



The On-Chain Market Report

2024

Prepared by
ODIG Research

Reporting Period
Aug,2023 - Aug,2024

1. Crypto Periods and On-chain Markets Overview

The crypto market is currently undergoing a special periods.

In previous cycle, BTC has recently hit its lowest point since November 2022, subsequently witnessing an emerging bull market towards the end of 2023. By March 2024, BTC soared to a new peak of \$73,000, reflecting a remarkable surge of nearly 300% from the low point. However, a comprehensive and extensive crypto market rally, in relation to market expectations and the market capitalization share of BTC compared to Altcoins, is yet to materialize.

Now we are looking for the on-chain growth in crypto market:

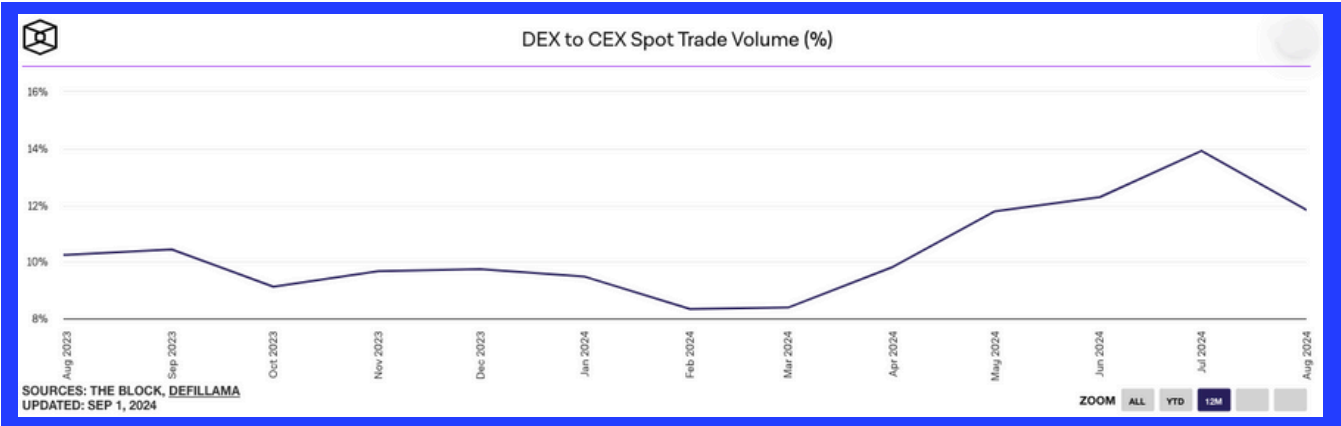
- From where does user growth arise?
- Which blockchains commonly demonstrate the users' growth?
- What opportunities does the on-chain data reveal?

As for Ethereum, the stablecoin, DEX and memecoin segments represent new sources of user growth over a year:



(Source: nansen)

Meanwhile, the DEX to CEX Spot trading ratio serves as an important reference signal that the DEX to CEX Spot trade volume is on the rise. Compared to the low point in February, this share of crypto transaction traded on DEX rose from 4.6% to 14.26% in August.



(Source: <https://www.theblock.co/data/decentralized-finance/dex-non-custodial>)

The surging inscriptions in the BTC ecosystem at the end of last year, and the rise of the 'Meme season', showcase the on-chain participants and clearly indicate the source of growth. This on-chain activity can be summarized as an on-chain market.

The growth is largely credited to on-chain trading of Memecoins and the increased long-tail assets. These assets are often initially list on the DEX, enabling early adopters to capture the value on-chain. Typically, these projects aim to list on CEX after establishing an impact independently.

This summer showcased more on-chain growth. It could be termed an on-chain summer. The significance of a mature, decentralized On-Chain marketplace is becoming prominent compared to the CEXs of previous cycles.

2. On-chain Markets: Definition and Background



On-chain transactions, by definition, represent the sum of all trading activities and states on blockchain.

In this report, the on-chain market refers to on-chain activities that occur through decentralized protocols, in addition to centralized trading platforms.

The report considers the number of Users, Transactions, and Daily Active Addresses (DAA) as primary reference factors. It examines key segments of the on-chain market experiencing rapid growth in DAA.

These segments encompass stablecoins, DeFi, Social projects, and more. Additionally, the report provides a more micro overview of 3 typical chains: Solana, Base, and TON.

1.1 Periods and Background



Review of the previous cycles, each bull market has tended to revolve around an innovative way of asset issuance. We have witnessed 2 significant surges in the past:

(1) In 2017-2018, the explosion of the ETH ecosystem was driven by ICOs, an innovation in fundraising and issuance. Essentially, this can also be viewed as the growth of 'Altcoins' or 'Memecoins'.

(2) In 2020-2021, driven by DeFi summer, users began to engage with market makers, IDOs, etc., as Uniswap and other DeFi blue-chip infrastructure were rolled out.

The massive growth in users described above is closely related to asset issuance and financing means, both of which remain important scenarios for the Crypto market as a whole.

In the latter half of 2023, two of the biggest growth include Inscriptions and Memecoins. It should be noted that while these two parts have demonstrated short-term effects, they have not yet created a widespread wealth effect.

In terms of use cases, both inscriptions and memecoins emphasize the attributes of the Fairlaunch. This method involves user participation on the on-chain platform, closely linked to the primary market, facilitating direct revenue reception through the on-chain market. Consequently, a substantial volume of on-chain user transactions and transfers ensues.

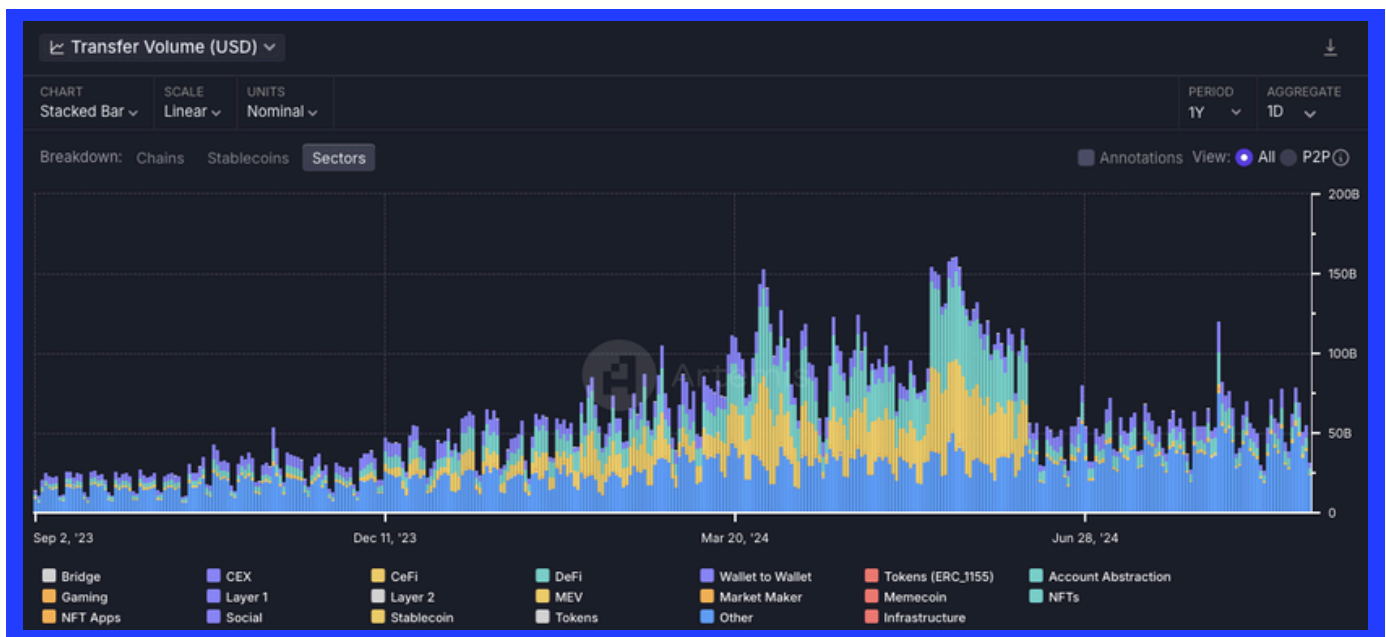
In general, the current market is not a bull market for infrastructure. Despite the existing imperfections within the infrastructure, it remains adequately functional in terms of fiat exchange, cost efficiency, and user experience interaction.

The market is focused on high-quality crypto apps and urgently needs them to attract new users. The marginal effect of infrastructure updates is diminishing, and the era of consumer-grade Dapps is approaching.

1.2 On-Chain Market Analysis

(1) Stablecoins

The past year, according to DeFiLlama, the Total Stablecoins Market Cap has grown from \$125.43B(Aug.2023)to \$165.93B (August 2024). According to Artemis, on-chain Stablecoins transactions have also rebounded, with \$50.5B of Stablecoins transferred on-chain, a 45.05% increase over the past year, and 1,998,600 active addresses.



Source: <https://app.artemis.xyz/stablecoins>

While the total market capitalization of stablecoins is growing, the volume of stablecoin trading on CEXs has declined, reaching a nearly six-month low in June.

The main drivers of growth on the Stablecoins on-chain:

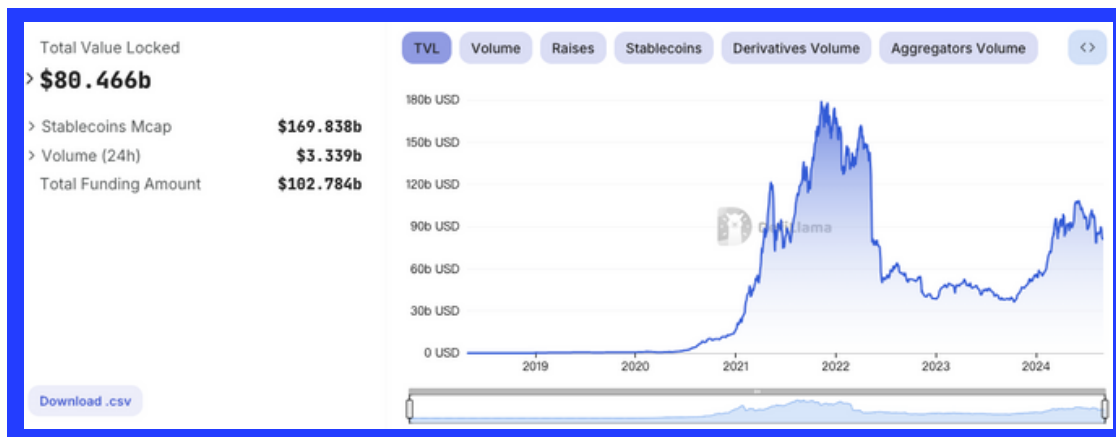
- Approval and listing of Bitcoin ETFs
- Bitcoin entering a halving cycle
- Inflows in anticipation of fiat devaluation
- Development of DeFi and on-chain trading activity

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(2) DeFi

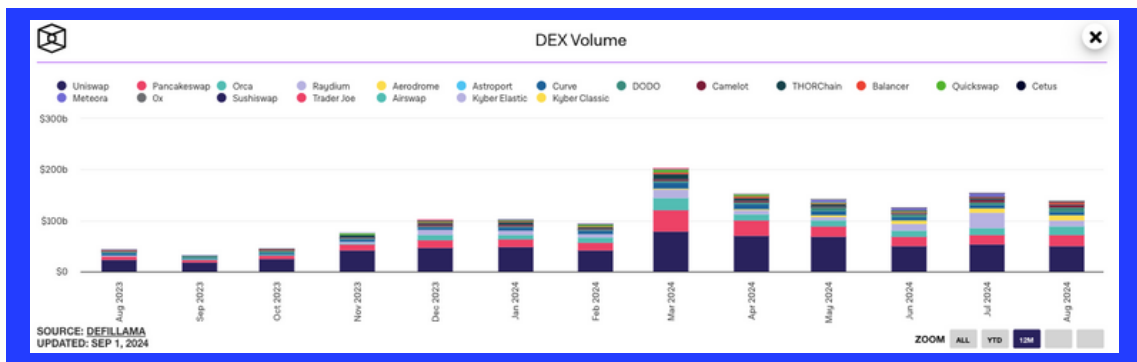
Focusing on the change in TVL (Total Value Locked) , it is possible to briefly quantify the level of activities in DeFi. Currently, DeFi's total TVL stands at \$83.789B, which is up about 2.23x from its low point last October (\$37.533B).



(Source: <https://defillama.com/>)

This suggests that on-chain activities is increasing, and there is a recovery in on-chain liquidity. At the same time, the growth in DeFi's total TVL, as well as the leverage effect, has not yet been reflected in the value of Altcoins' tokens.

On the other hand, the trading volume of DEX has grown steadily so far in 2024: from \$42.61B (Aug 2023) to \$153.38B in August 2024. The highest trading volume occurred in March when DEX traded for \$203.99B. Overall, Q1 2024 was a relatively active period for the market, with DEX reaching 322% growth, while CEX grew by 191%, demonstrating the huge room for growth in DEX.



(Source: <https://defillama.com/>)

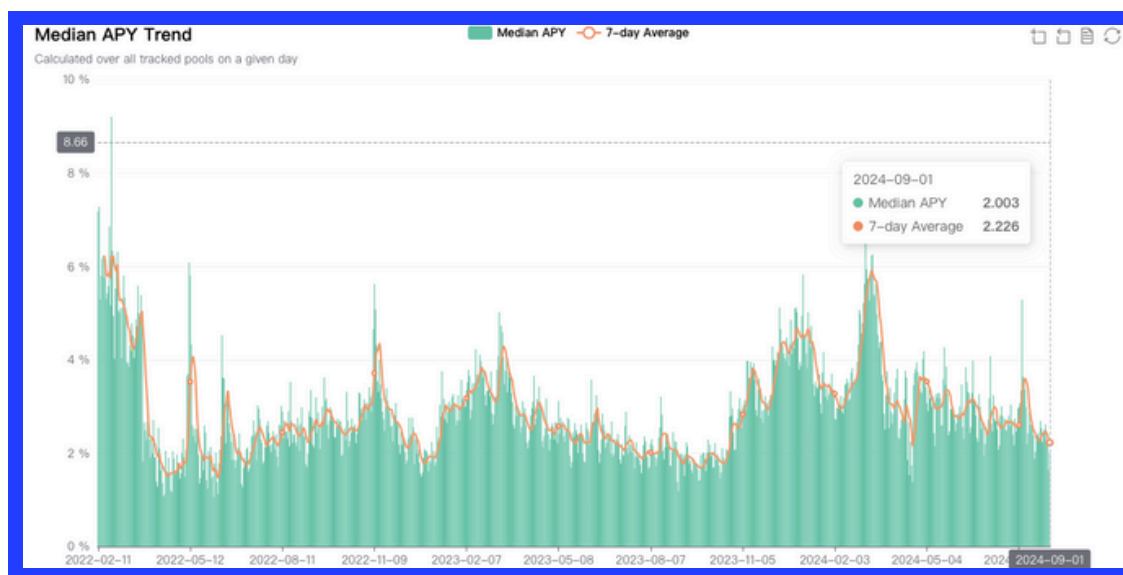
The main reasons for these increases are:

- Infrastructure maturity & On-chain user experience improved : L1/L2 have undergone development in previous period, with more mature and usable infras already in place. The advantages of low fees and high transaction speed have improved the on-chain user interactive experience under increased L2 competition.
- The Demonstration Effect of Memecoins
- Growth from Onchain Structured Product
- More long-tail assets

This also affects the current round of investment: from a more macro perspective, the current round has seen a more definitive direction since the end of 2023, with a more pronounced shift in the investment in the primary market. VCs are choosing the application rather than infrastructure.

Startups with applications and consumer use cases typically target consumers and possess revenue-generating potential. CEXs are also striving to transition towards on-chain users by integrating some of DeFi's functionalities to enhance competitiveness and attract increased on-chain transaction volume.

After "DeFi Summer" in 2020, Yield products have dominated the DeFi segment due to the stable APRs offered. These yields predominantly encompass returns associated with foundational assets such as BTC, ETH, or stablecoins, along with leveraged yields. The average APYs are detailed as follows:



(Source: <https://defillama.com/yields/overview>)

Structured products in traditional financial markets, typically denote financial instruments whose performance is tied to underlying assets, products, or indices. usually through a combination of core financial instruments and financial derivatives to fulfill asset allocation needs. These products are flexible and can be designed to meet the individual needs of investors with maturity durations, risk profiles, and return potentials.

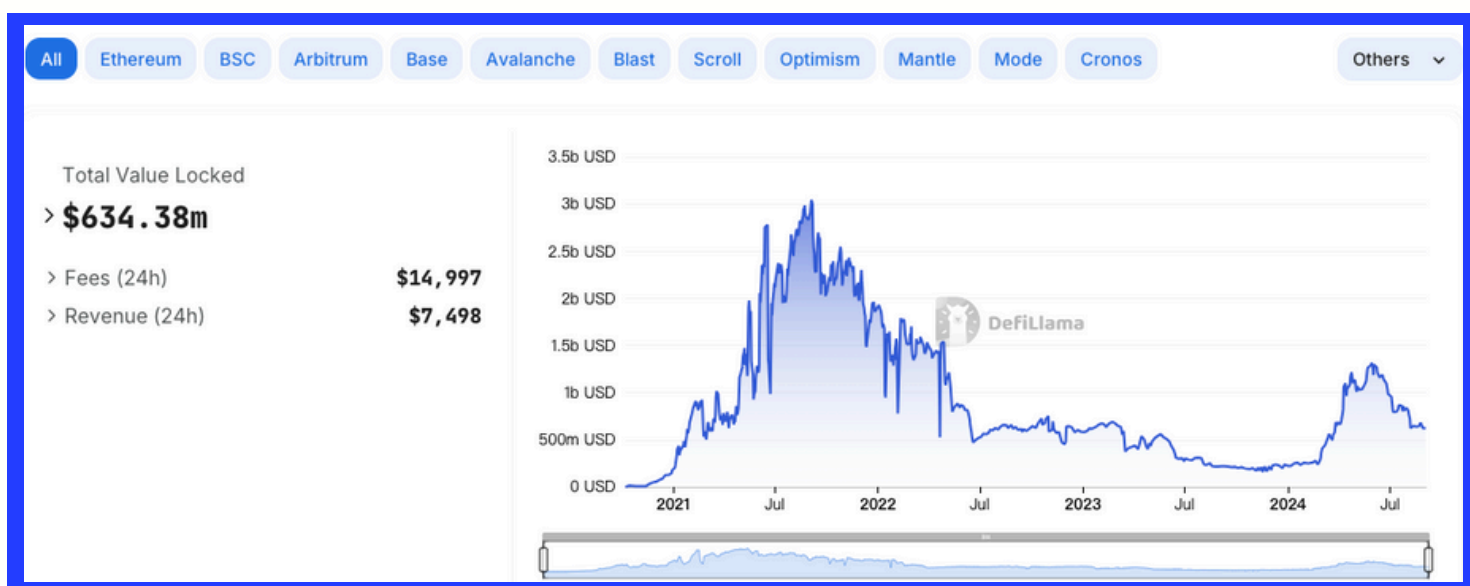
In DeFi, there has potential for substantial growth within on-chain structured products. These on-chain structured products offer users the opportunity to explore alternative financial functions, such as Vaults and derivatives, improving returns or reducing risk even more.

We define on-chain structured products with reference to: token, platform or vault that enables access to digital asset risks and returns and is delivered via a blockchain without the involvement of a centralized or traditional financial institution

The following categories of DeFi products are still high growth and have the potential to generate more DAA growth:

① Leverage/Inverse

Referring to defillama, Leveraged Farming TVL is currently over \$634.38m. Given the variation in user leverage among distinct groups, it is observed that larger and more active wallets demonstrate elevated leverage levels. As a result, there exists untapped potential for further expansion.



(Source: <https://defillama.com/yields/overview>)

Leveraged Tokens are a notable category that can offer holders a stable leveraged exposure to crypto assets. Holders do not need to worry about actively managed, borrowing, or being liquidated, among other factors. With leveraged tokens on-chain, this model will be decentralized.

- **Cases:**

Set Protocol: Set Protocol is a asset management platform for creating, managing, and obtaining baskets of tokenized assets. The primary use case of Set Protocol is the construction of "Structured Products", which are customizable baskets of fully collateralized crypto-assets, represented as on-chain ERC20 tokens, such as ETH 2x Flexible Leverage Index.

TLX: TLX is a leveraged token protocol that allows users to trade leveraged tokens for more than 50 assets at 20x leverage. Redeem users' positionv for stablecoins or bond it for staked \$TLX

② Interest Rate Swap

Interest rate swaps play an important role for many financial products. The fixed interest rate after the swap allows the financial product to calculate in advance the liquidity that needs to be allocated as well as the cost of liquidity. In traditional finance, interest rate derivatives are the largest category of derivative market, constituting 80% of the market share. Interest rate swaps represent about 80% of the derivative market. On-chain interest rates are still in their early stages, with potential for significant growth as traditional institutions gradually enter the market.

The key to designing a better interest rate swap product is: how to make it easier to distribute floating returns to users in advance, more efficiently to counterparty, and get more liquidity from interest rate swaps. It is expected that more interest rate swap and bond-based DeFi products will emerge.

- **Cases:**

Pendle: Similar to stripped bonds in traditional finance, Pendle splits yield-bearing assets into tokenized ownership (zero-coupon bonds) and yield components (coupons), enabling innovative yield trading opportunities.

③ DeFi asset management platform

DIY Portfolios and Index Products.

- **DIY Portfolios:** DIY products enable users to allocate funds to their own asset mix.
- **Index Products:** Index products provide users with the opportunity to diversify the risk exposure by holding multiple crypto assets or strategies within a single product. index strategies, leveraged strategies, and yield strategies.

Cases:

Enzyme: A representative DeFi asset management system was established in the early days and currently has an outstanding market capitalization of approximately \$40 million.

Index Coop: Index Coop builds simple yet powerful tokens that enable access to a range of complex crypto strategies. They offer a broad variety of tokens to both individuals and institutions, including index strategies, leveraged strategies, and yield strategies. Index Coop raised \$ 7.7M and \$ 2.25M in two funding rounds.

④ Automated proprietary strategies

Automated proprietary strategies enable users to capture the benefits of strategies executed within Token or Vaults. These products will be evaluated on Transparency, Security, Efficiency to Enter or Exit Position, Costs, Automation and Liquidity.

Cases:

Sommelier: Sommelier is a co-processor for Ethereum that automates Liquidity Providers' (LPs) portfolios to maximize their yields.

Ribbon Finance: Ribbon Finance is a protocol that helps users access crypto-structured products for DeFi. It combines options, futures, and fixed income to improve a portfolio's risk-return profile.

(3) DeSocial

As social products or protocols with decentralized features, decentralized social networks have advantages in transparency, security and data ownership.

In the past, initial users of decentralized social networks experienced a significant increase in engagement upon launch followed by a marked decrease as interest waned. Eventually, the network reached a state of stability where user adoption leveled off.

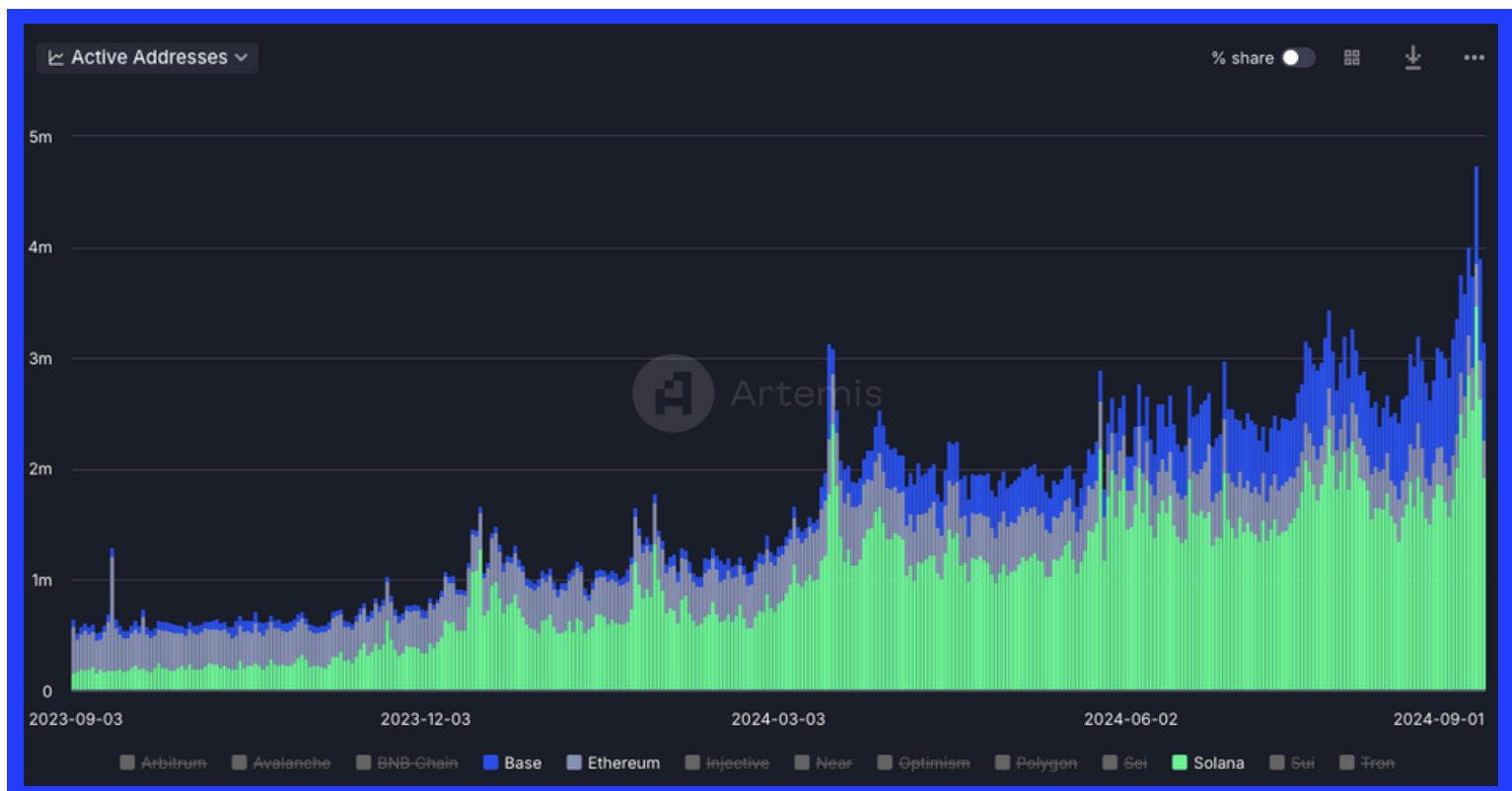
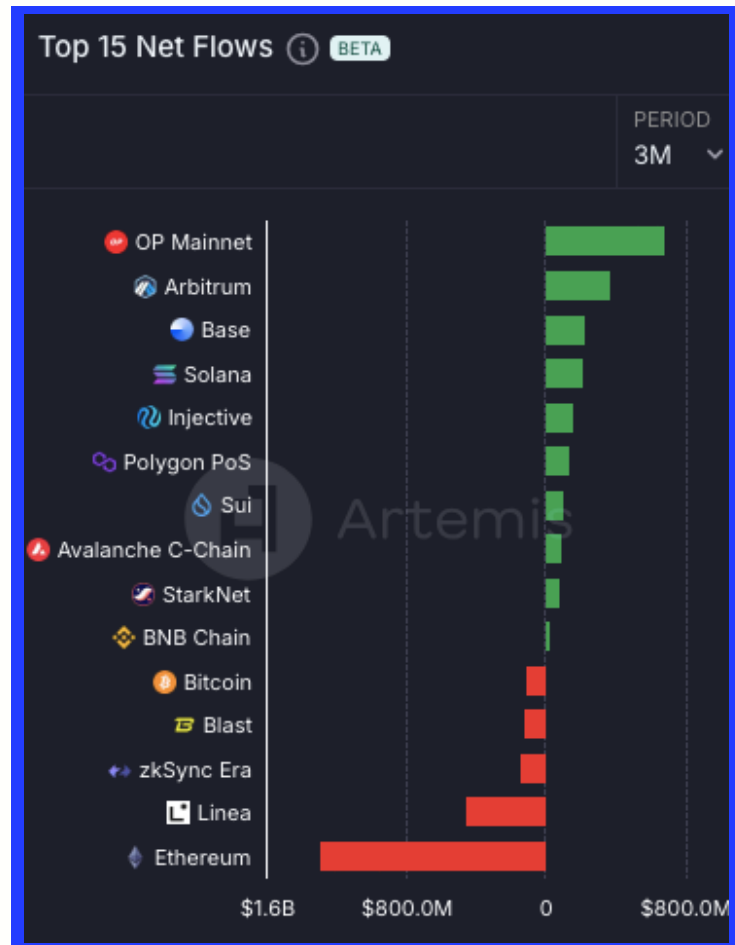
However, with tech innovation, new on-chain user growth in different ways. Decentralized social networks such as Farcaster, Lens, and Friend.tech experienced rapid growth in Q1 '24, showcasing a 425% surge in user activity. This trend underscores the potential of DeSocial.

Typical cases of growth are:

- **Farcaster:** Built on Optimism, with no reliance on centralized servers, Farcaster experienced a tenfold surge in DAA within a week after launching Frames in January.
- **Friend.Tech:** Built on Base, The native bonding curve system fosters a dynamic market where share prices fluctuate based on trading activity. Despite the subsequent growth failing to meet market expectations, it has nonetheless yielded valuable insights.
- **Telegram bots:** Telegram bots have effectively driven user adoption through the integration of a Dex-based trading feature within the Telegram, through interactions within Telegram conversations.

1.3 Observations on the public chains

The development of on-chain products cannot be separated from the performance of the chains itself. As the competition for L1/L2, The market is focusing on chains'capable of sustaining user growth. For example, ETH and EVM chains are eager to make a breakthrough in the mass adoption.



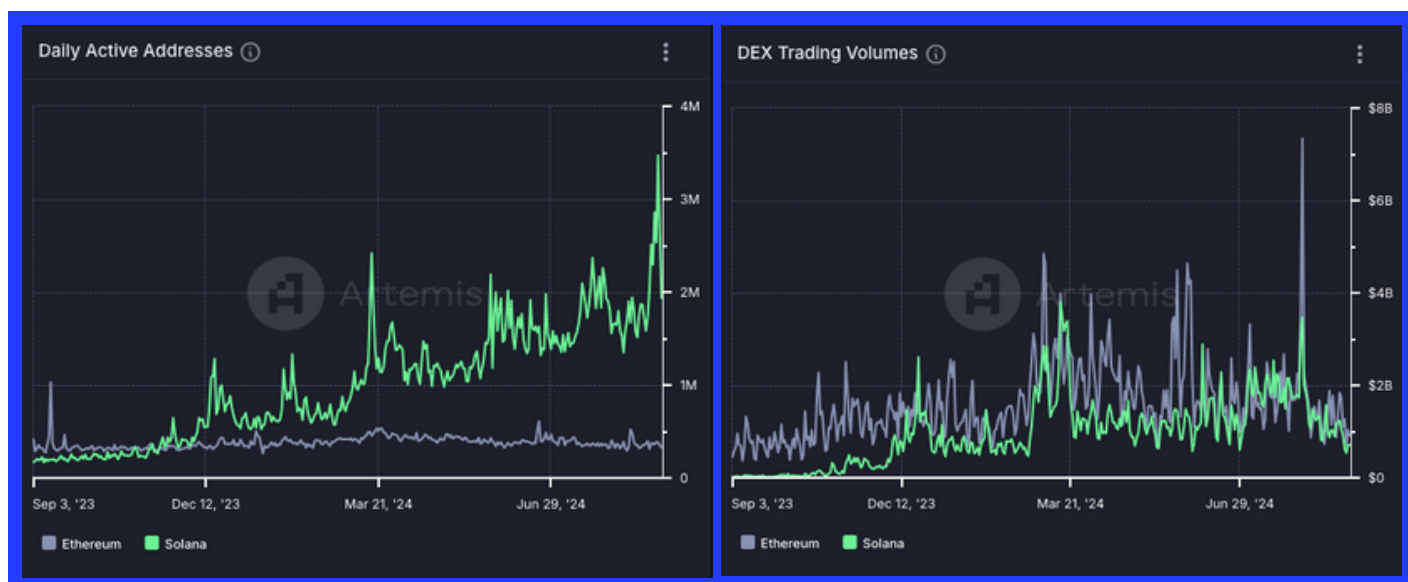
(Source: Artemis)

Referring to the Artemis, Solana and Base have a positive growth in terms of DAA growth and funds inflows.

Despite the on-chain data growth of the TON public chain not meeting initial expectations, its foundation on Telegram's sizable user base has garnered significant market attention towards its on-chain performance.

(1) SOLANA

The Memecoins transactions have been standout on Solana, with the majority of trading volume done through AMMs, bringing growth in the number of active user addresses and trading volume.



(Source: <https://defillama.com/yields/overview>)

Compared to other models, the AMM models can help projects in early stage to gain liquidity quickly, which is advantageous in supporting meme assets and long-tail assets.

In August, Solana's DEX daily trading volume declined overall, while the total DEX volume on the BSC chain showed an upward momentum.

Solana still need new use cases. In social sector: Blinks(Blockchain Links), converts Solana Actions into shareable, metadata-rich links, enabling users to initiate blockchain transactions directly from URLs.

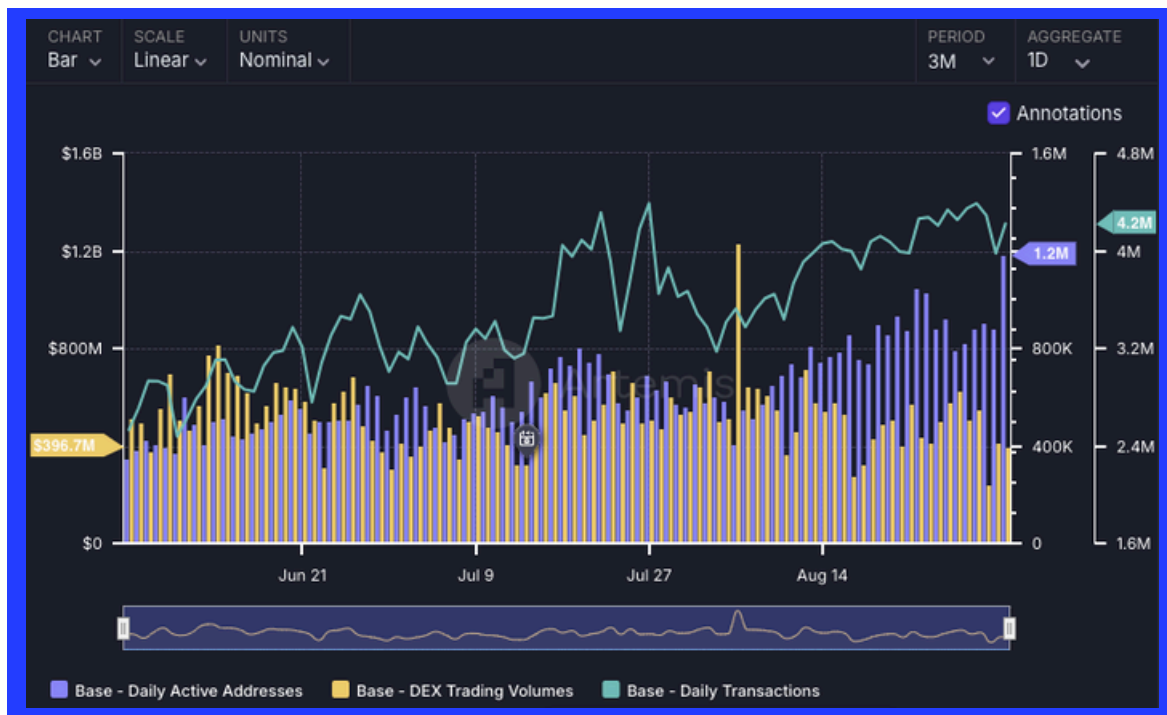
Blinks can be thought of as an encapsulation of transaction instructions. Translating on-chain actions into shareable links, seamlessly execute transactions directly on social platforms such as X. Also reducing the cutthroat feeling for users switching platforms, as well as lowering the threshold for blockchain interaction.

It can be used in scenarios such as spreading, transferring, betting, voting, rebates, donations, presale, and more. This may speed up memecoins' transaction efficiency and expand user base from social platforms.

The Solana ecosystem has significantly grown over the past year with more than 2.9 million daily active addresses, the highest level since mid-2021. Growth since the launch of Blinks in June is approximately 107%. Meanwhile, the total market cap of the stablecoins reached \$4 billion for the first time since November 2022.

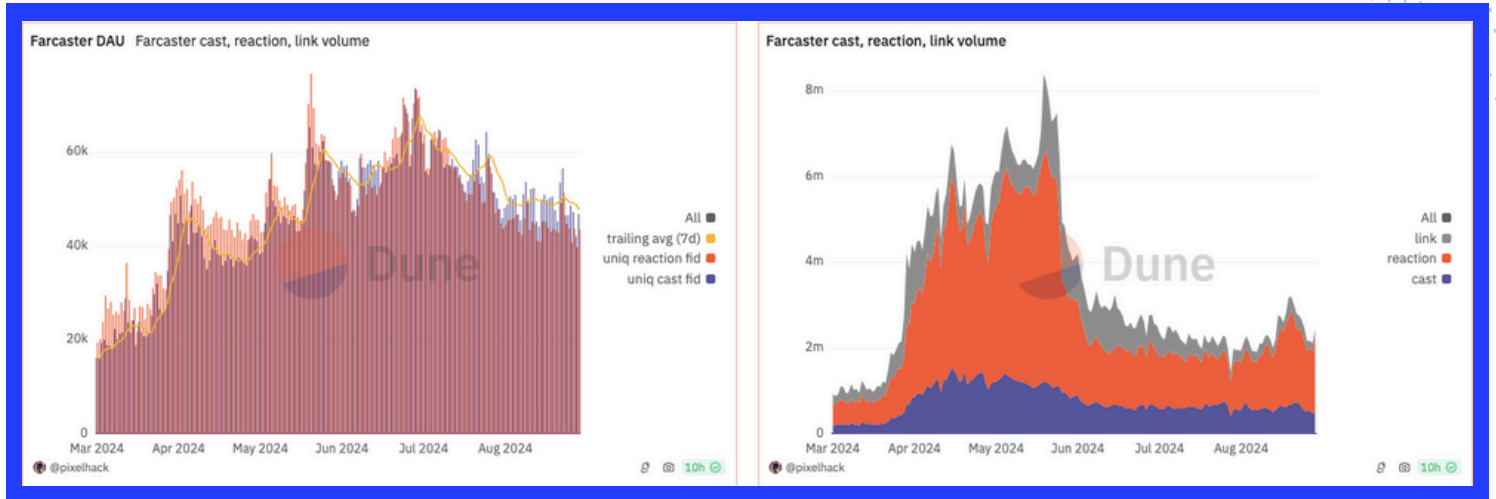
(2) BASE

In the current cycle, Base's significant growth came from the social sector and deep bonding with Farcaster, which contributed to most of Base's transaction volume. Base's significant growth came from the social sector and deep bonding with Farcaster, which contributed to most of Base's transaction volume.



(Source: <https://app.artemis.xyz/project/base?from=chains>)

Among Farcaster's early adopter , there was a high concentration of KOLs and developers from the Base eco. The representative meme, Degen, adopted a completely different product strategy than many memecoins on Solana: starting to release only small allocation and tying the airdrop deeper into platform, which more attuned to “social tokens”. This drove activity among Farcaster OGs, community participants, and developers.



(Source: <https://dune.com/pixelhack/farcaster>)

The current Base ecosystem is dominated by the Infras and app-layer. The Infras includes the tools of Farcaster and Friend.tech applications. Based on data, Base users are concentrated in Farcaster and Friend.tech. This unique community component enables the Base ecosystem's marketing strategy to directly target the Farcaster community.

According to DUNE, the Farcaster ecosystem currently has approximately 44,200 original creators and about 49,000 active users. Currently, the Base TVL is over \$1.494 billion, with 735,700 active addresses.

(3) TON

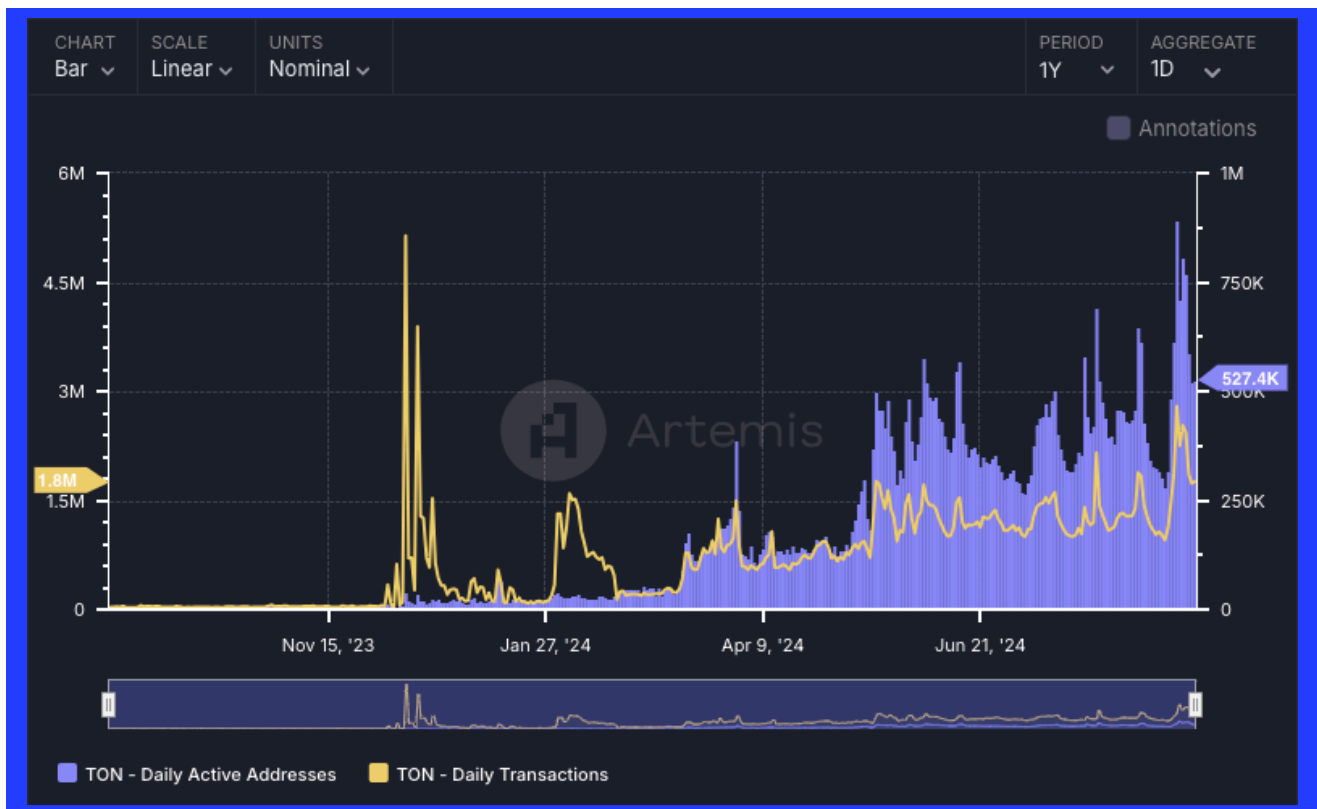
TON ecosystem is supported by Telegram and has a user base. As the market has shifted from competing for TVL to the attention economy, the expectation of attracting users to the on-chain market through MiniApps and mini-games is being amplified, even though it still faces issues of centralization and complexity.

In Q2 of 2024, Total Value Locked (TVL) on the Ton increased from \$100 million to \$700 million after the ecosystem support the native stablecoin, but then experienced a decline.



(Source: defillama)

Driven by the TON Foundation, its on-chain TVL has increased by over 20 times, peaking at over \$770 million but has now retreated to approximately \$350 million. When compared to public chains like Ethereum and Solana, TON still has ample room for advancement. Nonetheless, the market valuation of TON's chain is multi-dimensional and cannot be solely determined by TVL. In general, the quantity of DeFi protocols on TON is limited, yet the DeFi infrastructure is already available. Currently, the liquidity is concentrated on Liquid Staking (Tonstakers) and DEX (STON.fi, DeDust).



(Source: Artemis)

Based on the TON Foundation's roadmap and market expectations, the next goal for the TON chain's TVL is to surpass \$1 billion. The key is:

- Introduction of mainstream assets BTC and ETH
- More cross-chain bridge support for assets like ETH, BNB, and BTC
- More diversified liquid staking products
- Second layer Defi income agreement
- Memecoin Infrastructure

Based on this premise, the transition from Web2 to Web3 users can be effectively facilitated. DeFi products have a specific threshold, and new users from 'Tap to Earn' projects must undergo multiple adaptations before fully aligning with the on-chain market.

Compared with other PoS public chains, TON staking rate is still low, There is a high room for growth, which will require more time.

Based on TON's clear market strategy and strong distribution channels, the Telegram user pool, as the Total Addressable Market (TAM), is projected to have reached 950 million monthly active users as of July 2024. Furthermore, it is anticipated to expand to 1.5 billion within the upcoming five years.

The TON Foundation is strategically targeting to acquire 30% of TG's monthly active users within the upcoming 3-5 years, potentially reaching an estimated range of 285 million to 450 million on-chain users.

The adoption of DeFi by 10% of users is forecasted to encompass 28.5 to 45 million individuals, a figure significantly surpassing the current 3.5 million wallets by tenfold.

3. Onchain Market: Periodicity and the future

Between the end of 2023 and 2024, new asset issuance are driven by a combination of attention economy (Web2 social platforms) and DeFi.

For example, BTC Inscriptions driven by Fair launch and Meme cultural; Pump.fun driven by a combination of community livestreaming and Meme culture; TON eco adoption driven further by the combination of TG Bots and Meme culture; Solana ecosystem driven by Meme culture, attention economy.

Summarizing the cyclical and market, we will discuss the structural opportunities within the on-chain market.



1. Onchain Equivalent

A fully onchain equivalent will win the market when DEX liquidity is large enough. The current moat is CEX liquidity itself.

Case: Ethena is building derivative infrastructure to enable Ethereum to transform into the Global Internet Bond via delta-neutral positions on stETH, to create the first crypto-native, yield bearing stablecoin. It designed to provide a role similar to that of U.S. Treasuries in traditional financial markets.

2. On-chain Structured Products

- ① Leverage/Inverse
- ② Interest Rate Swap
- ③ DeFi asset management platform
- ④ Automated proprietary strategies

3. Aggregator

Attention is a limited resource in the present moment, and aggregators have the capability to draw increased focus towards the crypto market.

Currently, token liquidity is dispersed among various pools controlled by different protocols on different L1s or L2s, and the DEX Aggregator aims to consolidate the liquidity of the different pools. Once a critical mass of users is attained, platforms like 1inch, Cow Protocol, and others will enhance efficiency and expand their user base through the delivery of added value.

4. Onchain + Social


In reference to Facaster and Telegram bot, on-chain social has shown improved technological maturity.

Meanwhile, databases with social attributes are also worth tapping into, such as Dune Analytics, a data platform for the open web, and the Rootdata, a Web3 asset data platform.

5. MemeFi Market

As the services and infras grows, the next phase of Memecoins may require protocols to coordinate bottom-up communities. As the services and infras surrounding Memecoins grows, the next phase of Memecoins may require protocols to community participation and bottom-up governance.

Memecoins culture, like Solana, are already emerging. Memes encompass both financial and community aspects, deriving their value from consensus.



Expect a deeper integration of meme and social platforms. For instance, we're seeing early trends in TG bot trading that could pave the way for a new wave of specialized MemeFi services and marketplaces.

6. Onchainl + RWA

Centralized institutions are also experimenting with on-chain development, such as RWA.

For example, Robinhood has shown interest in on-chain markets, such as stablecoins and stock tokenization. If these platforms adopt Coinbase's experience and launch their own L2, they could open up a larger market for stock derivatives. Opening a larger perps market for equities could shed even more light on future iterations of on-chain markets.



Reference

Centralized Crypto Exchanges Losing Ground to DeFi in 2024: A Steady Shift in Trading Volume:

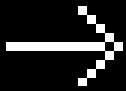
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Death, Taxes, and EVM Parallelization:

<https://paragraph.xyz/@reforge/evm-parallelization>



Thank you!

Thank you for taking the time to read this report. If you have any questions or would like to discuss our findings further, please don't hesitate to reach out to us.



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