

What is Blockchain Technology? A Complete Guide

While there may have been ample times when you must have come across the word blockchain technology, did you ever wonder what is blockchain technology and what are its utilities?' Besides being just a buzzword, blockchain technology has become a transformative force not only in the fintech sector but also in multiple other sectors that can benefit from decentralization, transparency, traceability of transactions, etc.

Blockchain technology was the by-product of Bitcoin – the first-ever and largest cryptocurrency in circulation. Or the first time, a pseudonymous personality by the name of Satoshi Nakamoto brought together cryptography, consensus, and decentralization into one technology. For anyone interested in exploring Satoshi's idea of a blockchain, go and check out the whitepaper published in 2008.

Let's explore <u>what is blockchain technology</u> and blockchain technology applications for you to have an introductory understanding of the innovative tech.

What Is Blockchain Technology?

Blockchain technology, explained in layman's terms, is a network of computers that verifies and stores a distributed database of records. Any data or information once recorded on a blockchain cannot be changed, manipulated, or hacked. The participating computers on a blockchain network are called nodes. Each node has a duplicate copy of the entire database of the blockchain transactions, which it uses to verify transactions. The verified transactions are stored as blocks on a blockchain. To define blockchain technology in simple terms, it is a peer-to-peer network made up of nodes that stores transactional records in a distributed digital ledger.

Why is Blockchain Important?

All businesses run on data – be it planning the strategies, organizing personnel, or running processes. How accurate a piece of information depends much on how fast and securely it is received. As the lesser the time, the lesser the risk for tampering. Blockchain is suited ideally for transferring, verifying, and storing that information. It delivers the information immediately in a shared and transparent way.

All this info is stored on an immutable ledger which anyone can access from anywhere in the world or else by permissioned members, in the case of permissioned blockchain. We will discuss that later. For one, let's discuss the significance of blockchain technology applications in real-world case scenarios. Blockchain technology can be used to keep an eye on orders, accounts, population, supply chain, orders, and much more. Blockchain helps all the members on a DLT network share a single truth as each node shares exactly the same copy. As such, members have greater confidence while bringing in efficiency, security, transparency, and endless opportunities simultaneously.