that no Bitcoin can be spent twice. Only participants' public keys are visible to the network, anonymizing transactions and ensuring privacy and security.

Mining for new Bitcoins

The supply of Bitcoins is not tied to any issuer (unlike dollars, which are issues by the Federal Reserve), but are instead "mined" via complex and computationally difficult calculations by participants in the Bitcoin network. Over time, the amount of computing power required to produce a new Bitcoin increases exponentially.

Bitcoin over time

- Bitcoin was first conceived of in a white paper in 2008 written by an anonymous author under the pseudonym Satoshi Nakamoto. Though the idea of a digital cryptocurrency predated Bitcoin, Nakamoto's idea was the first to gain major traction.
- By 2012, over 1,000 merchants worldwide accepted Bitcoin payments
- In April 2013, the total value of all Bitcoins in circulation passes \$1 billion
- Total Bitcoin trading volume grows 57% in USD between 2013-2014
- As of November 2016, there are over 16 million Bitcoins in circulation at a total market value of \$11.7 billion USD