



Certified Blockchain Architect

Business Components of Blockchain Architecture

Defining the problem

In creating a blockchain, organizations need to define the specific problem they are trying to solve. Then they must determine which transactions or interactions the blockchain should capture and who should have access to which portions.

Key Questions to ask:

| What are you trying to do? | What value do you want to capture? | For Whom |
|----------------------------|------------------------------------|-------------------------|
| Record | Information and Knowledge | Customers |
| Track | Attribution and Responsibility | Suppliers |
| Verify | Decision rights and votes | Investors |
| Aggregate | Contracts and Transactions | Government and Citizens |

Stakeholders



In a Blockchain Ecosystem there are various stakeholders at each layer in Blockchain who are motivated to fund new products and services or they motivated to educate others in the hope of blockchain reaching the scale of which blockchain is capable.

Following are the stakeholder in Blockchain Network Layer

1. Protocol Layer: Developer, Researchers and Academia
2. Networking Layer: Miners, Industry Bodies, Traders
3. Application Layer: Entrepreneurs, End-Users, Corporations, Venture Capitalists

Enterprise Devices



In blockchain ecosystem consists of various enterprise devices such as:

IDM : IDM stands for identity management that stores user credentials and provide API for authentication, authorization and perform SSO functions

Key Store: It is a vital part of blockchain infrastructure which maintains multiple keys and integrate with client applications to facilitate smooth transactions.

Cert Store: The Cert Stores are maintained by Certification authorities which provide the identity management services to participate in the network.

Types of Blockchain

There exists three types of Blockchain in the Ecosystem namely Public, Private and Hybrid Blockchain

- Public Blockchain: This type of Blockchain are usually more complexed in nature for better security. In public blockchain anyone can read and write without explicit permissions or authorisations. For eg Bitcoin, Ethereum etc
- Private Blockchain: Private Blockchain are more straight forward blockchains and are developed for closed group of people. Once a node is authorized then only it can read or write the blockchain.
- Consortium Blockchain : Consortium Blockchain are semi-decentralized meaning that the permissions are not granted to single entity but rather to group of approved individuals. In this blockchain consensus are done by the peers who are already pre-approved on the network. So the consortium blockchain possess the security features of public blockchain with the great degree of control over the network. Major examples of Consortium Blockchain are Hyperledger and Quorum.



THANK YOU!

Any questions?
You can mail us at
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