Social networks play a massive role in our daily communications and interactions. However, centralized control of these platforms has created many problems: data breaches, server outages, de-platforming, censorship, and privacy violations are some of the trade-offs social media often make. To combat these issues, developers are building social networks on Ethereum. Decentralized social networks can fix many of the problems of traditional social networking platforms and improve users' overall experience.

What are decentralized social networks? {#what-are-decentralized-social-networks}

Decentralized social networks are blockchain-based platforms that allow users to exchange information as well as publish and distribute content to audiences. Because these applications run on the blockchain, they are capable of being decentralized and resistant to censorship and undue control.

Many decentralized social networks exist as alternatives to established social media services, such as Facebook, LinkedIn, Twitter, and Medium. But blockchain-powered social networks have a number of features that put them ahead of traditional social platforms.

How do decentralized social networks work? {#decentralized-social-networks-overview}

Decentralized social networks are a class of decentralized applications (dapps)—applications powered by smart contracts deployed on the blockchain. The contract code serves as the backend for these apps and defines their business logic.

Traditional social media platforms rely on databases to store user information, program code, and other forms of data. But this creates single points-of-failure and introduces significant risk. For instance, Facebook's servers infamously went offline for hours last year, cutting off users from the platform.

Decentralized social networks exist on a peer-to-peer network comprising thousands of nodes around the globe. Even if some nodes fail, the network will run uninterrupted, making applications resistant to failures and outages.

Using decentralized storage systems like the InterPlanetary File System (IPFS), social networks built on Ethereum can protect user information from exploitation and malicious use. No one will sell your personal information to advertisers, neither will hackers be able to steal your confidential details.

Many blockchain-based social platforms have native tokens that power monetization in absence of advertising revenue. Users can buy these tokens to access certain features, complete in-app purchases, or tip their favorite content creators.

Benefits of decentralized social networks {#benefits}

1. Decentralized social networks are censorship-resistant and open to everyone. This means users cannot be banned, deplatformed, or restricted arbitrarily.

2. Decentralized social networks are built on open-source ideals and make source code for applications available for public inspection. By eliminating the implementation of opaque algorithms common in traditional social media, blockchain-based social networks can align the interests of users and platform creators.

3. Decentralized social networks eliminate the "middle-man". Content creators have direct ownership over their content, and they engage directly with followers, fans, buyers, and other parties, with nothing but a smart contract in between.

4. As dapps running on the Ethereum network, which is sustained by a global, peer-to-peer network of nodes, decentralized social networks are less susceptible to server downtime and outages.

5. Decentralized social platforms offer an improved monetization framework for content creators via non-fungible tokens (NFTs), in-app crypto payments, and more.

6. Decentralized social networks afford users a high level of privacy and anonymity. For instance, an individual can sign in to an Ethereum-based social network using an ENS profile or wallet—without having to share personally identifiable information (PII), such as names, email addresses, etc.

7. Decentralized social networks rely on decentralized storage, not centralized databases, which are considerably better for safeguarding user data.

Decentralized social networks on Ethereum {#ethereum-social-networks}

The Ethereum network has become the preferred tool for developers creating decentralized social media owing to the popularity of its tokens (ERC-20/ERC-721) and its massive user base. Here are some examples of Ethereum-based social networks:

Peepeth {#peepeth}

Peepeth is a microblogging platform similar to Twitter. It runs on the Ethereum blockchain and uses IPFS to store user data.

Users can send short messages called "Peeps", which cannot be deleted or modified. You can collect tips or tip anyone on the platform in ether (ETH) without leaving the app.

Mirror {#mirror}

Mirror is a web3-enabled writing platform that aims to be decentralized and user-owned. Users can read and write for free on Mirror by simply connecting their wallets. Users can also collect writing and subscribe to their favorite writers.

Posts published on Mirror are permanently stored on Arweave, a decentralized storage platform, and can be minted as collectable non-fungible tokens (NFTs) known as Writing NFTs. Writing NFTs are completely free for writers to create, and collection happens on an Ethereum L2 — making transactions inexpensive, fast, and environmentally friendly.

MINDS {#minds}

MINDS is one of the most used decentralized social networks. It works like Facebook and has racked up millions of users already.

Users use the platform's native ERC-20 token $MIND to pay for items. Users can also earn $MIND tokens by publishing popular content, contributing to the ecosystem, and referring others to the platform.

Web2 social networks on Ethereum {#web2-social-networks-and-ethereum}

Web3 native social platforms aren't the only ones trying to incorporate blockchain technology into social media. Many centralized platforms are also planning to integrate Ethereum into their infrastructure:

Reddit {#reddit}

Reddit has touted Community Points, which are ERC-20 tokens that users can earn by posting quality content and contributing to online communities (subreddits). You can redeem these tokens within a subreddit to get exclusive privileges and perks. For this project, Reddit is working with Arbitrum, a layer 2 rollup designed to scale Ethereum transactions.

The program is already live, with the r/CryptoCurrency subreddit running its version of Community Points called "Moons". Per the official description, Moons "reward posters, commenters, and moderators for their contributions to the subreddit." Because these tokens are on the blockchain (users receive them in wallets), they are independent of Reddit and cannot be taken away.

After concluding a beta phase on the Rinkeby testnet, Reddit Community Points are now on Arbitrum Nova, a blockchain that combines properties of a sidechain and an optimistic rollup. Besides using Community Points to unlock special features,

users can also trade them for fiat on exchanges. Also, the amount of Community Points a user owns determines their influence on the decision-making process within the community.

Twitter {#twitter}

In January 2021, Twitter Blue rolled out support for NFTs, allowing users to connect their wallets and display NFTs as profile pictures. At time of writing, the social media company has also announced plans to create a decentralized social network in the future.

Instagram {#instagram}

In May 2022, Instagram announced support for NFTs on Ethereum and Polygon. Users can post NFTs directly to Instagram by connecting their Ethereum wallet.

Use decentralized social networks {#use-decentralized-social-networks}

- **Status.im** - *Status is a secure messaging app that uses an open-source, peer-to-peer protocol, and end-to-end encryption to protect your messages from third parties.*
- **Mirror.xyz** - *Mirror is a decentralized, user-owned publishing platform built on Ethereum for users to crowdfund ideas, monetize content, and build high-value communities.*
- **Lens Protocol** - *Lens Protocol is a composable and decentralized social graph helping creators take ownership of their content wherever they go in the digital garden of the decentralized internet.*
- **Farcaster** - *Farcaster is a sufficiently decentralized social network. It is an open protocol that can support many clients, just like email.*

Further reading {#further-reading}

Articles {#articles}

- Decentralizing social media: a guide to the web3 social stack- *Coinbase Ventures*
- Social Networks Are the Next Big Decentralization Opportunity — *Ben Goertzel*
- Web3 holds the promise of decentralized, community-powered social networks— *Sumit Ghosh*
- An Overview of the Blockchain Social Media Landscape — *Gemini Cryptopedia*
- How Blockchain Can Solve Social Media Privacy— *Prableen Bajpai*
- Social Media Networks Are Coming To The Blockchain — *Emmanuel Awosika*
- Sufficient Decentralization for Social Networks — *Varun Srinivasan*

Videos {#videos}

- Decentralized Social Media Explained — *Coinmarketcap*
- DeSo Blockchain Wants to Decentralize Social Media— *Bloomberg Technology*
- The Future of Decentralized Social Media w/ Balaji Srinivasan, Vitalik Buterin, Juan Benet— *ETHGlobal*

Communities {#communities}

- Status Discord Server
- Mirror Discord Server
- r/CryptoCurrency subreddit