

Fiat

ERC-20

Bear Market

Bullrun

DEX

Defi

Bridge

A blockchain bridge serves as a gateway linking multiple separate blockchains, allowing for the transfer of data and assets between them. In terms of functionality, a cross-chain bridge converts a native asset from one blockchain into its corresponding asset on a different blockchain.

Price impact

Price Impact is a term used to define the price change in the market that happens when a trader buys or sells an asset.

The general idea is that when buying an asset, the price increases, and when selling an asset, the price decreases. How high or low the price will go depends on the asset's liquidity. If it's high in liquidity, then the price won't be impacted much. Likewise, assets with poor liquidity will see a stronger impact.

Traders that buy or sell in large amounts and the ones that participate in limited liquidity markets must remember that their actions can have a huge impact on the asset's price. Usually, the second purchase ends up being higher in price due to the trader's initial impact on the market.

Custodial vs Non-custodial

For a custodial wallet, a third party takes custody of the private key instead of the crypto owner (eg. Coinbase, Binance).

For a non-custodial wallet, the crypto owner holds their own private key and, therefore, their funds, can be both software or hardware wallets. (eg. Metamask, Phantom, ledger)
One drawback of non-custodial wallets is the lack of recovery options in case users lose their password. Non-custodial wallets, however, give users full ownership of their cryptocurrency, making them responsible for safeguarding their own private keys and funds.

Proof of Work:

Proof of work (PoW) is a decentralized consensus mechanism that requires network members to expend effort in solving an encrypted hexadecimal number. Solving this allows them to add that block to the blockchain and receive rewards. In this system, energy is the resource the network uses to secure itself. The huge amount of energy required to overcome the blockchain's consensus mechanism is a key deterrent for bad actors. However, this method is inefficient (1 block every 10 mins) with high transaction fees.

Proof of Stake: Security via Staked Coins

A proof-of-stake network like Ethereum secures itself via staked cryptocurrency. Instead of expending computing energy to solve a puzzle, the nodes validating new transactions stake their own value as collateral. These nodes then run efficiently and honestly to avoid losing that collateral.

Meanwhile, any bad actor wishing to gain control over the network would need to own more than 51% of the coins staked at that time. Controlling 51% of all staked coins on the network is so difficult that it makes such an attack extremely unlikely. This is how the consensus mechanism that secures Proof of Stake networks works.

Public key:

A public key, as the name suggests, is viewable by others. You can think of it like your checking account and routing numbers. You can safely provide your public key to anybody trying to send you funds, whether it's in an email signature, on a website or on a social media post. The only thing somebody with your public key will be able to do is send funds to your wallet and see your wallet balance, so sharing it presents no immediate security risk. Public keys are actually mathematically generated from their corresponding private key, but the process is not reversible.

Bridging

I understand bridging as basically getting my money from one network to another so i can farm airdrops on it lol. Blockchains on different networks often operate in isolation, but bridging allows the two networks to communicate information and assets.

Use Cases:

Asset transfer between multiple blockchains: This is particularly useful when users want to move their funds to blockchains that offer unique features and access to certain decentralized applications (dApps).

Cross-chain DeFi: Crypto bridges allow users to leverage the benefits of multiple decentralized finance (DeFi) ecosystems without being limited to a single blockchain.

More liquidity: By connecting different blockchain networks, bridges increase overall liquidity. Users can provide liquidity to liquidity pools on different blockchains.

Blockchain scaling and performance: Bridges can help with solving scalability problems by offloading transaction volume to other networks.

NFTs: Some bridges support the transfer of Non-fungible Tokens (NFTs) between different networks. This allows owners to access different marketplaces and applications.

2 types of bridges, centralized (eg. Binance bridge) and decentralized (eg. orbiter bridge)

Risks:

Centralized services entail custodial and censorship risks for users. Custodial risk means that the operators of the bridge could steal the users' funds. Censorship risk means that operators can stop the transfer of funds.

Decentralized crypto bridges also have vulnerabilities due to their underlying code and algorithms. Faulty smart contracts and other technology risks are among the main reasons for stolen crypto funds.

22/12 Marketplace for NFTs

NFT marketplaces are platforms where NFTs can be stored, displayed, traded and in some cases minted (created). These marketplaces are to NFTs what Amazon or eBay are to goods.

These tokens represent ownership of unique digital assets, such as digital art, music, virtual real estate, collectibles, and more. Unlike cryptocurrencies like bitcoin or Ethereum, which are fungible and can be exchanged on a one-to-one basis, NFTs are one-of-a-kind and cannot be replicated.

NFT marketplaces act as intermediaries that facilitate the interaction between creators and collectors in the NFT space. They provide the following essential functions:

1. Discoverability: NFT marketplaces serve as curated galleries, making it easy for users to explore a wide range of NFTs. This includes digital artworks, music albums, virtual real estate, and even virtual goods within video games.
2. Buying and Selling: Users can list their NFTs for sale and make purchases within these marketplaces. Transactions typically involve cryptocurrencies like Ethereum.
3. Ownership Transfer: NFT marketplaces ensure the secure transfer of ownership from the seller to the buyer. This is done by leveraging Blockchain technology and smart contracts, which record and automate these transactions.
4. Rarity and Provenance: NFT marketplaces often display information about the rarity and provenance of NFTs, allowing collectors to make informed decisions.

Narrative

Narratives in cryptocurrency refer to the trending ideas, stories, or beliefs that shape how people perceive and value cryptocurrencies – they can influence investor sentiment, market trends, and the adoption of new technologies.

Narratives are important because they play a significant role in shaping public perception and subsequently market movements. They provide a framework for people to understand the potential risks and rewards of different types of cryptocurrencies, and they can influence the trajectory of the entire cryptocurrency industry.

Popular narratives in 2023 are AI and decentralised stablescoins etc.

Node operator

Backend of how a network operates. What it does is that it holds accountable the infrastructure that is responsible for making sure that smart contracts across every blockchain have access to the real world data they need in order to execute that data in a proper way, such as verifying transactions, ensuring security within the blockchain

Lending and Borrowing (web3)

It provides a means for individuals to maintain self-custody of assets while earning interest on them.

Using **blockchain-based smart contracts**, users can select which money market they want to lend to and earn interest from, depending on the market's current annual percentage yield (APY). That market will provide the lender with a new token that embodies the worth of the original loaned token and its gained interest.

These lending pools are universally accessible, without depending on personal information like **credit scores or socioeconomic background**. Theoretically, this is a more equitable system than traditional financial institutions. Decentralized applications can provide financial access for underbanked populations, groups who often cannot obtain loans or open bank accounts.