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Blockchain trends: innovations and use cases 2024

Public blockchain networks such as Bitcoin and Ethereum are seeing growing use in various business sectors that benefit from the unique advantages of this technology. A glance at the current use cases and trends illustrates the potential and dynamics of these developments.

The key features of public blockchain networks offer significant advantages over traditional systems for storing and transferring value. The decentralized structure provides a new level of transparency and does not require trust in individual counterparties. All participants are treated equally, without the possibility of favoring or disadvantaging individuals.

In addition, the fast finality of transactions offers a further advantage over the financial settlement systems currently in use. It is no wonder that it is primarily financial transactions that are processed via the blockchain. However, the universe of blockchain technology now extends far beyond the world of finance.

Financial trends redefined

The Bitcoin network is still considered the most secure and decentralized system for storing and transferring value. At the same time, the financial application layer enabled by smart contract-enabled blockchains has a promising future ahead of it.

Decentralized finance (DeFi) applications encompass a variety of financial services, including decentralized exchanges (DEX), lending, staking and futures trading, and are among the most widely used applications on most blockchains. Around USD 100 billion in assets are currently deposited in smart contracts in this area. Blockchains used in this area include Ethereum and its layer 2 platforms Arbitrum and Optimism, Binance Smart Chain, Solana, Polygon and Avalanche.

RWAs

Real-world assets (RWA) are physical or traditional assets that are tokenized on the blockchain to improve access and tradability. Thanks to its highly decentralized nature, Ethereum is a preferred blockchain to settle financial instruments such as US Treasury bonds and T-bills. BlackRock also brought a project into the RWA space with BUIDL, a tokenized money market fund. Almost USD 3 billion of tokenized assets are now secured on public blockchains.

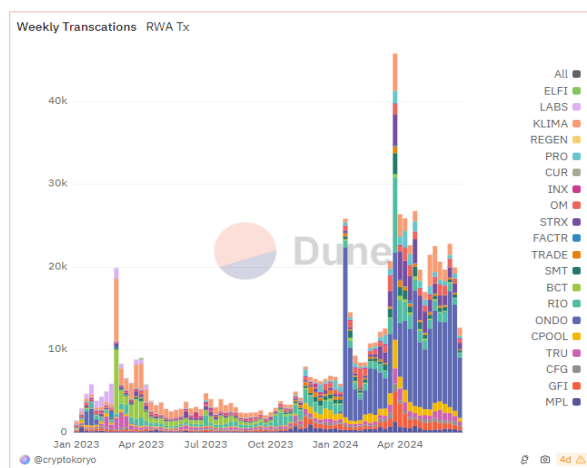


Figure 1: Number of transactions with real world assets /
Source: Dune

Through further integration into the DeFi sector, this young sector has considerable potential, as ultimately all financial instruments, including less liquid assets such as real estate, can be mapped on the blockchain through tokenization. The biggest hurdle remains regulatory uncertainty.



Stablecoins

Stablecoins are digital currencies that are pegged to a stable asset such as the US dollar in order to minimize price fluctuations and ensure a reliable store of value. The most important stablecoins by market capitalization are Tether(USDT)and USD Coin (USDC), which together account for over 80% of the stablecoin market.

The most popular use case for stablecoins is the processing of payments and transactions. Stablecoins process tens of millions of USD in transfers every day. Well-known companies such as SAP, PayPal and Visa use stablecoins as an alternative to traditional payment methods. Most of the volume is processed via Ethereum, Tron, Binance Smart Chain (BSC) and Solana.

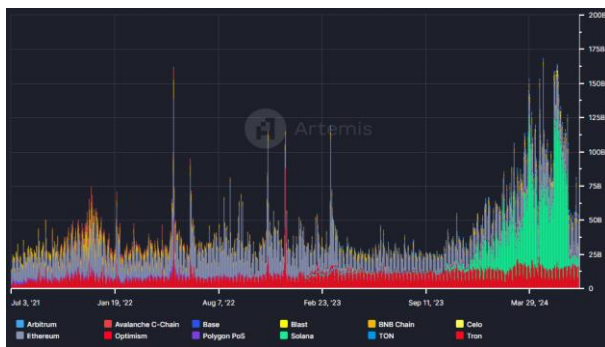


Figure 2: Daily stablecoin transfer volume per blockchain / Source: Artemis

Web3 infrastructure

The Web3 infrastructure enables decentralized applications and services by creating a new level of interaction on the Internet. Oracles play a crucial role by integrating external data into the blockchain. Chainlink is leading the way by providing reliable and secure oracle services.

Chainlink's CCIP enables seamless cross-chain transactions and supports the push into real-world assets (RWA). Chainlink is working with leading settlement providers such as Swift and DTCC to enable the tokenization of traditional financial assets and promote interoperability between existing financial infrastructure and blockchain networks.

DePIN (Decentralized Physical Infrastructure Networks) also allow the construction and operation of physical infrastructure through decentralized networks, often using blockchain technology.

Current DePIN projects include Helium, Filecoin, Akash Network, Render and Arweave. These protocols provide decentralized solutions for wireless networks, data storage, cloud computing and graphics rendering and demonstrate how DePIN projects can make the management and use of infrastructure more efficient and democratic using blockchain technology.

NFTs

Non-fungible tokens (NFTs) are unique digital assets that are stored on the blockchain and represent ownership and authenticity of digital or physical objects such as artworks, music and other items.

Initially, NFTs mainly represented digital art, which continues to attract considerable attention. Despite a decline in trading volume, the most traded collections still reached a volume of around USD 6 billion in the first half of the year.

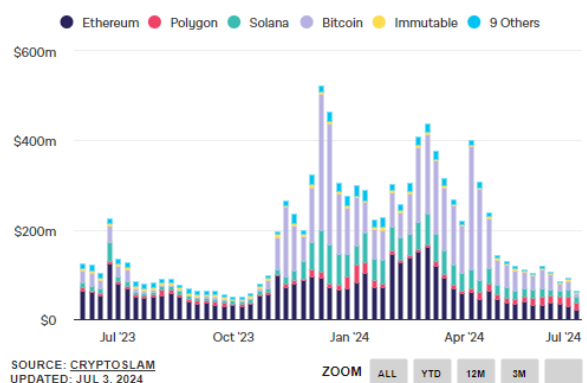


Figure 3: Weekly NFT trading volume per blockchain / Source: The Block, Cryptoslam

Thanks to their ease of use and tradability, NFTs are becoming increasingly popular in various industries. Fashion companies such as Nike, Gucci, Adidas and Lacoste have already used NFTs to create digital clothing and accessories. Starbucks has also introduced a loyalty program based on NFTs, while



ShopNEXT, Tiffany & Co. and Ticketmaster are experimenting with different applications.

Whether in music, sports or other areas, NFTs and tokens in general allow companies to expand and activate their existing community through new incentives.

Gaming

GameFi, a fusion of gaming and decentralized finance (DeFi), enables users to make real financial gains through blockchain-based games.

In addition to financial incentives, the integration of blockchain in gaming opens up further opportunities, such as the secure trading of digital assets, the creation of unique, non-interchangeable gaming objects (NFTs) and the implementation of transparent and tamper-proof gaming mechanisms.

Several leading gaming studios and companies are increasingly penetrating the Web3 gaming sector and developing on blockchain projects such as Immutable X, Solana etc. Among these companies are well-known producers of AAA games such as CCP Games, Epic Games, Konami, Ubisoft and Take-Two Interactive.

The blockchain industry is maturing

Web3 is therefore not only based on financial use cases, but extends across many areas. The infrastructure itself (blockchain layer) and the application side are developing at a rapid pace and are likely to have a lasting impact on numerous industries.

A broadly diversified exposure that encompasses all aspects of the web3, from infrastructure projects to innovative applications, offers a more robust long-term investment strategy than focusing on a few cryptocurrencies.