

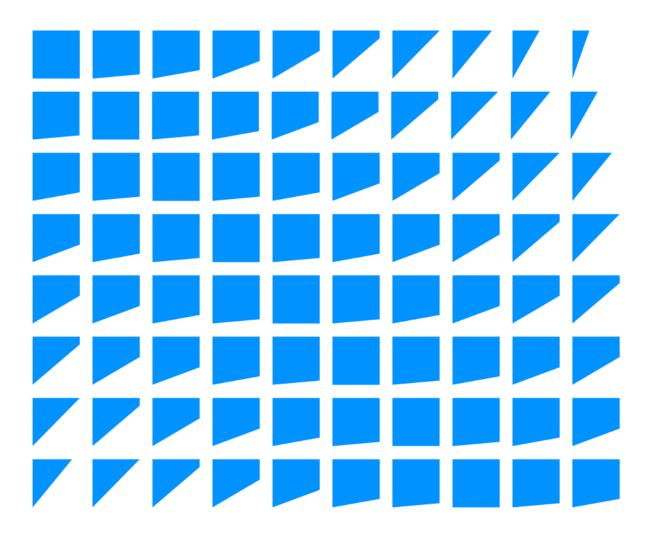
Quarterly Community Report

State of the Market Q2 2023

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Introduction

This report aggregates market data and key performance indicators of over 30 projects covered by Messari through our Protocol Services' engagements. We also included Bitcoin and Ethereum for comparison. These projects are ordered based on their respective market capitalization.

Protocol	Market Cap Q2 2023	Q2 2023	ative Token Pri QoQ Growth	ce YoY Growth	Q2 2023	Real Volume QoQ Growth	YoY Growt
Bitcoin	\$591.08B	\$30,469	7.0%	53.0%	\$642.69B	(53.2%)	(48.2%)
Ethereum	\$222.64B	\$1,933	6.1%	80.7%	\$297.59B		
😚 BNB	\$36.33B	\$240		9.6%	\$21.05B		
X XRP	\$24.80B	\$0.47	(12.0%)	42.6%	\$44.26B		
Cardano	\$9.62B	\$0.29			\$11.64B		
Solana	\$7.20B	\$18.86			\$18.33B		
TRON	\$6.70B	\$0.08	16.2%	17.7%	\$6.15B		
Polkadot	\$6.22B	\$5.18			\$6.80B		
Polygon	\$5.82B	\$0.66		37.7%	\$11.87B		
Avalanche	\$4.38B	\$13.02	(26.4%)		\$7.38B		
Filecoin	\$1.66B	\$3.95	(30.5%)	(26.8%)	\$6.67B		
H Hedera	\$1.56B	\$0.05	(30.7%)	(20.1%)	\$1.71B		
M NEAR	\$1.25B	\$1.38	(30.4%)	(58.5%)	\$3.35B		(92.6%)
# Stacks	\$0.95B	\$0.69	(25.7%)	69.3%	\$2.86B	(45.8%)	312.2%
The Graph	\$0.93B	\$0.11	(27.6%)	10.4%	\$2.21B	(62.1%)	(78.2%)
Aave	\$0.91B	\$70.47	(5.0%)	23.6%	\$1.86B	(50.9%)	
§ Fantom	\$0.84B	\$0.30	(36.1%)	21.1%	\$5.74B	(59.0%)	(77.8%)
ApeCoin	\$0.82B	\$2.22	(46.8%)	(52.0%)	\$1.81B		(82.2%)
The Sandbox	\$0.76B	\$0.42	(33.2%)	(62.8%)	\$4.12B	(57.3%)	(78.9%)
₿ EOS	\$0.74B	\$0.75	(37.2%)	(18.8%)	\$5.34B	(35.8%)	
S USDD	\$0.74B	\$1.00	1.1%	0.7%	\$1.61B	(40.1%)	(72.7%)
Tezos	\$0.72B	\$0.81	(27.8%)	(43.3%)	\$0.81B	(74.4%)	
X Synthetix	\$0.59B	\$2.29	(10.4%)	0.4%	\$1.62B		(72.8%)
S Osmosis	\$0.29B	\$0.49	(38.5%)	(36.1%)	\$0.16B	(52.1%)	
1inch	\$0.29B	\$0.32	(43.5%)	(54.3%)	\$0.68B	(73.4%)	(80.6%)
Siacoin	\$0.16B	\$0.003	(18.1%)	(12.7%)	\$0.38B	(62.7%)	(63.3%)
wax	\$0.15B	\$0.05	(33.1%)	(49.5%)	\$0.34B		(80.3%)
S SKALE	\$0.12B	\$0.03	(31.5%)	(40.9%)	\$0.42B	(48.9%)	(82.4%)
Livepeer	\$0.12B	\$4.80	(31.2%)	(48.5%)	\$0.35B	(36.4%)	(49.1%)
Ħ Hashflow	\$0.07B	\$0.38	(36.3%)		\$0.92B	(71.3%)	
VENUS	\$0.06B	\$4.13	(17.6%)		\$0.51B	390.4%	(12.9%)
Pocket Network	\$0.05B	\$0.03	(35.8%)	(72.0%)	\$0.02B	(43.3%)	
Boba Network	\$0.04B	\$0.13	(42.3%)	(63.9%)	\$0.08B	(29.0%)	



About Messari Protocol Services

Messari Protocol Services streamline stakeholders communication, KPIs tracking, protocol operations, and user participation by providing core tooling and reports to protocols and their communities.

It is our mission at Messari to facilitate better decision making by providing transparency to participants in the cryptoeconomy.

- Our <u>Quarterly reports</u> provide comprehensive insights into the performance and progress
 of protocols and their communities. The quarterly reports include key metrics, governance
 updates, and qualitative events from the quarter.
- Our <u>Diligence reports</u> provide comprehensive information on cryptoassets, including their usage, economics, technology, and legal/regulatory considerations. These reports equip exchanges, investors, and service providers with crucial information for evaluating various projects in the cryptoeconomy.

For custom or specific quarterly reports not yet covered by Messari, <u>please contact our Sales team</u> to discuss how we can cater to your needs and requirements.

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Table of Contents

State of Ethereum Q2'23	5
State of BNB Chain Q2'23	7
State of XRP Ledger Q2'23	9
State of Cardano Q2'23	11
State of Solana Q2'23	13
State of TRON Q2'23	15
State of Polkadot Q2'23	17
State of Polygon Q2'23	19
State of Avalanche Q2'23	21
State of Filecoin Q2'23	23
State of Hedera Q2'23	25
State of NEAR Q2'23	27
State of Stacks Q2'23	29
State of The Graph Q2'23	31
State of Aave Q2'23	33
State of Fantom Q2'23	35
State of ApeCoin Q2'23	37
State of The Sandbox Q2'23	39
State of EOS Q2'23	41
State of USDD Q2'23	43
State of Tezos Q2'23	45
State of Synthetix Q2'23	47
State of Osmosis Q2'23	49
State of 1inch Q2'23	51
State of Sia Q2'23	53
State of WAX Q2'23	55
State of SKALE Q2'23	57
State of Livepeer Q2'23	59
State of Hashflow Q2'23	61
State of Venus Q2'23	63
State of Pocket Network Q2'23	65
State of Boba Network Q2'23	67



State of Ethereum Q2'23

Kunal Goel • Senior Research Analyst (@kunalgoel)

	Unit	Q3′22	Q4'22	Q1′23	Q2′23
Financial Performance					
Price	\$	1,336	1,199	1,793	1,853
		22%	(10%)	50%	3%
Price	втс	0.068	0.072	0.064	0.061
		25%	6%	(11%)	(5%)
Market capitalization	\$B	161	145	216	223
		21%	(10%)	49%	3%
Outstanding supply	ETH M	121	121	120	120
		0.9%	(0.0%)	(0.1%)	(0.2%)
L1 TVL	\$B	34	25	32	30
		0%	(24%)	28%	(6%)
L2 TVL	\$B	2.8	1.7	3.7	3.8
		180%	(39%)	117%	2%
Network Performance					
Unique addresses	# M	207	218	227	237
		3.4%	5.8%	3.7%	4.5%
Average active addresses	# K	0.51	0.44	0.42	0.41
		7.4%	(12.4%)	(4.1%)	(2.9%)
Average daily transactions	# K	1.15	1.06	1.05	1.05
		5.0%	(7.8%)	(0.7%)	(0.5%)
Average gas price	Gwei	21	22	30	47
		-65%	3%	42%	53%
Network Security					
ETH staked	ETH M	14	16	18	24
		8%	13%	14%	31%
Staking ratio	%	12%	13%	15%	20%
		1%	1%	2%	5%

- Amidst Q2's regulatory changes, ETH dominance grew to 18% by the end of Q2'23, up from 17.4% at the start of it.
- Ethereum saw **higher usage and burn**. Validator yields were supported by higher deflation.
- Ethereum experienced brief finalization issues in May. Client diversity and decentralization of stake allowed the blockchain to recover without intervention.
- Layer-2 solutions continued to grow, but growth was stifled by higher gas costs.
- A smooth Shapella upgrade completed Ethereum's transition to Proof-of-Stake. Staking saw material inflows, and liquid staking tokens continued to grow.



Primer on Ethereum

Ethereum (<u>ETH</u>) is a distributed blockchain computing platform for <u>smart contracts</u> and decentralized applications. Building on Ethereum has led to the creation of various new assets and industries, such as Decentralized Finance (DeFi), Non-Fungible Tokens (NFTs), Decentralized Autonomous Organizations (DAOs), and more. It features an execution engine optimized for smart contract processing, the <u>Ethereum Virtual Machine</u> (EVM).

Ethereum utilizes a <u>Proof-of-Stake (PoS)</u> consensus mechanism. As such, users can run <u>validators</u> to secure the network and participate in block production. Users that meet the <u>hardware</u> <u>requirements</u>, run the latest <u>execution</u> and <u>consensus</u> clients, and deposit 32 ETH into the <u>Beacon</u> <u>Deposit Contract</u> can permissionlessly operate an Ethereum validator.

Blocks on the Ethereum network comprise <u>transactions</u>, which are initiated actions (e.g., sending ETH from one account to another) that require the state of the EVM to be changed. The lifecycle of a transaction on Ethereum is as <u>follows</u>:

- An externally owned account (EOA) or smart contract creates and signs a transaction. In addition, the user defines the gas fee (in ETH) they are willing to pay for block inclusion.
- The transaction is sent to the Ethereum <u>execution</u> client, which then confirms that the sender has the required amount of ETH to execute the transaction and has the ability to send the transaction.
- If the above conditions are satisfied, the transaction is added to the <u>mempool</u>, a queue of pending transactions on the network.
- The transaction is queued in the mempool until a validator chosen for block production decides to include it in its proposed block.
- The block, and the transactions within it, are finalized once it has a confirmed "checkpoint block" preceding it and succeeding it.

Following the <u>Shapella</u> (Shanghai + Capella) hard fork that went live on April 13, 2023, validators can withdraw ETH rewards earned by running a validator, as well as fully exiting the validation protocol and withdrawing the 32 ETH collateral. Today, Ethereum is the world's second-largest cryptocurrency by market capitalization.

Read Messari's full **Quarterly** and **Diligence** reports on Ethereum



State of BNB Chain Q2'23

James Trautman • Research Analyst (@JamesTrautman_)

BNB Chain Quarterly Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Network Usage					
Average Active Daily Addresses ¹	1,042,120	889,280	1,128,435	1,080,837	1,357,170
	(11.6%)	(14.7%)	<i>26.9%</i>	(4.2%)	<i>25.6</i> %
Average Daily Transactions ¹	4,653,114	3,396,009	3,402,400	3,271,362	4,071,040
	(17.3%)	(27.0%)	0.2%	(3.9%)	24.4%
Network Financials					
Circulating Market Cap (\$ Billions) ²	\$35.2	\$46.4	\$40.3	\$50.1	\$37.5
	(51.2%)	31.9%	(13.2%)	24.4%	(25.2%)
Total Quarterly Revenue ²	\$111,999,388	\$66,797,281	\$59,725,663	\$56,958,653	\$52,247,437
	(36.4%)	(40.4%)	(10.6%)	(4.6%)	(8.3%)
Ecosystem					
Total Value Locked (\$ Billions) ³	\$5.8	\$6.3	\$5.1	\$5.4	\$4.0
	(53.0%)	9.4%	(18.3%)	5.7%	(26.3%)
NFT Secondary Sales Volume ⁴	\$60,564,035	\$64,219,474	\$31,468,578	\$18,592,368	\$61,946,323
	126.1%	6.0%	(51.0%)	(40.9%)	233.2%
Development					
Unique Contracts Verified ¹	121,530	96,033	68,626	62,116	94,355
	(21.5%)	(21.0%)	(28.5%)	(9.5%)	51.9%
Staking and Decentralization					
Average Total Engaged Stake ⁵	10.9%	11.1%	12.6%	14.3%	14.5%
	2.3%	2.4%	13.4%	13.4%	1.6%
Average Number of Validators ⁵	21	21	26	29	29
	(0.1%)	1.4%	22.9%	10.7%	(0.1%)
Nakamoto Coefficient ⁵	7	8	8	8	8
	0.0%	14.3%	0.0%	0.0%	0.0%

- BNB Chain's average daily active addresses and transactions increased by 25.6% and
 24.4%, respectively. The growth was primarily driven by a rise in activity from LayerZero.
- BNB Chain's market cap declined 25.2% after the SEC alleged BNB is a security in its regulatory actions against Coinbase and Binance. In contrast, the total crypto market cap increased by 2% QoQ, primarily driven by BTC and ETH.
- BNB Chain revenue (in BNB) decreased 6.1% QoQ as average transaction fees declined 25.5% after BSC validators voted to reduce gas fees from 5 to 3 Gwei.
- Staking on the network was stable through Q2. BNB Chain plans to increase the number of validators from 29 to 100 with a new validator reward model (balanced mining) and a validator reputation system.
- Several technical developments were rolled out during Q2, including the Planck hard fork, Luban hard fork, and opBNB.



Primer on BNB Chain

BNB Chain (<u>BNB</u>) is a public, open-source blockchain that aims to deliver scalable smart contract support for decentralized applications. It seeks to accomplish this with a <u>modular design</u> and scaling solutions. BNB Chain consists of a multichain framework — the <u>BNB Smart Chain</u>, <u>Beacon Chain</u>, <u>BNB Sidechain</u>, <u>BNB ZkRollup</u>, and most recently, <u>Optimistic Rollup</u> and <u>BNB Greenfield</u>.

The Beacon Chain is the dedicated layer for governance (staking and voting), and the BNB Smart Chain is the dedicated layer for Ethereum Virtual Machine (EVM) consensus and execution. The BNB Smart Chain is based on a Proof-of-Staked-Authority (PoSA) mechanism and is powered by a growing network of active validators. The BNB Sidechain framework is designed to create BNB Smart Chain-compatible sidechains. Plans also include the launch of ZK-rollups and optimistic rollups for high-performance scaling, allowing sidechains to customize solutions. Finally, BNB Greenfield is designed to serve as a decentralized storage infrastructure within the broader BNB Chain ecosystem.

Read Messari's full **Quarterly** and **Diligence** reports on BNB Chain



State of XRP Ledger Q2'23

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	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Average Daily Active Addresses	74,802 (49.4%)	74,063 (1.0%)	57,517 (22.3%)	65,525 13.9%	53,990 (17.6%)
Network	Average Daily Transactions	1.3M (19.5%)	1.2M (10.2%)	1.2M 2.7%	1.3M 10.7%	1.2M (11.9%)
Ž	Total New Addresses	130,376 1.9%	126,687 (52.9%)	230,280 64.0%	140,617 (31.8%)	138,790 (31.8%)
_	XRP Price	\$ 0.33 (61.7%)	\$ 0.49 47.3%	\$ 0.35 (28.8%)	\$ 0.54 55.5%	\$ 0.47 (11.7%)
Financial	Circulating Market Cap	\$15.9B (61.5%)	\$24.2B 51.5%	\$17.4B (28.1%)	\$27.8B 59.9%	\$24.8B (10.7%)
	Quarterly Revenue (USD)	\$87,239 (51.4%)	\$55,008 (36.9%)	\$43,774 (20.4%)	\$58,812 34.4%	\$188,376 220.3%
mens	Average Daily NFT Mints			11,803	4,845 (59.0%)	5,609 15.8%
Ecosystem	Average Daily NFT Offers Accept	ed -		5,967	3,080 (48.4%)	3,864 25.5%

- XRP's circulating market cap is up 42.5% YTD, primarily due to Q1's surge. However, the market cap decreased 10.7% QoQ from \$27.8 billion to \$24.8 billion in Q2.
- Average daily transactions and average daily active addresses declined 11.9% and 17.6%
 QoQ, respectively. Aside from NFT activity, most network activity metrics declined in Q2.
- Average daily NFT transactions increased 12.7% QoQ from 13,800 to 15,500. Almost all NFT transaction types increased QoQ, and NFTokenCreateOffer increased its dominance to over 50% of all NFT transactions.
- The XRPL continues to expand in new directions with efforts on sidechains including
 Coreum and Root Network.



Primer on XRP Ledger

The XRP Ledger (XRP) has been running for over a decade, offering fast, energy-efficient, cross-currency, and cross-border payments, among other features. The XRPL offers native Issued Currencies, a decentralized exchange (DEX), escrow functionality, and token management. With these native capabilities, the XRPL can execute many of the same functions that other networks do, even though it does not support smart contracts. Arbitrary smart contracts are not enabled on the base layer as a design choice to ensure maximum security and stability.

XRP, the native token on the XRPL, is the sixth largest cryptocurrency by market capitalization at \$24.8 billion, as of Q2 2023. The XRPL averages ~15 transactions per second, although it could theoretically support up to 1,500. Transactions on the XRPL are deterministic in cost, with most transaction types costing 10 drops. A drop is a millionth of an XRP, worth a fraction of a cent at XRP's current price of \$0.47.

The XRPL – supported by <u>Ripple</u>, <u>XRPL Foundation</u>, <u>XRPL Labs</u>, <u>XRPL Commons</u>, and other developers around the world – aims to go beyond other networks' narrow focus of peer-to-peer transactions. It provides a digital payment infrastructure not just for individuals but also for existing financial entities such as central banks.

Read Messari's full **Quarterly** report on XRP Ledger



State of Cardano Q2'23

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	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Network	Average Daily Active Addresses	90,595 (42.3%)	64,176 (29.2%)	68,262 6.4%	60,208 (11.8%)	57,821 (4.0%)
Netv	Average Daily Transactions	94,082 (25.1%)	66,798 (29.0%)	75,440 72.9%	67,456 (10.6%)	68,765 1.9%
	ADA Price	\$ 0.47 (60.9%)	\$ 0.44 (5.9%)	\$ 0.25 (43.9%)	\$ 0.38 53.5%	\$ 0.28 (26.9%)
Financial	Circulating Market Cap	\$15.7B (58.8%)	\$14.8B (6.0%)	\$8.6B (41.9%)	\$13.2B 53.6%	\$9.7B (26.9%)
Π	Real Yield	(2.07%) (175.5%)	3.41% (265.2%)	(0.35%) (110.1%)	3.16% (1,014.2%)	3.28% 3.7%
_	Total Value Locked (USD)	\$121.5M (58.0%)	\$77.9M (35.9%)	\$50.8M (34.8%)	\$138.3M 172.3%	\$151.7M 9.7%
Ecosystem	Quarterly NFT Trading Volume (Total Sales)	\$150.9M 1.9%	\$71.1M (52.9%)	\$116.7M 64.0%	\$79.5M (31.8%)	\$46.2M (41.9%)
Я	Active Stake (ADA)	24.7B	25.0B	25.4B	24.6B (2.9%)	22.7B (7.7%)

- TVL (USD) was up 9.7% QoQ and 198.6% YTD. Through 2023, Cardano moved up from 34th to 21st in TVL ranking across all chains.
- Average daily dapp transactions were up 49% QoQ. Minswap had the largest absolute growth, but several new dapps contributed to the overall increase.
- **Hydra Head development continued** with proposed topologies, interest from ecosystem teams, and a demo shared.
- Milkomeda C1 sidechain announced plans to become an L2. Midnight, Wanchain, and IOG's sidechains team continue to build towards increased interoperability and new use cases in the greater Cardano ecosystem.



Primer on Cardano

Cardano (ADA) is a Proof-of-Stake (PoS) Layer-1 smart contract network launched in 2017. Cardano's PoS mechanism allows for delegation of stake. Cardano aims to provide security, scalability, and sustainability to decentralized applications and systems building on top of the blockchain. In addition to the community of developers, node operators, and projects, Cardano is supported by multiple entities: Input Output Global (IOG), <a href="description-decomposition

Cardano has taken a unique approach to development when compared to other smart contract networks, based on a phased roadmap:

- Cardano's development is methodical and deliberate prioritizing sustainability and stability over speed. For example, smart contracts were not enabled until the <u>Alonzo hard</u> <u>fork</u> in 2021, over four years after the network launched.
- The <u>extended unspent transaction output</u> (eUTXO) accounting model enables native token transfers, scalability, and decentralization.
- Cardano has offered liquid staking and economic models to incentivize decentralization on its <u>Ouroboros</u> PoS consensus model since inception.

Read Messari's full **Quarterly** and **Diligence** reports on Cardano



State of Solana Q2'23

James Trautman • Research Analyst (@JamesTrautman_)

Solana Quarterly Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Network Usage					
Average Daily Unique Fee Payers ¹	325,360	220,814	137,421	129,258	149,847
	59.5%	(32.1%)	(37.8%)	(5.9%)	15.9%
Average Daily Transactions (Vote) ²	144,679,284	187,198,459	272,807,924	258,626,912	273,036,533
	(8.9%)	29.4%	45.7%	(5.2%)	5.6%
Average Daily Transactions (Non-Vote) ²	20,764,473	34,888,770	21,814,088	19,559,629	24,274,403
	(46.1%)	<i>68.0</i> %	(37.5%)	(10.3%)	24.1%
Network Financials					
Circulating Market Cap (\$ Billions) ³	\$11.6	\$12.1	\$3.6	\$7.9	\$7.2
	(70.4%)	3.9%	(69.9%)	118.1%	(9.2%)
Total Quarterly Revenue (SOL) ¹	165,288	241,063	201,541	340,078	289,173
	(29.1%)	45.8%	(16.4%)	68.7%	(15.0%)
Ecosystem					
Total Value Locked (\$ Billions) ⁴	\$1.8 (64.6%)	\$1.5 (12.6%)	\$0.2 (84.0%)	\$0.3 23.5%	\$0.3 3.8%
NFT Secondary Sales Volume ⁵	\$777,486,017	\$250,812,352	\$252,508,439	\$330,673,016	\$193,490,609
	(5.5%)	(67.7%)	0.7%	31.0%	(41.5%)
Unique Active Programs ⁶	92,883	104,048	101,167	95,955	86,779
	59.1%	12.0%	(2.8%)	(5.2%)	(9.6%)
Staking and Decentralization					
Average Engaged Stake ⁷	76.1% (3.0%)	76.7% 0.8%	72.8% (5.1%)	70.7% (2.9%)	71.0% 0.5%
Average Number of Validators ⁷	1,912	2,098	2,136	2,412	1,904
	<i>16.8%</i>	9.7%	1.8%	12.9%	(21.1%)
Nakamoto Coefficient ⁷	27	31	32	31	32
	35.0%	14.8%	3.2%	(3.1%)	3.2%

- Solana's **market cap declined** 9.2% after the SEC alleged SOL is a security in its regulatory actions against Coinbase and Binance. Solana revenue (in SOL) decreased 15% QoQ as utilization of priority fees cooled off during Q2.
- Staking on the network was stable through Q2, while the average number of validators decreased by 21.1% QoQ.
- The Solana Foundation's growth initiatives to invest in the ecosystem continued, including those with Convertible Grants, a \$10 million Al Fund, and Grizzlython winners.
- The Solana Foundation launched state compression, which was quickly leveraged by a myriad of projects including Crossmint, Dialect, and Tensor.
- The Solana smartphone, Saga, was made available to the public for new orders.



Primer on Solana

<u>Solana</u> is a Layer-1 blockchain optimized for scalability. The network's <u>design goal</u> is to provide a platform that allows developers to create applications without needing to work around performance bottlenecks, such as transaction throughput limitations and prohibitively expensive transaction fees. Additional design goals include sub-second settlement times, low transaction costs, and support for all <u>LLVM</u>-compatible smart contract languages (LLVM is a collection of modular and reusable compiler and toolchain technologies).

Solana features a timestamp system called <u>Proof-of-History (PoH)</u> that automatically orders transactions for validators and serves as the network's consensus mechanism. PoH is <u>used</u> to cryptographically verify the passage of time between two events and builds on the Proof-of-Stake (PoS) consensus algorithm to help secure the network. Validators in the PoH mechanism are grouped into "<u>clusters</u>." In a cluster, one validator serves as the leader and produces "ledger entries" while the remaining validators sign the entries produced by the leader.

The lead validator responsible for producing ledger entries, named the "<u>Slot Leader</u>," is determined by a pseudo-random <u>Leader Schedule Generation Algorithm</u>. The algorithm samples a bank of all the staked accounts (<u>active set</u>) that have voted within a certain number of ticks. The network's <u>tick</u> height is then used as a seed to select nodes, weighted by stake, to create a stake-weighted ordering schedule. The other validators are then responsible for voting on the Slot Leader's proposed entries. Slot <u>Leaders receive 50%</u> of all transaction fees for successful ledger entries produced and are "recomputed locally and periodically." The other half of the transaction fees are burned. Lastly, validators receive inflationary SOL rewards in proportion to the total amount of tokens staked, including delegated tokens.

Read Messari's full Quarterly report on Solana



State of TRON Q2'23

James Trautman • Research Analyst (@JamesTrautman_)

TRON Quarterly Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Network Usage					
Average Active Daily Addresses ¹	2,669,421 47.2%	2,676,152 0.3%	3,156,518 <i>17.9</i> %	2,297,332 (27.2%)	2,618,478 <i>14.0</i> %
Average Daily Transactions ¹	4,776,581 46.2%	5,370,844 12.4%	6,575,981 <i>22.4%</i>	7,084,345 7.7%	9,135,002 28.9%
Network Financials					
Circulating Market Cap (\$ Billions) ²	\$6.0 B (20.3%)	\$5.6 B (5.9%)	\$5.0 B (11.0%)	\$6.0 B 19.2%	\$6.9 B 14.7%
Total Quarterly Revenue ¹	\$48,572,573 22.5%	\$38,291,695 (21.2%)	\$47,964,819 <i>25.3%</i>	\$89,984,946 87.6%	\$109,922,740 22.2%
<u>Ecosystem</u>					
Total Value Locked (\$ Billions) ³	\$3.9 B (17.5%)	\$6.3 B <i>61.2%</i>	\$4.6 B (27.7%)	\$5.4 B 18.8%	\$5.8 B 7.0%
Stables Total Market Cap (\$ Billions) ³	\$31.4 B	\$33.9 B 8.1%	\$33.6 B (0.8%)	\$43.6 B 29.6%	\$43.9 B 0.7%
Staking and Decentralization					
Average Total Engaged Stake ¹	36.7% <i>31.6%</i>	47.9% 30.7%	48.1% 0.5%	48.0% (0.3%)	47.6% (0.9%)
Average Total Stake (TRX Billions) ¹	35.6 B 25.7%	44.3 B 24.2%	44.4 B 0.2%	44.0 B (0.9%)	43.0 B (2.1%)

- TRON's daily average active accounts, new accounts, and transactions increased by 14%, 13.4%, and 28.9%, respectively. The growth coincided with the launch of the BitTorrent bridge and integrations of Stake 2.0, among other developments.
- The **growth in network activity positively impacted revenue**, which increased by 11.6% in TRX QoQ (up 22.2% in USD terms).
- Revenue translated to a substantial amount of TRX burned, which supported the value of TRX during an otherwise flat-to-down market.
- TRX outperformed most L1 tokens in Q2. TRX's market cap increased 14.7% QoQ, compared to an average decline of 23% for other major L1s.
- **TRON continued to improve network functionality**, including the release of Stake 2.0 (TIP-467), GreatVoyage-V4.7.1.1 (Pittacus) and initiation of Great Voyage-V4.7.2 (Periander).



Primer on TRON

TRON (TRON) is a public open-sourced blockchain network using a Delegated-Proof-of-Stake (DPoS) mechanism. DPoS is an election mechanism that determines who maintains the network. An election occurs every six hours, resulting in 27 Super Representatives who take turns producing blocks.

The <u>TRON Virtual Machine</u> (TVM) powers applications on the network and uses "Energy & Bandwidth" instead of gas, like its Ethereum Virtual Machine (EVM) counterpart. The TVM is EVM-compatible and offers developers affordable smart contract execution.

Read Messari's full Quarterly and Diligence reports on TRON



State of Polkadot Q2'23

Nick Garcia • Research Analyst (@nickdgarcia)

Section	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Circulating Market Cap	\$7.89B	\$7.43B	\$5.13B	\$7.74B	\$6.24B
		(68.1%)	(5.8%)	(30.9%)	50.7%	
Financial	Total Revenue	\$217.67K	\$115.33K	\$94.32K	\$120.35K	\$81.35K
		(21.4%)	(47.0%)	0.8%	27.6%	
	Avg Daily Active Accounts	7.18K	5.05K	8.27K	6.92K	5.81K
		(11.8%)	(29.6%)	63.7%	(16.3%)	
Network	Avg Daily New Accounts	2.24K	1.57K	2.35K	1.69K	1.37K
		(27.0%)	(29.8%)	49.4%	(28.0%)	
	Avg Daily XCM Messages	687	726	707	751	572
Ecosystem and			5.7%		6.3%	(23.8%)
Development	Active XCM Channels	19	44	70	111	155
			131.6%	59.1%	58.6%	
	Total Stake (DOT)	660.89M	698.25M	572.20M	648.47M	607.20M
Decentralization		3.5%	5.7%	(18.1%)	13.3%	
and Staking	% of Total Supply Staked	54.7%	56.4%	45.1%	50.0%	45.7%
		1.0%	3.1%	(20.0%)	10.7%	

- OpenGov officially launched. Polkadot's new fully-decentralized governance model,
 OpenGov, introduces concurrent referenda, community-centered governance bodies, and enhanced delegation flexibility, enabling a more efficient and transparent decision-making process.
- XCM V3 officially launched. This new iteration of the messaging format introduces advanced programmability, bridging capabilities with external networks, cross-chain locking, improved fee payment mechanisms, and support for NFTs.
- Polkadot's native token DOT was not flagged by the SEC as a security. The omission follows the Web3 Foundation stating DOT had morphed and was no longer deemed a security after three years of discussions with the SEC.
- Acala and Moonbeam re-leased their parachain slots. The initial leases for the first batch of parachains expire in October, indicating increased competition for slots as new projects seek to join and existing projects aim to re-sign.



Primer on Polkadot

Polkadot (DOT) is a Nominated Proof-of-Stake (NPoS) blockchain network designed to support various interconnected, application-specific Layer-1 chains known as <u>parachains</u>. Each chain built within Polkadot uses Parity Technologies' blockchain development framework <u>Substrate</u>, which allows developers to select specific components that best suit their application-specific chain. Polkadot refers to the entire ecosystem of parachains that plug into a single base platform known as the <u>Relay Chain</u>. This base platform does not support application functionality but instead houses all validators and is responsible for securing, governing, and connecting the parachains.

Read Messari's full **Quarterly** report on Polkadot



State of Polygon Q2'23

Nick Garcia • Research Analyst (@nickdgarcia)

Section	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Circulating Market Cap	\$3.97B	\$5.68B	\$6.82B	\$9.92B	\$5.82B
		(65.8%)	43.1%	20.2%		
Financial	Total Fees	\$5.71M	\$4.19M	\$6.16M	\$11.85M	\$11.44M
		(44.1%)	(26.6%)	46.9%	92.5%	(3.5%)
	Avg Daily Active Addresses	314.90K	276.37K	425.91K	396.05K	417.64K
Network		(13.7%)	(12.2%)	54.1%		5.5%
	Avg Daily Total Transactions	3.13M	2.78M	2.85M	2.94M	2.41M
		2.4%		2.5%		(18.1%)
	Total Value Locked	\$1.47B	\$1.33B	\$1.02B	\$1.17B	\$1.09B
Ecosystem and		(66.7%)	(9.5%)	(23.6%)	14.7%	(6.5%)
Development	Avg Weekly NFT Sales Volume	\$4.71M	\$3.70M	\$4.76M	\$6.05M	\$8.60M
			(21.4%)	28.6%	27.1%	
	Total Stake (MATIC)	2.78B	3.36B	3.64B	3.82B	3.84B
Decentralization		(4.2%)	20.8%	8.5%	4.9%	0.5%
and Staking	% of Supply Staked	28.6%	34.5%	36.4%	38.2%	38.4%
		(10.1%)	20.8%	5.5%	4.9%	

- Despite a 41% reduction in market cap, Polygon's active daily addresses (417,000 [+5.5%]) and total value locked (\$1.09 billion [-6.5%]) held up relatively well in Q2.
- Polygon Labs unveiled Polygon 2.0, a network of zero-knowledge Layer-2 blockchains. It
 aims to become the "Value Layer of the Internet" and brings significant updates to protocol
 architecture, tokenomics, and governance.
- Polygon zkEVM experienced steady growth, showcasing notable collaborations and integrations with industry players. By the end of the quarter, it achieved 200,000 unique addresses
- **Despite a hostile U.S. regulatory environment**, Polygon's network fundamentals were unaffected by the news.
- Polygon expanded its list of partnerships with prominent legacy companies and institutions, including Franklin Templeton, Securitize, Mastercard, and Warner Music Group.



Primer on Polygon

Polygon (MATIC) is a suite of Ethereum-based scaling solutions that allow developers to move computation and data storage off Ethereum and into low-fee, high-speed development environments. Polygon offers the following solutions:

- <u>Polygon PoS</u> Polygon's flagship product is the Polygon PoS network, a Delegated Proof-of-Stake (DPoS) EVM-compatible sidechain for the Ethereum network.
- Polygon zkEVM A Zero-Knowledge (ZK) Layer-2 rollup protocol for Ethereum that launched on mainnet beta on March 27, 2023. Polygon zkEVM aims to enable secure, quick, and cheap transactions. As a ZK-rollup, Polygon zkEVM bundles transactions into batches that are executed off-chain.
- Polygon Miden Polygon Miden is an upcoming Zero-Knowledge (ZK) Layer-2 rollup protocol designed for Ethereum. Setting itself apart from zkEVM, Polygon Miden does not rely on the Ethereum Virtual Machine (EVM). Instead, it utilizes the Miden Virtual Machine (MVM), written in Rust.
- <u>Polygon Supernets</u> An app-chain-focused scaling solution for Polygon PoS that is in testnet. Polygon Supernets aim to expand the block space of Polygon PoS by providing both Layer-2 and Layer-3 networks for specific applications.
- <u>Polygon ID</u> A privacy-preserving identification service for Web3 users. Polygon ID uses ZK-proofs to verify a user's credentials privately without disclosing unwanted personal information.

In June 2023, Polygon Labs unveiled <u>Polygon 2.0</u>, a network of zero-knowledge Layer 2 blockchains. It aims to become the "Value Layer of the Internet" and brings significant updates to protocol architecture, tokenomics, and governance. Polygon 2.0 is the future of the Polygon ecosystem.

Read Messari's full **Quarterly** and **Diligence** reports on Polygon



State of Avalanche Q2'23

James Trautman • Research Analyst (@JamesTrautman_)

Avalanche Quarterly Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Network Usage					
Average Active Daily Addresses (C-Chain + Subnets) 1	70,237	46,416	48,034	38,097	79,167
	(26.3%)	(33.9%)	3.5%	(20.7%)	107.8%
Average Daily Transactions (C-Chain + Subnets) ¹	910,197	1,526,337	2,897,971	1,946,079	1,589,645
	4.9%	67.7%	89.9 %	(32.8%)	(18.3%)
Network Financials					
Circulating Market Cap (\$ Billions) ²	\$4.7	\$5.1	\$3.4	\$5.8	\$4.5
	(81.6%)	8.3%	(33.4%)	70.3%	(22.2%)
Total Quarterly Revenue (USD) ²	\$37,807,700	\$2,305,070	\$1,479,001	\$1,816,921	\$4,547,448
	(28.7%)	(93.9%)	(35.8%)	22.8%	150.3%
<u>Ecosystem</u>					
Total Value Locked (\$ Billions) ³	\$4.2	\$2.3	\$1.0	\$1.0	\$0.8
	(67.5%)	(44.7%)	(58.7%)	4.2%	(19.4%)
NFT Secondary Sales Volume ⁴	\$55,701,441	\$5,942,705	\$6,159,594	\$3,980,038	\$2,454,521
	(81.7%)	(89.3%)	3.6%	(35.4%)	(38.3%)
Unique Contracts Verified ⁵	5,801	4,698	3,583	3,015	2,443
	(36.9%)	(19.0%)	(23.7%)	(15.9%)	(19.0%)
Staking and Decentralization					
Average Total Engaged Stake ⁶	65.9%	63.7%	64.4%	64.5%	61.3%
	12.3%	(3.4%)	1.2%	0.2%	(5.0%)
Average Number of Validators ⁶	1,466	1,273	1,222	1,209	1,259
	16.7%	(13.2%)	(4.1%)	(1.0%)	4.1%
Nakamoto Coefficient ⁶	30	32	32	33	31
	15.4%	6.7%	0.0%	3.1%	(6.1%)

- Avalanche's daily average daily active addresses and transactions on the C-Chain increased by 132.1% and 162.2%, respectively. The growth was primarily driven by a rise in stablecoin liquidity and activity from LayerZero.
- Renewed network activity positively impacted revenue, which increased by 173.1% in AVAX QoQ (up 150.3% in USD terms).
- Ava Labs introduced Avalanche Arcad3 to accelerate gaming development with partners like GREE, Loco, and TSM.
- Evergreen Subnets and Spruce were launched during Q2. Spruce ushered in several partners, including T. Rowe Price, WisdomTree, Wellington Management, and Cumberland.
- Alibaba Cloud launched Cloudverse, a launchpad for businesses to deploy metaverses on Avalanche. In addition, SK, one of South Korea's largest conglomerates, launched its dedicated Avalanche Subnet, UPTN.



Primer on Avalanche

The Avalanche network (<u>AVAX</u>) is a Proof-of-Stake (PoS) smart contract platform for decentralized applications. Avalanche differentiates itself by creating and implementing a consensus family known as "<u>Avalanche consensus</u>."

Following years of research, the Avalanche mainnet was launched in September 2020 and featured the release of a multichain framework utilizing three chains: the P, X, and C chains. Each chain plays a critical and unique role within the Avalanche ecosystem while providing the same capabilities of a single network, often called the Primary Network. Avalanche consensus and the Primary Network are designed to support sovereign, interconnected blockchains known as subnets.

Subnets are subclasses of Primary Network validators that run the same Virtual Machines (VMs) with their own rules. Subnets enable different properties of reliability, efficiency, and data sovereignty. They provide the ability to create custom blockchains for different use cases while isolating high-traffic applications from congesting activity on the Primary Network.

Read Messari's full **Quarterly** and **Diligence** reports on Avalanche



State of Filecoin Q2'23

Mihai Grigore • Senior Research Analyst (@tech_metrics) Jennifer Obem • Research Analyst (@jenniferovat)

	Q2′22	Q3′22	Q4'22	Q1′23	Q2′23
<u>Financials</u>					
Protocol Revenue (FIL Millions)	1.6M	1.8M	1.2M	1.3M	2.5M
	264.0%	8.5%	(30.5%)	4.9%	91.3%
Protocol Revenue (USD Millions)	\$19.4M	\$11.1M	\$5.7M	\$6.9M	\$11.5M
	104.8%	(43.0%)	(48.9%)	21.4%	66.6%
Supply-Side Revenue (FIL Millions)	21.2M	20.4M	20.2M	18.9M	17.6M
	(3.6%)	(3.8%)	(1.2%)	(6.6%)	(6.4%)
Supply-Side Revenue (USD Millions)	\$258.8M	\$129.8M	\$91.8M	\$102.4M	\$85.7M
	(48.1%)	(49.9%)	(29.3%)	11.5%	(16.3%)
Network KPIs					
Average Active Storage Deals (PiB)	86.9	150.7	331.5	580.5	954.2
	132.4%	73.4%	120.0%	75.1%	64.4%
Average Raw Byte Storage Capacity (EiB)	16.7	16.7	15.9	13.8	12.2
	7.0%	(0.1%)	(4.8%)	(13.2%)	(11.6%)
Storage Utilization (%)	0.5%	0.9%	2.0%	4.1%	7.6%

- Filecoin's storage market continued to grow in Q2'23, as active deals rose 64% QoQ.
- As storage capacity decreased 12% QoQ, storage utilization grew from approximately 4.1% in Q1'23 to nearly 8% in Q2'23.
- Revenue from fees increased 91% in Q2'23 (up 67% in USD terms), driven by a 47% QoQ increase in new storage deals.
- The Filecoin Virtual Machine (FVM) brought **Ethereum-style smart contracts to enable new use cases**, including liquid staking, perpetual storage, and decentralized compute.



Primer on Filecoin

Relying on centralized data storage has a major shortcoming: it's hard to systematically verify the integrity of the stored data. The Filecoin storage network (FIL) is a <u>peer-to-peer</u> version of Amazon S3. It's built on top of the InterPlanetary File System (IPFS), which serves as the Filecoin network's distributed data storage and sharing layer. Filecoin regularly verifies the storage of data and uses <u>deals</u> that price the storage based on supply and demand dynamics, instead of a fixed pricing structure.

A storage deal is like a contract with a service level agreement (<u>SLA</u>) — users pay fees to storage providers to store data for a specified duration. To keep data safe, Filecoin uses a cryptoeconomic incentive model that regularly <u>verifies</u> the storage with <u>zero-knowledge proofs</u>. To incentivize storage providers to participate in deals, Filecoin rewards them with FIL, the network's native token. Storage providers are also <u>slashed</u> in the event they either fail to provide reliable uptime or act maliciously against the network.

To retrieve data, Filecoin users pay a retrieval provider to fetch the data. Unlike storage deals, which involve transactions on-chain, retrieval deals use payment channels to settle payments off-chain, resulting in faster retrieval.

The launch of the Filecoin Virtual Machine (FVM) in March 2023 brought Ethereum-style smart contracts to enable new use cases on Filecoin, including liquid staking, perpetual storage, and decentralized compute.

Read Messari's full Quarterly report on Filecoin



State of Hedera Q2'23

Nick Garcia • Research Analyst (@nickdgarcia)

Section	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Circulating Supply (HBAR)	21.30B	24.15B	25.14B	30.50B	32.23B
		6.8%	13.4%	3.5%		
Financial	Circulating Market Cap	\$1.37B	\$1,40B	\$0.94B	\$1.96B	\$1.54B
		(72.9%)	1.9%		108.0%	
	Avg Daily Transactions	0.91M	0.87M	1.47M	40.00M	71.99M
		(71.4%)	(5.3%)	70.2%	2,614.7%	
Network	Avg Daily Active Accounts	2.34K	4.09K	3.49K	5.95K	13.57K
		56.5%	75.0%	(14.7%)	348.4%	
	TVL	\$0.04M	\$17.73M	\$23.77M	\$36.20M	\$24.18M
			42,912.9%	34.1%	52.3%	
Ecosystem	Avg Daily NFT Active Accounts	309	714	591	398	495
		163.8%	131.0%	(17.2%)	(32.6%)	24.2%

- COFRA became the 29th member of the Hedera Governing Council. The Council consists
 of organizations that are dedicated to advancing the growth and development of Hedera,
 which includes operating Hedera's validator nodes.
- There was consistent growth and adoption across all Hedera Network Services. The Hedera Consensus Service is the fastest growing of the Network Services.
- The increase in Hedera network usage was primarily driven by NFTs. This is a shift from previous quarters where DeFi was the main driver.
- Hedera announced a strategy for EVM equivalence. A key contribution to this strategy
 has been made by Swirlds Labs, which developed a Hedera-specific JSON-RPC Relay
 codebase, known as Hashio. This will pave the way for Solidity and Vyper smart contracts
 functionality on the Hedera network.



Primer on Hedera

Hedera (HBAR) is a public-permissioned leaderless Proof-of-Stake (PoS) blockchain network. It is governed by 29 global organizations, known as the Hedera Governing Council, with input from the community via Hedera Improvement Proposals (HIPs). Members of the Governing Council operate Hedera's validator nodes while the network transitions to permissionless node hosting. Although Hedera's network operation is currently permissioned in nature, the division of responsibility across each of the 29 geographically and industry diversified (collusion-proof) council members is unique among public DLTs. This governance structure physically prevents aggregation of hash rate or stake to the same point that is threatening the security of other public ledgers.

Hedera offers developers core services, known as the <u>Hedera Network Services</u>, to build decentralized applications. The network is powered by the <u>Hashgraph Consensus Algorithm</u>, which offers high throughput, fair ordering, and low-latency consensus.

Read Messari's full Quarterly report on Hedera



State of NEAR Q2'23

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Section	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Circulating Market Cap	\$2.47B	\$2.82B	\$1.08B	\$1.67B	\$1.25B
		(73.5%)	13.9%	(61.8%)	54.9%	(24.9%)
Financial	Total Revenue	\$1.19M	\$0.22M	\$0.16M	\$0.12M	\$0.10M
		(31.8%)	(81.5%)	(28.7%)	(22.5%)	
	Avg Daily Active Accounts	13.93K	31.55K	63.70K	63.94K	58.07K
		(44.0%)	126.5%	101.9%	0.4%	(9.2%)
Network	Avg Daily Transactions	683.65K	442.74K	453.44K	393.05K	357.63K
		20.9%	(35.2%)	2.4%	(13.3%)	(9.2%)
Ecosystem and	TVL	\$0.64B	\$0.45B	\$0.14B	\$0.10B	\$0.06B
		(43.1%)	(30.1%)	(68.0%)	(32.4%)	
Development	Total NFT Sales Volume (NEAR)	622.38K	136.14K	153.03K	96.30K	45.43K
		(40.1%)	(78.1%)	12.4%		
	Total Validators	100	114	144	215	219
Decentralization			14.0%	26.3%	49.3%	
and Staking	% of Supply Staked	38.7%	43.8%	43.4%	46.3%	46.8%
		(1.5%)	13.2%	(0.9%)	6.7%	

- NEAR was among the 13 assets listed in the SEC's complaint against Coinbase. However,
 NEAR's financial and network fundamentals remained unaffected by the news.
- The introduction of the Blockchain Operating System (BOS) in March proved to be a significant milestone for NEAR. Within four months, NEAR Social attracted over 15,000 user accounts and witnessed the creation of nearly 6,000 widgets.
- The Sweat Economy continues to be a leading application. Within a year, it accumulated a total of 19 million Sweat wallets and recently conducted one of the largest governance votes in DAO history, attracting over 350,000 participants.
- NEAR made notable progress in achieving its 2023 goal of driving adoption and attracting more users to the NEAR Protocol and the BOS. This progress was fueled by strategic partnerships with established industry players and grassroots initiatives.



Primer on NEAR

NEAR (NEAR) is the Blockchain Operating System (BOS), a fully Web3-native stack that unifies the Web3 space into a single interface and a common layer for building, browsing, and discovering Web3 experiences on any blockchain. NEAR Protocol is a smart contract platform that utilizes a Thresholded Proof of Stake (PoS) consensus algorithm to execute transactions. NEAR incorporates a Nightshade Sharding mechanism, which facilitates increased transaction throughput and scalability, takes a novel approach to basic network functionality, and supports EVM and Substrate via Aurora and Octopus Network.

Read Messari's full Quarterly report on NEAR



State of Stacks Q2'23

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	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Network	Average Daily Transactions	5,447 (2.1%)	4,821 (11.5%)	6,861 42.3%	9,174 33.7%	7,094 (22.7%)
INEL	Average Daily Active Addresses	1,604 (7.2%)	1,281 (20.1%)	2,265 <i>7</i> 6.8%	3,054 34.8%	1,686 (44.8%)
Clai	STX Price	\$ 0.45 (70.1%)	\$ 0.33 (27.3%)	\$ 0.22 (34.0%)	\$ 0.93 329.7%	\$ 0.69 (25.8%)
Financial	Total Quarterly Revenue (STX)	65,096 (77.2%)	39,332 (39.6%)	67,304 71.1%	83,098 23.5%	59,137 (28.8%)
Sterm	Total Value Locked (USD)	\$13.7M (69.9%)	\$12.2M (11.2%)	\$7.1M (41.8%)	\$26.7M 276.2%	\$24.7M (7.5%)
Ecosystem	Average Daily BNS Registrations	110 1182.6%	252 729.6%	1,055 318.4%	769 (27.1%)	80 (89.7%)
6un	Average Total Stacked (USD)	\$398M (44.0%)	\$193M (51.6%)	\$137M (28.8%)	\$232M 69.5%	\$221M (4.9%)
Staking	Average Number of Stackers	199 (5.9%)	182 (8.6%)	167 (8.3%)	169 1.3%	1 59 (6.3%)

- Stacks' market cap is up 53.3% YTD, fueled by Ordinals and other activity on Bitcoin.
- TVL (USD) set its yearly high of \$36.0 million, and TVL (STX) set its all-time high of 56.4 million STX. These milestones are due to multiple factors, including new bridges to Ethereum and BNB, ALEX B20, and sUSDT.
- The Nakamoto release is still in development, with the aim to reduce block times which would both benefit DeFi UX and help alleviate Bitcoin MEV issues.
- **sBTC is still in development**, with the aim to grant Stacks access to a massive amount of BTC liquidity via a trust-minimized bridge.
- Stacking was disabled for two cycles in reaction to a bug found in the stacking contract. Stacking was reenabled in May prior to Cycle 60.



Primer on Stacks

Stacks (<u>STX</u>) is a Bitcoin layer for smart contracts. Decentralized applications are executed on Stacks and settled on Bitcoin, leveraging the security and capital of Bitcoin while offering arbitrary programmability that is not possible on Bitcoin's scriptable settlement layer.

Stacks has knowledge of the full Bitcoin state, thanks to its <u>Proof-of-Transfer</u> (PoX) consensus mechanism and <u>Clarity</u> programming language, enabling it to read from Bitcoin at any time. With PoX, miners commit BTC to eligible Stacks addresses that participate in consensus. This process of STX holders participating in consensus and <u>earning</u> BTC from miners is known as Stacking and was launched as part of the Stacks Mainnet launch in January 2021. PoX runs parallel to Bitcoin's Proof-of-Work (PoW) consensus, hashing and settling Stacks transactions on the Bitcoin L1. Metadata from newly mined Stacks blocks are anchored to every Bitcoin block, allowing users to verify the canonical Stacks chain via Bitcoin blocks.

Read Messari's full Quarterly report on Stacks



State of The Graph Q2'23

Mihai Grigore • Senior Research Analyst (@tech_metrics)

70,439	60,114	62,862	88,872	46,577
	(14.7%)	4.6%	41.4%	(47.5%)
17,262,746	7,887,704	5,965,593	8,812,064	9,068,795
	(54.3%)	(24.4%)	47.7%	2.9%
392	496	618	776	1,082
	26.5%	24.6%	25.6%	39.4%
166	219	292	460	328
	31.9%	33.3%	57.5%	(28.7%)
9,233	10,129	11,044	11,297	11,486
	9.7%	9.0%	2.3%	1.7%
2,424	2,481	2,540	2,568	2,640
	2.4%	2.4%	1.1%	2.8%
	17,262,746 392 166 9,233	(14.7%) 17,262,746 7,887,704 (54.3%) 392 496 26.5% 166 219 31.9% 9,233 10,129 9.7% 2,424 2,481	(14.7%) 4.6% 17,262,746 7,887,704 5,965,593 (54.3%) (24.4%) 392 496 618 26.5% 24.6% 166 219 292 31.9% 33.3% 9,233 10,129 11,044 9.7% 9.0% 2,424 2,481 2,540	(14.7%) 4.6% 41.4% 17,262,746 7,887,704 5,965,593 8,812,064 (54.3%) (24.4%) 47.7% 392 496 618 776 26.5% 24.6% 25.6% 166 219 292 460 31.9% 33.3% 57.5% 9,233 10,129 11,044 11,297 9.7% 9.0% 2.3% 2,424 2,481 2,540 2,568

- As of Q2'23, **1,082 subgraphs have been published** from The Graph's hosted service to the decentralized network (mainnet), up 39% QoQ.
- The ongoing L2 <u>migration</u> of The Graph's protocol smart contracts to Arbitrum aims to bring a seamless and gas-efficient decentralized data experience to The Graph's users.
- In Q2'23, **The Graph saw a 48% QoQ decrease in demand-side revenue in USD**, driven by dapps optimizing query volumes, coupled with a general reduction in usage from governance activities and decentralized infrastructure protocols across the board.
- Revenue from indexing rewards increased 3% QoQ to over 9 million USD in Q2'23.
 Delegators received 64% of the total indexing rewards distributed in Q2'23.
- Following the MIPs incentive program, The Graph's active Indexers decreased 29% QoQ, while Delegators and Curators grew 2% and 3%, respectively.



Primer on The Graph

<u>The Graph</u> (<u>GRT</u>) is an indexing protocol that provides on-chain data to consumers from a wide spectrum of sources. It removes the need for data consumers (e.g., app developers) to build out complicated infrastructure to get on-chain data. Instead, data consumers pay to query APIs of on-chain data — called "<u>subgraphs</u>" — via the <u>GraphQL API</u>.

To ensure the protocol runs correctly and efficiently, The Graph network incentivizes several key roles within its ecosystem of both technical and non-technical participants:

- <u>Indexers</u> process and store on-chain data from subgraphs. They usually have advanced technical knowledge to operate nodes. In return, Indexers receive query fees from data consumers and indexing rewards from new token issuance.
- <u>Curators</u> are economically incentivized to analyze and signal which subgraphs are valuable to index. Curators earn a 10% portion of the query fees generated by particular subgraphs.
- <u>Delegators</u> do not employ resources to index on-chain data; instead, they delegate The
 Graph's native utility token <u>GRT</u> to Indexers. In return, Delegators earn a portion of query
 fees and indexing rewards without running nodes themselves.

As of Q2'23, seven networks are <u>supported</u> by The Graph's decentralized protocol and hosted service: Ethereum, Polygon, Arbitrum, Avalanche, Fantom, Gnosis Chain, and Celo. The L2 <u>migration</u> of The Graph's protocol smart contracts to Arbitrum is ongoing.

Read Messari's full **Quarterly** report on The Graph



State of Aave Q2'23

Kentrell Key • Research Analyst (@portkey256)

USD, Millions	Q2'22	Q3'22	Q4'22	Q1′23	Q2′23	YoY
Outstanding Loans % Growth	4,044	3,102 <i>(23.3%)</i>	1,865 <i>(39.9%)</i>	2,480 <i>33.0%</i>	2,860 <i>(7.9%)</i>	29.3%
Outstanding Deposits <i>% Growth</i>	9,781	8,754 <i>(10.5%)</i>	5,719 <i>(34.7%)</i>	7,985 <i>39.6%</i>	8,675 <i>(11.7%)</i>	11.3%
Net Borrow/Repay	12,031	9,937	2,177	2,997	3,173	
Net Deposit/Withdraw	160.3	1,937	(620.2)	666.8	(74.1)	
Depositor Lending APY ¹		1.37%	0.98%	1.02%	1.04%	
Liquidation Volume	392.2	14.6	99.3	56.3	24.9	(93.7%)
% Growth		(96.3%)	(580.1%)	(43.3%)	(55.8%)	
Average Daily Active Users ²	4,397	4,607	8,180	5,382	2,858	(35.0%)
% Growth		4.8%	77.6%	(34.2%)	(46.9%)	
Insurance Assets ³ % Growth	51.5	96.6 <i>87.8%</i>	58.0 <i>(40.0%)</i>	109.1 <i>88.1%</i>	104.4 <i>(4.3%)</i>	102.9%

- The Aave V3 market launched on Ethereum in late January, accumulating over \$1 billion in deposits and \$350 million in outstanding loans by quarter-end.
- AAVE Companies released recommendations for GHO Parameters, including a 25% discount on borrow rates for stkAAVE holders.
- The \$ARB airdrop contributed to a 305% increase in outstanding loan balance on **Arbitrum**, with AAVE DAO receiving approximately 2.7 million ARB in its treasury.
- The forthcoming AAVE Governance V3 introduces Aave Robot and Cross-Chain Infrastructure, revolutionizing Aave's voting process and cross-chain communication capabilities.
- **Despite a 34% decrease in daily active users in Q1**, the numbers still represent at least a 17% increase compared to any of the first three quarters of 2022.



Primer on Aave

Aave (AAVE) is a decentralized money market protocol that facilitates the depositing and borrowing of various crypto assets. The protocol has two main versions (Aave V2 and V3) and is deployed across various Layer-1 (L1) chains and Layer-2 (L2) networks, with the majority of activity on Ethereum. Aside from the core permissionless lending business, the protocol has introduced various complementary products such as a stablecoin (GHO), an open social protocol (Lens Protocol), and a permissioned instance of the core Aave protocol (Aave Arc).

Read Messari's full **Quarterly** and **Diligence** reports on Aave



State of Fantom Q2'23

James Trautman • Research Analyst (@JamesTrautman_)

Fantom Quarterly Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Network Usage					
Average Daily Active Addresses ¹	52,639 (26.3%)	36,544 (30.6%)	58,133 59.1%	53,223 (8.4%)	43,559 (18.2%)
Average Daily Transactions ¹	839,155 (14.0%)	803,237 (4.3%)	558,473 (30.5%)	395,114 (29.3%)	277,634 (29.7%)
Network Financials					
Circulating Market Cap (\$ Billions) ²	\$0.6 (82.7%)	\$0.6 (7.8%)	\$0.5 (11.3%)	\$1.3 162.2%	\$0.9 (36.1%)
Total Quarterly Revenue ¹	\$5,392,289 (67.9%)	\$338,991 (93.7%)	\$433,893 28.0%	\$815,206 87.9%	\$992,240 21.7%
Ecosystem					
Ecosystem Vault (FTM) ³	0	0	27,570 -	249,173 803.8%	529,524 112.5%
Total Value Locked (FTM) ⁴	2,792,583,695 (27.8%)	1,888,049,923 (32.4%)	2,228,683,967 18.0%	933,287,554 (58.1%)	810,470,050 (13.2%)
Development					
Unique Contracts Deployed ⁵	161,928	39,251	27,608,903	14,863,568	37,862,600
	(44.9%)	(75.8%)	70,239.4%	(46.2%)	154.7%
Unique Contracts Verified ¹	7,696 (42.6%)	4,212 (45.3%)	2,327 (44.8%)	3,233 38.9%	2,573 (20.4%)

- Fantom's average daily active addresses declined by 18%, while new unique addresses grew by 146% QoQ. The growth in new addresses coincided with increased activity on LayerZero and Galxe.
- Fantom's average daily transactions have steadily declined over the past year and decreased by 24.4% QoQ.
- Proposal 34 was passed to reduce the minimum stake required to validate from 500,000 FTM to 50,000 FTM.
- Several ecosystem growth initiatives have been established, including Fantom's recent Ecosystem Vault and Gas Monetization program, which started to build momentum in Q2 2023.
- Fantom TVL denominated in USD dropped 46% QoQ. Towards the end of May, the DeFi ecosystem saw a significant decline in TVL when concerns about cross-chain router protocol, Multichain, surfaced.



Primer on Fantom

Launched in 2018, Fantom (<u>FTM</u>) is a Layer-1 protocol focused on fast and cost-efficient transaction execution. With developments pioneered by <u>Andre Cronje</u>, Fantom's network hosts dozens of early DeFi protocols, including Curve, Yearn, and SushiSwap.

Fantom uses a Proof-of-Stake consensus mechanism, called <u>Lachesis</u>, which was created by the Fantom Foundation. Lachesis can provide security to multiple other layers, the first of which is Fantom's EVM-compatible smart contract chain, called <u>Opera</u>. Because Fantom nodes reach consensus independently, each node verifies transactions asynchronously and is not required to incorporate other blocks sequentially. This speeds-up transaction execution.

<u>FTM</u>, the project's native token, is used for payments and governance. It also enables ongoing block rewards for validators and delegators who stake FTM. Fantom validators must stake a minimum of 50,000 FTM.

Read Messari's full **Quarterly** report on Fantom



State of ApeCoin Q2'23

Micah Casella • Research Analyst (@CabronElBufon)

	Metrics	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23
	Total Transfer Volume (USD)	\$24.2	\$4.9 (79.6%)	\$6.2 25.4%	\$10.2 65.3%	\$5.3 (48.0%)
ials	Average DEX Swap Size (USD)	\$14,382	\$8,413 (41.5%)	\$8,024 (4.6%)	\$8,080 0.7%	\$7,397 (8.5%)
Financials	Average APE Price (USD)	\$9.51	\$5.60 (41.2%)	\$4.09 (26.9%)	\$4.93 20.6%	\$3.38 (31.5%)
	Fully Diluted Valuation at Quarter-End (USD)	\$2.8	\$1.9 (31.9%)	\$1.5 (22.2%)	\$2.1 38.7%	\$1.6 (24.0%)
υ	Daily Avg. Token Transfers	7,533	2,274 (69.8%)	3,902 71.6%	11,972 206.9%	5,709 (52.3%)
Ioken Usage	Quarter Avg. Transfer Velocity	7.04%	2.97% (57.8%)	4.54% 53.0%	6.10% 34.1%	3.93% (35.6%)
: lokei	Avg. Votes per Gov. Proposal	576	514 (10.8%)	812 58.1%	814 0.3%	605 (25.8%)
APE	New APE Holders	134,298	36,754 (72.6%)	48,879 33.0%	58,503	33,963 (42.0%)

- APE trade volume was dominated by sharks (\$1 million \$10 million in daily trading), which flipped whales (over \$10 million in daily trading) for the first time since APE launched.
- Throughout Q2'23, roughly 25 million APE was unlocked to non-DAO entities and almost 26 million APE was claimed by Yuga ecosystem asset and APE holders. The average APE price dropped by 32%, potentially due to the sell pressure from over 50 million APE unlocked to non-DAO entities and claimed by users in Q2'23.
- Two new Special Council members were elected in Q2'23, transitioning the power of special roles within the ApeCoin DAO.
- All of ApeCoin's key metrics fell QoQ, though daily token transfers, votes per governance proposal, and transfer volume remained higher than in certain previous quarters. Average DEX swap size and the addition of new APE holders hit all-time lows in Q2'23.



Primer on ApeCoin

ApeCoin (APE) is an ERC-20 token used for governance of the ApeCoin DAO. Holding any amount of APE qualifies the holder as an ApeCoin DAO member, allowing one to create and vote on ApeCoin Improvement Proposals (AIPs).

APE is the adopted token of the <u>APE Foundation</u>, a legal entity that administers the decisions of the ApeCoin DAO. The APE Foundation also has a Special Council, called the DAO's Board, to perform certain functions within the governance process. The operations of the APE Foundation are run by transient administrative entities elected by members of the ApeCoin DAO.

The ApeCoin DAO and the APE Foundation are separate entities from <u>Yuga Labs</u>, the creator of the Bored Ape Yacht Club (BAYC) and associated NFTs. Below is a breakdown of the relevant entities associated with the APE token.

- ApeCoin DAO A decentralized autonomous organization (DAO) made up of APE holders that <u>create</u> and <u>vote</u> on AIPs.
- APE Foundation A legal entity <u>incorporated</u> in the Cayman Islands that administers the decisions of the ApeCoin DAO. Consists of the Special Council and a third-party project management team also called an administrator.
- Special Council (the DAO's Board) Five individuals that oversee the APE Foundation's administrators, can approve grants outside of the AIP process, and perform certain functions within the ApeCoin DAO governance process.
- Cartan Group The first and former administrator of the APE Foundation. Registered in the Cayman Islands.
- WebSlinger Current administrator of the APE Foundation; started its 12-month renewing agreement on March 1, 2023. <u>Based</u> in the Cayman Islands.
- Yuga Labs A Web3 company responsible for creating the Bored Ape Yacht Club (BAYC).
 Yuga Labs is a contributor to ApeCoin and plans to use APE as the primary token in future projects like Otherside, an NFT-based game incorporating APE and Yuga Labs IP
 co-developed by Yuga Labs and Improbable.

Read Messari's full **Quarterly** and **Diligence** reports on ApeCoin



State of The Sandbox Q2'23

Micah Casella • Research Analyst (@CabronElBufon) Jennifer Obem • Research Analyst (@jenniferovat)

Metrics	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23
Daily Avg. SAND Staked	78.3M	99.9M 27.5%	112.2M 12.3%	117.4M 4.6%	123.2M 5.0%
% of SAND Supply Staked	6.50%	7.30% 12.0%	7.30% 0.4%	6.90% (5.9%)	6.70% (2.6%)
Active Non-LAND Buyers	8,163	24,026 194,3%	22,659 (5.7%)	10,819 (52.3%)	14,025 29.6%
Non-LAND Minted	4,338	9,702 123.7%	8,718 (10.1%)	7,323 (16.0%)	11, 631 58.8%
Non-LAND Secondary Sales	9,363	23,970 156.0%	25,570 6.7%	10,406 (59.3%)	7,498 (27.9%)
Non-LAND Sec. Sale Vol. (USD)	\$2.63M	\$1.83M (30.4%)	\$0.95M (48.5%)	\$0.55M (41.9%)	\$0.4M (27.9%)
Active LAND Buyers	4,010	2,302 (42.6%)	3,724 61.8%	2,442 (34.4%)	2,204 (9.7%)
LAND Minted	3,590	165 (95.4%)	2,594 1472.1%	1,068 (58.8%)	1,720 61.0%
LAND Secondary Sales	6,362	3,920 (38.4%)	4,076 4.0%	3,643 (10.6%)	3,353 (8.0%)
LAND Sec. Sale Vol. (USD)	\$28.24M	\$8.81M (68.8%)	\$6.84M (22.3%)	\$5.36M (21.6%)	\$3.13M (41.6%)

- The Sandbox experienced QoQ increases in nominal activity around total NFT mints (+59%), total primary sales (+52%), and total active buyers (+22%).
- The 30% increase in non-LAND primary sale volume and 18% rise in ESTATE volume anchored total revenue into only a 15% QoQ fall while five other revenue metrics fell by over 25%.
- The SEC filed lawsuits against Coinbase and Binance in which they took the position that a number of cryptocurrencies and tokens, including SAND, were securities.
- According to The Sandbox roadmap, it plans to release new features such as the ability to self-publish experiences on the map by the end of Q3. It will also enable users to create ESTATEs and rent/lease LANDs and ESTATEs in Q4 2023.



Primer on The Sandbox

The Sandbox (<u>SAND</u>) is a gaming metaverse where players and creators can make 3D assets and experiences (e.g. games) that can be monetized via NFTs. The tokenized and gaming features leveraged by The Sandbox are listed below.

- SAND an ERC-20 token and digital in-game currency used for purchases, monetization, and asset creation
- LAND digital ownable land within The Sandbox virtual world
- ESTATE a combination of LANDs to create a larger plot
- ASSET assets created using the VoxEdit application that are converted to ERC-1155 tokens when uploaded to The Sandbox marketplace
- GEM tokens burnt to give attributes to ASSETs
- CATALYST tokens burnt to define an ASSETs tier/scarcity
- Game Maker a <u>toolbox</u> that enables users to create 3D games and experiences in The Sandbox virtual world

The Sandbox provides Mindcraft-esque gameplay with digital ownership and more robust in-game economics due to the tradeable nature of the SAND token and the other assets within the Sandbox virtual world.

Sandbox offers a variety of in-game NFTs as well as user-generated NFTs. The VoxEdit NFT builder is used for creating 3D objects (ASSETs) such as characters, equipment, wearables, and art.

The Sandbox was initially launched as <u>a 2D mobile game in 2012</u> by the software development company <u>Pixowl</u>. Pixowl was founded in 2011 by Arthur Madrid and Sebastien Borget. The mobile game iteration of Sandbox accumulated more than <u>40 million downloads</u> by April 2018. In May 2018, The Sandbox <u>rebranded</u> as a 3D metaverse game and blockchain-focused development began. In August 2018, Pixowl and The Sandbox were <u>acquired by Animoca Brands</u>, a gaming-focused software development company and VC Fund.

Read Messari's full **Quarterly** report on The Sandbox



State of EOS Q2'23

Peter Horton • Research Analyst (@ph0rt0n)

	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Circulating Market Cap	\$0.9B (67.9%)	\$1.2B 30.2%	\$0.9B (22.8%)	\$1.3B 38.6%	\$0.7B (42.6%)
Financial	Revenue (USD)	\$53.1K (40.8%)	\$53.1K (0.0%)	\$38.9K (26.7%)	\$31.5K (19.0%)	\$22.4K (29.0%)
Ī	Inflation	3.1% (15.9%)	3.5% 10.8%	30.6% 783.2%	3.1% (89.8%)	3.1%
	Avg Daily Transactions	0.7M (10.0%)	0.9M 15.5%	1.4M 62.1%	1.3M (6.8%)	0.9M (31.2%)
Network	Avg Daily Active Addresses	56.5K (26.5%)	48.7K (13.8%)	35.5K (27.1%)	35.0K (1.5%)	29.4K (15.9%)
ž	Active Validators	21 0.0%	21 0.0%	21 0.0%	21 0.0%	21 0.0%
_	DeFi TVL (USD)	\$54M (62.5%)	\$41M (24.2%)	\$35M (14.1%)	\$50M 40.7%	\$36M (26.2%)
Ecosystem	Stablecoin Market Cap	\$78M	\$73M (6.3%)	\$67M (8.7%)	\$63M (5.6%)	\$ 59M (5,9%)
O E C O	Total Unique Active Contracts	1,090 (2.2%)	1,113	962 (13.6%)	959 (0.3%)	900 (6.2%)

- \$EOS's market cap decreased 43% QoQ to \$740 million, with its market cap rank dropping from 42nd to 49th.
- EOS EVM, an EVM execution environment deployed as a smart contract on EOS native, launched in mid-April. So far, the network has accumulated over \$1 million in TVL and averaged 5,100 daily transactions.
- Ecosystem growth initiatives have been targeting GameFi and EVM-based projects. In Q2'23, EOS Network Ventures (ENV) deployed \$5.4 million of its \$20 million fund, and the ENF committed \$158,000 to Pomelo match contributions.
- Virtual property game Upland was by far the most popular dapp by active addresses. In May, Upland partnered with the ENF to host a hackathon with up to \$10,000 in prizes.
- The ENF announced that the EOS native consensus upgrade bringing near-instant finality is estimated to launch in Q4'23.



Primer on EOS

EOS (EOS) is a Delegated Proof-of-Stake (DPoS) Layer-1 blockchain built using the open-source Antelope protocol. EOS's founding team Block.one raised around \$4.1 billion in a 2017-18 ICO but slowly stopped supporting the network through core development and ecosystem funding. A community-led effort driven by the non-profit EOS Network Foundation ensued to take over ownership of the project to prevent further decay of the protocol codebase and the EOS ecosystem. The grassroots effort has driven several technical upgrades, including an IBC implementation, EVM solution, and new consensus mechanism (estimated Q4'23 launch). For a full primer on EOS, refer to our Initiation of Coverage report.

Read Messari's full Quarterly report on EOS



State of USDD Q2'23

John_TotalValue_Locke • Senior Research Analyst (@john_tv_locke)

USD, Millions	Q2'22	Q3′22	Q4'22	Q1′23	Q2′23
Outstanding Supply	723	762	725	725	739
% Growth		0.0%	-4.8%	0.0%	1.8%
TRX Deposited	8,969	29			
TRX Deposited (% of Circulating)		9.7%	9.8%	9.9%	10.0%
Volume on TRON	1,336	6,159	7,710	1,895	1,992
% Growth		361.1%	25.2 %	(75.4%)	5.1%
Number of Holders	20,795	120,698	130,250	130,781	130,281
% Growth		<i>480.4%</i>	7.9%	<i>0.4</i> %	-0.4%
BTC Reserve Balance	280	272	232	399	427
% Growth		-2.6%	(14.9%)	72.2%	7.0%
Non-TRX Reserve Balance ¹	1,450	1,378	630	399	427
% Growth		<i>-4.9</i> %	<i>(54.3%)</i>	<i>(36.7%)</i>	7.0%
TRX Reserve Balance ² % Growth	706	667 -5.5%	595 (10.7%)	716 20.3%	833 16.2%
Collateral Ratio ¹	2.00	1.81	0.87	0.55	0.58

- **USDD traded tight to its peg in Q2**, enabling \$13 million of backing to accumulate in the PSM and the Curve pool to return to balance.
- Adoption metrics leveled out but did not show a meaningful increase from Q1, with volumes and holders roughly flat quarter over quarter.
- The backing for USDD improved in Q2, thanks to BTC and TRX prices rising 7% and 15%, respectively. The stablecoin remains undercollateralized with non-TRX assets but is 171% collateralized including TRX assets.



Primer on USDD

USDD (<u>USDD</u>) is an overcollateralized stablecoin issued by the TRON DAO Reserve (TDR), which is also the custodian. The TDR is <u>made up of</u> seven crypto-native institutions. USDD's value is backed by the overcollateralization of crypto assets under the TDR, including BTC, USDT, USDC, and TRX. The peg is maintained through the Peg Stability Module (<u>PSM</u>), which allows 1:1 transfer of USDD for USDT, USDC, TUSD, and USDJ. The PSM's USDD funding is controlled by the TRON DAO Reserve. USDD can be minted by the whitelisted institutions of the TDR by depositing TRX.

Read Messari's full Quarterly report on USDD



State of Tezos Q2'23

Nick Garcia • Research Analyst (@nickdgarcia)

Section	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Circulating Market Cap	\$1.31B (61.2%)	\$1.30B (1.3%)	\$0.66B (48.9%)	\$1.03B 54.5%	\$0.72B (29.8%)
Financial	Revenue	\$472.30K	\$191.44K	\$148.14K	\$121.84K	\$22.20K
		106.3%	(59.5%)	(22.6%)	(17.8%)	(81.8%)
	Total Active Accounts	291.26K	250.56K	302.33K	306.62K	246.81K
		(22.2%)	(14.0%)	20.7%		
Network	Daily Avg Transactions	45.54K	42.29K	43.13K	44.46K	44.08K
					3.1%	
	NFT Sales Volume	\$22.29M	\$18.05M	\$10.34M	\$9.51M	\$6.10M
Ecosystem and		(35.9%)	(19.0%)	(42.7%)	(8.0%)	(29.8%, \$22.20k (81.8%, 246.81k (19.5%, 44.08k (0.9%, \$6.10M (35.8%, \$87.97M (4.4%, 418
Development	TVL	\$50.49M	\$58.13M	\$52.34M	\$92.03M	\$87.97M
		(57.5%)	15.1%	(10.0%)	75.9%	
	Active Validators	405	417	409	422	418
Decentralization		(1.5%)		(1.9%)	3.2%	
and Staking	% of Total Supply Staked	75.4%	74.4%	77.0%	72.5%	70.5%
		(0.4%)	(1.3%)	3.5%	(5.9%)	

- Tezos is making significant progress in its rollup infrastructure roadmap, with the introduction of WASM rollups and an EVM-compatible rollup on testnet.
- The 14th network upgrade, Nairobi, is now live, offering notable improvements such as increased TPS, new rollup functionality, and enhanced attestations.
- Tezos core developers unveiled the Data Availability Layer (DAL), which will operate in parallel with Tezos Layer-1. Leveraging Tezos validators, the DAL ensures data availability while scaling bandwidth and storage capacity.
- **DeFi is experiencing growing traction on Tezos**, with the TVL nearly doubling in the past year. Several new DeFi protocols are nearing launch including novel DEXs, lending protocols, and perps protocols.
- **Tezos introduced the Tezos Ecosystem DAO**, aimed at managing and distributing XTZ to support community initiatives.



Primer on Tezos

Tezos (XTZ) is a <u>Liquid Proof-of-Stake</u> (LPoS) blockchain network that relies on low power consumption and <u>energy-efficient</u> consensus. It combines <u>on-chain governance</u> with self-amending functionality to implement forkless network upgrades and manage future changes. Tezos supports <u>multiple smart contract languages</u>, has a <u>robust NFT ecosystem</u>, and continues to <u>scale</u> through EVM- and WASM-compatible rollups and data availability layer improvements.

Read Messari's full Quarterly report on Tezos



State of Synthetix Q2'23

John_TotalValue_Locke • Senior Research Analyst (@john_tv_locke)

	Q1'22	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23	YoY
Number of Stakers % Growth	20,242	26,832 <i>32.6</i> %	37,212 <i>38.7</i> %	38,709 4.0%	43,561 12.5%	44,063 1.1%	64.2%
DAUs % Growth	435	1,030 <i>136.7</i> %	1,547 50.2%	5,310 243.2%	4,132 (22.2%)	1,833 <i>(55.6%)</i>	
Synth Value Outstanding (USD, Thousands) % Growth	234,389	157,048 <i>(33.0%)</i>	154,687 <i>(1.5%)</i>	109,156 <i>(</i> 29.4%)	124,865 <i>14.4</i> %	122,453 <i>(</i> 1.9%)	(22.0%)
Volume Traded (USD, Millions) % Growth	635	6,964 996.5%	8,370 <i>20.2</i> %	773 (90.8%)	4,408 470.1%	11,891 <i>16</i> 9.7%	70.8%
Trading Fees Paid (USD, Thousands) ¹ % Growth	4,062	13,922 <i>242.8</i> %	15,659 <i>12.5</i> %	3,308 (78.9%)	6,822 106.2%	7,323 7.3%	(47.4%)
SNX Outstanding (Thousands) % Growth	250,109	277,886 11.1%	300,182 <i>8.0</i> %	310,809 <i>3.5</i> %	315,996 <i>1.7</i> %	320,235 1.3%	15.2%
Debt Share Performance ² SNX Performance	13.99%	9.88% (70.43%)	15.44% 6.85%	6.77% (38.15%)	14.47% 73.22%	(2.74%) (11.15%)	

- Product improvements for Synthetix Perps continue to drive adoption, with volumes
 jumping 170% quarter over quarter and total trading volume surpassing 11 billion. In Q2,
 product enhancements included reduced execution delays, cheaper trading fees, and more
 underliers to trade.
- Part of the improved product is much cheaper trading, with ETH/BTC fees of only 2bp maker and 6bp taker now competitive with CEX pricing. Fees increased only 7.3%, to \$7.3 million, despite the jump in volumes.
- Synthetix paid out \$3.4 million in OP incentives in Q2. The incentives will continue until September 6, after which their long-term efficacy can be better understood.
- snxETH, the new spot synthetic ETH on V3, went live in Q2, as **Synthetix begins to roll out features for V3.** The DAO will continue to release with tight risk controls as it introduces the new version.



Primer on Synthetix

Synthetix (<u>SNX</u>) is a decentralized synthetic asset issuance and liquidity protocol that allows users to trade synthetic cryptocurrencies, fiat currencies, and commodities. Each synthetic asset tracks the price of an external asset through the use of Chainlink, Pyth, or Uniswap V3 TWAP oracles. Users can either trade in spot or in perpetual futures markets for synthetic assets. SNX is the native protocol token, responsible for governance as well as the primary collateral that backs the liquidity of the network. SNX can be staked as collateral for sUSD, the Synthetix stablecoin, which can be traded on Synthetix for any other synth (sAsset). The DAO uses a novel <u>V3 Governance</u> <u>Module (V3GM)</u>, which uses councils of appointees who are voted on by SNX holders.

Read Messari's full **Quarterly** report on Synthetix



State of Osmosis Q2'23

John_TotalValue_Locke • Senior Research Analyst (@john_tv_locke)

USD, Millions	Q2'22	Q3′22	Q4'22	Q1′23	Q2′23	YoY
Volume % Growth	9,269	2,665 (71.2%)	2,267 (14.9%)	2,290 1.0 %	1,298 <i>(43.3%)</i>	(85.99%)
End of Period Liquidity % <i>Growth</i>	153	211 37.8%	147 <i>(</i> 30.4%)	165 12.4%	123 (25.3%)	(19.46%)
Trading Fees Paid % Growth	11.2	2.8 (74.5%)	2.5 (12.3%)	2.4 (4.6%)	1.4 <i>(42</i> .5%)	(87.74%)
DAUs ¹ % Growth	29,272	27,039 <i>(</i> 7.6%)	26,651 <i>(1.4%</i>)	24,127 (9.5%)	17,926 <i>(25.7%</i>)	(38.76%)
DSMO Circulating Supply % Growth	406	456 12.6%	506 10.9%	555 9. <i>7</i> %	602 8.4%	48.52%
Number of Transactions % Growth		33.4	13.5 (59.5%)	12.3 (9.3%)	8.4 (31.8%)	
Net IBC Transfers	6,032	37	(10)	(39)	466	

- Reduced emissions and a subdued market continue to weigh on volumes and users, each down over 25% in Q2.
- The bright spot in the second quarter was IBC transfers, which yielded **nearly half a billion dollars in inflows to Osmosis**.
- Governance and development remained active, highlighted by the <u>unveiling of OSMO 2.0</u>.
 The revised tokenomics for the network will reduce inflation and extend the emissions timeline, while also introducing burn and fee switch mechanisms.



Primer on Osmosis

Osmosis (OSMO) is a sovereign decentralized exchange (DEX)-focused app-chain in the Cosmos ecosystem, meaning it simultaneously serves as a blockchain and an application. The application operates similarly to other automated market making (AMM) functioning DEXs – liquidity providers (LPs), which are responsible for supplying liquidity to asset pools where traders can make trades from. It's the same model for Uniswap or Balancer, though more similar to the latter as Osmosis places a high priority on offering asset pool customization. Tweaks to market-maker functions, swap costs, token weighting, and more are all parameters that can be changed within the DEX. Additionally, Osmosis has introduced new features such as superfluid staking that allows users who provided liquidity in certain pools to also stake to help secure the network. In the future, Osmosis will also offer maximal extractable value (MEV) mitigation and capture, stable pools, and more.

Read Messari's full Protocol Usage report on Osmosis



State of 1inch Q2'23

Ryan Celaj • Research Analyst (@RyGuy_LikesETH)

JSD, Millions	Q2′22	Q3'22	Q4'22	Q1′23	Q2′23
Total Volume	49,722	27,071	26,161	44,551	28,443
% Growth		(45.6%)	(3.4%)	70.3%	(37.3%)
Total Transactions	4.63	4.75	4.76	6.73	9.63
% Growth		2.7%	0.1%	41.4%	43.1%
Total Unique Users	2.10	2.15	2.42	2.59	4.94
% Growth		2.2%	12.6%	7.0%	90.7%
Total Earnings	7.66	0.80	0.64	0.90	(1.98)
% Growth		(89.5%)	(20.6%)	40.7%	(320.0%,
Total 1INCH Staked (Millions)	21.6	21.8	33.4	144.1	184.7
% Growth		0.9%	52.2%	331.4%	28.2%
End-of-Period Treasury Balance	14.72	15.74	16.36	18.29	16.30
% Growth		7.0%	3.9%	11.8%	(10.8%)

- The 1inch DAO voted to discontinue the collection of a swap surplus citing the inconsistency and negative impacts on users. The swap surplus will now go back to users and the DAO plans to explore alternative revenue streams.
- Ethereum continues to dominate volumes making up over 70% of Q2's total aggregation volume.
- The diversity of fusion resolvers and total resolver volumes continue to increase, with over \$11.7 billion in volume processed by resolvers in Q2.
- Development on <u>linch Network's hardware wallet</u> continues, with 2 million USDC in funding to complete the product trade version (PTV).



Primer on 1inch

The 1inch Network (1INCH) is an all-in-one decentralized finance (DeFi) service provider operating on Ethereum, Arbitrum, Optimism, Polygon, Avalanche, BNB Chain, Gnosis, Fantom, Klaytn, and Aurora. Launched in 2019, 1inch's Aggregation Protocol (AP) allows users to route trades across various markets and realize the best available rate compared to any individual decentralized exchange (DEX). In late 2020, the 1inch Liquidity Protocol introduced a native automated market maker (AMM) to the network, which enabled users to provide liquidity and earn passive liquidity mining rewards. The network's third product, the 1inch Limit Order Protocol (LOP), was introduced in June 2021 to support conditional limit and stop-loss orders with no fees. In late December 2022, the 1inch Swap Engine enabled Fusion mode, which is partially based on the existing tech, including the 1inch Limit Order Protocol and the 1inch Aggregation protocol. This new feature empowers DeFi users to place orders with a specified price and time range without paying network fees. All three protocols, and Fusion Mode, are governed by the 1inch DAO using the network's native 1INCH token.

Note: This report includes data from Ethereum, BNB Chain, Polygon, Optimism, Arbitrum, Avalanche, Gnosis Chain, and Fantom. Data from zkSync, Klaytn and Aurora are currently not included. We are working to improve access to this data.

Read Messari's full Quarterly report on 1inch



State of Sia Q2'23

Micah Casella • Research Analyst (@CabronElBufon)

	Metrics	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23
	New Storage Contracts	355,842	583,196 63.9%	407,662 (30.1%)	47,753 (88.3%)	46,495 (2.6%)
	Avg. Daily Active Contracts	250,967	267,965 6.8%	412,562 54.0%	51,535 (87.5%)	23,516 (54.4%)
etrics	Avg. Daily Active Hosts	590	567 (3.9%)	604 6.6%	421 (30.4%)	373 (11.2%)
Network Metrics	Avg. Daily Storage Used (TB)	2,728	3,144 <i>15.3</i> %	2,265 (27.9%)	973 (57.1%)	1,086 11.7%
a Netw	Avg. Daily Storage Capacity (TB)	7,310	6,796 (7.0%)	6,182 (9.0%)	5,015 (18.9%)	4,415 (12.0%)
Sia	Total Transactions	1,648,040	2,356,343 43.0%	1,949,324 (77.3%)	369,588 (81.0%)	352,798 (4.5%)
	Total Sia Fees (SC)	45,876	59,095 28.8%	39,387 (33.4%)	9,279 (76.4%)	10,703 <i>15.4%</i>
trics	Total Miner Inflation Rewards (USD)	\$2.84M	\$1.65M (41.9%)	\$1.14M (30.9%)	\$1.41M 23.7%	\$1.39M (1.9%)
Financial Metrics	Average Market Cap (USD)	\$368M	\$214M (41.9%)	\$148M (30.7%)	\$187M 26.5%	\$182M (2.6%)
Finan	Average SC Price (USD)	\$0.0072	\$0.0041 (42.7%)	\$0.0029 (30.7%)	\$0.0036 26.5%	\$0.0035 (2.6)%

- Used storage increased by 12% QoQ, leading the storage utilization rate to increase from 19% to 25% QoQ. Despite the fall in new storage contracts, renters stored more data per contract in Q2 than in the previous quarter.
- The addition of storage contracts, which impact most metrics of the Sia network, fell by
 3% QoQ. This followed the negative momentum from Q1'23, which saw new contracts drop by 88% as a result of problems with third-party interfaces.
- The Sia Foundation approved seven grants throughout Q2'23 for a total of \$260,000, with the largest being \$94,000 and the smallest being \$5,000.
- Sia published the beta version of its "hostd" application on GitHub. The hostd app offers a user-friendly interface, an API, and an embedded web UI.
- Sia published the alpha version of its "walletd" application on GitHub. The walletd app enables users to interact with Sia assets on both hot and cold wallets.



Primer on Sia

Sia (<u>SC</u>) is a decentralized cloud storage network that combines a Proof-of-Work blockchain with a contract-based storage model. Storage contracts are used to uphold storage agreements between hosts and renters. Renters define the amount of data to be stored, the timeframe for storage, and the price.

As users and storage providers enter into storage contracts, they each deposit the native asset — Siacoin (SC) — into an escrow account. Storage providers cryptographically prove they are hosting the required data. At contract expiry, the storage provider receives the majority of the escrowed funds, with a small portion going to holders of Siafund (SF) tokens. Siafunds are security tokens that accrue SC to the SF holder from finished contracts on Sia.

Sia facilitates a <u>global</u> data storage marketplace by connecting storage providers (hosts) with underutilized hard drive capacity to storage consumers (renters). Siacoin can be used to pay for gas on the Sia blockchain and as the medium of exchange for the storage market. The costs associated with storage contracts fall under contract formation, storage price, bandwidth, collateral, and/or Siafund fees.

Files <u>stored</u> on the Sia network are encrypted via <u>ChaCha20</u> and stored redundantly via <u>Reed–Soloman Erasure Coding</u>. The encryption aspect ensures that uploaded files remain private, and redundancy ensures security by sharding files. Files uploaded to Sia are split into 30 chunks, or shards, and sent to various hosts. Only 10 shards are required to rebuild the file, and their copies are re-duplicated to new hosts whenever one is offline.

Sia was <u>conceived</u> at HackMIT in 2013 and <u>launched</u> in 2015 by Nebulous Inc., which later <u>split</u> into two entities: the Sia Foundation and Skynet Labs. The Sia Foundation <u>launched</u> after a successful hardfork of the Sia blockchain, which introduced an SC token subsidy to fund the foundation. In <u>April 2021</u>, Nebulous announced its full rebrand to Skynet Labs. It started to reduce its services in <u>August 2022</u>, shutting down its portals in early November 2022 due to a lack of funding. Despite the shutdown of Skynet Labs, Sia continues to operate and implement new developments under the Sia Foundation.

Read Messari's full **Quarterly** and **Diligence** reports on Siacoin



State of WAX Q2'23

Peter Horton • Research Analyst (@ph0rt0n)

	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Circulating Market Cap	\$205M (70.9%)	\$186M (8.9%)	\$97M (48.0%)	\$166M 71.4%	\$153M (8.0%)
Financial	Revenue (USD)	\$716K (52.6%)	\$307K (57.1%)	\$143K (53.5%)	\$207K 44.9%	\$105K (49.5%)
ᇤ	Real Yield				(0.3%)	(1.1%) (289.3%)
	Avg Daily Transactions	20.8M 2.2%	20.6M (0.7%)	19.1M (7.3%)	20.0M 4.8%	17.8M (10.9%)
Network	Avg Daily Active Addresses	418.9K 7.5%	363.6K (13.2%)	338.3K (6.9%)	338.0K (0.1%)	339.1K 0.3%
ž	Active Validators	21 0.0%	21 0.0%	21 0.0%	21 0.0%	21 0.0%
_	Avg Daily NFT Sales Volume (USD)	\$731K (83.1%)	\$213K (70.9%)	\$161K (24.2%)	\$141K (12.8%)	\$78K (44.3%)
Ecosystem	DeFi TVL (USD)	\$804K (70.2%)	\$599K (25.5%)	\$357K (40.4%)	\$523K 46.4%	\$209K (60.0%)
й	Total Unique Active Contracts	1.2K 16.0%	1.3K 7.9%	1.3K (1.8%)	1.3K 4.1%	1.3K (1.1%)

- In a rough quarter for alternative Layer-1 (L1) tokens, WAX's market cap decreased only 8% QoQ to \$153 million, mainly due to a reclassification of some tokens as circulating.
 WAX's price fell 33% QoQ.
- Q2'23 featured fewer but stickier new addresses. Average daily new addresses
 decreased 68% QoQ to 1,600, but April and May cohorts both had over 61% one month
 retention rate.
- WAX integrated Antelope IBC in May, securely connecting WAX with EOS, UX Network, and Telos. IBC activity has been low so far, but a planned consensus upgrade to add near-instant finality will further unlock use cases of the cross-chain protocol.
- P2E game Alien Worlds drove the majority of active address activity. The game averaged 240,000 daily active addresses in Q2'23, of which around 68% were power addresses.
- Average daily NFT sales volume decreased 44% to \$78,000, but daily unique NFT buyers increased 38%.



Primer on WAX

Worldwide Asset eXchange (WAXP) is a Layer-1 (L1) network geared toward gaming and NFT use cases. WAX launched in June 2019 following an ICO that raised around \$60 million at the end of 2017. The network is built using the open-source Antelope framework (formerly EOSIO) which features Delegated Proof-of-Stake consensus, smart contract programming in C++, a unique resource model with bandwidth and state storage components, and a smart contract accounts model with similar effects to account abstraction. On top of this core Antelope stack, WAX Labs built other services including a cloud-based wallet, an NFT creator and marketplace, an on-chain random number generator, and a block explorer. These services were built to provide a more familiar Web2 experience on top of the core blockchain protocol. For a full primer on WAX, refer to our Initiation of Coverage report.

Read Messari's full **Quarterly** report on WAX



State of SKALE Q2'23

Peter Horton • Research Analyst (@ph0rt0n)

1	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
	Circulating Market Cap	\$178.4M (75.5%)	\$145.4M (18.5%)	\$80.5M (44.6%)	\$166.5M	\$11 7.9M (29.2%)
Financial	Revenue (USD)	\$56.3K	\$3.9K (93.0%)	\$1.6K (59.7%)	\$5.0K 210.4%	\$0.0K (700.0%)
Ē	Real Yield	4.1% 0.0%	3.3% (78.4%)	3.4% 3.4%	3.8% 9.5%	5.0% 33.7%
	Avg Daily Transactions	1.3K	84.8K 6,794.0%	383.8K <i>3</i> 52.6%	312.1K (18.7%)	210.7K (32.5%)
Network	Active SKALE Chains	28 211.1%	22 (21.4%)	18 (18.2%)	20 11.1%	20 0.0%
Ž	Total Staked (USD)	\$122M (75.5%)	\$104M (14.9%)	\$53M (48.6%)	\$105M 97.5%	\$64M (39.1%)
۶	DeFi TVL (USD)				\$1.4M	\$1.3M (10.7%)
Ecosystem	Top Chain by Txs Avg Daily Txs	Block Brawlers 1K	CryptoBlades 79K	Exorde 228K	Exorde 260K	CryptoBlades 142K
Ë	Full Time Devs	14 (12.5%)	14 0.0%	9 (35.7%)	1 1 22.2%	10 (9.1%)

- At the end of Q2, a vote passed to enact a token-based governance system using off-chain voting platform Snapshot. The system will bring greater utility to the SKL token and increase community-ownership of the network.
- SKALE developers announced Levitation Protocol and SKALE G, which will bring zk-rollups to the SKALE network.
- PVP game CryptoBlades accounted for the majority of network usage in Q2. The game had a 67% share and 85% share of total SKALE transactions and daily active addresses, respectively.
- The Nebula gaming Hub witnessed increased usage driven by launches of games, most notably Untitled Platformer. The Hub's average daily transactions and active addresses increased QoQ by 422% and 69%, respectively.



Primer on SKALE

SKALE (<u>SKL</u>) is a Layer-1 (L1) sidechain framework with pooled security. A set of Ethereum smart contracts manage several core network functions, including staking, validator orchestration, BLS key generation for each SKALE chain, and more. SKALE supports a network of configurable EVM-compatible, dapp or general purpose chains (SKALE chains). Each SKALE chain is secured by a rotating subset of SKALE's pooled validator set. The SKALE V2 upgrade in Q2'22 brought interoperability between SKALE chains.

Another of SKALE's core differentiators is that it offers zero gas fees to end users. To generate fees, the protocol instead collects subscription fees from developer to create a new SKALE chain. SKALE contributors SKALE Labs and the Network of Decentralized Economics (N.O.D.E.) Foundation, are specifically targeting gaming and other retail use cases via their development and growth efforts. At the end of Q2'23, SKL tokenholders passed a proposal to initiate token-based governance over protocol parameters using off-chain governance platform Snapshot. For a full primer on SKALE, refer to our Initiation of Coverage report.

Read Messari's full Quarterly and Diligence reports on SKALE



State of Livepeer Q2'23

Mihai Grigore • Senior Research Analyst (@tech_metrics)

	Q2′22	Q3′22	Q4'22	Q1′23	Q2′23
Financials & Key Performance Indicators					
Network Usage: Minutes Transcoded	33,017,703	36,722,163	42,472,698	32,520,728	25,932,043
	0.0%	11.2%	15.7%	(23.4%)	(20.3%)
Node Operator Fee Revenue (ETH)	40.24	61.26	89.02	56.80	38.80
	(14.6%)	52.2%	45.3%	(36.2%)	(31.7%)
Node Operator Fee Revenue (USD)	\$85,430	\$91,389	\$116,215	\$90,297	\$72,506
	(37.2%)	6.5%	27.2%	(22.3%)	(19.7%)
Protocol Staking Rewards Revenue (USD)	\$8,919,553	\$4,839,342	\$3,831,791	\$3,794,111	\$3,757,067
	(40.4%)	(45.7%)	(20.8%)	(0.1%)	(1.0%)
Staking Metrics					
Livepeer Staking Rewards (LPT)	557,679	650,516	538,179	576,504	724,162
	7.3%	16.6%	(17.3%)	7.1%	25.6%
Livepeer Staking Rewards (USD)	\$8,919,553	\$4,839,342	\$3,831,791	\$3,794,111	\$3,757,067
	(40.4%)	(45.7%)	(20.8%)	(0.1%)	(1.0%)
Percent of Total Supply Staked	49.0%	50.6%	50.0%	45.1%	45.9%
	1.3%	1.6%	(0.6%)	(4.9%)	0.8%

- The usage of the Livepeer transcoding network decreased QoQ, down 20% in Q2'23. Its decline was in line with other Web3 infrastructure protocols.
- As a result of decreased usage, demand-side revenue declined 20% QoQ in USD terms (down 32% in ETH terms).
- Revenue from staking rewards remained flat QoQ in USD terms (up 26% in LPT terms).
- The Livepeer community put together a pre-proposal for an **on-chain community treasury**, **aiming to fund public goods**.
- Throughout Q2'23, Livepeer improved its video-on-demand service, reduced latency for its streaming service, and introduced token-gating for custom playback policies.



Primer on Livepeer

Building decentralized video apps like Twitch or TikTok requires heavy infrastructure for video streaming. Based on a user's bandwidth and device, video content needs to be processed (i.e., transcoded) into viewable formats. While cloud providers like AWS, Google, or Microsoft are commonplace solutions for video transcoding services, they incur high costs.

Livepeer (<u>LPT</u>) offers an open and permissionless transcoding marketplace — allowing anyone to contribute compute resources and to compete on price. The network is <u>designed</u> to reduce transcoding costs for end users by up to 10x.

Within Livepeer's decentralized transcoding network, there are three key participants:

- Node operators (called "orchestrators") route transcoding jobs. The amount of work a node operator can perform is proportional to how many Livepeer native tokens (LPT) it stakes.
 Node operators earn ETH fees and newly minted LPT rewards.
- Transcoders provide compute resources for node operators and deliver transcoded video content. In return, they earn ETH fees.
- Delegators stake LPT with node operators to help secure the Livepeer network. Staking is rewarded with a portion of both ETH fees and newly minted LPT rewards.

Beyond transcoding, Livepeer offers a customizeable streaming layer on top of decentralized storage networks, e.g., IPFS and Arweave. Simultaneously, Livepeer aims to become the go-to decentralized technology stack for developers integrating video streaming into their apps.

Read Messari's full Protocol Usage report on Livepeer



State of Hashflow Q2'23

John TV Locke • Senior Research Analyst (@john_tv_locke)

	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23
Total Volume (USD, M)	2,185	1,335	1,816	1,456	1,564
% Growth		<i>(38.9%)</i>	<i>36.0</i> %	(19.8%)	<i>7.4</i> %
Number of Trades	302,812	335,116	478,845	382,748	527,547
% Growth		<i>10.7</i> %	<i>42.9</i> %	(20.1%)	<i>37.8</i> %
Number of New Users	91,332	38,145	91,395	68,391	136,061
% Growth		<i>(</i> 58.2%)	<i>139.6</i> %	(25.2%)	98.9%
Single-Chain Volume (USD, M)	2,173	1,332	1,813	1,455	1,563
% Growth		(38.7%)	<i>36.1%</i>	<i>(19.7%)</i>	7.5%
Cross-Chain Volume (USD, K) % Growth	11,803	3,710	2,984 (19.6%)	1,119 <i>(62.5%)</i>	140 (87.4%)
DAUs	1,618	1,478	2,478	1,965	3,149
% Growth		<i>(</i> 8.6%)	<i>67.6</i> %	<i>(</i> 20. <i>7%)</i>	<i>60.2</i> %
Staked HFT				6,294,960	6,660,303

- The number of users interacting with Hashflow increased significantly in Q2, with **DAUs up** 60% QoQ, including 136,000 new users.
- Hashflow facilitated over \$1.5 billion in volume in Q2, up 7.4% QoQ. The average trade size fell, but the number of trades increased to over 500,000 trades.
- While Hashflow volumes remained steady on Ethereum, **Hashflow's trading volume on Arbitrum more than doubled in Q2**.
- The Hashflow forum and decentralized governance were significantly busier in Q2.
 Combined with the upcoming launch of the Hashverse, they likely drove the 20% increase in the number of HFT stakers.



Primer on Hashflow

Hashflow (HFT) is a decentralized exchange (DEX) that uses a request-for-quote model with pricing provided by professional market makers. Hashflow's signature-based pricing offers traders guaranteed execution price, MEV-resistance, and no slippage. Hashflow was founded in 2020 by Varun Kumar, Victor Ionescu, and Vinod Raghavan. After launching in Private Alpha in April 2021, Hashflow fully launched in August 2021. Since initially launching on Ethereum, it has expanded to Arbitrum, Avalanche, BNB, Polygon, and Optimism. Hashflow also offers cross-chain trading, allowing traders to exchange assets on different chains without escrowing or bridging assets between chains. HFT is the governance token for the Hashflow protocol. In early 2023, the Hashflow Foundation announced the Hashverse, a gamified experience to onboard new users, diversify HFT ownership, and promote usage.

Read Messari's full Quarterly report on Hashflow



State of Venus Q2'23

Kentrell Key • Research Analyst (@portkey256)

USD, Millions	Q2'22	Q3'22	Q4'22	Q1′23	Q2′23	YoY
Outstanding Loans	339.8	335.2	426.5	481.1	490.0	44.2%
% Growth Outstanding Deposits	962.1	<i>4.5%</i> 973.8	<i>20.1%</i> 1.074.9	<i>12.8%</i> 1.331.9	<i>1.9%</i> 1.167	21.3%
% Growth	962.1	973.8 1.2%	1,074.9 <i>(10.4%)</i>	1,331.9 23.9%	(12.4%)	21.3%
Lincold-Malore Values a						
Liquidation Volume % Growth	145.2	6.8 <i>(95.3%)</i>	16.8 <i>(148.4%)</i>	8.5 <i>(148.4%)</i>	7.1 <i>(19.9%)</i>	(95.1%)
		(93.3%)	(140.470)	(140.470)	(19.9%)	
Treasury Balance	11.1	4.9	5.3	4.5	5.5	(50.5%)
% Growth		(55.5%)	-6.8%	14.0%	18.2%	
Average Daily Active Users ¹	1,209	618	693	673	608	(50.5%)
% Growth		(48.9%)	12.2%	(2.9%)	(9.6%)	
Net Deposit/Withdrawn	(569.2)	(54.9)	228.1	(80.8)	(92.7)	
Net Borrow/Repay	(254.0)	(13.8)	82.7	(4.1)	28.9	
ource : Messari Subgraph						

- Venus experienced its fourth consecutive quarter of interest revenue growth, generating \$2.3 million for the DAO and \$9.2 million for depositors.
- A 32% drop in the price of BNB following SEC charges against various Binance entities
 affected the total value of assets on Venus, leading to a 12% quarter-over-quarter
 decrease in total value supplied.
- Venus continued to ship its V4 features, including isolated pools and Resilient Price Feeds to enhance the platform's security, flexibility, and reliability.
- Adjustments to the interest rate parameters led to higher borrow rates and a decline in user activity in Q2, including a lower-than-usual spike in activity during the Maverick Launchpool event.



Primer on Venus

Venus (XVS) is a decentralized money market protocol on the BNB Chain that facilitates depositing and borrowing of various cryptoassets. The interest rates for these assets are set algorithmically using an interest rate model that triggers updates based on the proportion of deposited assets lent. This is known as the utilization ratio. The protocol is managed by the Venus DAO community and governed by the XVS token. Users can stake the governance token in a vault to participate in governance and receive a portion of the protocol revenue.

Read Messari's full **Quarterly** and **Diligence** reports on Venus



State of Pocket Network Q2'23

Micah Casella • Research Analyst (@CabronElBufon) Mihai Grigore • Senior Research Analyst (@tech_metrics)

	Metrics	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23
	Relay Requests	75.6B	88.6B 17.2%	104.9B 18.5%	105.3B 0.4%	107B
	Staked Service Nodes (Daily Avg.)	44,134	31,638 (28.3%)	25,983 (17.9%)	21,958 (75.5%)	20,650 (6.0%)
Network	Unstaking Nodes (Daily Avg.)		5,238 142.4%	1,640 (68.7%)	1,311 (20.1%)	804 (38.7%)
ž	Unique Block Proposers (Daily Avg.)	86	87 7.0%	93 6.9%	96 2.6%	96 0.6%
	Total POKT Staked (Daily Avg.)	0.826B	0.801B (3.7%)	0.915B 14.3%	0.974B 6.4%	1.000B 2.8%
ls	Total Txn Fee Volume (POKT)	267,212	280,813 5.1%	271,738 (3.2%)	357,178 31.4%	262,139 (26.6%)
	POKT Supply at Q-end	1.29B	1.42B 9.6%	1.51B 6.70%	1.57B 4.3%	1.63B <i>3.5%</i>
Financials	Inflation (POKT)	237.4M	124.4M (47.6%)	94.5M (24.0%)	64.9M (31.4%)	55.1M (15.0%)
<u></u>	POKT Price (USD)	\$0.383	\$0.101 (73.6%)	\$0.070 (31.2%)	\$0.061 (12.4%)	\$0.038 <i>(38.2%)</i>
	Total Revenue (USD)	\$95.33M	\$11.17M (88.3%)	\$5.93M (46.9%)	\$3.57M (39.8%)	\$1.96M (45.2%)

- Activity on Pocket Network increased over the past four quarters, as relays serviced grew 2% QoQ and 41% YoY.
- With a 38% QoQ fall in POKT-USD price and a 15% QoQ decline in the POKT inflation (3% more POKT was still minted), **total revenue decreased 45% QoQ in USD terms.**
- The total revenue drop was driven by a 47% QoQ decrease in the USD value of supply-side revenue (minting), accounting for 97% of total revenue. Simultaneously, protocol revenue (POKT burns) accounted for 3% of total revenue.
- While staking participation remained constant at about 62% of the current 1.6 billion total supply, Q2'23 saw over 1 billion of total POKT staked for the first time.



Primer on Pocket Network

Pocket Network (<u>POKT</u>) is a Web3 node infrastructure protocol that creates a two-sided marketplace for RPC node providers to offer developers access to blockchain data.

Pocket Network's protocol runs atop its Proof-of-Stake blockchain, which uses a <u>Stake-for-Access</u> (SFA) model, also known as a work token model. In other words, Pocket requires its node providers to stake the native token (POKT) to provide services on the network. Simultaneously, end users are required to stake POKT to access the network's services. Inflation is no longer tied to relays and is, instead, determined through Pocket DAO governance. Currently, service nodes earn POKT in proportion to their <u>stake-weight</u> (and <u>rewards multipliers</u>).

The key participants in Pocket Network are described below.

- Service Nodes: These nodes stake POKT to provide servicing relays to users
 (applications/developers); get compensated in POKT per relay fulfilled and proved; retain
 85% of total POKT rewarded for relays.
- Validator Nodes: These nodes stake POKT to validate the PoS blockchain; confirm blocks that contain proofs of the relays serviced; retain 5% of total POKT rewarded for relays and 1% of POKT paid for transaction fees (the other 99% is sent to the Pocket DAO).
- Users: Often applications or developers that stake POKT to request RPC relays to various blockchains. Currently, staking is conducted through the <u>Pocket Portal</u>, but this will change with the Pocket V1 upgrade.
- Pocket DAO: A whitelisted group of holders of the <u>POKTDAO</u> token (on Gnosis Chain),
 which is strictly used for governance on <u>Snapshot</u> and currently has a supply of 61
 POKTDAO. Members must go through a <u>proof-of-participation onboarding process</u> before
 admission to the DAO.
- Gateways: Access points for developers to use the Pocket Network. Gateways must pay
 the Pocket DAO a \$0.00000085 fee per relay serviced that is then burned by the DAO on a
 weekly basis. Currently, the Pocket Portal is the only gateway available and is operated by
 Pocket Network Inc. Pocket plans to launch its first community-run gateway by Q4'23.

Read Messari's full **Quarterly** report on Pocket Network



State of Boba Network Q2'23

Red Sheehan • Research Analyst (@redvelvetzip)

	Metrics	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Network	Average Daily Active Addresses	240 7.0%	99 (58.9%)	182 84.4%	398 119.2%	323 (18.8%)
	Average Daily Transactions	3,018 69.7%	1,397 (53.7%)	1,626 16.4%	8,726 436.8%	130,052 1.390.4%
Ne	Average Transaction Fee (USD)	\$0.730 (70.1%)	\$0.2464 (66.2%)	\$0.1407 (42.9%)	\$0.0408 (71.0%)	\$0.0054 (86.6%)
	Circulating Market Cap	\$67.9M (69.0%)	\$98.3M 44.9%	\$50.8M (48.3%)	\$75.7M 49.1%	\$42.8M (43.5%)
Financial	Circulating Supply	173.2M 8.9%	339.4M 96.0%	317.2M (6.5%)	329.4M 3.8%	338.4M 2.8%
늍	Quarterly Revenue (USD)	\$132.4K (28.9%)	\$19.9K (85.0%)	\$11.4K (42.6%)	\$15.8K 38.7%	\$30.1K 90.5%
=	Total Value Locked (USD)	\$11.3M (74.5%)	\$4.3M (62.0%)	\$4.1M (3.8%)	\$4.0M (2.4%)	\$3.4M (17.0%)
ecosystem	Average Daily Unique Contract C				305	229 (25.0%)
Eco	Average Daily Contract Calls				8,681	130,022 1,397.7%

- Boba's main focus is on gaming, NFTs, and metaverse via Hybrid Compute. Hybrid
 Compute is a key feature that allows developers to leverage existing Web2 tooling for more
 powerful computation and data usage.
- Activity on Boba BNB's ROVI Network drove average daily transactions up 1,390% QoQ to 130,000. Boba BNB accounted for 99% of all Boba Network transactions.
- Despite a decrease in BOBA's price, revenue (in USD) grew 90.5% QoQ due to increased transaction volume.
- Bobabeam (Moonbeam) was deprecated in May.



Primer on Boba Network

Boba Network (<u>BOBA</u>) is a Layer-2 multichain scaling solution with a focus on gaming. Boba operates on Ethereum, <u>BNB</u>, and <u>Avalanche</u>, and it is maintained by <u>Enya Labs</u>. As an optimistic rollup (OR) based on Optimism's codebase, Boba offers:

- Reduced gas fees
- Increased transaction throughput
- L1 security guarantees
- EVM compatibility for smart contracts, such as NFTs and decentralized finance (DeFi)

This network also has unique features that set it apart from other ORs and Optimism forks:

- Hybrid Compute the ability to connect to off-chain computational resources, data, and APIs
- Multichain focus
- Fast exit bridging to L1
- DAO governance

Boba's combination of features — specifically Hybrid Compute — enables decentralized applications (dapps) to:

- run at a fraction of the cost of L1 dapps
- leverage off-chain computation via Web2 APIs, and
- provide the multichain solutions needed for blockchain gaming.

Boba Network was previously active on <u>Fantom</u> and <u>Moonbeam</u>, but those implementations have since been deprecated.

Read Messari's full **Quarterly** report on Boba Network