6 Things You Need In Order To Get Started With Blockchain

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Blockchain is a decentralized ledger that provides a secure way to store and transfer data, but it's not as simple as it sounds. If you want to get started using Blockchain, there are a few things you need to understand before diving into the technology.

Here are six essential concepts that will help guide your exploration of this exciting new technology:

1) Get an overview of Blockchain

Blockchain is a distributed database that can store any type of data. It's decentralized, meaning no centralized servers or companies are managing it. The Blockchain is also peer-to-peer — all transactions are verified by the network of computers on which the Blockchain runs (called nodes).

The first block in every Blockchain contains a hash pointer to the previous block. Each subsequent block has its hash pointer and a list of transactions related to those preceding blocks.

2) Understand the Bitcoin protocol

Let's dive into the details of how Bitcoin works. The Blockchain is a shared database that records all transactions on the network, creating an unalterable record of every single bitcoin exchange. This means anyone can verify what happened with any other participant in the network and see if it matches their own copy of the ledger.

The Blockchain is distributed across multiple computers, called nodes. Each node has a copy of the entire Bitcoin ledger and can process transactions on the network. This means that if one computer goes down, many others are still available to continue processing transactions.

The nodes also verify transactions and prevent fraud. They store a copy of the Blockchain, which records every bitcoin exchange that has ever occurred. This means that if someone tried to spend their bitcoins twice or claimed them as their own after sending them off elsewhere, everyone would know about it immediately.

3) Understand the use cases of Blockchain

Before diving into Blockchain and building a project, you must understand the use cases.

Blockchain is not just used for currency. It can be used for more than just money. The possibilities are endless! You might want to consider banking, healthcare, real estate, or even voting in your country. All of these things could benefit from the use of

blockchain technology and supply chain management (i.e., tracking products throughout their journey).

The most important thing is that you start small and build from there. You don't want to try creating a blockchain-based banking system if you haven't even built an app before — it will be too much for you! Start with something simple and then add to it as time goes on.

4) Understand mining

Mining is the process of verifying transactions and solving complex math problems. When you're mining, your computer solves a mathematical problem to find a solution that's less than or equal to some target number. The miners who solve these problems first get rewarded with cryptocurrency (e.g., Bitcoin) in return for their efforts.

In order to understand how mining works, let's walk through an example: imagine 1000 people want to buy bitcoins, and they each pay $2 per bitcoin at a particular time (let's say on January 1st). As we already know from our previous section about blockchain technology, this would mean there are 100 bitcoins available for sale!

Now suppose that only 100 people buy into this market—but then another person comes along who decides he wants one too! To keep things fair, he pays $2, too—and now both parties have enough currency so everyone can sell their coins back onto the market again at whatever price they want them sold at.

5) Understand blockchains and smart contracts

One of the most important things you need to understand about Blockchain is that it's a distributed ledger—a database that keeps track of transactions in real-time. This means there are no single points of failure, and making verifiable claims about what happened with your money at any given time is possible.

In other words, if I want to send someone 10 dollars using this platform (let's call it Blockchain), then they would have access not only to my public key but also their

own private key, which allows them to verify whether or not I actually sent them money.

But what happens if we want our smart contract system to focus not just rely on trust but also accountability? That's where smart contracts come into play! These programs run on top of blockchains, so they can automatically send funds when certain conditions are met, like "this date has passed."

6) Understand all the differences between permission and permissionless blockchains.

This section will cover the difference between permission and permissionless blockchains.

Permissioned Blockchains

Permissioned Blockchains are closed to specific groups of people. They have rules and regulations that only give access to those who can prove they have the proper credentials or need them for legal reasons.

This means that if you're not part of these groups, then your funds will be locked away until you prove yourself worthy by passing some sort of test or paying some fee (which may be higher than what it would cost if you were allowed into the system).

Permissionless Blockchains

Permissionless Blockchains are open to anyone. You don't have to prove anything or pay a fee in order to be allowed into the system. The only thing that could stop you from joining is if your computer isn't powerful enough to handle the workload (which can be solved by upgrading your hardware).

Permissionless Blockchains are the most common type of Blockchain in existence today. They're what Bitcoin, Ethereum, Litecoin, and many other cryptocurrencies use.

Conclusion

We hope you found this article helpful and have given you a better understanding of Blockchain and how it works.