The Beginner's Guide To Understand Blockchain Better

"*The modern era is all about technology. People from all over the world expect modernization in their everyday lives and they welcome any new technology with open arms. Technologies such as Artificial Intelligence, Augmented Reality, IoT have gained a lot of attention in the past decade and now there is one more addition to the squad* ***– Blockchain Technology.****"*

What Is A Blockchain?

In simple terms, blockchain is a system to capture information securely, therefore, making it impossible to modify, delete, or hack the information. Blockchain technology falls under the category of distributed ledger technology, and yes, it is a digital ledger of transactions distributed across millions of computers.
Multiple blocks together contribute to a blockchain. Each block in the chain holds a certain number of transactions, and whenever a new transaction occurs on the blockchain, a time-stamped record of the new transaction is included in the ledger. This decentralized database is managed by multiple participants, hence the name ***Distributed Ledger Technology (DLT).***

What's So Special About A Blockchain?

In a blockchain network, transaction blocks are secured with an immutable cryptographic signature, and that's known as 'hash.' This immutability feature is the guardian angel of every blockchain, because if one block is modified or deleted, then it would reflect in all the previous and current blocks. If hackers want to hack the network, they will have to change every single block in the distributed network, which is ***'impossible.'***

Types Of Blockchain:

Public Blockchain / Permissionless Blockchain

Public blockchains are also called permissionless ledgers/blockchains. As the name indicates, everyone can access this type of blockchain. The user just needs Internet access to download and use a public network. Besides, the users can take a look at the overall history of the blockchain and also initiate transfers.

Private Blockchain / Permissioned Blockchain

They are the total opposite of public blockchains. Private blockchain networks are shared only among the trusted participants. The control of a private network lies in the hands of the owner. However, the owner cannot be involved in any suspicious activity since the ledger is immutable. The rules that a private blockchain abides by can be customized depending on levels of permissions, exposure, number of participants, authorization requirements, and a lot more.

Federated Blockchain / Consortium Blockchain

Consortium blockchains are partially decentralized blockchain networks. The network here is managed by two or more entities. These blockchain networks work on an entirely different consensus process. Pre-selected groups of nodes regulate them. This federated blockchain resembles a hybrid blockchain because it is shared among multiple participants, and the restriction is levied on nodes from accessing the network. This type of blockchain is useful when a group of enterprises wish to share a blockchain but restrict access only to themselves.

Hybrid Blockchain: A Duo Of Public And Private Blockchains

A Hybrid blockchain is defined as the one that uses both permissionless and permissioned blockchain solutions. To be precise, a hybrid blockchain offers controlled access and complete freedom, both at the same time. A hybrid blockchain network is not open to all. However, it includes features such as transparency, integrity, and security.

Hybrid blockchains are totally customizable. The existing members of this blockchain decide who can participate in the network and who cannot and also which transactions are made public and which are kept private. This type of blockchain opens up the door to the best possible way that an organization can work with its shareholders.

About Blockchain Firm

Blockchain Firm is a standardized company offering enterprise blockchain development services. We are a team blended with intelligent minds and smart problem solvers. We help you incorporate blockchain technology with your business and identify business outcomes, prioritize use cases, and develop a minimum viable product.

Our services are not limited to blockchain development. We do offer ***Decentralized Finance (DeFi) Development Services****, Smart Contracts Development & Audit, Android & iOS Mobile App Development, and Cryptocurrency-based Products.*