# L1 Blockchains & Decentralisation

Exploring the Web3 Ecosystem





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# Why Decentralisation?

Limitations of Centralization Advantages of Decentralisation

Web3 & World Change





Roles of Each Layer

Pros & Cons

Importance of Layer 2

### Roles of Each Layer

Layer 0

Physical Layer

**Layer 1** •------

Protocol Layer

Layer 2

**Application Layer** 

# Pros and Cons of each layer

Layer 0

Layer 1

Layer 2

**Pros** 

Cons

provides the physical infra

Vulnerable to security breaches and attacks

Provides the underlying protocol that powers web3

Limited in terms of scalability and transactions throughput

Provides scalable and fast applications

Complex and requires additional layers of security

## Importance of Layer 2

- More efficient and cost-effective transactions
- Off-chain transactions
- Congestion on blockchain is reduced
- Increases tps
- Gas fees decreases

Barriers to Decentralisation

### **Barriers to Decentralisation**

**Current Barriers** 

Addressing Barriers Community Building



### **Addressing Barriers**

Scalability

L2s, sidechains

Governance

DAOs

Regulatory

Collaboration







- IPFS is a peer-to-peer protocol for decentralized file storage and sharing.
- It uses a content-addressed system, where files are identified by their content rather than their location.
- This allows for easy sharing and retrieval of files, even if the original host is offline.
- IPFS is also designed to be highly scalable, with no central point of failure and the ability to handle large amounts of data.

### Arweave vs

Has its own blockchain with their own consensus SPORA.

Used for permanent storage.

Cost of storage: 1 GB = 0.244 AR (~6.8\$) depends on AR price

### **IPFS**

Not a blockchain, it is a P2P network like Bittorrent. Uses distributed hash tables.

Does not give permanent storage by default.

No transaction cost, need to pinning services like Infura, Pinata, Temporal or setup your own IPFS cluster on AWS

### Thank You!

