

Quarterly Community Report State of Tezos Q2 2022

 July 21, 2022
XTZ

Key Insights

- Network usage increased year over year, with a 12% increase in smart contract calls and a 94% increase in transactions.
- Through H1 2022, developer activity, measured by new smart contract deployments, is up 288% versus the same period in 2021.
- Staking activity was consistent with 75–77% of total XTZ tokens staked.
- The ninth and tenth protocol upgrades, Ithaca and Jakarta, were deployed.
- NFT marketplaces are the top five applications on Tezos by unique users, as Tezos continues to command a global NFT presence.
- Tezos core developers announced scaling plans through enshrined optimistic rollups.

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Tezos Q2 2022 Key Metrics				
Tezos Quarterly Metrics	Q3 2021	Q4 2021	Q1 2022	Q2 2022
Circulating Market Cap	\$4,839,611,480	\$3,787,677,751	\$3,388,838,949	\$1,314,949,226
% Change		-21.7%	-10.5%	-61.2%
Transactions	9,934,333	12,624,092	12,588,378	11,092,033
% Change		27.1%	-0.3%	-11.9%
Smart Contract Calls	11,835,174	15,743,750	15,436,830	13,218,903
% Change		33.0%	-1.9%	-14.4%
Average Transaction Fee	\$0.0034	\$0.0024	\$0.0014	\$0.0027
% Change		-30.7%	-38.9%	83.6%
Total Accounts	4,734,590	5,638,927	6,343,995	6,793,510
% Change		19.1%	12.5%	7.1%
Funded Accounts	268,067	297,147	198,873	119,959
% Change		10.8%	-33.1%	-39.7%
Cleared Accounts	32,378	40,448	32,069	63,597
% Change		24.9%	-20.7%	98.3%
Total Stake (XTZ)	689,287,070	678,655,952	680,057,308	697,974,135
% Change		-1.5%	0.2%	2.6%
Active Delegators	145,245	160,412	171,740	176,806
% Change		10.4%	7.1%	2.9%
Active Validators	394	391	411	406
% Change		-0.8%	5.1%	-1.2%
New Smart Contract Deployments	13,916	19,000	23,888	20,122
% Change		36.5%	25.7%	-15.8%

Source: T2Stats and Tezos
 Note: Circulating Market Cap, Total Stake, Active Delegators, and Active Validators are snapshots from the final day of the quarter.

MESSARI Data as of July 01, 2022



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A Primer on Tezos

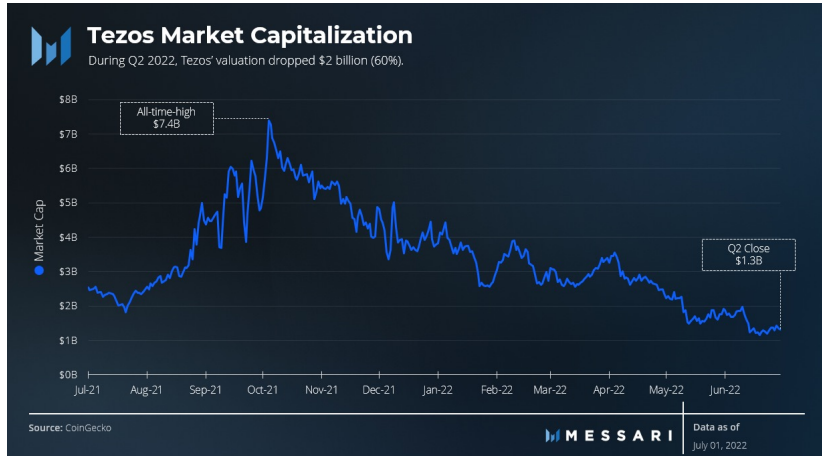
Tezos is a Liquid Proof-of-Stake (LPoS) blockchain network that relies on low power consumption and energy-efficient consensus. It combines on-chain governance with self-amending functionality to implement forkless network upgrades and manage future changes. Tezos supports multiple smart contract languages,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



Performance Analysis

Network Financials

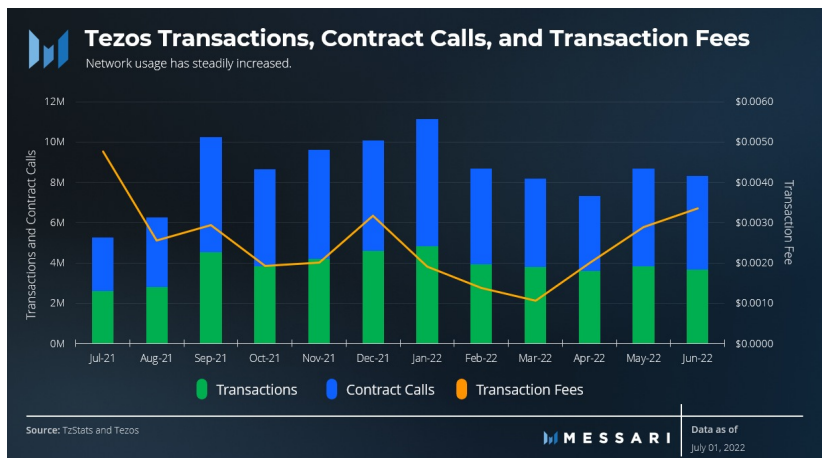
During Q2 2022, Tezos' valuation dropped \$2 billion (60%).



Q2 2022 was the worst quarter for crypto markets in the last decade, with the total crypto market cap decreasing by 58%. Tezos closed the quarter valued at \$1.3 billion, down 60% (\$2 billion) for the quarter. The drop puts it in line with the broader market. Tezos has experienced similar declines before. On Jul. 21, 2021, Tezos dropped to \$1.8 billion before gaining 307% over the following 75 days to make an all-time high of \$7.4 billion on Oct. 4, 2021. During the 2018 bear market, Tezos dropped to an all-time low of \$272 million on Dec. 7, 2018. From trough to peak, Tezos gained 2,617% or 27X.

Network Usage

Network usage increased year over year led by smart contract calls and transactions. Transaction fees remain less than \$0.01.

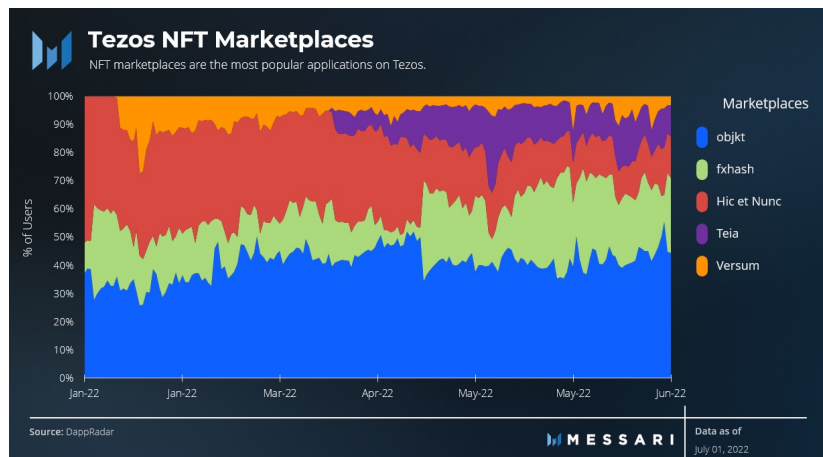


Network usage on Tezos is composed of smart contract calls and transactions. During Q2 2022, Tezos averaged 4.4 million smart contract calls (12% increase from Q3 2021) and 3.7 million transactions per month (12% decrease quarter over quarter). Transaction fees remain consistent, averaging less than \$0.01 over the last year.

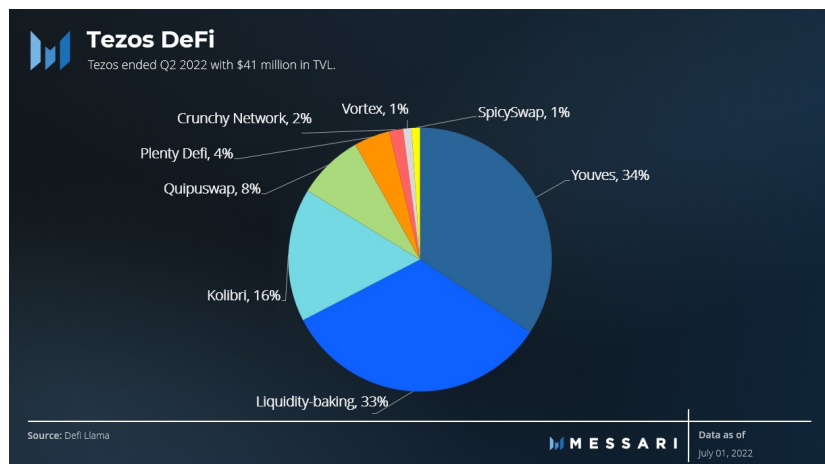
Overall, network usage has increased significantly year over year. In Q2 2021, Tezos averaged 1.9 million transactions per month, a 94% increase year over year. Concurrently, smart contract calls are trending upwards.



Similarly, account metrics have seen steady growth. Total accounts have increased month over month for the last year; however, new accounts have dropped 9 of 10 months, peaking in September 2021 with 147,000 and bottoming in June 2022 with 32,000. Concurrently, cleared accounts, defined as emptied accounts, doubled in Q2 2022 to 64,000.



NFTs account for the majority of network activity. Through H1 2022, NFT marketplaces represent the top five applications by users. Objkt is the most popular with 545,000 users (40% share), followed by Hic et Nunc (370,000 or 27%), fxhash (261,000 or 19%), and Teia and Versum (roughly 90,000 or 7% each). Additionally, Tezos has partnerships with prominent brands including Manchester United, Oracle, Red Bull Racing, McLaren Racing, Team Vitality, Gap, Papa Johns, Evian Water, Ubisoft, CCP Games, LVMH Guerlain, and more.



Although Tezos’ NFT marketplaces captures the bulk of attention, Tezos also has a developed DeFi ecosystem. Youves, a synthetic asset protocol, has the most TVL with \$14 million, followed by the decentralized exchange (DEX) Liquidity Baking (\$13 million), the stablecoin protocol Kolibri (\$7 million), the DEX QuipuSwap (\$3 million), the DEX Plenty DeFi (\$2 million), and DEXs Vortex and SpicySwap (roughly \$400,000 each). Tezos closed Q2 2022 with \$41 million in TVL, ranked approximately 50th in TVL according to Defi Llama.

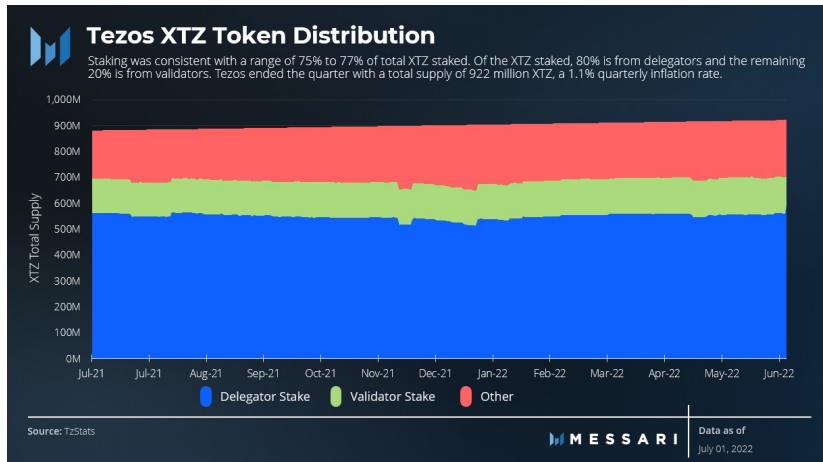
Decentralization and Staking

Staking was consistent with 75-77% of total XTZ tokens staked. The top 20 validators hold 64% of the total stake.

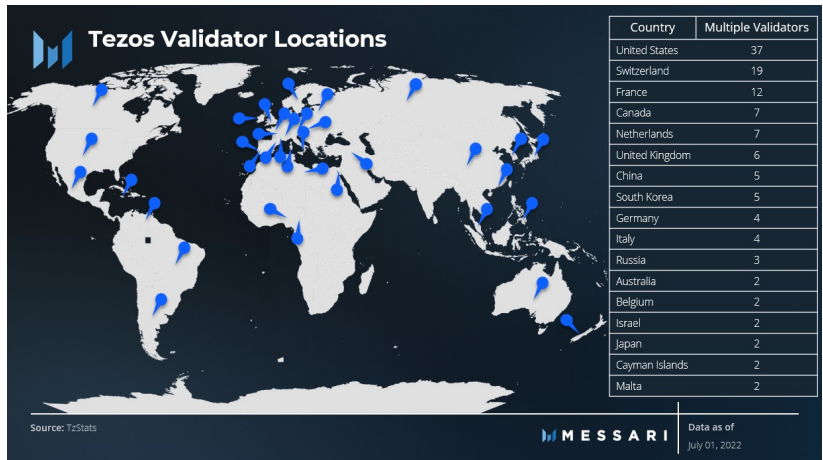
Tezos uses a Liquid Proof-of-Stake (LPoS) consensus mechanism. Liquid PoS consensus differs from Delegated Proof-of-Stake (DPoS) consensus because delegators (XTZ holders who wish to stake their tokens) can participate in consensus without conceding custody of their tokens.

Validators on Tezos are called bakers and require a minimum of 6,000 XTZ (\$8,800) to participate in Tezos’ consensus. Validators are allocated block publishing rights based on their total stake and are required to post roughly 8.25% of their XTZ delegations. Tezos uses inflationary block rewards, approximately 4.8% annually, as well as transaction fees to incentivize validators and delegators to participate in consensus.



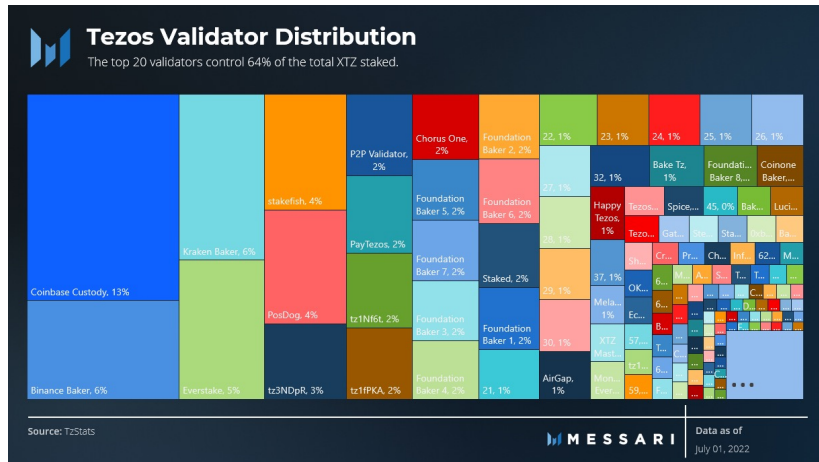


Through Q2 2022, Tezos maintained a high, consistent staking rate of 75–77% of total XTZ tokens staked. Of the XTZ staked, 80% (557 million XTZ) comes from delegators, with the remaining 20% (141 million XTZ) coming from validators. Tezos ended the quarter with a total supply of 922 million XTZ, a 1.1% quarterly inflation rate.



Tezos closed the quarter with 406 active validators. Over the 24 hour period of Jun. 30, 2022, new blocks were signed and published in 36 different countries. The United States registered the most validators with 37, followed by Switzerland (19), France (7), Canada (7), the Netherlands (7), and the United Kingdom (6).





Validator	Total Stake	% of Total Stake	Self-Stake	Delegated Stake	Delegator Count	Lifetime Rewards
Coinbase Custody	91,699,478	13.22%	10,462,428	81,237,050	2,617	11,933,334
Binance Baker	43,937,158	6.33%	4,951,275	38,985,883	977	6,157,339
Kraken Baker	41,142,309	5.93%	7,004,616	34,137,692	682	8,899,591
Everstake	34,510,337	4.97%	3,738,160	30,772,177	56,845	2,891,923
Stakefish	27,894,411	4.02%	3,005,157	24,889,253	8,522	2,495,965
PosDog	27,492,472	3.96%	4,123,789	23,368,682	5,702	2,639,168
tz3NDpR	18,165,489	2.62%	2,643,793	15,521,696	68	233,882
P2P Validator	15,608,190	2.25%	1,887,856	13,720,333	3,355	2,726,455
PayTezos	15,005,091	2.15%	1,502,945	13,502,146	2,011	2,471,813
tz1Nf6t	14,330,176	2.07%	2,484,971	11,845,205	9	603,556
tz1PKA	13,771,484	1.98%	1,373,787	12,397,697	18	132,423
Chorus One	12,744,110	1.84%	1,300,515	11,443,595	2,345	3,870,244
Foundation Baker 5	11,773,128	1.70%	1,699,697	10,073,431	12	5,141,088
Foundation Baker 7	11,738,917	1.69%	1,665,485	10,073,432	6	5,106,542
Foundation Baker 3	11,664,114	1.68%	1,666,472	9,997,642	15	5,108,062
Foundation Baker 4	11,443,283	1.65%	1,669,798	9,773,485	13	5,111,251
Foundation Baker 2	11,396,391	1.64%	1,612,704	9,783,688	9	5,049,781
Foundation Baker 6	11,365,644	1.64%	1,642,209	9,723,435	8	5,083,805
Staked	11,269,496	1.63%	1,742,003	9,527,494	2,474	1,812,021
Foundation Baker 1	10,918,232	1.57%	1,644,617	9,273,615	12	5,086,283
Other (386) Validators	247,224,193	35.25%	51,574,826	195,649,368	91,210	48,458,411
total	695,094,705	100%	109,397,104	585,697,602	74,808	127,562,338

Tezos' validator distribution by stake shows 448 million XTZ, or 64% of the total XTZ staked, are delegated to the top 20 validators (5% of the validator set). These include exchange entities operating validators like Coinbase, Binance, and Kraken, and the Tezos Foundation operating seven validators. The remaining 247 million XTZ, or 36% of the total XTZ staked, is delegated across 386 validators.



Developer Activity

Developer activity is trending upwards..



Tezos was listed among the largest developer ecosystems according to the annual Electric Capital Developer Report. Through H1 2022, developer activity (which is measured by new smart contract deployments) is up 288% versus the same period in 2021. Activity has stabilized with an average of 7,335 new smart contract deployments per month.

Tezos smart-contracts execute on a virtual machine called Michelson. The virtual machine is relatively high level, functional, and statically typed which helps analyze and audit contracts. Application developers typically use one of several smart-contract languages like SmartPy, JSLIGO, Archetype, and others.

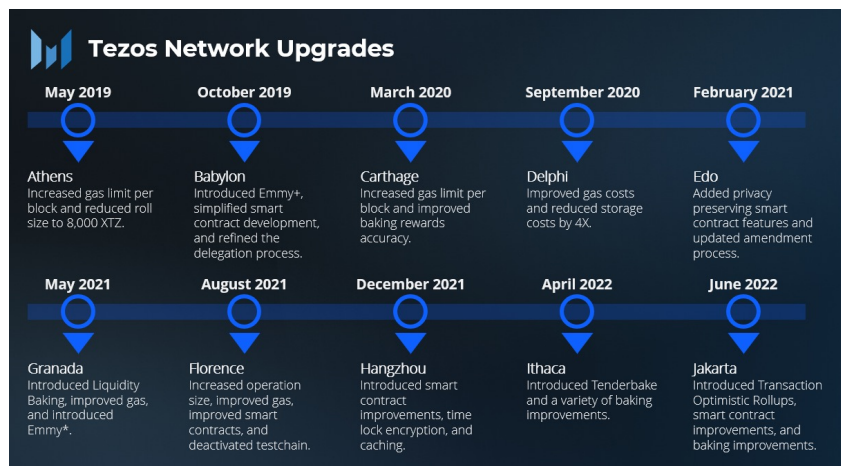


Qualitative Analysis

Governance

The ninth and tenth protocol upgrades were released.

Tezos is a self-amending blockchain that removes the need to hardfork by employing on-chain governance for protocol upgrades. Users delegate their XTZ to validators who participate in stake-weighted voting; therefore, validators are responsible for both consensus and governance. The self-amendment governance process is split into five periods totaling approximately 2 months and 10 days.



Since May 2019, Tezos has undergone 10 protocol upgrades. During Q2 2022, the ninth upgrade Ithaca and tenth upgrade Jakarta were released. Nomadic Labs, alongside Marigold, TriliTech, Oxhead Alpha, Tarides, Dai Lambda, Functori, and Tweagio, announced the next protocol upgrade Kathmandu. Kathmandu will introduce improved randomness for distribution of baking rights, event-logging for off-chain systems to react to smart contract execution, ongoing block validation tweaks to increase max transactions per second, and support for 'Ghostnet' testnet that upgrades with mainnet.



Key Events

Key events include protocol upgrades, NFT collaborations and launches, developer events, and exhibitions and festivals.

Q2 2022 was a busy quarter across every facet of the Tezos ecosystem. Key developments include:

Protocol Upgrades

Tezos core developers deployed the ninth upgrade Ithaca and tenth upgrade Jakarta. Ithaca introduced a new consensus algorithm, scaled the number of operations gossiped through the network, and released a plethora of protocol wide improvements. Jakarta introduced optimistic rollups, smart contract improvements, and additional protocol upgrades. The next upgrade, Kathmandu, has been introduced and is on track for adoption in Q3.

NFT Collaborations and Launches

Artists and brands from around the world launched NFT projects. Notable projects include Evian Water, Gap, Montreux Jazz Festival, Maison Guerlain, Decathlon, Tezotopia Battles game, Papa Johns, Oracle Red Bull Racing, McLaren Racing, Team Vitality, and more. Tezos partnered with new artists, platforms, and institutions like VERSEverse, CADAF NFT Marketplace, Cortesi Gallery, Superchief Gallery, VerticalCrypto Art, Marina Abramović, Herbert W. Franke, Venice Biennale, Bloomberg Philanthropies, Serpentine Gallery, HEK Basel, NXT Museum, Light Art Space Foundation, and more.

Developer Events

The Tezos community held a number of workshops and hackathons with partners Gitcoin, Encode Club, and Devfolio. The TezAsia hackathon attracted over 11,000 participants across Asia and India. Tezos Ukraine launched a hackathon with \$250,000 in prizes and over 1,100 participants. Additionally, Tezos attended the We Are Developers World Conference, MoonFire Ventures held a pitch day for Tezos project teams, and Entrepreneur First launched a Web3 incubator program for Tezos.

Exhibitions and Festivals

Tezos NFTs were featured in multiple events across the globe. Events showcasing Tezos NFTs included La Biennale, Cortesi Verso, Art Basel Basel, Art Basel Hong Kong, Sonar Festival, Proof of People, VidCon, and NFT NYC.



Other Events

- Tezos created a TikTok account.
- Tezos was featured on Binance Academy.
- r/CryptoCurrency hosted a Tezos ecosystem career fair.
- Tezos conducted an anime challenge on Instagram.
- USDT launched on the Tezos Network.
- The Tezos Community hosted the TezDev developer conference in Paris.

Challenges

Challenges include Layer-1 competition, developer limitations, and a nascent DeFi ecosystem.

Although Tezos has experienced plenty of growth in network usage year over year, the protocol still has a handful of challenges to address:

First, Tezos faces unrelenting competition from other NFT ecosystems Ethereum and Solana. OpenSea, the largest NFT marketplace, has over \$400 billion in lifetime sales. Additionally, marketplaces LooksRare and Magic Eden have billions of dollars in lifetime volume. Comparatively, the largest marketplace on Tezos, objkt, recently surpassed \$100 million in total volume. Despite the growth, Tezos has a long way to go to catch the market leaders.

Next, while the majority of applications on Tezos deploy smart contracts in SmartPy, JSLIGO, and others, Tezos smart-contracts execute on a virtual machine called Michelson. According to DefiLlama, the most common smart contract languages are Solidity, Vyper, and Rust. Until the Ethereum Virtual Machine (EVM) and Web Assembly (WASM) are available through rollups, Tezos' developer base might be limited by using a unique virtual machine.

Lastly, Tezos has a nascent DeFi ecosystem. At Q2 2022 close, Tezos had eight DeFi protocols with over \$100,000 in TVL. Combined, Tezos has roughly \$41 million in TVL ranking it approximately 50th across chains. The Tezos DeFi ecosystem may benefit from new liquidity onramps with the integration of Tezos and USDT. NFTs are clearly the leading value proposition for Tezos; however, the ecosystem may benefit from stronger DeFi activity and supporting applications.



Roadmap

Tezos' primary focus will be scaling the network. Since May 2019, Tezos has continually evolved with 10 forkless protocol upgrades. Most recently, Tezos adopted a new classical BFT-style consensus algorithm, Tenderbake, during the Ithaca upgrade which improved latency and finality.

The Layer-2 scaling rollout began in late June 2022 with the Jakarta upgrade. Jakarta introduced Transaction Optimistic Rollups (TORUs), which increase throughput for account-to-account transactions. The Transaction rollups are an experimental step for the ecosystem to begin supporting rollup functionality. The end state for Tezos scaling is enshrined optimistic rollups such as Smart Contract Optimistic Rollups (SCORUs). The enshrined optimistic rollups will support any virtual machine, thus vastly expanding Tezos's capabilities. Testing for SCORUs is slated to begin with the Kathmandu upgrade.

The final element to horizontally scaling Tezos through rollups is a data-availability layer to increase total bandwidth and capacity and improve throughput for rollups. While rollups move computation from Layer-1 to Layer-2, the data availability layer moves data from Layer-1 to Layer-2 which is projected to increase throughput by 1,000-10,000x.



Closing Summary

Despite the brutal start to 2022, Tezos network usage is up significantly year over year. During Q2 2022, Tezos smart contract calls were up 12% versus Q3 2021, transactions were up 94% year over year, transaction fees remained less than \$0.01, developer activity was up 288%, and staking was consistent with 75–77% of total XTZ tokens staked. Additionally, NFT marketplaces continue to be the leading applications and the DeFi ecosystem continues to develop.

Tezos also introduced the ninth upgrade Ithaca and the tenth upgrade Jakarta. Ithaca introduced the new consensus algorithm Tenderbake, scaled the number of operations, and released multiple improvements. Jakarta introduced optimistic rollups, smart contract improvements, and additional protocol-wide improvements. The next protocol upgrade, Kathmandu, was also announced. Kathmandu will introduce randomness for distribution of baking rights, event-logging for off-chain systems to react to smart contract execution, ongoing block validation tweaks to increase max transactions per second, and support for 'Ghostnet' testnet that upgrades with mainnet. The end state for Tezos scaling is enshrined optimistic rollups such as Smart Contract Optimistic Rollups (SCORUs).

Tezos has established itself as a leading NFT ecosystem and continues to see improvement in both network adoption and development. Tezos must continue gaining market share and scaling the network to compete with leading Layer-1s.





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