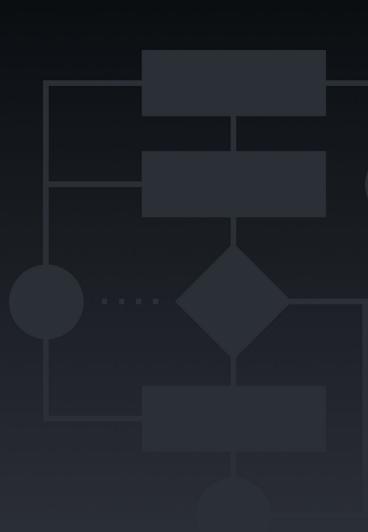


Q1 State of Crypto: Market Pulse

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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



Market Overview

Q1 was a strong quarter for crypto. Total crypto market capitalization increased by 49.4% QoQ even amidst an uncertain macro environment.



Layer 1s

Blockchain activity bounced back well in Q1. From a price perspective, Bitcoin had a great quarter, while attention was also on Ethereum ahead of the Shanghai Upgrade.



DeFi

Q1 marked a recovery period for DeFi as TVL increased 27.1% QoQ, ending the quarter at US\$49.7B.



NFTs

NFT sales increased 67% QoQ in Q1, largely driven by increased activity on Blur. However, performance fell 16% QoQ, as measured by the NFT-500 index.

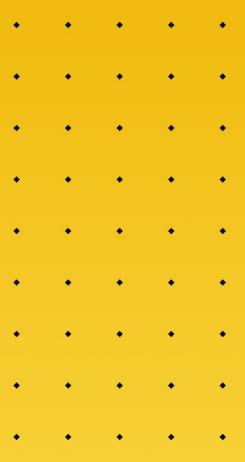


Gaming

The gaming landscape was led by BNB Chain, Ethereum, and Polygon, with more than 67% market share (by number of games).



Market Overview





Crypto Market Overview Market capitalization increased in Q1

Global Crypto Market Capitalization





+49.4% QoQ

- Crypto market capitalization increased by 49.4% in Q1 2023.
- Despite growing macroeconomic uncertainty and turmoil in the banking sector, the crypto market exhibited resilience in Q1. This comes as Bitcoin broke the \$28,000 ceiling in March, a level not seen since June 2022.



Source: Coinmarketcap, Binance Research. Data as of 31 Mar 2023

Crypto Fear and Greed Index

Index rose significantly, suggesting positive sentiment





+37 points in Q1

- The Crypto Fear and Greed Index, which measures market sentiment, reached a high of 68 points, a level not seen since Nov 2021, indicating positive sentiment.
- This is a stark contrast to last year, when the index remained largely in the "fear" zone throughout 2022.



Crypto Unicorn Index

Number of coins with >US\$1B market cap rose in Q1

Number of Coins with Market Cap above US\$1B





+45.9% QoQ

- The number of coins with a market cap >US\$1B increased from 37 in Q4 to 54 in Q1.
- This comes alongside a general recovery in the crypto market in Q1. This metric is now back in line with the range in Q3 2022 (post-Terra's fall), although still significantly lower when compared to the start of last year.



Performance of Largest Coins by Market Cap Top 3 coins held their spot in 2021, 2022 and YTD

Price Performance of Top 10 Coins (2017 to YTD)

	2017	2018	2019	2020	2021	2022	2023 YTD
	Bitcoin 1317.08%	Bitcoin -72.39%	Bitcoin 92.48%	Bitcoin 308.91%	Bitcoin 59.70%	Bitcoin -64.42%	Bitcoin 72.49%
	XRP 34096.50%	XRP -84.11%	Ethereum -2.99%	Ethereum 478.27%	Ethereum 397.84%	Ethereum -68.17%	Ethereum 52.68%
۵	Ethereum 8762.26%	Ethereum -81.94%	XRP -45.46%	XRP 24.75%	BNB 1258.62%	BNB -54.25%	BNB 28.94%
ırket Cap	Bitcoin Cash 451.97%	Bitcoin Cash -93.21%	Bitcoin Cash 26.19%	Litecoin 217.78%	Solana 10682.40%	XRP -59.68%	XRP 58.26%
Decreasing Market	Cardano 3400%	EOS -66.60%	Litecoin 37.44%	Polkadot 188.93%	Cardano 620.39%	Dogecoin -56.45%	Cardano 61.51%
Decrea	Litecoin 5019.14%	Stellar -73.92%	EOS 1.34%	Bitcoin Cash 73.63%	XRP 251.18%	Cardano -81.21%	Dogecoin 10.07%
1	IOTA 867.48%	Litecoin -86.39%	BNB 130.73%	Cardano 452.21%	Terra Classic 13310.47%	Polygon -68.92%	Polygon 48.17%
	NEM 29070.31%	Bitcoin SV 5.84%	Bitcoin SV 9.60%	BNB 180.23%	Avalanche 3408.97%	Polkadot -84.90%	Solana 112.82%
	Dash 9377.84%	Tron -57.00%	Tezos 194.10%	Chainlink 542.13%	Polkadot 197.82%	Tron -29.53%	Polkadot 47.70%
	Stellar 17666.95%	Cardano -94.15%	Stellar -60.09%	Bitcoin SV 72.34%	Dogecoin 3389.64%	Litecoin -54.24%	Litecoin 28.21%



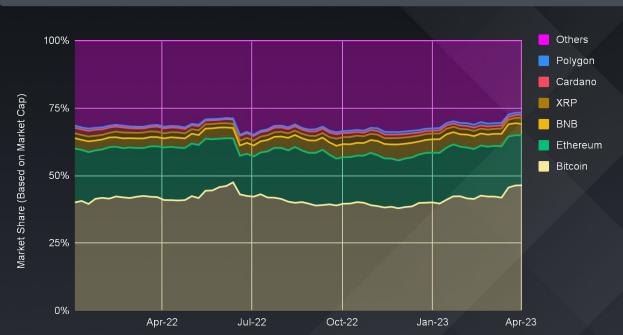
+52.1% average performance in Q1

- BTC, ETH, and BNB remain the top 3 coins by market capitalization in 2023, excluding stablecoins.
- Compared to 2022, SOL has staged a recovery and erased most of its post-FTX losses, while TRX has fallen off the top 10 coins by market cap.



Market Share of Coins BTC dominance increased

Market Share of Coins





+6% share for BTC

- BTC was the biggest gainer in Q1 as the narrative of it as a store of value gained steam amidst an uncertain macro environment.
- Most other large-cap coins generally maintained market share during the quarter.



Source: Coinmarketcap, Binance Research. Data as of 2 Apr 202

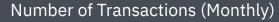
Layer 1s

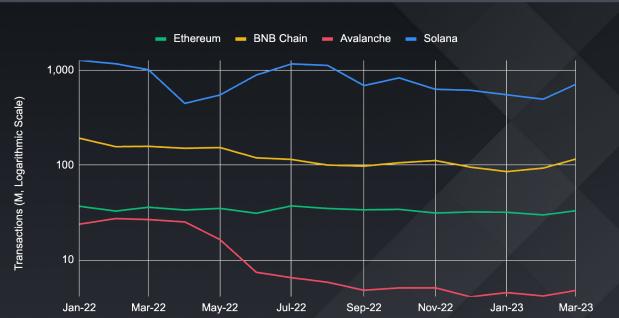




Monthly Transactions by Chain Up across the board - BNB Chain was the

Up across the board - BNB Chain was the top gainer in Q1







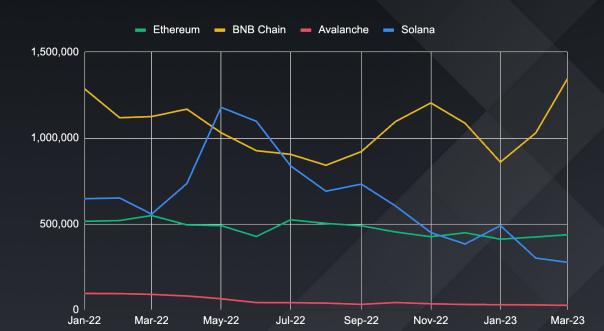
QoQ Change: ETH (+3%); BNB (+22%); AVAX (+17%); SOL (+16%)

- Activity tracked lower across the sample set, with an avg. ~14% increase across all 4 L1s in Q1.
- While Solana saw the largest % decline in transaction count in Q4-22, it has since bounced back in line with the cohort.



Average Daily Active Addresses by Chain BNB Chain - the outlier

Average Daily Active Addresses





Only BNB Chain showed an increase in Q1

- Average daily active addresses for BNB Chain rose 24%, while they fell 2% for Ethereum. Avalanche and Solana saw 15% and 28% declines, respectively.
- BNB Chain active addresses have increased for two consecutive quarters, while the other three L1s have all declined in the last six months.



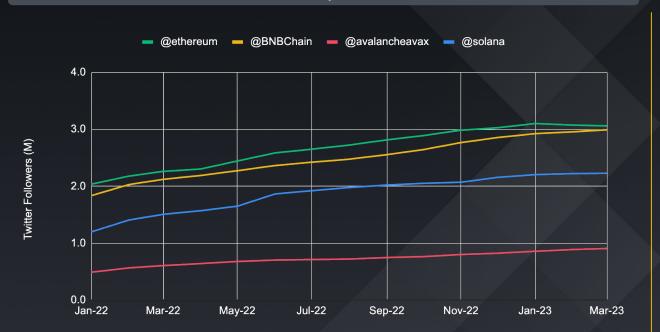
Addresses

Source: Etherscan, Bscscan, Snowtrace, Artemis, Binance Research. Data as of 31 Mar 2023.

Twitter Followers

Followers continue to increase across the board

Cumulative Twitter Followers by Official Blockchain Accounts





@ethereum leads, @BNBChain a close 2nd

- @BNBChain (+5% QoQ) and
 @avalancheavax (+10% QoQ)
 saw the strongest Q1 growth.
- @ethereum continues to lead with over 3M followers, with @BNBChain very close behind.
- On a monthly basis, Ethereum has been losing followers for two months, while the other three L1s in our cohort steadily increased.



BTC: Grayscale Bitcoin Trust ("GBTC") Premium GBTC discount improved across Q1







Discount to NAV:

- End of 2022: -45.2%
- ♦ End of Q1-23: **-36.7%**
- After hitting their all-time highest discount of 48.9% vs. Net Asset Value ("NAV") in Dec-22, things have improved.
- Recent reports from hearings of the case between the U.S. SEC and Grayscale were received positively by traders, possibly contributing to a narrowing of GBTC discount in recent weeks.



BTC: Bitcoin Balance on Exchanges vs. Price Balance and Price both increased in Q1

BTC Balances on Exchanges vs BTC Price





A strong first quarter for the largest crypto

- Bitcoin price rose ~72% in Q1, reaching levels last observed in June 2022.
- Bitcoin balance on exchanges steadied, rising 0.5% across the quarter. This compares to an 11% contraction in Q4 and a 20% fall in 2022. With the continued interest in self-custody and ongoing innovation in the wallet space, this number may continue to fall further.

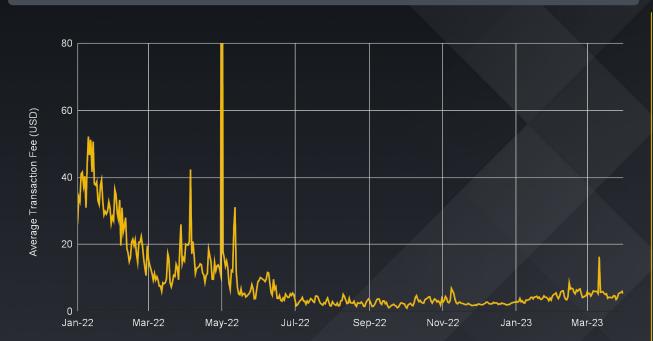


Source: Glassnode, Coinmarketcap, Binance Research. Data as of 31 Mar 2023

ETH: Ethereum Transaction Fees

Average Ethereum fees rose through Q1

Ethereum Transactions Fees





Average fees (US\$):

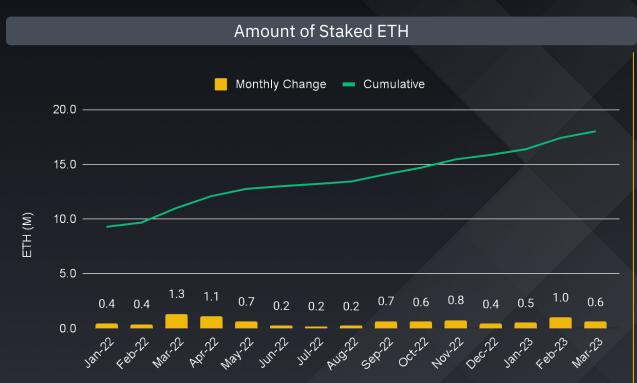
- **Q4-22: 2.7**
- **Q1-23: 4.8**
- Having declined ~88% between Q1 and Q4 of 2022, average transaction fees on Ethereum have since bounced back and rose 92% across Q1 2023.
- Generally more favorable market conditions, alongside continued growth in the Ethereum ecosystem (Arbitrum, Optimism, Polygon zkEVM, zkSync Era, etc.), have led to increased block space demand and, thus, higher fees.



Source: Etherscan, Binance Research. Data as of 31 Mar 2023

ETH: Staked ETH Statistics

~15.1% of all ETH in circulation has been staked



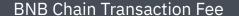


18.1M+ ETH is staked

- Q1 saw a 13.6% increase in the amount of ETH staked, with a notable increase of ~1M ETH in Feb, likely contributed by the successful Zhejiang and Sepolia testnets.
- The <u>Shanghai hard fork</u>, which enabled staked ETH withdrawals, went live on April 12.



BNB Chain: Average Transaction Fee Users paid an average of \$0.25 transaction fees in Q1







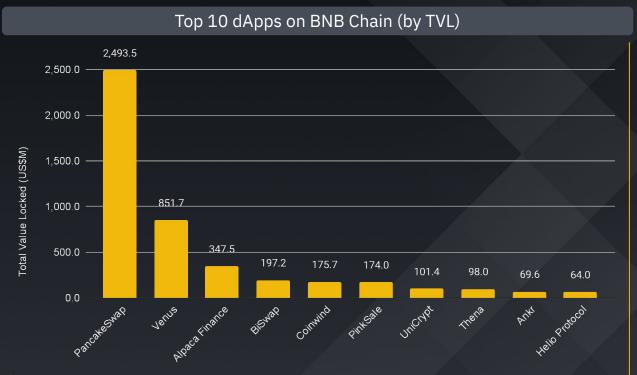
+13% QoQ average fees in Q1

- Average transaction fees bounced back a little from a Q4 average of \$0.23.
- The increase is in line with increased network activity for BNB Chain in Q1, as illustrated by data on transactions (Slide 11) and addresses (Slide 12).



BNB Chain: Top dApps by TVL

DEXes and lending remain the largest verticals





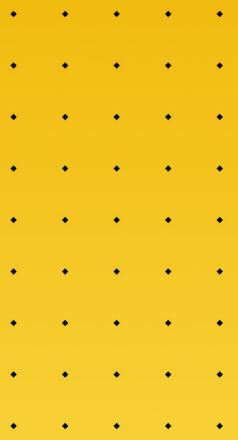
PancakeSwap remained the dominant dApp

- PancakeSwap continues to lead, despite the entrance of Uniswap onto BNB Chain a few weeks ago (Uniswap has yet to break into the top 10 DEXes on BNB Chain).
- With PancakeSwap announcing their v3 in early April, it will be interesting to see how TVL evolves.
- Aave is currently deliberating a proposal to launch on BNB Chain this may provide some competition for the leading lending dApp, Venus. 19



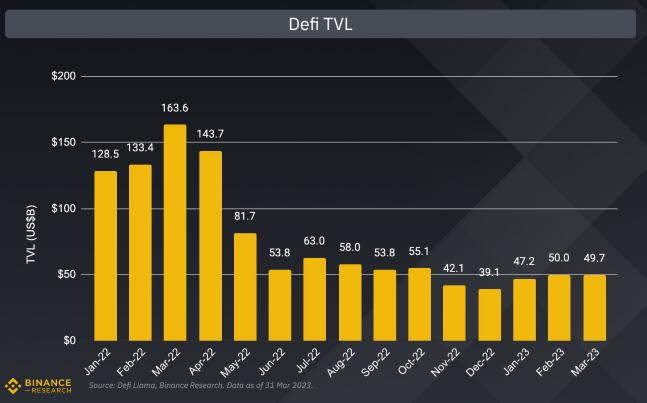
Source: DefiLlama, Binance Research, Data as of 31 Mar 2023.

DeFi





DeFi Total Value LockedSlight recovery in DeFi TVL in Q1



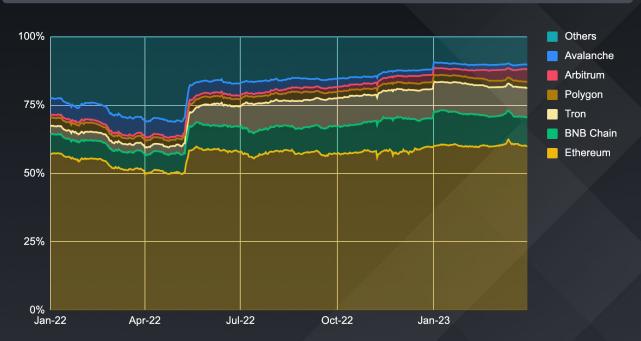


+27.1% QoQ

- DeFi TVL bottomed in Dec 2022 but has since recovered to just slightly below the US\$50B mark.
- Nonetheless, DeFi TVL has largely remained range-bound during the quarter.

Market Share by TVL Layer 2s showed signs of growth







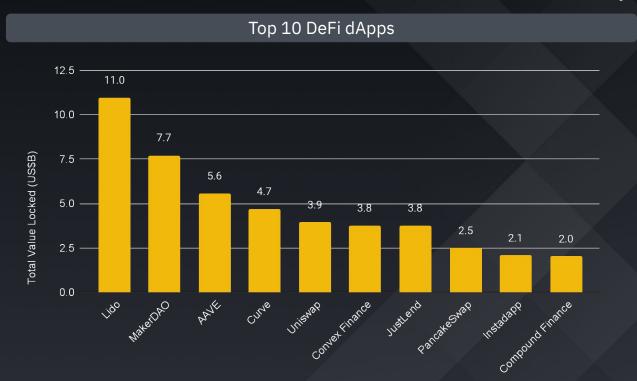
L2s in the spotlight

- Top spots continued to be held by Ethereum, BNB Chain, and Tron, with minimal changes in TVL market share during the quarter.
- Layer 2s such as Arbitrum (+2%) and Optimism (+0.5%) have notched some gains, likely contributed by interest in the space following Arbitrum's \$ARB airdrop.



Top DeFi dApps by TVL

Lido extended its lead over other DeFi dApps





Top 10 dApps unchanged

 Lido saw the largest absolute gain, with TVL increasing from U\$\$5.9B to \$11.0B QoQ. This is likely contributed by increased demand for liquid staking leading up to the Shapella upgrade.



DEX/CEX Trading Volume

DEX/CEX ratio was slightly higher at the end of Q1





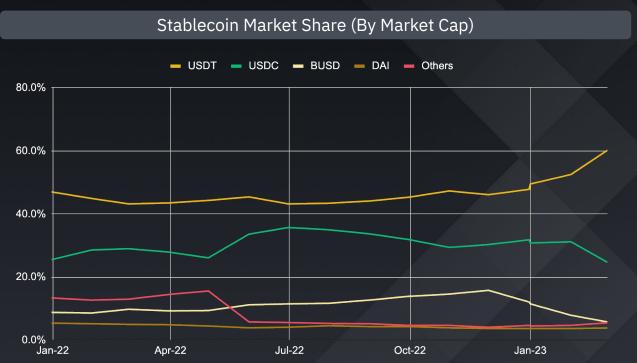


+0.2% (absolute) in Q1

- Following the spike in Nov 2022 due to a CEX fallout, the DEX/CEX ratio has generally normalized and trended down.
- The increase in March could have been contributed by the temporary USDC depeg as traders swapped their USDC holdings on DEXes.



Stablecoin Market Share USDT gained market share post recent market events



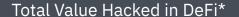


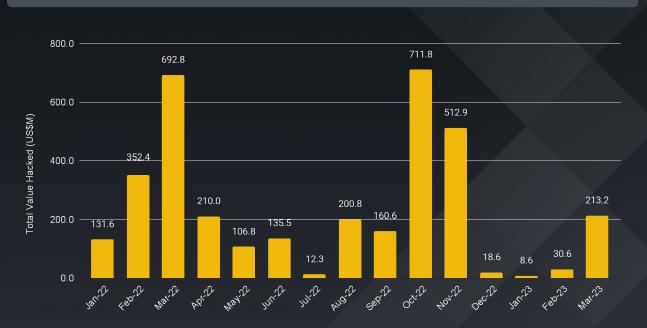
+12% market share for USDT

- USDT has extended its lead as the largest stablecoin in the market and currently has over 60% of stablecoin market share.
- USDT has seen capital inflow and has absorbed market share from both USDC and BUSD following the unwinding of BUSD and the temporary USDC depeg.



Total Funds Lost Due to Hacks Amount loss due to hacks declined in Q1







Losses resulting from DeFi hacks totaled US\$252M in Q1

 The Euler Finance hack (US\$197M) accounted for the bulk of the funds exploited in the quarter. Importantly, most of the funds have since been recovered.



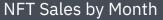
NFTs

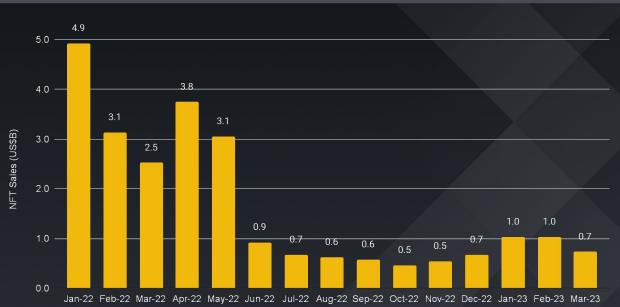




Total NFT Sales

Sales rose briefly to start 2023







Q1 sales +67% **Q0Q**

- NFT sales picked up moderately at the start of 2023.
- The rise in NFT sales coincided with broader market trends and other sector catalysts, such as the \$BLUR token launch.



Number of Unique Buyers

Traders returned to the market





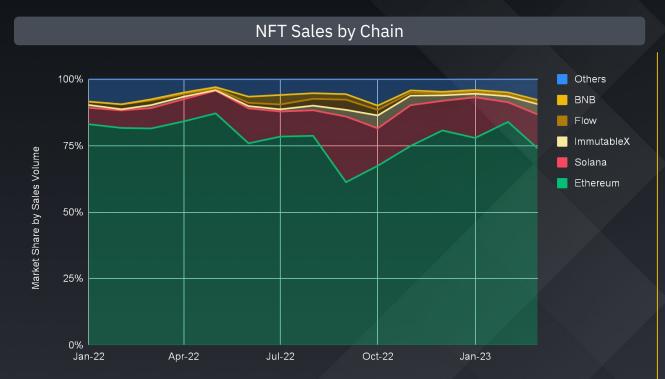


Q1 total number of unique buyers +64% QoQ

- The quarterly unique buyers metric has risen for the first time in 12 months.
- In February, there was a noteworthy spike around the \$BLUR token launch date.



NFT Sales Volume by Blockchain Ethereum lost market share while other L1s gained





Ethereum market share fell 7% in Q1

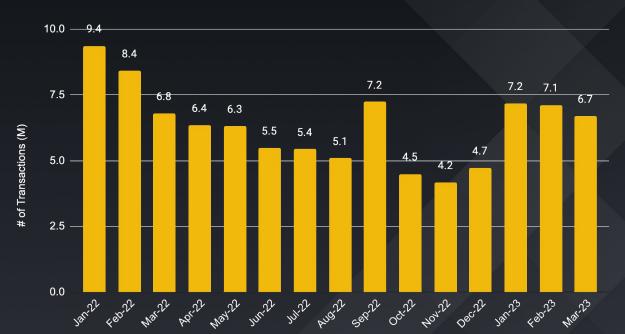
- Ethereum remained the strongest blockchain in terms of NFT sales. However, it lost NFT market share to other L1s in Q1 2023.
- Following a weak Q4, NFT sales for Solana and Immutable X increased by 2% each in Q1. Sales in other L1s also increased by 3%.



Total NFT Transactions

Transaction activity rose significantly in Q1

NFT Number of Transactions by Month





Q1 Transactions increased +56% QoQ

- After a year-long downtrend throughout 2022, transaction activity spiked in Q1 of 2023.
- This was largely contributed by increased activity on the Blur marketplace in light of its \$BLUR airdrop.



Source: CryptoSlam, Binance Research. Data as of 31 Mar 202

NFT-500 Price Index A relatively subdued Q1 for NFT performance





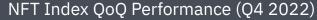


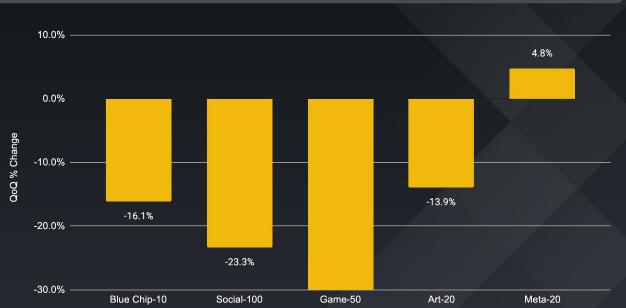
-16% QoQ drop in the NFT-500 index in Q1

- Despite other on-chain NFT metrics showing positive signs, the NFT-500 price index told a different story.
- Following a brief bounce at the start of the year, the NFT-500 price index has been on a general decline.



Price Performance by Sectors Metaverse NFTs outperformed in Q1





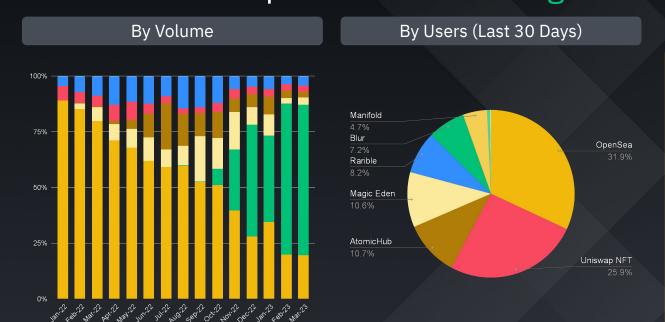


As other NFT sectors fell, Metaverse NFTs rose

 After underperforming for three straight quarters, Metaverse NFTs finally found some relief in comparison to other sectors, as they were the only NFT sector to have risen in terms of QoQ performance.



NFT Marketplaces Market Share Blur NFT marketplace continues to gain market share





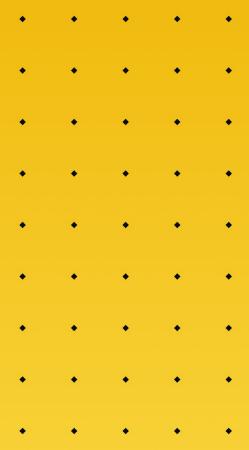
New entrant, Blur, dominates in terms of volume

- After releasing the \$BLUR token in February, Blur has not only maintained top market share but also has grown in market share since Q4 2022.
- OpenSea remained the platform with the most active user base.
 OpenSea has also recently rolled out its OpenSea Pro aggregator.



Looksrare X2Y2 Magic Eden Blur Opensea

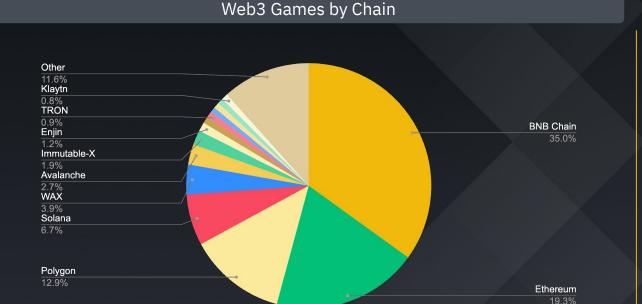
Gaming





Games by Chain

BNB Chain leads with the greatest number of games





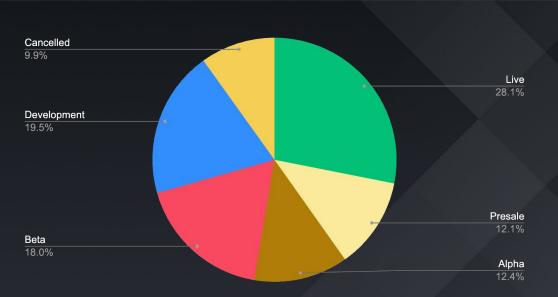
The gaming landscape was led by the top three players

• BNB Chain, Ethereum, and Polygon accounted for over 67% of all games.



Games by StatusGaming is still in its early days







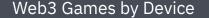
With only ~28% of games live, most games are still under development

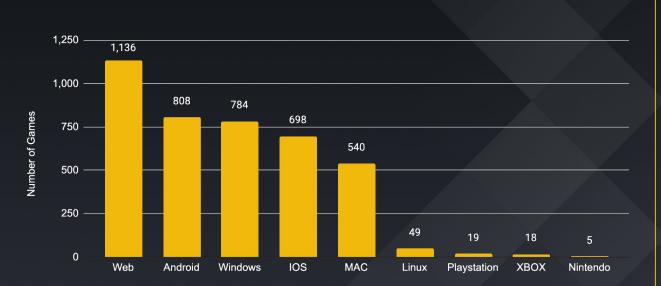
• Compared to the previous quarter, there has been a slight increase in games in different stages of development (+0.6%), as well as in cancelled games (+1.5%).



Games by Device

Most blockchain games are on Web and Mobile







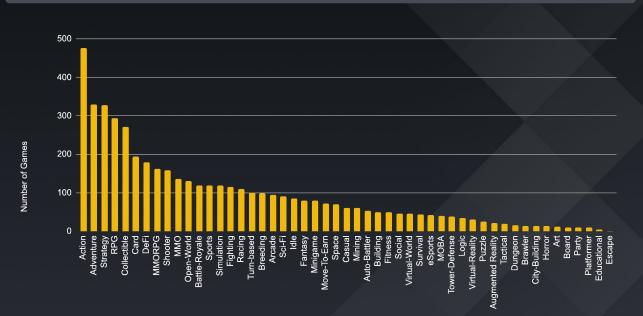
As of now, web-based and mobile games are head-to-head

- Mobile games (Android + iOS) are leading by a small margin.
 Considering the large mobile gaming market in Asia and high crypto adoption for the region, we are not surprised.
- Console games are clearly lagging behind.



Games by Genre Entertainment across the board





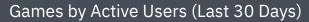


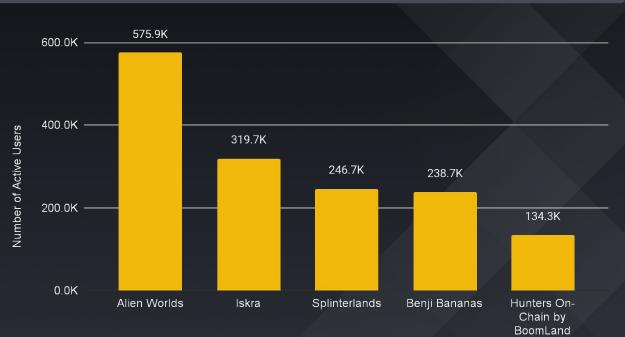
Action-oriented games are leading

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



Top 5 Games by Active Users in the Past 30 Days Alien Worlds had the most active users







Alien Worlds led in terms of active users

- Alien Worlds is an NFT
 Metaverse that is available on
 WAX, Ethereum, and BNB Chain.
- Iskra is a blockchain gaming hub that brings together gamers and game studios. The Iskra platform allows gamers to explore and enjoy blockchain games and create their own community.



Top 5 Gaming Tokens by Market Cap The Otherside maintains its leadership position





Metaverse tokens stand out

- Out of the top 5 games by market cap, 3 are Metaverse-related projects.
- As compared to Q4, Gala Games has dropped out of the top 5 spots, while WEMIX PLAY debuted on the leaderboard.

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.











@BinanceResearch



Contributors



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Shivam holds a BSc Economics degree from the London School of Economics & Political Science ("LSE") and has been involved in the cryptocurrency space since 2017.



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Keng Ying ("Sky") is currently working as a Research Data Analyst at Binance. Before joining Binance, she has prior experience as a Research Analyst at Bybit, and has also worked at Citi with a focus on offshore wealth management analytics.

Sky is an on-chain data enthusiast and enjoys going down the rabbit hole in her free time.



Mac Naggar

Mac is an intern on the Macro Research team. Prior to joining Binance, he worked as a Web3 Product Manager for HSBC's Global Ventures, Innovation, and Partnerships team. Additionally, Mac has had experience on the trading side, spending time with Morgan Stanley's Fixed Income Division, Algorand's Capital Markets Team, and CrossTower's Digital Assets Trading Desk.

Mac is currently a student at the University of Nicosia, mastering in Blockchain and Digital Currencies.



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