**What is Ethereum?**

Ethereum is a blockchain-based software platform that is primarily used to support the world's second-largest cryptocurrency, following Bitcoin, in terms of market value. Ethereum, like other cryptocurrencies, may be used to transmit and receive value internationally without the need for a third party to monitor or intervene.

Ethereum is a decentralized public ledger for validating and recording transactions as a blockchain network. Users of the network may build, publish, monetize, and utilize apps on the platform, and they can pay using Ether, the network's cryptocurrency. Ether, or ETH, is an Ethereum-related cryptocurrency.

Insiders refer to the network's decentralized applications as "dapps." To utilize dapps, Ethereum users must pay a charge. The costs are referred to as "gas" since they fluctuate based on the amount of computing power used.

Advantage:

**Ethereum is Transparent**

Ethereum has transparency embedded into its code and design -- both Ethereum and the applications built on the platform are open sources. Developers can, at any time, re-use Ethereum’s functionalities in their own projects.

Ethereum is also community-driven, and there’s a whole host of resources available to those looking to join the community.

**Ethereum Reliability**

Aside from a high-profile hack that occurred in 2016 resulting in the birth of Ethereum Classic (or the birth of ETH, depending on who you ask), and the crypto kitties congestion in 2017 caused by well, internet cats, the Ethereum network status has suffered from little to no downtime or lag, making it a great platform to build applications on.

The Ethereum network has also remained free from censorship (more on this later) and sudden 51% attacks that have plagued other currencies.

### Ethereum is Decentralized

Ethereum is powered by thousands of nodes scattered all around the globe. This protects the network from failure, attacks, and malicious connivance. This ensures that the Ethereum platform remains censorship-free and free of control from one single entity.

While the numbers are changing daily, only 28% of Ethereum nodes are concentrated in huge [ETH mining operations](https://thetopcoins.com/blog/building-an-ethereum-mining-rig-profitability-analysis-for-2021).

### Fast Deployment

Deploying smart contracts on the blockchain is designed to be easy and straightforward, but it does require a degree of knowledge in web development and programming, particularly in Solidity. Considering the fact that any “if-then” scenario can be turned into a smart contract, this makes

Ethereum is an accessible platform for a lot of businesses, enterprises, and innovators across a wide variety of industries.

### Scalability Issues

Scalability is one of the [most pressing issues](https://www.forbes.com/sites/forbestechcouncil/2018/10/02/creating-scalability-on-ethereum/) that Ethereum seeks to address through the upgrade. Ethereum is currently processing transactions at a sluggish rate of 15 transactions per second. Considering how big the network is (around 4x as many developers as any other platform), that is proving to be a legitimate hindrance to widespread adoption.

Ethereum 2.0 promises to solve the problem, ushering in a brand new era of 10,000 transactions per second. However, the rollout is proving to be slow, and there’s no definitive end date for when Eth 2.0 goes live.

### Transaction Privacy

While Ethereum is, by design, private, it’s so easy for cryptocurrency newbies to reveal their identities when transacting on the platform. Transaction data is concealed from the public, but some entities can actually connect wallets to people’s information through their gas price settings, the time when the account is most active and customized Ethereum Name Service (ENS) names.

Some entities are also known to send small, specific amounts of ETH to certain wallets to track it.