

# Q3 State of Crypto: Market Pulse

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October 2023

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# Key Takeaways

Market Pulse is a compilation of key charts and insights by Binance Research, shedding light on the state of crypto.



## Overview

Q3 was a challenging quarter. Total crypto market capitalization declined by 8.6% QoQ amidst a challenging market environment. Nonetheless, institutional adoption continued to gain traction.



## Layer 1s & 2s

Activity on L1s has generally fallen across the board. Ethereum L2s have seen signs of rejuvenation with the launch of Base driving transaction activity.



## DeFi

Total value locked (“TVL”) in DeFi declined 13.1% QoQ to US\$38.5B, contributed by low DeFi yields, a risk-off environment, and a decline in ETH price.



## NFTs

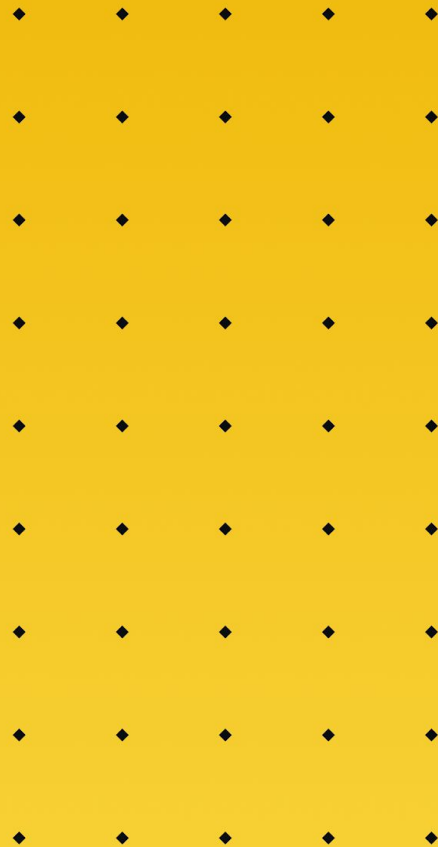
Q3 marked the worst quarter for NFT sales in nearly three years, at US\$299M in sales. This can be attributed to a decline in floor prices of most collections and the price of ETH.



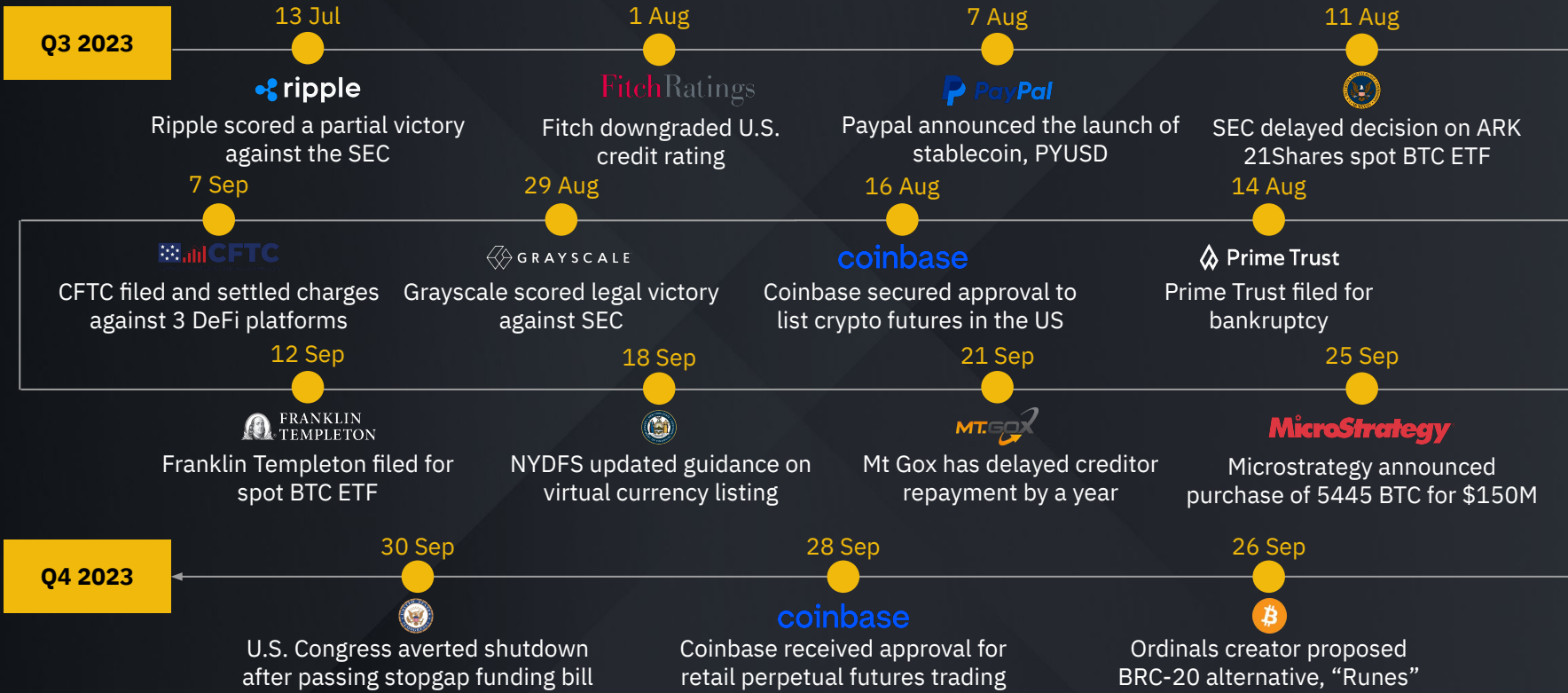
## Gaming

The gaming landscape was led by BNB Chain, Ethereum, and Polygon, with around 66% market share (by number of games).

# Market Overview



# Notable Events in Q3



# Crypto Market Overview

## Market capitalization decreased in Q3

Global Crypto Market Capitalization



### Decline of -8.6% QoQ

- With the 'higher for longer' interest rate rhetoric set to persist, overall crypto market capitalization has declined by 8.6% in Q3. This is despite the brief rally that we saw following legal victories by Ripple and Grayscale.
- In Q3, institutional adoption continued gaining steam even in the face of declining prices, with major companies like Deutsche Bank, Sony, Grab, and PayPal announcing their involvement in web3 initiatives.

# Performance of Largest Coins by Market Cap

The top 3 coins held their spot in 2021, 2022 and YTD

Price Performance of the Top 10 Coins

	2017	2018	2019	2020	2021	2022	2023 YTD
Decreasing Market Cap ↓	Bitcoin 1317.08%	Bitcoin -72.39%	Bitcoin 92.48%	Bitcoin 308.91%	Bitcoin 59.70%	Bitcoin -64.42%	Bitcoin 63.05%
	XRP 34096.50%	XRP -84.11%	Ethereum -2.99%	Ethereum 478.27%	Ethereum 397.84%	Ethereum -68.17%	Ethereum 39.90%
	Ethereum 8762.26%	Ethereum -81.94%	XRP -45.46%	XRP 24.75%	BNB 1258.62%	BNB -54.25%	BNB -12.77%
	Bitcoin Cash 451.97%	Bitcoin Cash -93.21%	Bitcoin Cash 26.19%	Litecoin 217.78%	Solana 10682.40%	XRP -59.68%	XRP 52.02%
	Cardano 3400%	EOS -66.60%	Litecoin 37.44%	Polkadot 188.93%	Cardano 620.39%	Dogecoin -56.45%	Cardano 3.37%
	Litecoin 5019.14%	Stellar -73.92%	EOS 1.34%	Bitcoin Cash 73.63%	XRP 251.18%	Cardano -81.21%	Solana 113.73%
	IOTA 867.48%	Litecoin -86.39%	BNB 130.73%	Cardano 452.21%	Terra Classic 13310.47%	Polygon -68.92%	Dogecoin -11.47%
	NEM 29070.31%	Bitcoin SV 5.84%	Bitcoin SV 9.60%	BNB 180.23%	Avalanche 3408.97%	Polkadot -84.90%	Tron 62.74%
	Dash 9377.84%	Tron -57.00%	Tezos 194.10%	Chainlink 542.13%	Polkadot 197.82%	Tron -29.53%	Ton -3.11%
	Stellar 17666.95%	Cardano -94.15%	Stellar -60.09%	Bitcoin SV 72.34%	Dogecoin 3389.64%	Litecoin -54.24%	Polkadot -4.60%



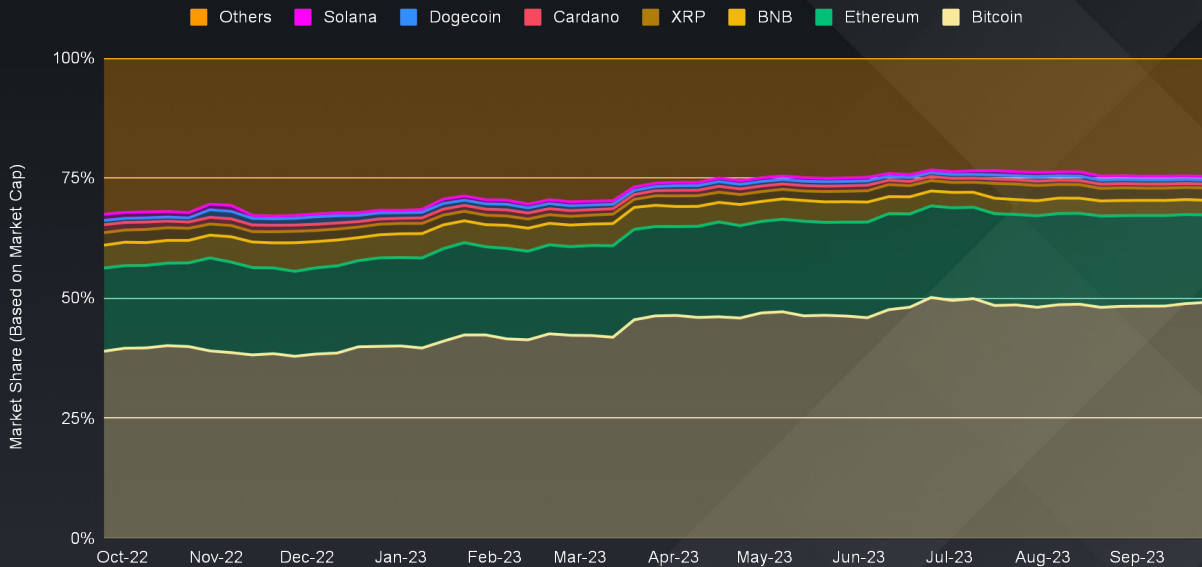
## BTC leads in gains YTD

- Amidst a wave of spot BTC ETF filings from TradFi players, BTC has surged 63.1% YTD.
- Other tokens such as XRP and SOL have also recorded notable gains, supported by XRP's legal victories, and Solana's partnerships with Visa and Shopify.
- TON is a notable entrant into the leadership board after staging a strong rally due to news of Telegram's TON wallet integration.

# Market Share of Coins

## Slight decrease in BTC dominance

Market Share of Coins



### -1.5% QoQ for BTC

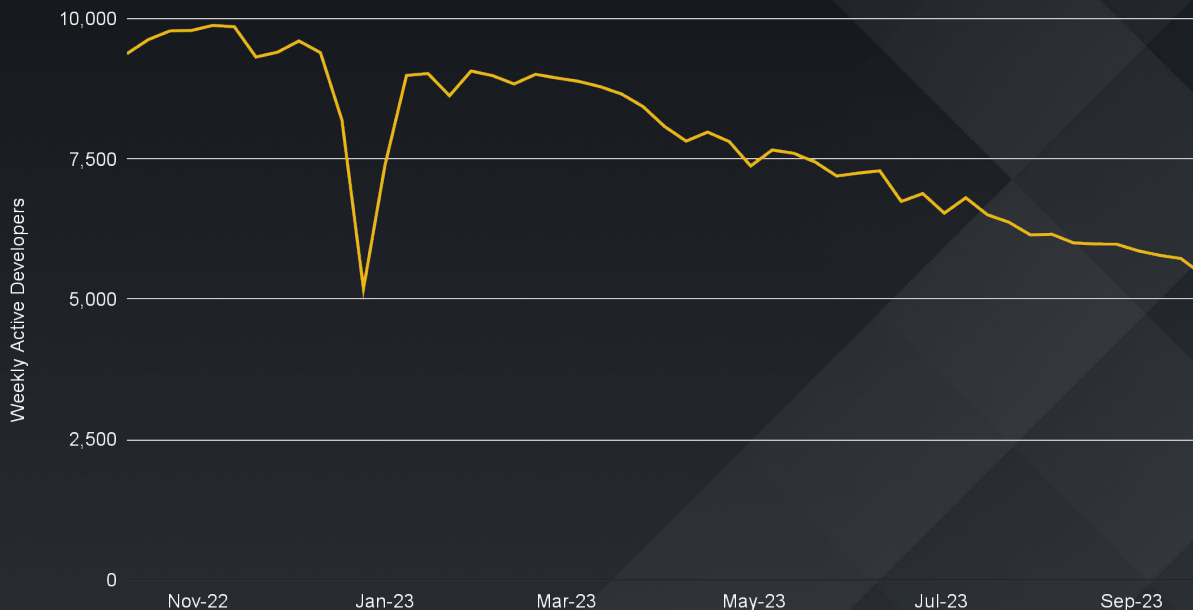
- While BTC dominance has dipped slightly from Q2, the metric remains high with investors eyeing the 2024 halving and tracking the spot BTC ETF applications.
- Historically, after every BTC halving, BTC market dominance had declined over the next 6 to 12 months, while altcoins gained notable market share.



# Developer Activity

Overall **decline** QoQ, but with pockets of growth

Weekly Active Developers



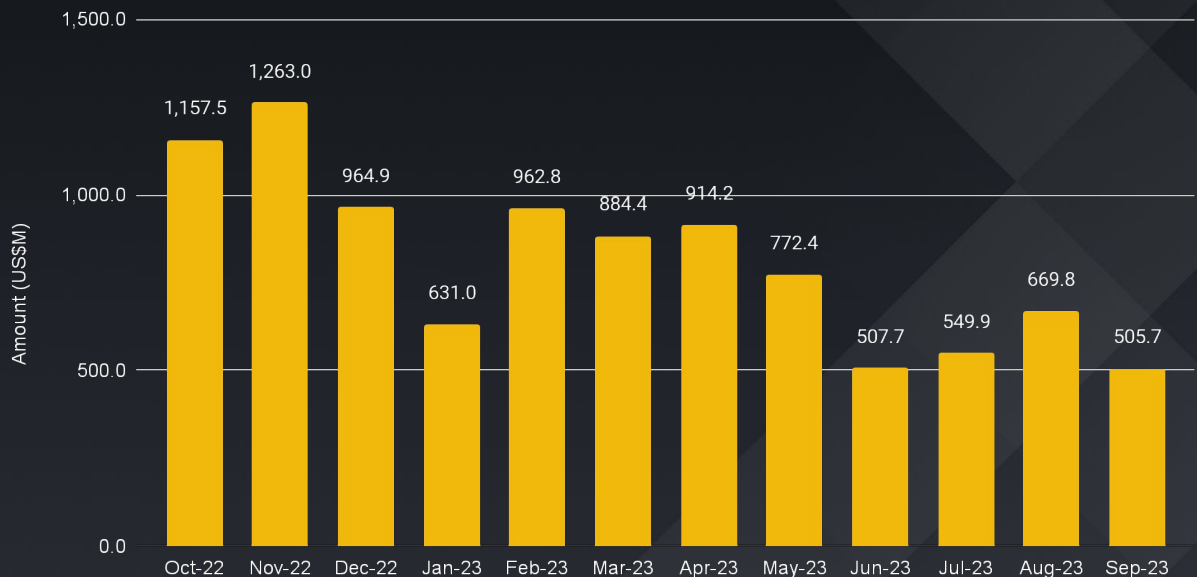
## 2nd consecutive quarterly decline in developer activity

- Weekly active developer count has been steadily decreasing.
- However, certain projects still continue to draw developers, with Chainlink, Taiko and Zora seeing QoQ increases of 363%, 200%, and 100% in weekly active developers respectively, highlighting continued innovations in infrastructure and L2s.

# Crypto Fundraising

Amount of funds raised hits a new low

Monthly Fundraising



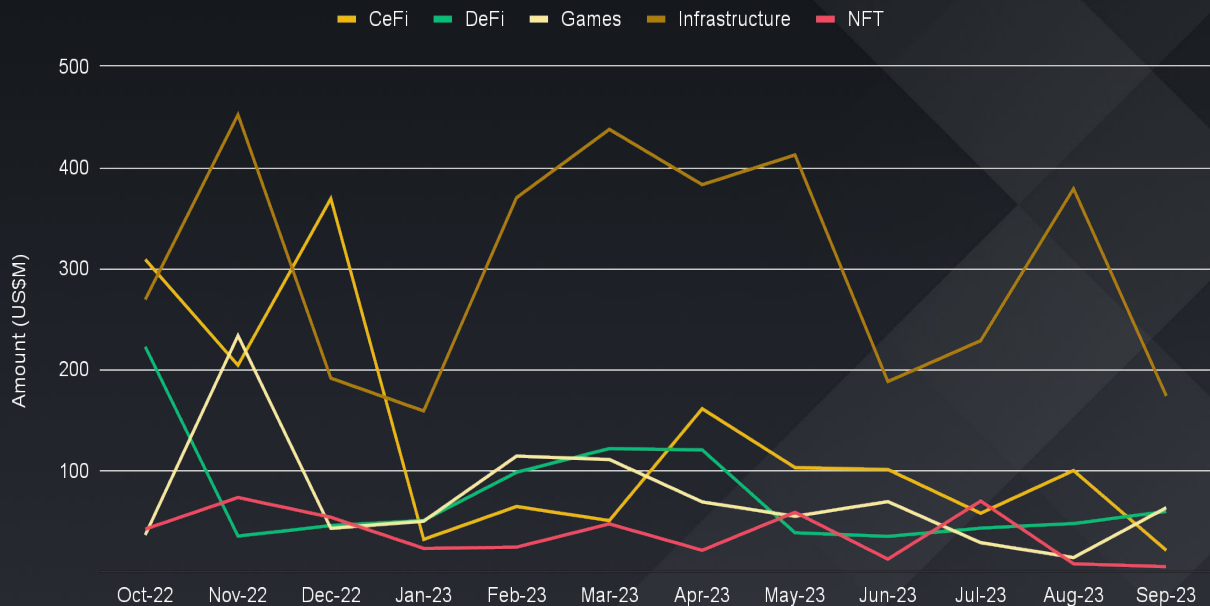
## A tough quarter for fundraising

- Fundraising activity decreased further in Q3, recording the lowest amount raised since Q4 2020. The overall decline in fundraising activity is a reflection of the challenging market environment.
- Fundraising rounds and total funds raised have declined 24.9% and 21.4%, respectively, in Q3.

# Crypto Fundraising by Sectors

## Infrastructure is a bright spot

Funds Raised by Sectors



### Infrastructure held the top spot in Q3 again

- Infrastructure has raised the most funds YTD compared to its peers. Notable deals include Flashbots' US\$60M Series B fundraising and Bitmain's US\$54M strategic investment in Core Scientific.
- Gaming and Metaverse also saw strong interests with Futureverse clinching US\$54M in funding to develop AI-centric consumer games. Animoca Brands also recently raised US\$20M for its Mocaverse project.

# Crypto Fear & Greed Index

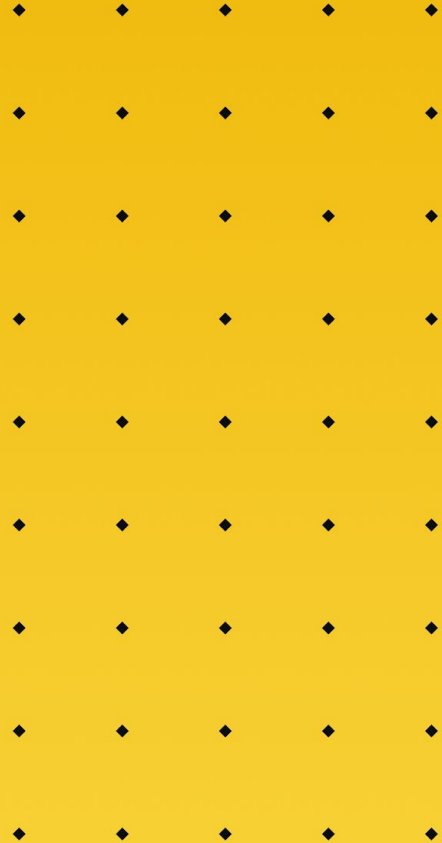
The index **fell**, dipping below 50



## -9 points in Q3

- Following a positive Q2 and a strong start to Q3, the index took a dip in August as crypto prices experienced a sudden pullback and traders suffered over US\$1B of losses in liquidation within 24 hours.
- On a more positive note, sentiment has improved over the past month, with the fear and greed index increasing steadily.

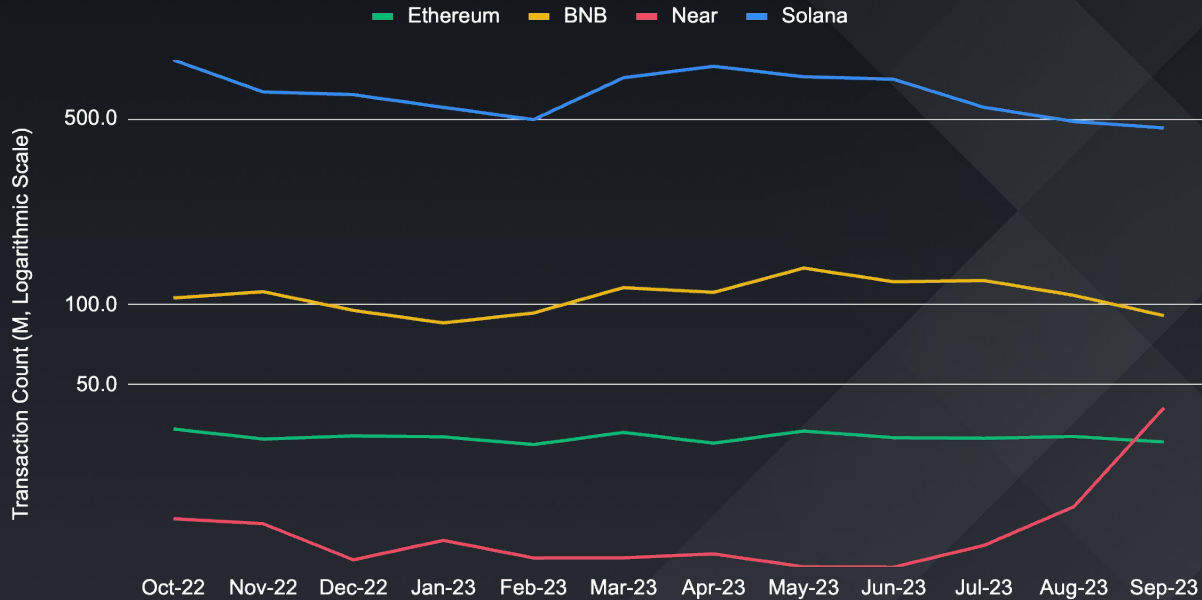
# Layer 1s



# Monthly Transactions by Chain

## NEAR gained steam in Q3

Number of Transactions (Monthly)



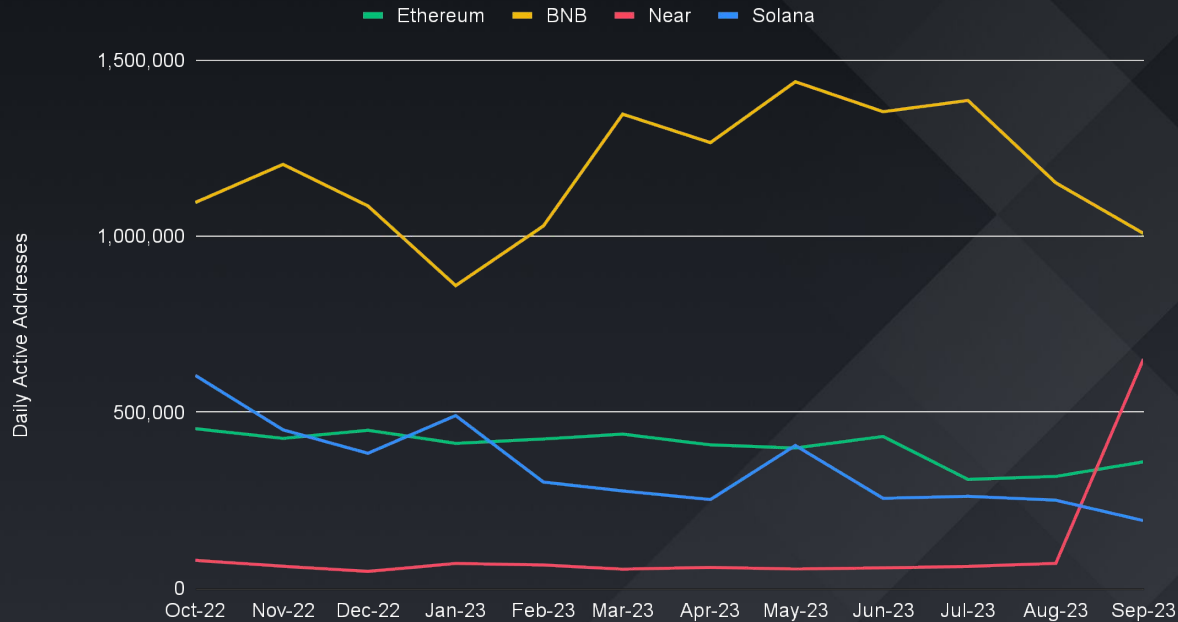
**NEAR recorded ~120% QoQ growth in average monthly transactions.**

- Blockchain activity generally declined across the board in Q3 with a fall in the number of transactions across most blockchains.
- Notwithstanding that NEAR is starting from a low base, it has witnessed increasing usage driven by top-down partnerships and grassroots initiatives.

# Average Daily Active Addresses by Chain

Active addresses have generally declined

Average Daily Active Addresses



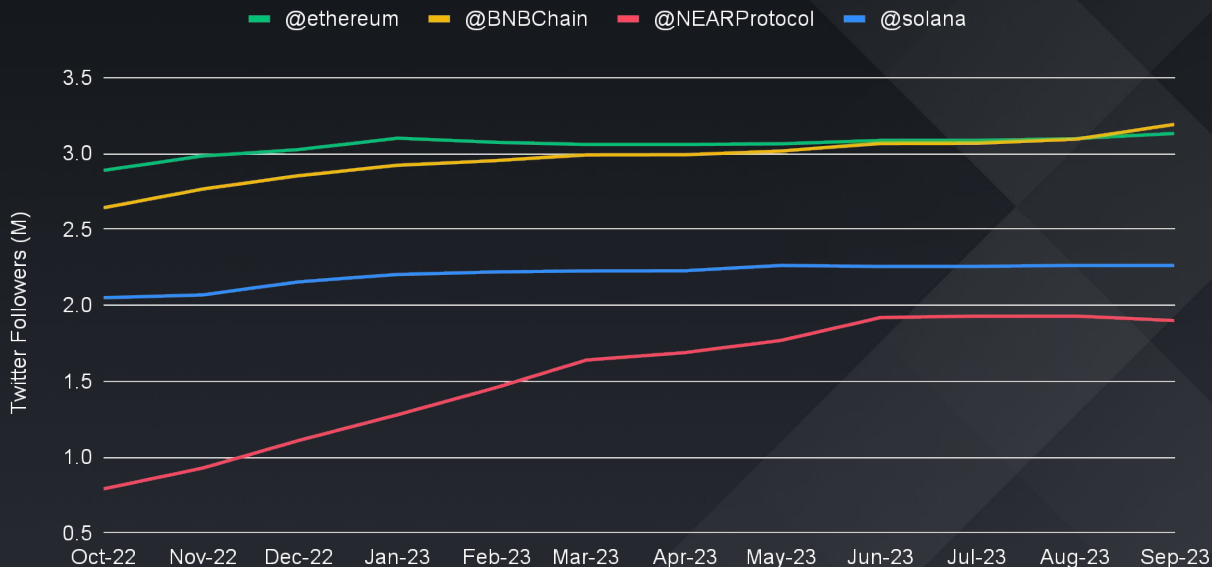
## Only NEAR recorded a QoQ increase

- While other protocols experienced a decline in daily active addresses, NEAR has bucked the trend with average daily active addresses at more than 650,000, surpassing that of Ethereum and Solana in September.
- NEAR's growth was driven by the launch of native USDC on NEAR, and the NEAR-powered KaiKai, a retail shopping app, being the #1 dApp in terms of daily active wallets.

# Twitter Followers

## BNB Chain takes the top spot as the most followed chain

Cumulative Twitter Followers by Official Blockchain Accounts



### @BNBChain leads, overtaking @ethereum

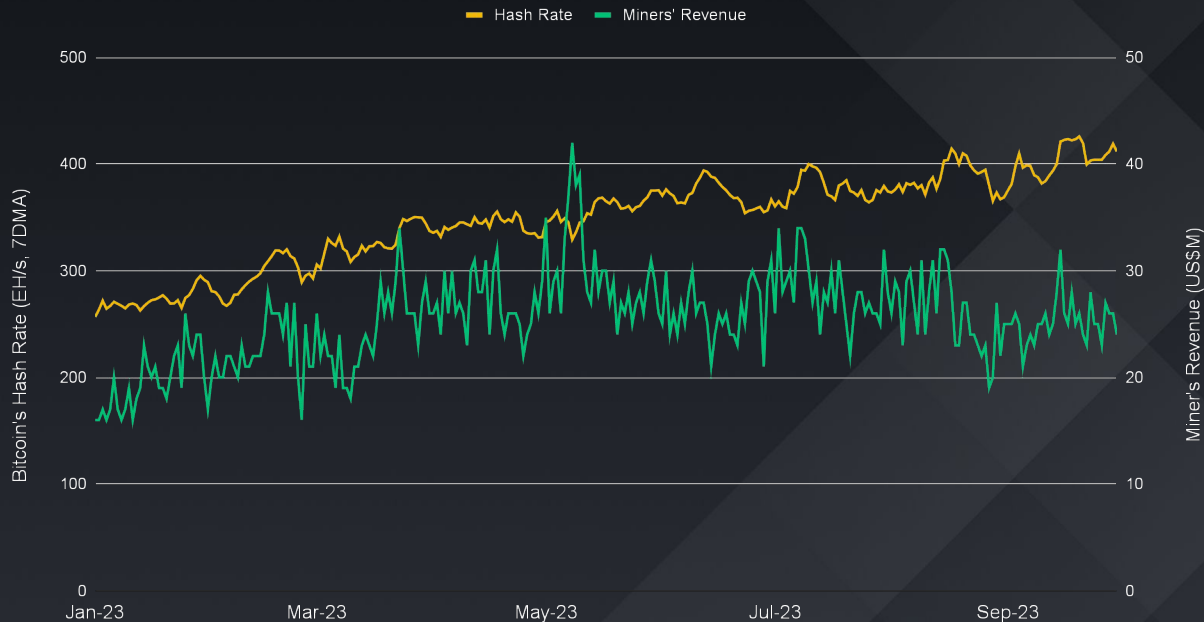
- With @BNBChain now having more than 3.2M followers, it has overtaken @ethereum that has around 3.1M followers.



# BTC: Hash Rate vs Miners' Revenue

## Miners' revenue has been range-bound

Hash Rate vs Miners' Revenue YTD



## Hash rate recorded a new peak

- Hash rate is a measurement of the difficulty of mining a bitcoin.
- Even while hash rate has reached an all time high, miners' revenue has remained range-bound, posing a challenge for miners to maintain profitability.

# BTC: Grayscale Bitcoin Trust (“GBTC”) Premium

The GBTC discount **improved** over Q2

Grayscale BTC Premium Rate (%)



## Discount to NAV:

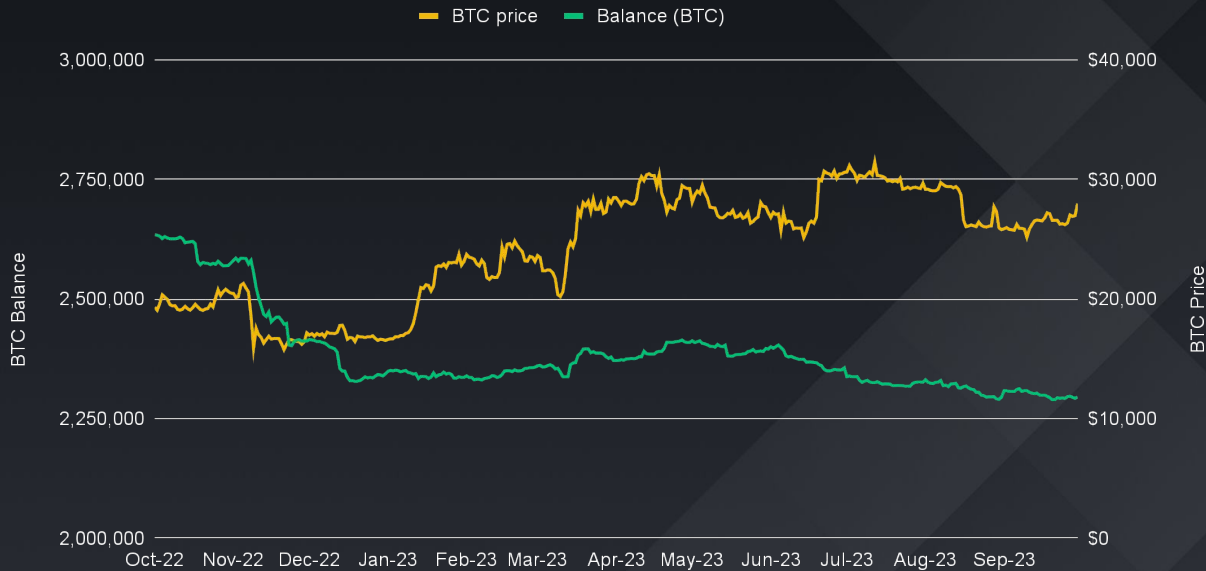
- ◆ End of Q1-23: **-36.7%**
- ◆ End of Q2-23: **-30.2%**
- ◆ End of Q3-23: **-20.7%**

- The GBTC discount has narrowed to its lowest level this year, propelled by Grayscale’s victory against the SEC in a recent ETF-related ruling.
- Additionally, the flurry of spot BTC ETF filings from the likes of Blackrock, WisdomTree, Franklin Templeton has also fuelled demand for the asset.

# BTC: Bitcoin Balance on Exchanges vs. Price

## Price and balance both decreased in Q3

BTC Balances on Exchanges vs. BTC Price



## A short-lived rally for Bitcoin

- Despite Grayscale's legal victory, Bitcoin failed to sustain its rally and ended the quarter in the red. A challenging macroeconomic environment continues to weigh on investors' minds.
- However, BTC balances on exchanges have fallen slightly QoQ. This is generally seen as a positive indicator that investors are storing assets in self-custody for the long-term.

# ETH: Average Transaction Fees

Average Ethereum fees **declined** through Q3

Ethereum Transaction Fees



## Average fee/transaction:

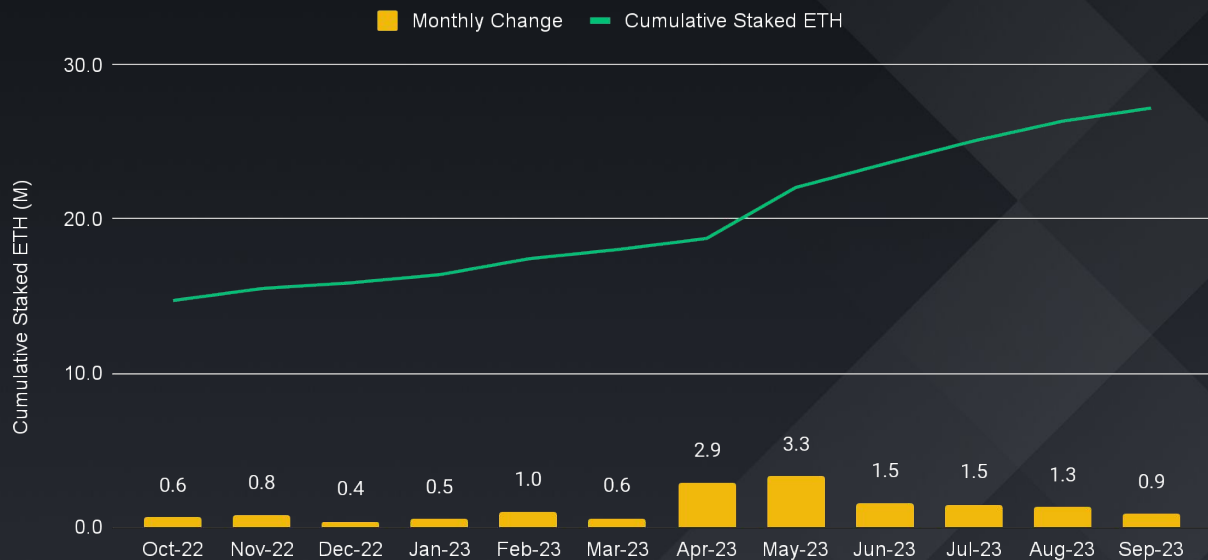
- ◆ Q1-23: **US\$4.8**
- ◆ Q2-23: **US\$8.8**
- ◆ Q3-23: **US\$4.8**

- Average transaction fees in Q3 have been on a decline, falling back to the lows seen in Q1.
- This is likely contributed by increased activity on layer 2s which has taken some load off Ethereum. Moving forward, the upcoming Dencun upgrade will also contribute to lower fees.

# ETH: Staked ETH Statistics

~22% of all ETH in circulation has been staked

Amount of Staked ETH



## >27M ETH staked

- Amount of ETH staked continued to increase in Q3, as holders look to receive staking yields.
- We have also witnessed the growth of liquid staking and LSTfi protocols which offer opportunities for participants to generate additional yield while securing the network.

# BNB Chain: Average Transaction Fees

Users paid an average of \$0.09 for transaction fees in Q3

BNB Chain Transaction Fees



## Average fee/transaction:

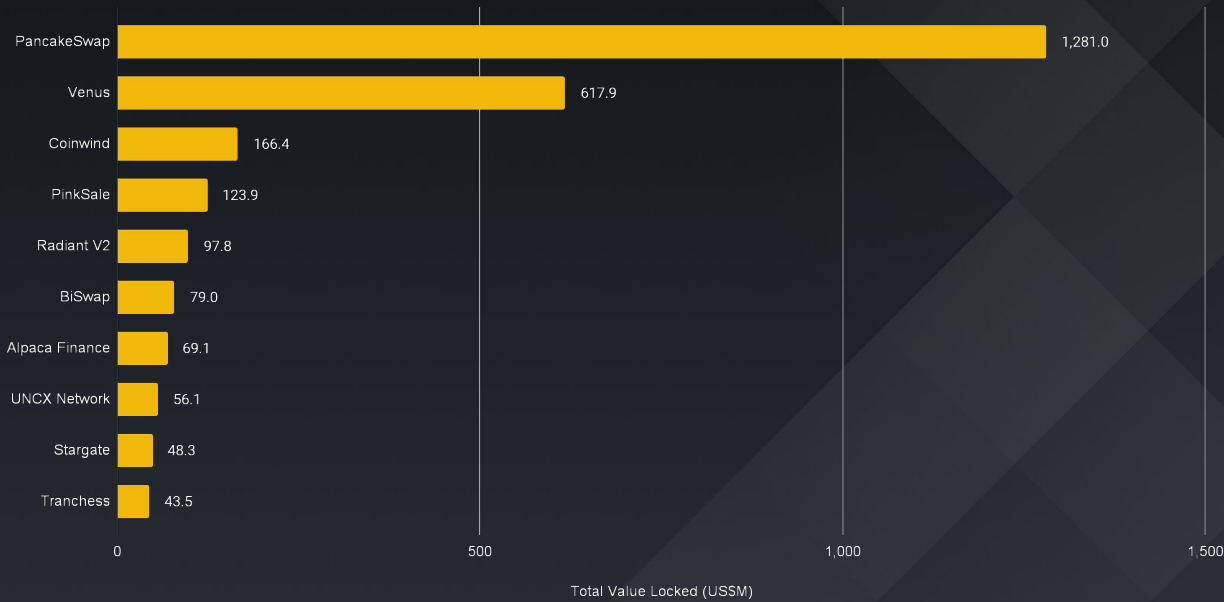
- ◆ Q1-23: **US\$0.19**
- ◆ Q2-23: **US\$0.14**
- ◆ Q3-23: **US\$0.09**

- Despite a relatively flat change in average monthly users, average monthly transaction count has declined by about 13% QoQ, contributing to a decrease in average transaction fees.
- Q3 also saw the launch of opBNB, a layer 2 on BNB Chain built with the OP Stack. Users are able to enjoy even lower fees and higher throughput on the opBNB network.

# BNB Chain: Top dApps by TVL

DEXes and lending remained the largest verticals

Top 10 dApps on BNB Chain (by TVL)



## PancakeSwap remained the dominant dApp

- PancakeSwap continues to lead as the top DeFi dApp on BNB Chain with over US\$1.2B in TVL.
- Tranchess, a yield enhancing asset tracker protocol, is a new entrant to the leadership board, with over US\$43M in TVL.

# Layer 2s

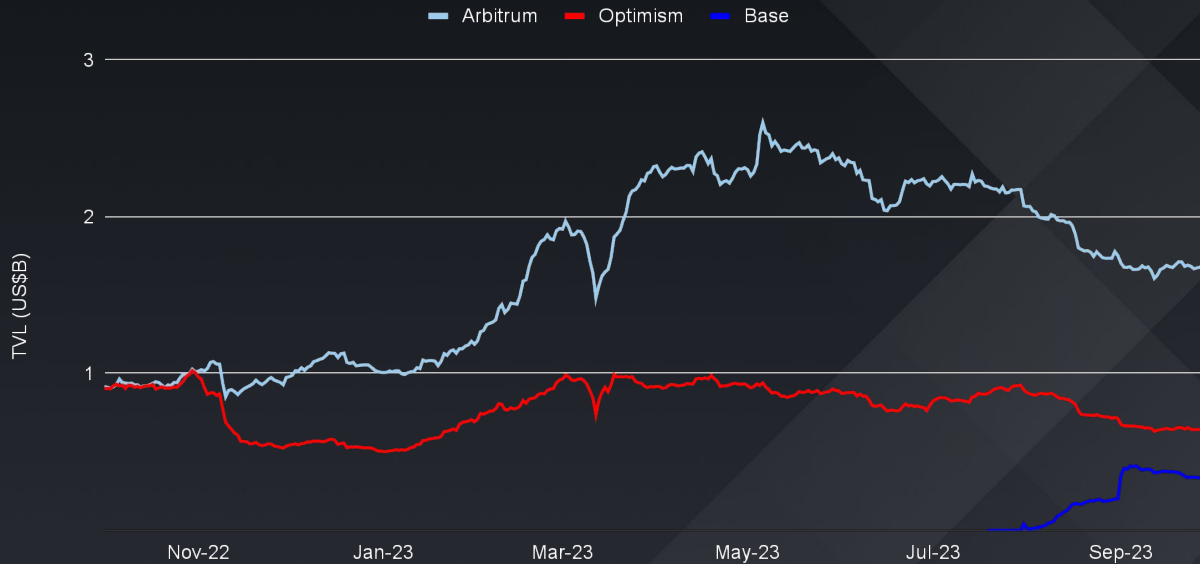




# Total Value Locked in Top L2s

Arbitrum, Optimism and Base are the top L2s

Total Value Locked (US\$B)



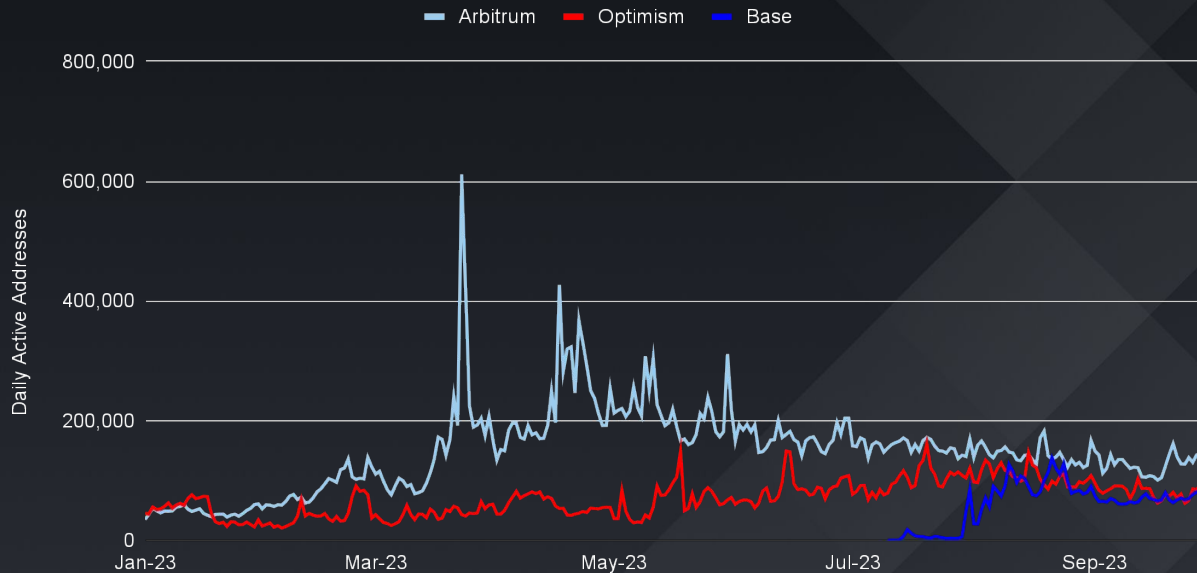
## Base rose through the ranks in Q3

- Activity on Base has surged since its launch in August, driven by a successful marketing campaign, memecoin trading and the popularity of friend.tech.
- On the other hand, Arbitrum and Optimism have both seen a decline in TVL in Q3. It remains to be seen if Arbitrum's reboot of its seven-weeks Odyssey program and Optimism's recent airdrop will reignite activity on the chains.

# Daily Active Addresses of the Top L2s

## Arbitrum remains the top L2 network

Daily Active Addresses of the Top L2s



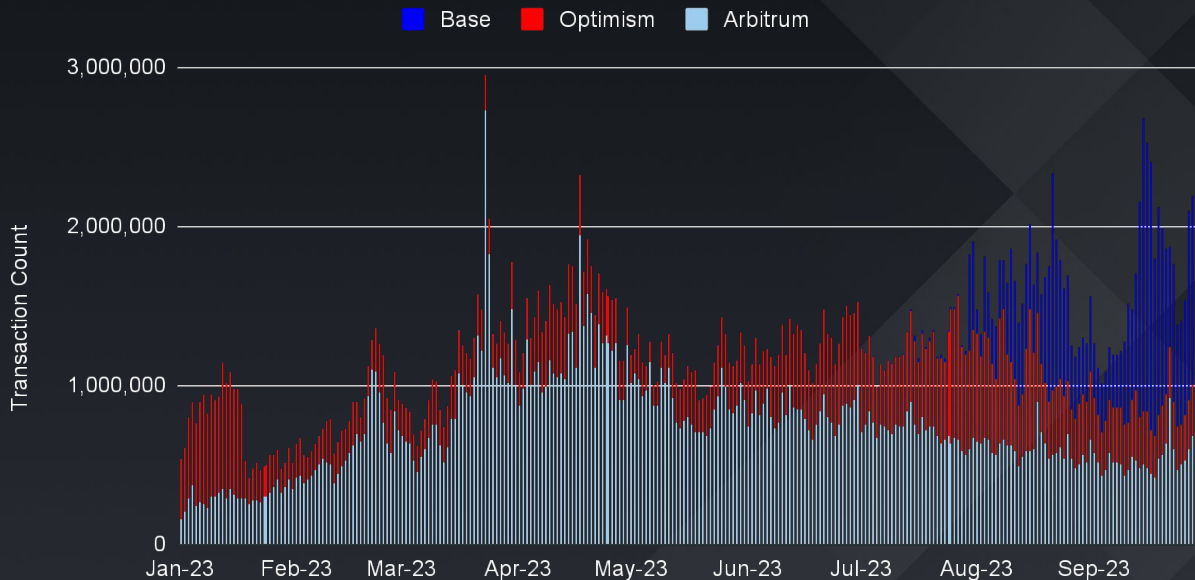
### Arbitrum has the highest number of active addresses

- Although activity on Arbitrum has fallen from its YTD peak, it is still the most popular L2 chain with 2x more transacting addresses than Base, and 55% more than Optimism.
- Base has emerged as a strong contender. Since Base's launch, MAU on Arbitrum has declined ~30% QoQ. Base has also exceeded the daily active addresses on Optimism on several occasions.

# Daily Transaction Count

Transaction activity on Base is notable

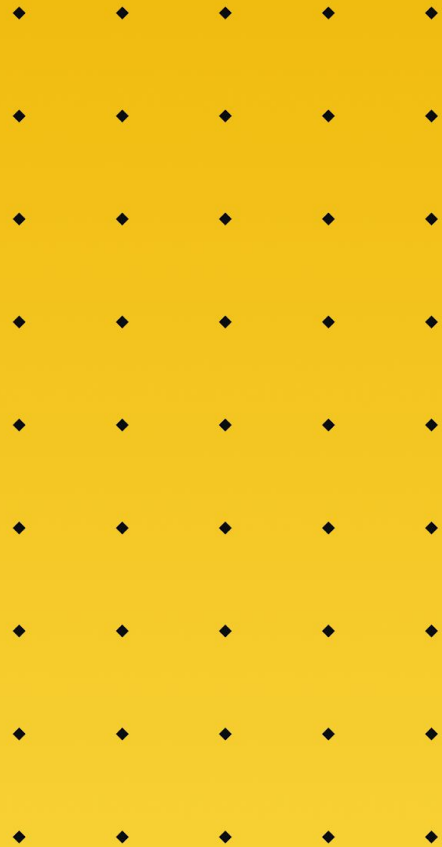
Daily Transaction Count of the Top L2s



**Base witnessed a peak of >1.8M in daily transactions**

- Despite being a new L2, activity on Base has been strong, driven by the rise of dApps such as Friend.tech and Aerodrome.
- In September, Base saw daily transactions surpassing the combined transactions on Arbitrum and Optimism for almost  $\frac{1}{3}$  of the month.

# DeFi



# DeFi TVL

## DeFi TVL fell in Q3

DeFi TVL (US\$B)



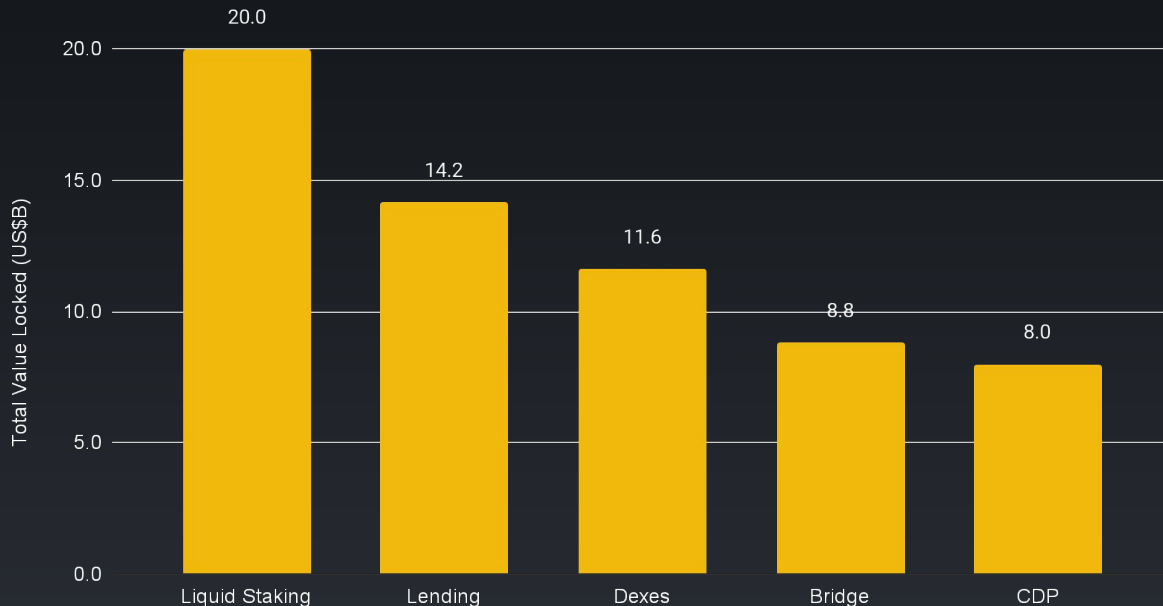
### - 13.1% decline QoQ

- Assets within the DeFi ecosystem continued to dwindle in Q3. A risk-off environment, coupled with low DeFi yields relative to TradFi have contributed to a decline in DeFi TVL.
- Nonetheless, we continue to see healthy developments within DeFi, such as the growth of real-world assets which has contributed to higher yields in some areas.

# Top 5 DeFi Sectors

## Lending protocols overtook DEXes in Q3

TVL Of The Top 5 DeFi sectors



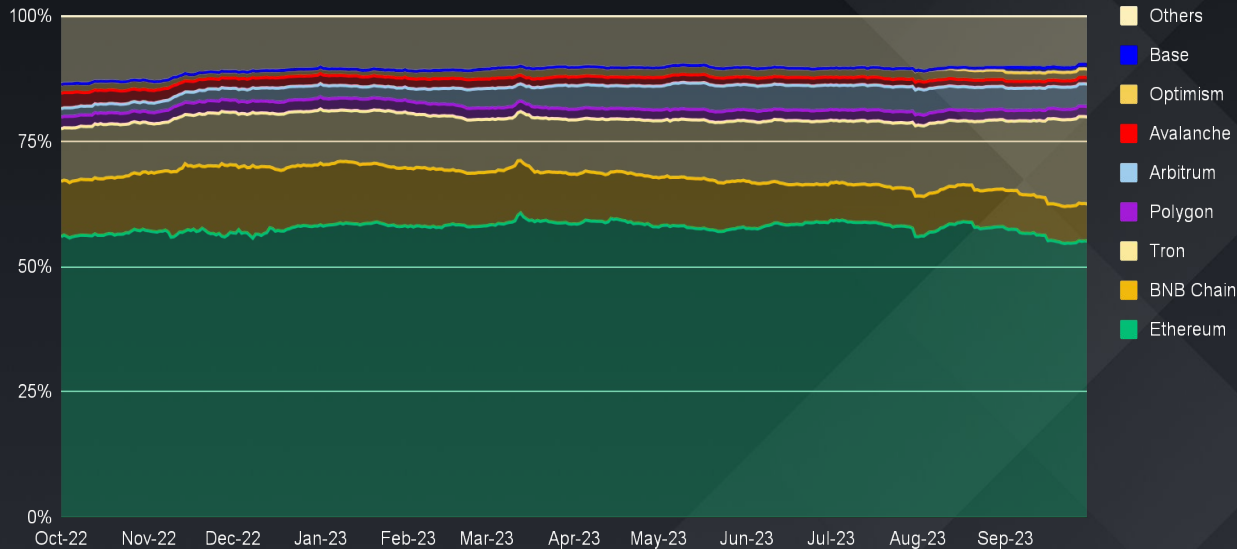
### Liquid staking remains #1

- Liquid staking remains the dominant sector and continued gaining steam with a QoQ growth of 10.5%. However, there has been increasing centralization concerns as Lido approaches the 33% threshold of total ETH staked.
- Lending has overtaken DEXes for the second spot in Q3 with a QoQ growth of 1.3%. Concurrently, DEXes saw a QoQ decline of 24.6% driven by a sharp fall in TVL attributed to Velodrome and Balancer.

# TVL by Blockchain

Tron showed notable growth in Q3

DeFi TVL Market Share by Chain



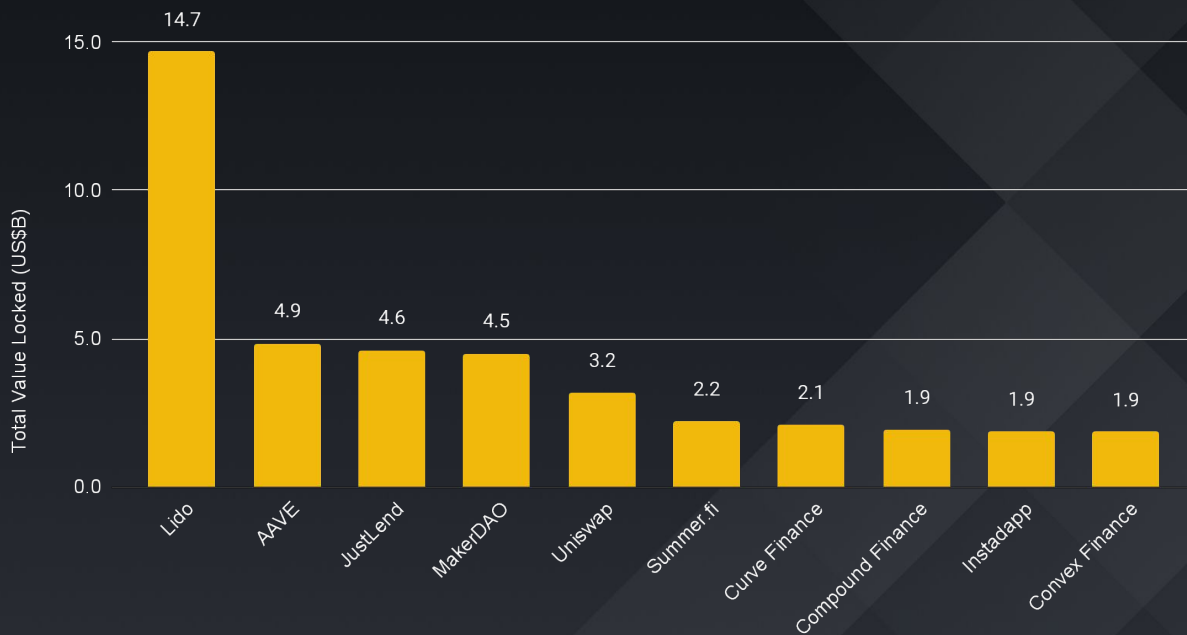
## Tron in the spotlight

- Tron saw notable gains during the quarter as its DeFi TVL share rose from 12.8% in Q2 to 17.4% in Q3. This was contributed by increases in TVL of several top dApps on the network, driving an overall TVL growth of 17.9% QoQ.
- Ethereum remained the leader in terms of DeFi TVL with 55.1% market share, but witnessed a double-digit QoQ decline of 18.6% in terms of TVL.

# Top DeFi dApps by TVL

## Lido extended its lead over other DeFi dApps

Top 10 DeFi dApps



### Lido consolidated its lead

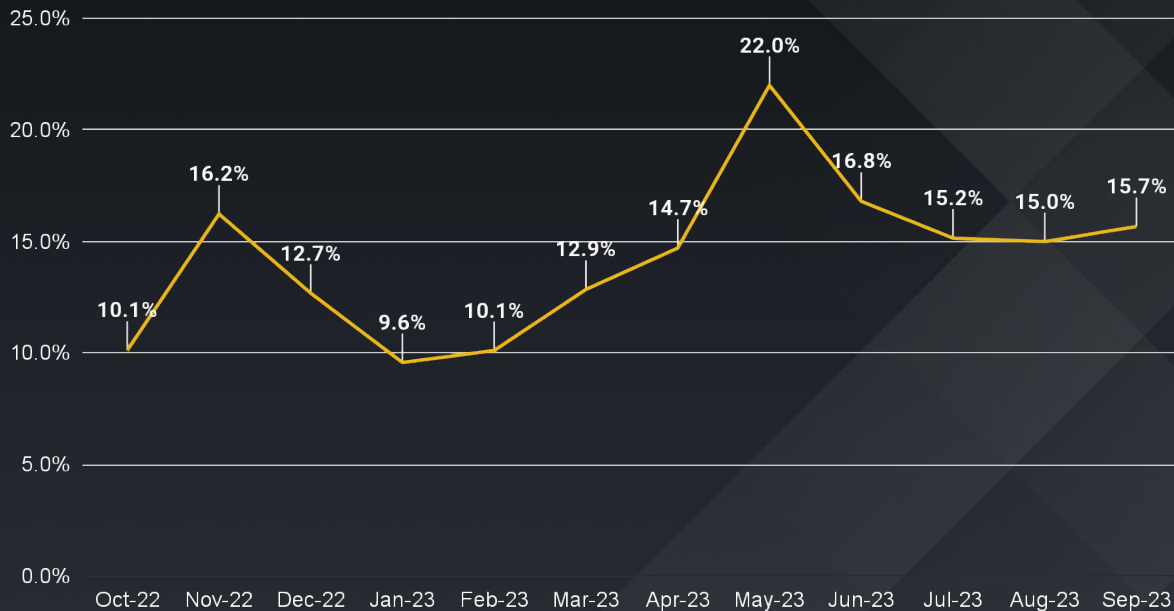
- Lido has been a beneficiary of liquid staking growth on Ethereum, contributing to its dominance in the space.
- Growth in JustLend has been rapid with TVL increasing 20.2% QoQ. However, utilization (total borrowed/total supply) of the protocol is very low at less than 2% as compared to Aave V3 on Ethereum at more than 35%.
- Curve has declined significantly in rankings following a US\$61M hack. Curve TVL ended the quarter with a QoQ decline of around 46.2%.



# DEX/CEX Trading Volume

The DEX/CEX ratio was slightly **lower** at the end of Q3

DEX to CEX Ratio (%)



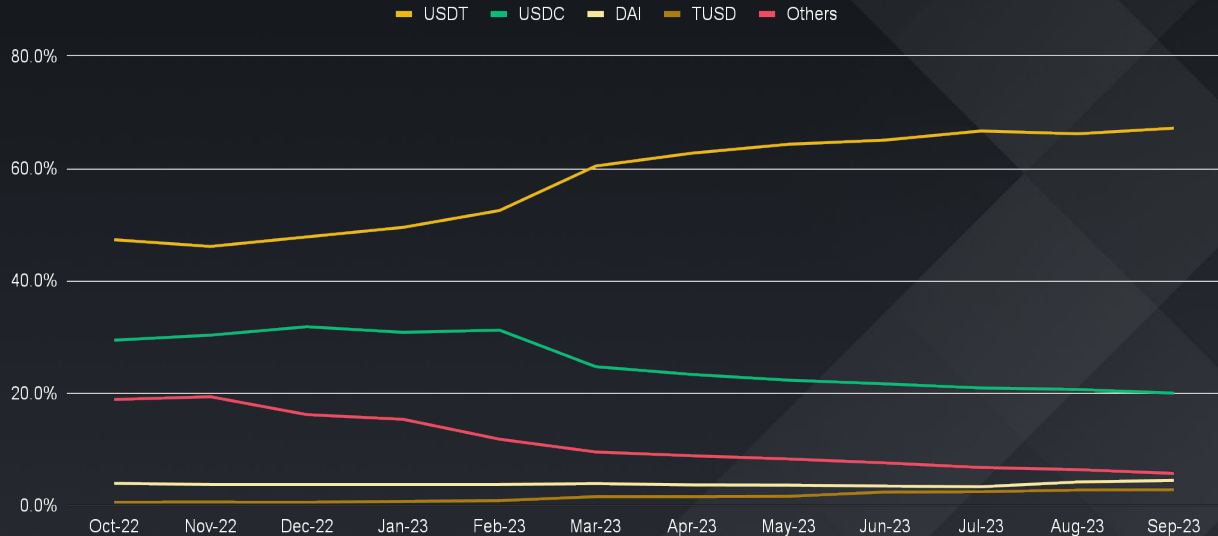
**-1.1% (absolute) in Q3**

- In the absence of a catalyst, the DEX/CEX ratio remained relatively stable throughout Q3, hovering around the 15% range.

# Stablecoin Market Share

## USDT continues gaining ground

Stablecoin Market Share (By Market Cap)



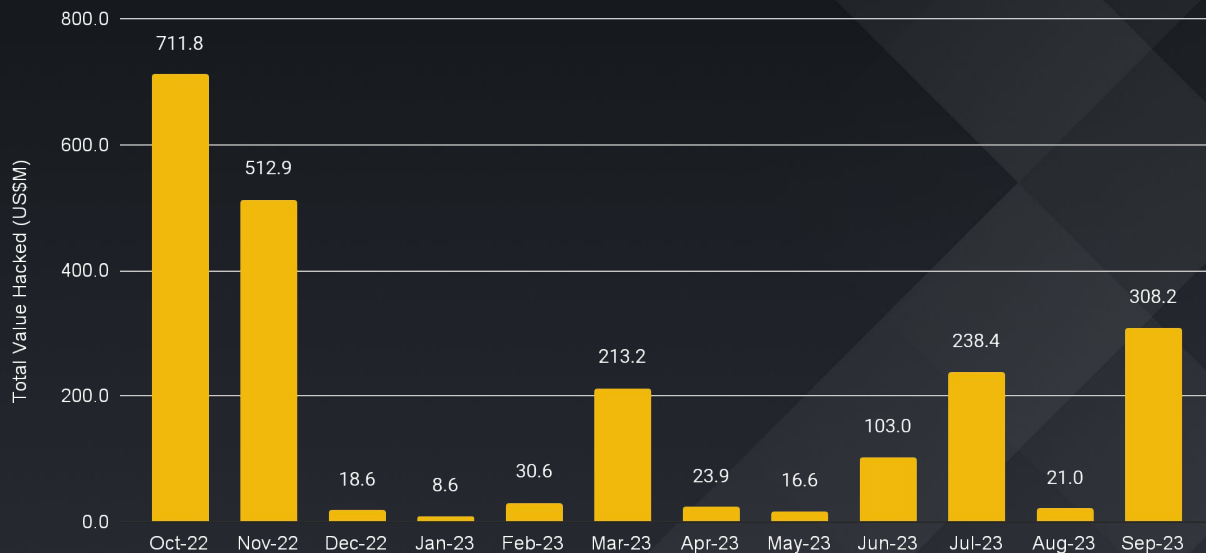
### USDT, DAI, and TUSD saw gains in market share

- With BUSD set to phase out completely by Feb 2024, other stablecoins such as USDT and DAI and TUSD have been the key beneficiaries, occupying a market share of 67.2%, 4.4% and 2.8% respectively in Q3.
- DAI has seen positive growth following the initiation of the Enhanced DAI Savings Rate (“DSR”) in August, with circulating supply increasing by over 38% from its lows in August through the end of September.

# Total Funds Lost Due to Hacks

The amount lost due to hacks **increased** in Q3

Total Value Hacked in DeFi\*



## Q3 was the worst quarter of the year

- Q3 marked the worst quarter of the year in terms of funds lost due to exploits. The Multichain and Mixin attacks made up 47.5% of Q3 losses alone.
- According to data from ImmuneFi, the number of exploits more than doubled from 30 in Q3 last year to 76 in Q3 this year.

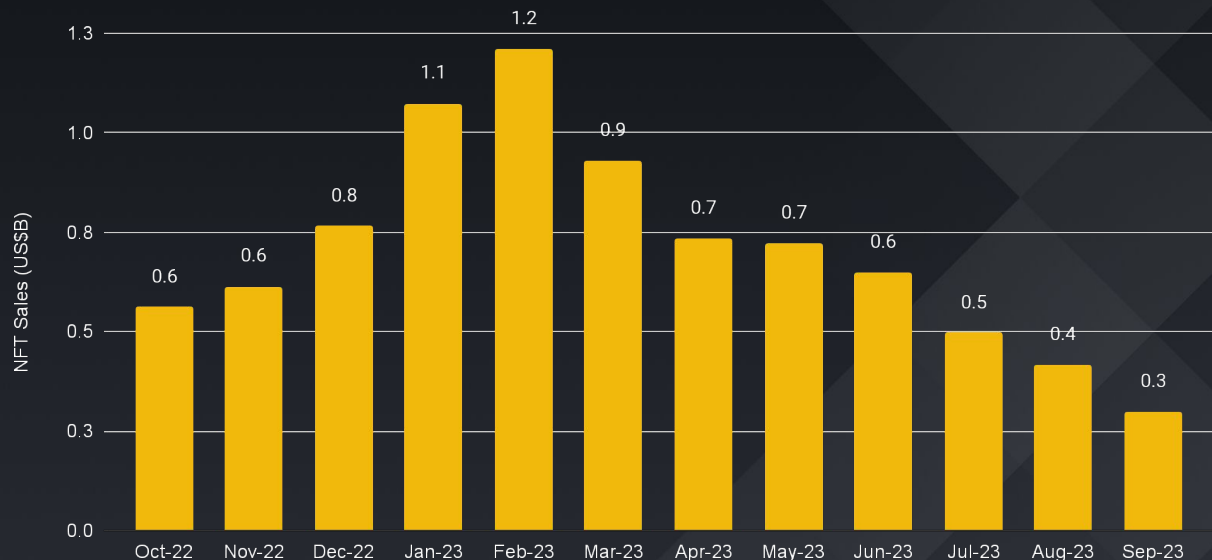
# NFTs



# Total NFT Sales

Sales **fell** in Q3, marking the worst quarter in nearly 3 years

NFT Sales by Month



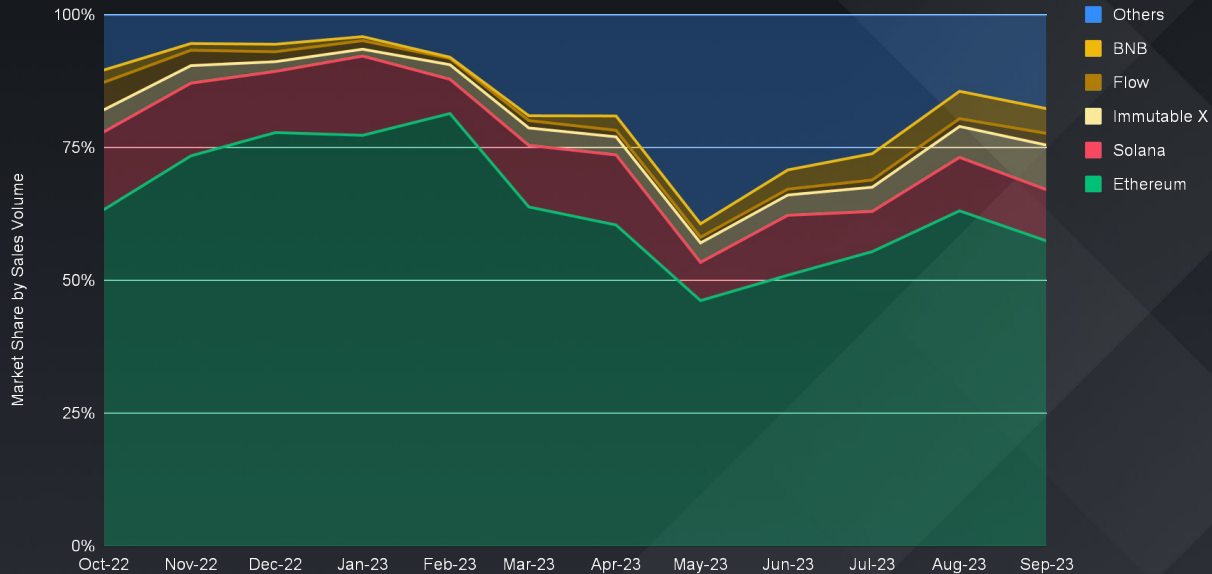
## Q3 2023 marked the worst quarter for NFT sales since Q4 2020

- NFT sales continued its downtrend in Q3 with September being the worst month on record since January 2021, printing a sales figure of around US\$300M.
- This can be attributed to declining average sales prices with floor prices of notable collections such as Azuki, BAYC, MAYC declining more than 25% QoQ. Average sales price in September was US\$38.17, drastically down from its peak of US\$791.84 in August 2021.

# NFT Sales Volume by Blockchain

Ethereum & Immutable X **gained** notable market share in Q3

NFT Sales by Chain



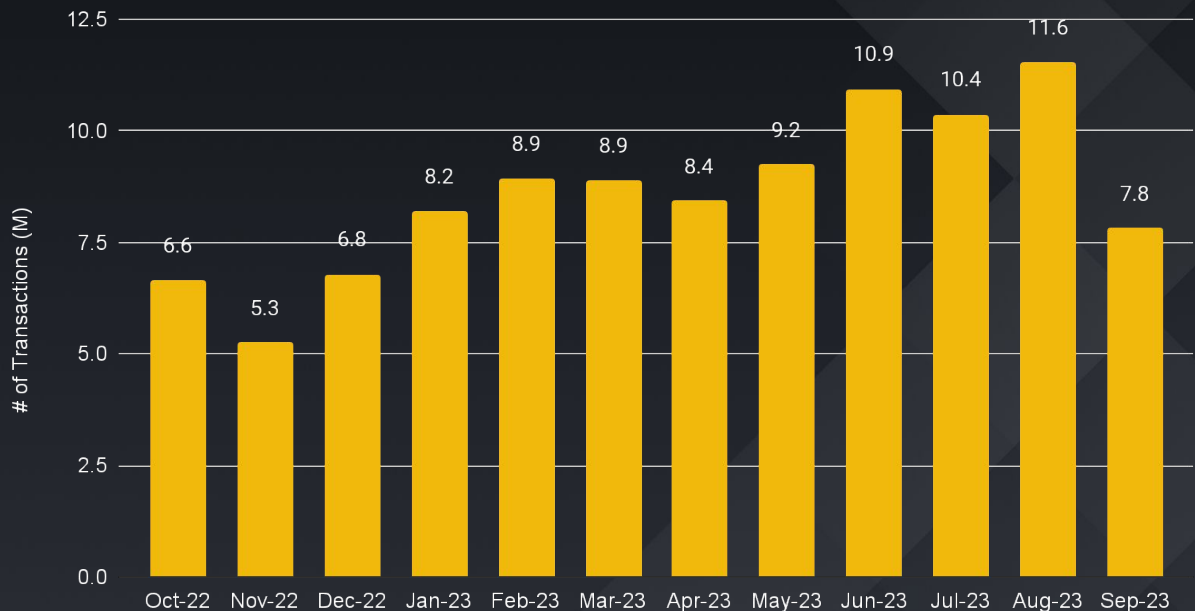
## Ethereum market share increased by 6% in Q3

- Notwithstanding an overall decline in NFT sales volume QoQ, Ethereum and Immutable witnessed an increase in market share in Q3.
- This comes as Ethereum gas fees on leading marketplaces have fallen in Q3, coupled with lower ETH price.
- Immutable X, an L2 built top of Ethereum, has also seen its share rise by 4% to 8%. Notably, the chain hosts popular blockchain games such as Gods Unchained, which topped the chart for sales count in Q3.

# Total NFT Transactions

Transaction activity **fell** sharply in September

Number of NFT Transactions by Month



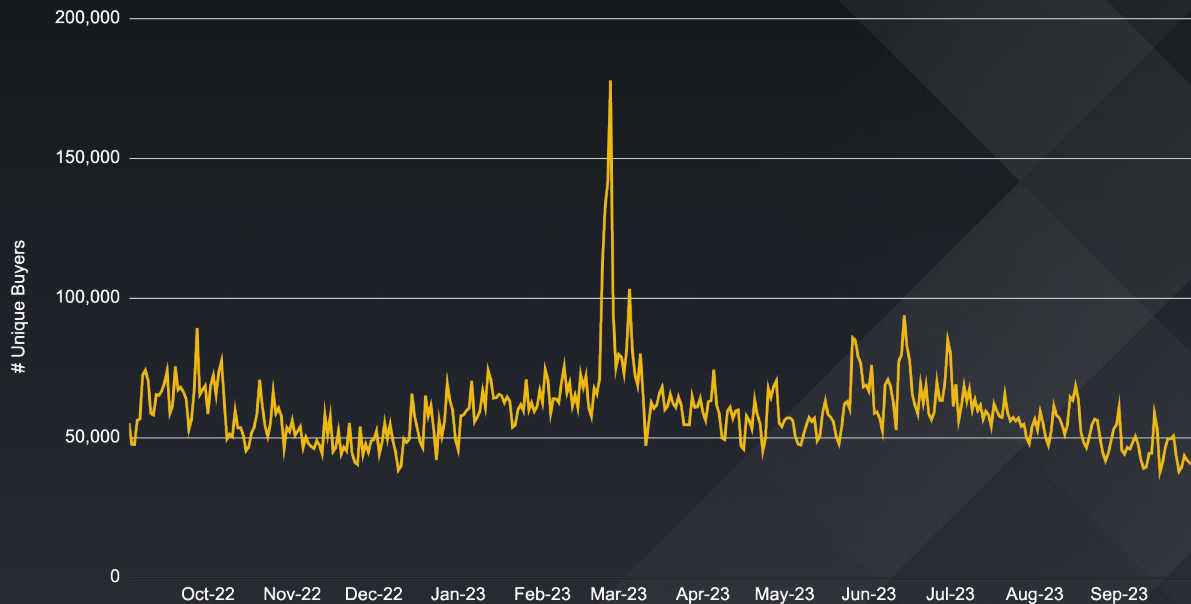
## Q3 Transactions increased 4.6% QoQ

- Gaming NFTs continued its popularity in Q3, with the top five collections in terms of transaction count being Gods Unchained, Axie Infinity, NBA Top Shot, NFL All Day, and Mythical Beings.
- Although September saw a decline in the number of transactions, Q3 overall showed growth, likely due to lower fees and moderate ETH prices.

# Number of Unique Buyers

## A prolonged winter for NFT collections

Number of Daily Unique Buyers



### Unique buyers continue to decline in Q3

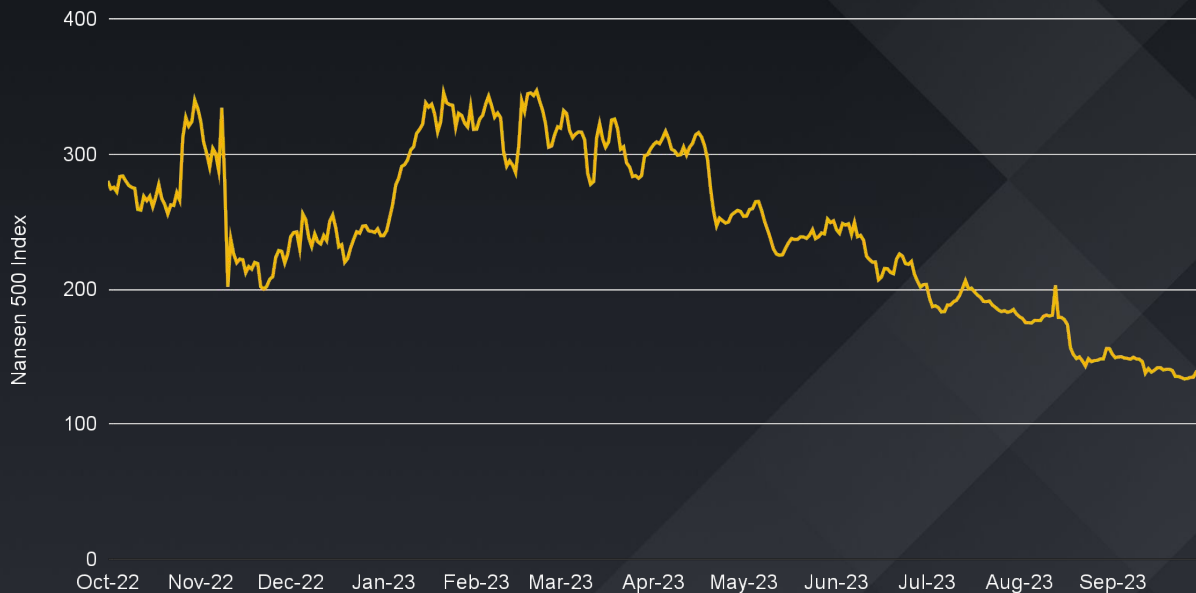
- The average number of daily unique NFT buyers in Q3 has decreased by 14.1% QoQ to around 53K buyers on a daily basis.
- A challenging market environment, coupled with low liquidity have contributed to waning interest in NFTs.



# NFT-500 Price Index

A relatively lackluster Q3 for NFT performance

NFT-500 Price Index (USD)



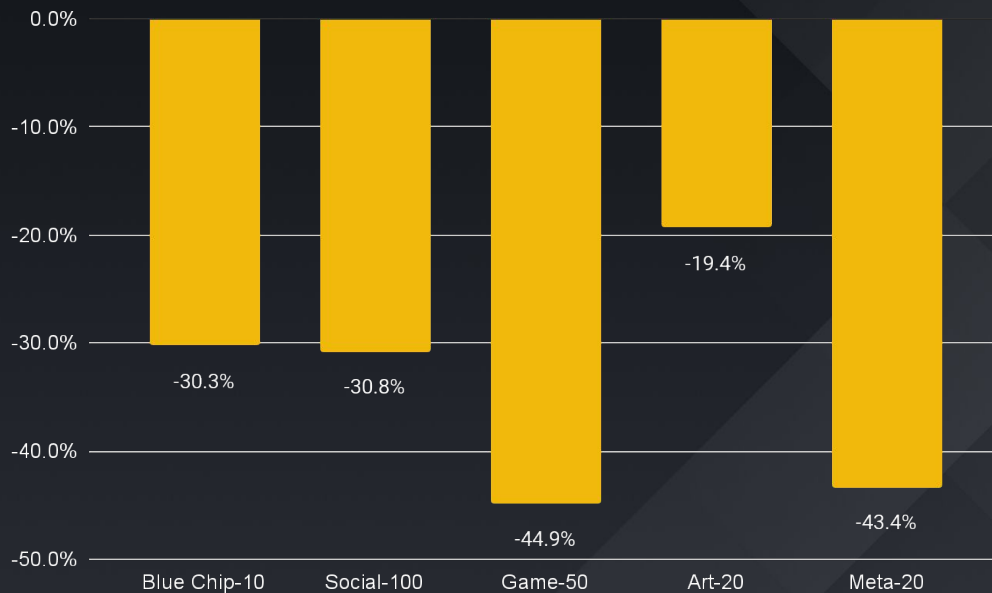
## -31% QoQ in NFT-500 Index

- Following a brief bounce at the start of the year, the NFT-500 price index has been on a steady decline.
- The NFT-500 price index extended a double-digit fall as the prices of various NFT collections fell across the board (sector breakdown in the next slide).

# Price Performance by Sector

## Gaming-related NFTs fell sharply in Q3

NFT Index QoQ Performance (Q3 2023)



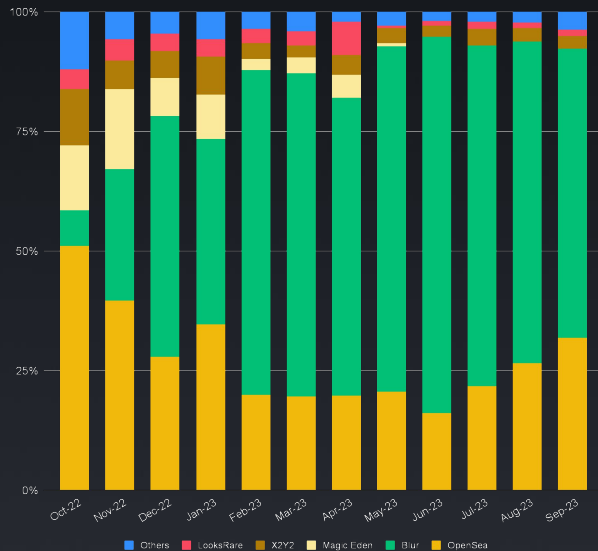
### Gaming-related NFTs fared the worst in Q3

- Gaming and Metaverse collections declined the most in Q3, extending declines of over 40%.
- Overall, it seems that no sector has been spared from the NFT market downturn.

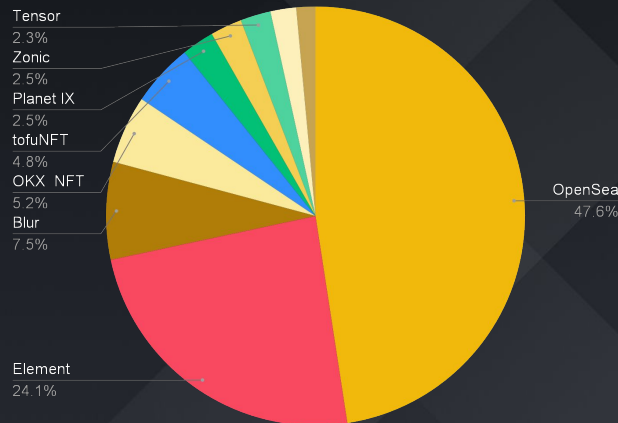
# Top NFT Marketplaces Market Share

## Blur **lost** market share to intense competition

By Volume



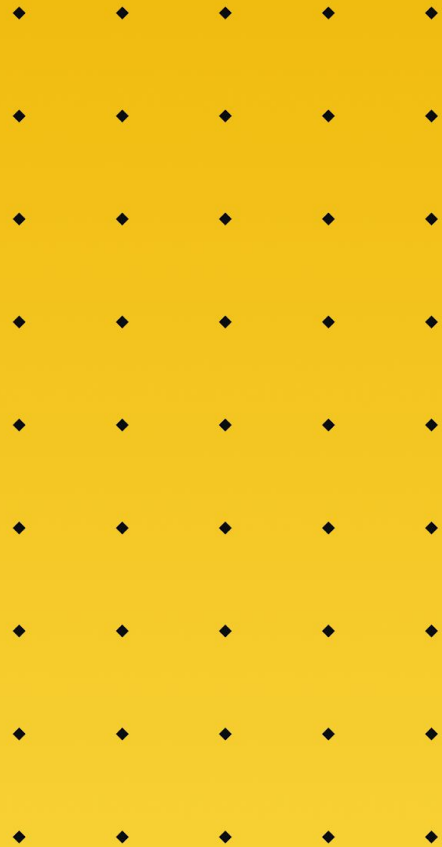
Active Wallets (Last 3 Months)



### Blur dominance declined vs. Q2

- While Blur remained as the biggest marketplace by sales volume, OpenSea still led in terms of active wallets in Q3. Element rose up the ranks after its recent integration with Base, Linea, opBNB, Bitcoin and zkSync networks.
- The divergence in sales volume and active wallets suggests that traders on Blur have a higher average trading volume, supportive of Blur's positioning as the platform for pro traders.

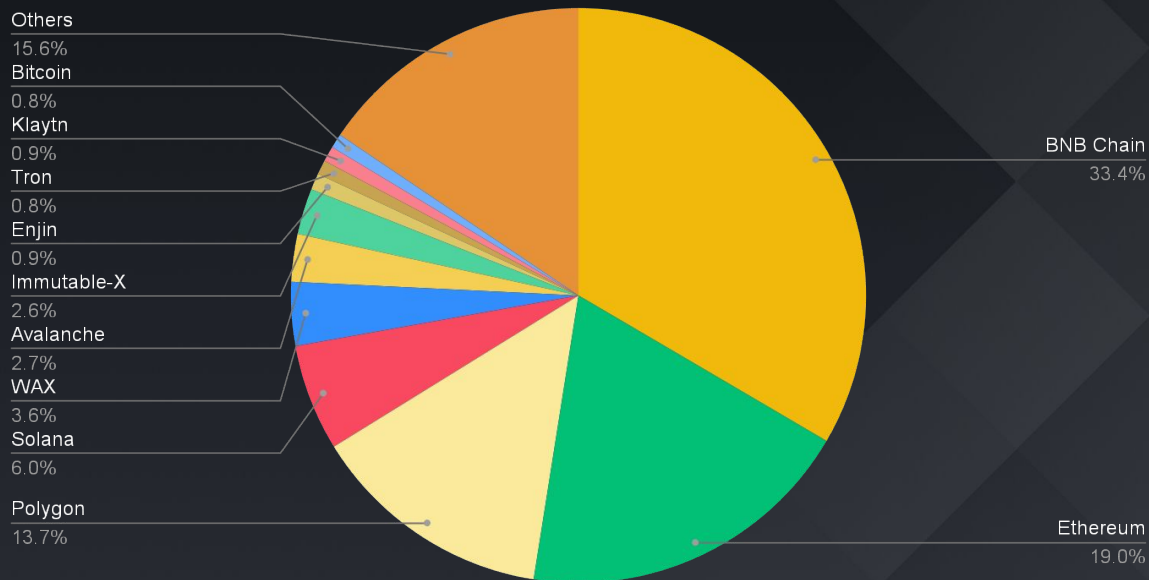
# Gaming



# Games by Chain

BNB Chain **leads** with the most number of games

Web3 Games by Chain



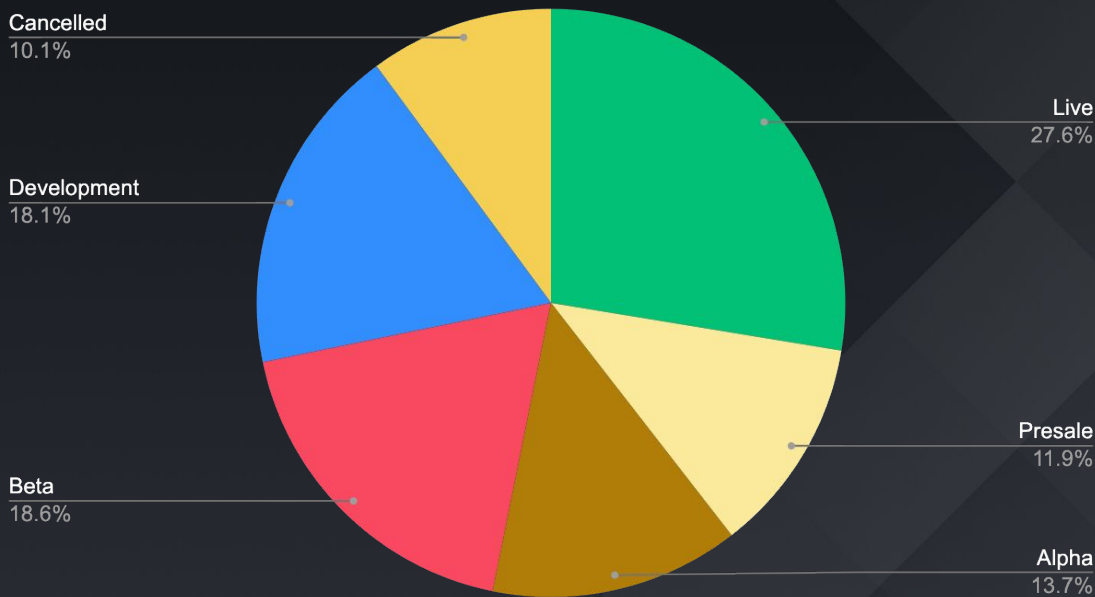
## BNB Chain looks set to continue dominating the gaming landscape in Q4

- BNB Chain has introduced “Airdrop Marathon”, a 2 months airdrop campaign in partnership with ecosystem projects which could further solidify its leadership among developers and gamers in Q4.
- This is also coupled with other catalysts such as cheap transaction fees, fast transaction finality, builder grants and gas grants offered by the network.

# Games by Status

## Gaming is still in its early days

Web3 Games by Status



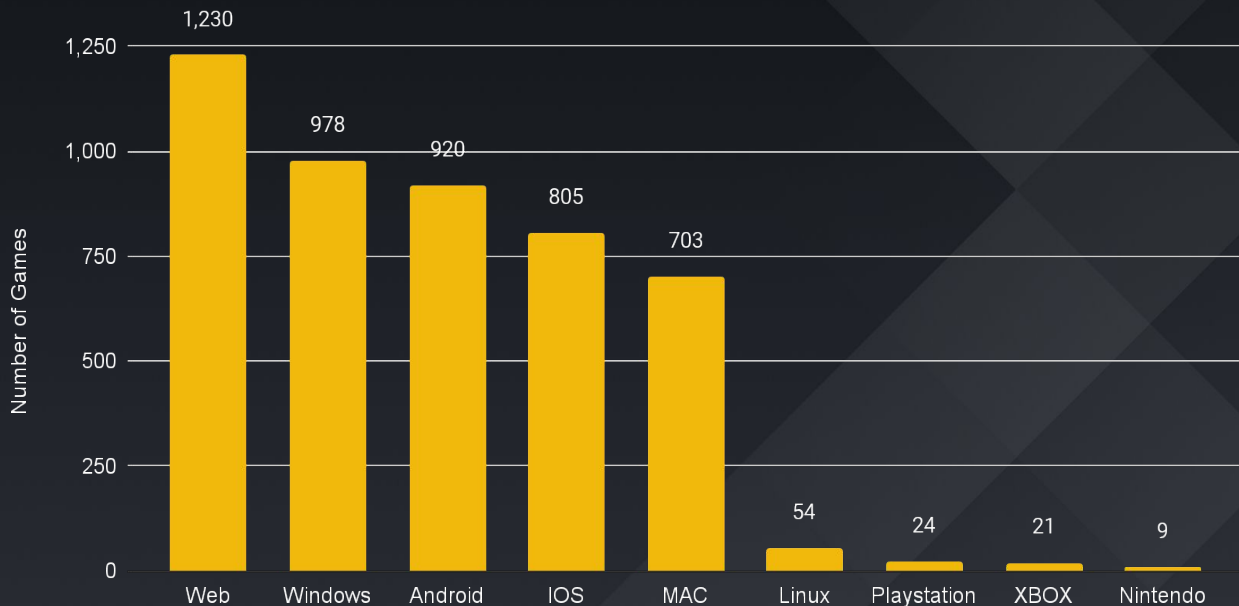
**With only ~28% of games live, most games are still in alpha/beta phase**

- Compared to Q2, there has been a slight increase in games in their alpha stage (+0.3%), and beta stage (+0.1%). Games in development and presale stages noted a decline QoQ, while percentage of cancelled games recorded an increase.
- Looking ahead, following Google's policy shift in July to allow NFT integration in apps and games on its Play Store, this could drive fresh enthusiasm in Web3 game development.

# Games by Device

## Most blockchain games are still on Web and Windows

Web3 Games by Device



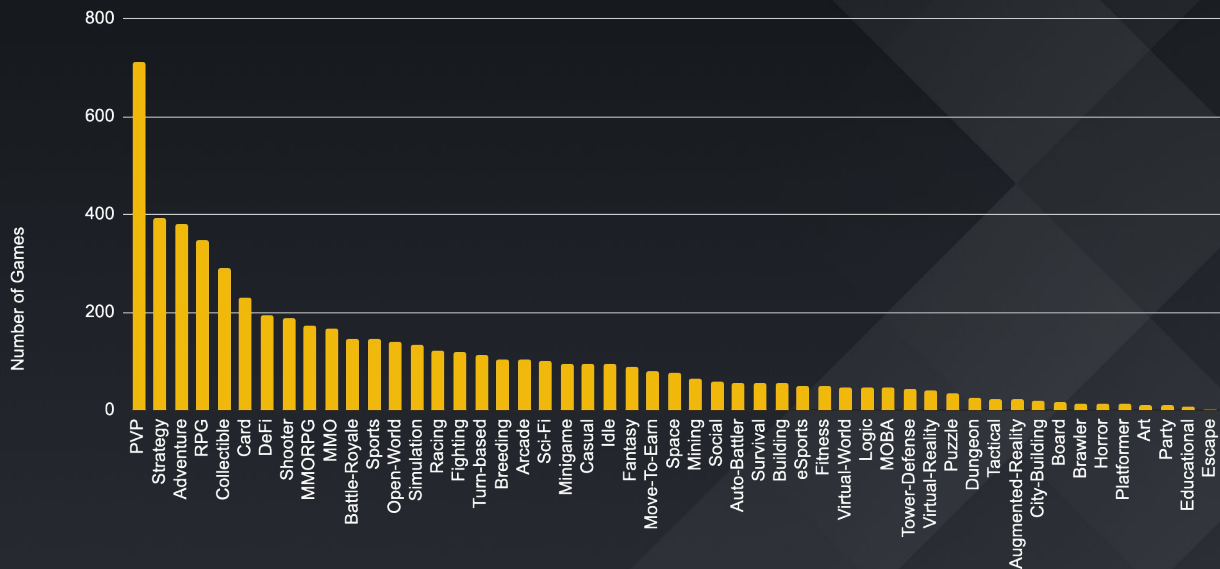
### Web-based games lead

- The number of web-based games increased by 3.3% QoQ, while Windows and Mac games saw a combined growth of 8% QoQ.
- Mobile-based games recorded a growth of 5.6% QoQ. Notable games under development and slated to launch on mobile in Q4 includes Guild of Guardians.
- Web3 gaming adoption by console continues to lag behind.

# Games by Genre

## Entertainment across the board

Web3 Games by Genre



### Action-oriented games are leading

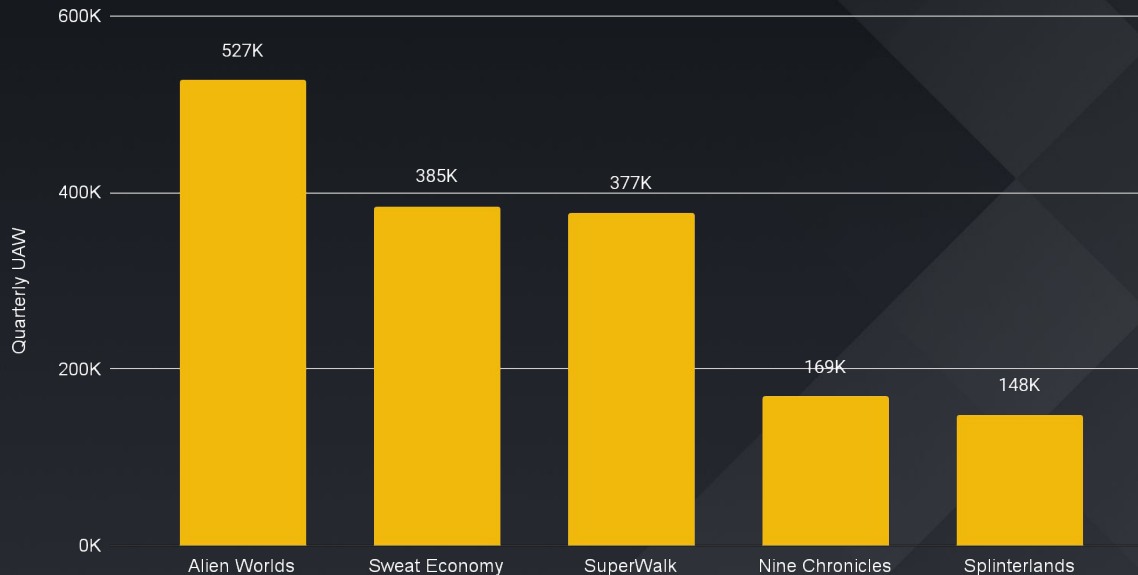
- Action, Strategy, and Adventure are the categories with the greatest number of games, possibly indicating that developers see these verticals as having the most potential.



# Ranking of The Most Popular Games

## Most popular games by unique active wallets

Games by Unique Active Wallets (Q3 2023)



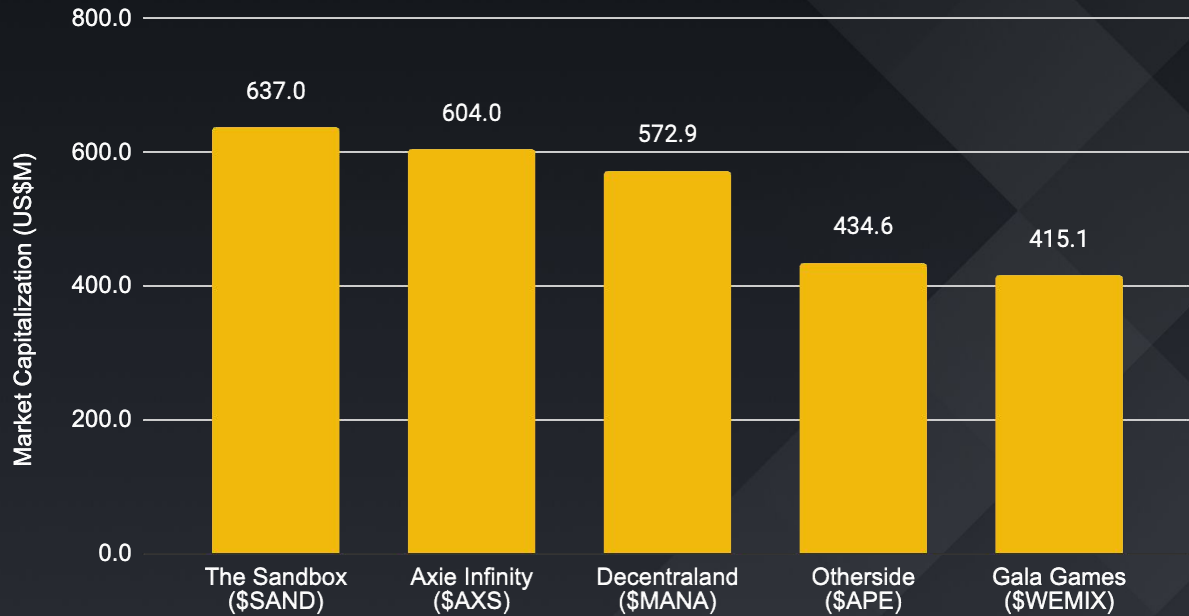
### Move-to-Earn games joined the ranks

- Alien Worlds and Splinterlands have maintained their spots in the top 5 games by unique active wallets in Q3, indicating their success in onboarding and retaining gamers.
- Additionally, move-to-earn games have gained traction this quarter, as games like Sweat Economy and SuperWalk clinched the 2<sup>nd</sup> and 3<sup>rd</sup> spot respectively.

# Top 5 Gaming Tokens by Market Cap

## \$SAND maintained its leadership position

Gaming Tokens by Market Cap (Last 30 Days)



## Gaming - Metaverse tokens stand out

- Out of the top five gaming tokens by market cap, all of them are Metaverse-related. Partnerships remain key to Sandbox's strategy - they collaborated with AIMC to bring the Netflix global hit series "Extraordinary Attorney Woo" to the Metaverse with the launch of the "Woo Young-Woo" avatar collection in October.
- Compared to Q2, the top 5 tokens remain unchanged. However, \$AXS has switched ranks with \$APE, given the significant drop in the latter's market cap.

# About Binance Research

Binance Research is the research arm of Binance, the world's leading cryptocurrency exchange. The team is committed to delivering objective, independent, and comprehensive analysis and aims to be the thought leader in the crypto space. Our analysts publish insightful thought pieces regularly on topics related but not limited to, the crypto ecosystem, blockchain technologies, and the latest market themes.



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