



# IAS PARLIAMENT

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## Web3.0 Imagines a Decentralized Web

### What is the issue?

- Web3 or Web3.0 refers to the next generation of the worldwide web, which is supposed to take over from Web2.0.
- Web3.0 may be a more decentralised web than the Web2.0 and it may challenge the dominance of the tech giants.

### What is the evolution?

- **Web1.0** - This is the term used for basic websites that provide a limited or static user experience.
- This term would be used to describe the simple "shop front" websites of the past.
- e-Commerce was the main area of explosion that saw the web first used in a commercial manner.
- **Web 2.0** - As technology evolved, websites were able to provide a richer and more interactive user experience.
- Web 2.0 has been used to describe this web phenomenon.
- Examples include Facebook, MySpace, YouTube and Wikipedia.
- If Web 2.0 has stood for anything it is the creation and sharing of information delivered via the web.

### How Web 2.0 works?

- Web2.0 is more centralised and focused on user-created content.
- Here few corporations hold the power of data. we don't own or control that data, and this concept gets changed on Web3.
- In Web 2.0 we provide our personal data over and over again on each platform we sign up for.

### How Web 3.0 differs from Web 2.0?

- Web3 is supposed to be a more decentralised web.
- It challenges the dominance of the tech giants by concentrating the power and data in the hands of the users.
- This means that data is distributed across networks and no single entity owns the information.
- Instead of providing your personal data over and over again on each platform you sign up for, you will instead simply authorise the platforms to use your data.

## How Web 3.0 benefits the Common man?

- **Data Protection** - Massive data breaches that have proliferated during the Web2 era.
- Data protection must be central to the next wave of tech innovations.
- Web3 applications sometimes referred to DApps are built on decentralised peer-to-peer networks like Ethereum and IPFS.
- Instead of being run by some tech giants companies, these networks are built, operated, and maintained by users.
- It is possible to split up large files into smaller chunks.
- It can be individually encrypted and stored in other locations, making it nearly impossible to hack.
- **User Friendly** - Any change in personal data like your address or credit card number needs to be changed once on your end.
- Automatically all your sites will be updated. This will make the Web much more user-friendly.
- They aren't subject to the business hours of mainstream financial institutions.
- Web3 allows for low-cost, nearly instantaneous, borderless, peer-to-peer transfers of actual value.
- **Innovations** - Centralisation helped billions of people get access to amazing technologies (mostly free to use), but it has stifled innovation.
- Companies that own networks have unilateral power over who gets network access, how revenue is divided, what features are supported, etc.
- That makes it harder for start-ups, creators and other groups to grow their internet presence.
- Decentralising the web removes these hurdles for new start ups.

## What are some recent applications of Web3.0?

- The applications are much larger and wilder. It is growing beyond its financial origins such as cryptocurrency.
- Web3 will power the new financial world order on metaverse.

Metaverse is as a combination of virtual and augmented reality and video where people can live in a virtually programmed and developed world (like a pokemon game)

- It is different from reality but is built by taking inspiration from the real environment around us.
- It will unleash innovation in online gaming, tokenisation of assets in virtual spaces.
- Some of the use cases of Web3 are Decentralised Autonomous Organisations (DAOs), Decentralised Finance (DeFi), Stablecoins and Central Bank Digital Currencies (CBDCs), private and digital infrastructure, and creator economy enablers like NFTs and blockchain-based games.

## What are the challenges ahead?

- The classic challenge of decentralised networks is that they are public goods. Without a central entity to control decisions and capture profits, it is hard to incentivise their maintenance and development.
- Crypto helps solve this problem through decentralised coordination and providing economic incentives for development.
- A lot of work has to be done to lay the foundation for Web3 —meaning that users, developers,

tech companies, and others would have to come in on agreements around how the Web3 protocols would work.

- Only when this work gets going, and when financial incentives align behind it, will Web3 start to get real.

## Reference

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