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Quarterly Community Report State of Avalanche Q1 2022

Key Takeaways

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- Ql 2022 consisted of continued growth and the stabilization of network usage, financial performance, and network infrastructure.
- Quarterly growth can be attributed to the continued deployment of Avalanche Rush, the Blizzard ecosystem fund, Ethereum Virtual Machine (EVM) subnet development, and the introduction of the <u>Multiverse</u> subnet incentive program and <u>Culture Catalyst fund</u>.
- With further releases of Apricot and the launch of subnets anticipated, average transaction fees should continue to stabilize and trend downwards.
- Avalanche showed signs of capturing market share versus top EVMcompatible chains across several key metrics over Q1.
- The user experience is expected to improve with the launching of a browser extension and a mobile wallet, set to be released in Q2.
- Along with the continued development of subnets, the launch of the browser extension and a mobile wallet will enable native bridging between subnets.

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Avalanche Key Metrics Summary

Avalanche Quarterly Metrics	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Circulating Market Cap ¹	\$2,059,481,956	\$14,324,823,285	\$24,667,095,817	\$25,725,736,661
% Change	(45.7%)	595.6%	72.2%	4.3%
Total Quarterly Revenue ¹	\$2,037,487	\$7,149,020	\$30,279,971	\$52,286,902
% Change	41.4%	250.9%	323.6%	72.7%
Total Value Locked (TVL) ²	\$187,666,506	\$3,680,687,692	\$11,826,019,638	\$11,180,809,369
% Change	(3.3%)	1,861.3%	221.3%	(5.5%)
Average Active Daily Addresses ³	3,588	10,330	69,113	92,081
% Change	96.0%	187.9%	569.1%	33.2%
Average Daily Transactions ³	25,321	83,050	473,367	865,489
% Change	125.2%	228.0%	470.0%	82.8%
Unique Contracts Deployed ³	6,457	32,143	79,274	127,558
% Change	208.1%	397.8%	146.6%	60.9%

Data as of: Mar 31, 2022 Source: Token Terminal¹, DeFi Llama², Avax.Network³

A Primer on Avalanche

The Avalanche network is a Proof-of-Stake (PoS) smart contract platform for decentralized applications. Whereas most competitors use consensus mechanisms in the Classical or Nakamoto families, Avalanche differentiates itself through its creation and implementation of a new consensus family known as "Avalanche consensus." 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.

As a follow-up to the <u>State of Avalanche Q4 2021</u> report, this report will revisit developments and events from the prior quarter, analyze the network's most recent quarterly performance, and give insight into the coming months. A full appendix of data tables is available at the end of the report.

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The First Quarter Narrative

Q4 2021 was a period of high growth for the Avalanche network. With the Ethereum– Avalanche bridge, major exchange listings, high-profile partnerships, and the <u>Avalanche</u> <u>Rush</u> liquidity program, the network was positioned to grow its user base and welcome new participants into its economy. As individuals and institutions piled in, Avalanche recorded all-time-highs in active addresses, daily transactions, total value locked (TVL), and market capitalization. As we moved into the new year, additional growth strategies and developments were on the horizon, but it was unknown whether the network would continue growing, experience a downturn, or show signs of stabilization.

QI saw continued growth on the back of several key developments in the Avalanche ecosystem. Ultimately, QI 2022 consisted of continued growth and the stabilization of network usage, financial performance, and network infrastructure. The outcomes were attributed to several key developments: the continued deployment of Avalanche Rush, the Blizzard ecosystem fund, Ethereum Virtual Machine (EVM) subnet development, and the introduction of the <u>Multiverse</u> subnet incentive program and <u>Culture Catalyst fund</u>. As existing enterprise partners such as Deloitte began to implement business solutions, new partnerships were formed over the quarter.

Network Overview

MESSARI Avalanche Network Overview

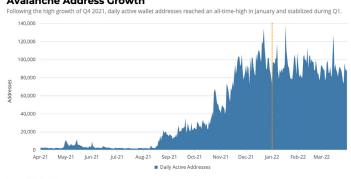
Avalanche Quarterly Metrics	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Network Usage				
Average Active Daily Addresses 1	3,588	10,330	69,113	92,081
% Change	96.0%	187.9%	569.1%	33.2%
Average Daily Transactions 1	25,321	83,050	473,367	865,489
% Change	125.2%	228.0%	470.0%	82.8%
Average Transactions Per Second 1	0.29	0.96	5.48	10.02
Average Transaction Fee 1	\$0.87	\$0.78	\$0.62	\$0.67
% Change	(29.4%)	(9.8%)	(20.9%)	7.4%
Network Financials				
Circulating Supply ²	172,418,164	220,286,577	243,245,382	267,271,557
% Change	34.8%	27.8%	10.4%	9.9%
Circulating Market Cap ³	\$2,059,481,956	\$14,324,823,285	\$24,667,095,817	\$25,725,736,661
Fully Diluted Market Cap 3	\$8,551,622,444	\$46,940,119,194	\$73,109,635,893	\$69,147,768,394
% Change	(59.9%)	448.9%	55.8%	(5.4%)
Total Quarterly Revenue 3	\$2,037,487	\$7,149,020	\$30,279,971	\$52,286,902
% Change	41.4%	250.9%	323.6%	72.7%
Circulating P/S Ratio 3	604 x	267 x	160 x	91 x
% Change	62.1%	(55.9%)	(40.0%)	(43.0%)
Nominal Staking Yield ²	10.38%	10.08%	9.82%	9.86%
% Change	82.6%	(2.9%)	(2.6%)	0.5%

Data as of: Mar 31, 2022 Source: Avax Network¹, Messari², Token Terminal²

Note: Single point-in-time metrics measured on final day of quarter. P/S ratio based on projected annualized revenue using on 30-day moving average.

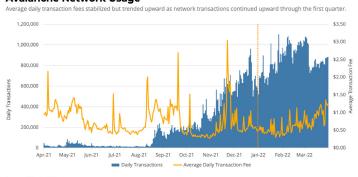
Across the board, Avalanche experienced modest growth compared to the prior quarter, and its key metrics stabilized across the network. While the market cap was relatively flat (-5.4%), the network experienced continued uptrends in usage, revenue generation, and a move towards favorable fundamental valuation. Average daily transactions nearly doubled over the quarter (+82.8%), total revenue grew by 72.7%, and the price-to-sales (P/S) ratio continued to settle down, with the ratio of price relative to revenue moving from 160x to 91x.

MESSARI Avalanche Address Growth



Active addresses reached an all-timehigh of 140,000 in January. As a result, daily active addresses did not reverse course, and instead, adoption continued as active addresses reached an all-time-high of 140,000 in January. For perspective, Avalanche had <u>more active users</u> in the first week of January than in all of October 2021. The network averaged around 70,000 daily active addresses during Q4 and reached a stable range with an average of 92,000 during Q1.

M E S S A R I Avalanche Network Usage



Data as of: Mar 31, 2022 Source: Avax.Network

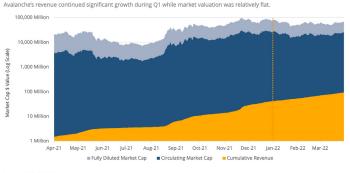
Average daily transactions rose to roughly 74% of Ethereum's. Similar to Q4, transaction activity on the network followed a similar pattern to daily active address growth. On aggregate, Avalanche's average daily transactions rose from 473,000 last quarter to 865,000 in Q1, which is ~ 74% of Ethereum's roughly 1.17 million. Daily transactions continued their upward trend with additional DeFi application launches and the rollout of GameFi subnets such as DeFi Kingdoms Crystalvale and <u>Crabada</u>. Ultimately, while on testnet, Crabada would become the top transaction driver on Avalanche during Q1. Beyond DeFi and GameFi, total 24 hour NFT volume surpassed \$1 million for the first time, while the NFT market cap broke \$110 million.

Throughout 2021, the network experienced volatility in average daily transaction fees. With further releases of <u>Apricot</u>, transaction fees have since stabilized, averaging around \$0.67 per transaction. Apricot is intended to facilitate "verifiable pruning," a process where nodes can securely compact historical transactions. It features a fee mechanism that enables transaction costs to be low and predictable for users. While stable, transaction fees have been trending upward in tandem with daily transactions. With more anticipated releases of Apricot, we should expect to see average transaction fees continue to stabilize and trend downwards.

Further, the continued launch of subnets should put downward pressure on transaction fees. <u>Subnets</u> are a horizontal scaling strategy that aims to validate Avalanche blockchains running in parallel, enabling transaction order, and increased performance by splitting up network traffic allowing for optimization and more control over transaction fees.

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Avalanche Network Value and Cumulative Revenue



Data as of: Mar 31, 2022 Source: Token Terminal Note: Dollar values displayed in log scale

Intuitively, as daily active addresses and transactions grew, total revenue increased. Revenue grew by 72.7% over the quarter, and cumulative revenue became a more significant fraction of the network FDV. To put it into perspective, cumulative revenue as a percentage of FDV is 20x from a year ago, which signals that fundamentals like network revenue are moving more in line with market value.

As Avalanche burns 100% of fees, revenue growth should put upward pressure on AVAX market value. Avalanche's network revenue (transaction fees) is atypical for smart contract platforms. Rather than distributing transaction fees to validators, 100% of fees are burned from the network's circulating supply. This drives value to all token holders through increased scarcity rather than compounding the balances of validators and delegators. In other words, revenue growth should put upward pressure on the market value of AVAX. The question is just how statistically significant the spread between revenue and market value is. With that in mind, as fundamental value (as opposed to speculative value) becomes a more substantial part of market value, a strong correlation between revenue and market value should theoretically exist.

MESSARI Avalanche Network Value and Daily Revenue



Data as of: Mar 31, 2022 Source: Token Terminal

Network usage has become more correlated to AVAX' market value. Most notably, a spike in daily revenue on November 22, 2021, was accompanied by a spike in FDV. The same relationship exists between circulating market cap and price. Additionally, the spread between the two variables tightened during Q1, with occasional spikes in revenue once again accompanied by spikes in FDV. As the spread tightens, the network usage becomes more correlated to the market value. This correlation could indicate that the network is moving closer to fundamental value versus speculative value. If the relationship holds, then revenue will have a significant /relationship with network value.



Data as of: Mar 31, 2022 Source: Messari

Note: Engaged stake = total stake / (genesis supply + staking rewards - burned fees)

Since June 2021, engaged stake and nominal staking yields have been stable, with an average annualized yield of ~10%. One of the last significant token unlocks occurred during March, but there was no indication of a change in engaged stake. Should those tokens engage or disengage in staking, there could be additional volatility in yield over the near term.

Ecosystem & Development Overview

M E S S A R I Avalanche Ecosystem & Developer Overview

Avalanche Quarterly Metrics		Q2 2021		Q3 2021		Q4 2021		Q1 202
Ecosystem								
Total Value Locked (TVL)		\$187,666,506		\$3,680,687,692		\$11,826,019,638		\$11,180,809,36
% Change		(3.3%)		1861.3%		221.3%		(5.5%
Top 3 Protocols by TVL ¹								
Protocol	1.	Pangolin	1.	Benqi	1.	AAVE	1.	AAV
TVL		\$158,085,513		\$1,499,429,539		\$3,078,289,183		\$3,043,485,83
Protocol	2.	Beefy Finance	2.	Trader Joe	2.	Trader Joe	2.	Trader Jo
TVL		\$1,241,355		\$1,232,486,415		\$2,122,167,453		\$1,535,726,28
Protocol	3.	N/A	3.	Pangolin	3.	Bengi	3.	Ben
TVL		N/A		\$279,786,833		\$1,565,763,288		\$1,274,640,95
Development								
Unique Contracts Deployed ²		6,457		32,143		79,274		127,55
% Change		208.1%		397.8%		146.6%		60.9
Unique Contract Deployers ²		1,947		3,994		16,884		19,10
% Change		424.8%		105.1%		322.7%		13.1
Core Developer Activity (New Github Events) 3		3,056		3,308		3,138		5,53
% Change		(41.7%)		8.2%		(5.1%)		76.4

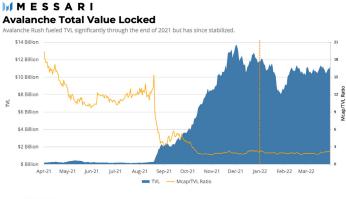
Data as of: Mar 31, 2022 Source: DeFi Llama¹, Avax.Network², Santiment³ Notes: Single point-in-time metrics measured on final day of quarter. Santiment's "Developer Activity" metric measures number of Github events generated by a project.

\$2m in AVAX incentives were combined with LUNA and PNG rewards to

and PNG rewards to incentivize usage. Development

activity grew, even though TVL declined. Heading into 2022, Avalanche DeFi was expected to be fueled by the ongoing Avalanche Rush program and the new \$200 million Blizzard ecosystem fund. Over the course of Q1, Pangolin (PNG), an Avalanche native DEX, and Terra (LUNA) joined the Rush program and combined to bring TerraUSD (UST) to the Avalanche ecosystem. In total, \$2 million in AVAX incentives were combined with additional LUNA and PNG rewards to incentivize usage.

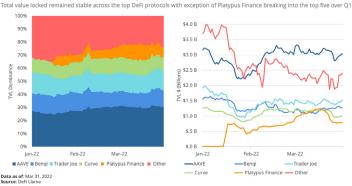
Continued network adoption was also evident in Avalanche development activity with unique contracts deployed and contract deployers having grown by 60.9% and 13.1%, respectively. Although development marched forward, TVL declined by 5.5%.



Data as of: Mar 31, 2022 Source: DeFi Llama

Continued growth and development in the DeFi sector impacted TVL. The TVL decline would have been more drastic if not for the continued growth and development in the DeFi sector. TVL is highly sensitive to overall market valuations. While TVL on Avalanche experienced a slight decline, top DeFi protocols Aave, Benqi, and Trader Joe experienced TVL declines of 4%, 18%, and 20%, respectively. Their collective TVL declined by 12% — more than twice the total Avalanche DeFi ecosystem's decline. Essentially, the continued growth and development of newer and smaller protocols in the Avalanche DeFi ecosystem offset the market forces negatively impacting top protocol TVL. Ultimately, like other metrics in the Avalanche ecosystem, TVL appears to have also stabilized at around \$11 billion.





Aave, Trader Joe, and Benqi solidified their positions as the top three DeFi protocols after joining Rush in Q4. Collectively, these three protocols experienced a 12% decline in TVL, which is greater than the decline of the entire Avalanche DeFi ecosystem. The disconnect between the greater decrease in TVL across the top DeFi protocols and the lower decline of the entire DeFi ecosystem can be attributed to additional launches of DeFi services on the network, such as the launch of Platypus Finance (PTP).

<u>Platypus Finance</u> is a stableswap protocol that was the fastest growing DeFi application over the quarter, having grown from just \$10 million to over \$750 million in TVL, representing a ~7,500% increase. Platypus also became one of the top 10 applications generating network transactions on Avalanche.

The number of apps with recorded TVL grew from 100 to 150. Additional launches and Rush deployments, such as Pangolin and Terra, helped prop up Avalanche's TVL despite overall market declines. The other notable trend across Ql was the steady long tail of DeFi protocols on Avalanche. Entering Ql, 60 protocols had amassed \$1 million TVL, up from just 29 from the prior quarter. Exiting Ql, 60 protocols maintained the \$1 million TVL mark. Despite the flat to down quarter, the number of applications with recorded TVL grew from 100 to 150.





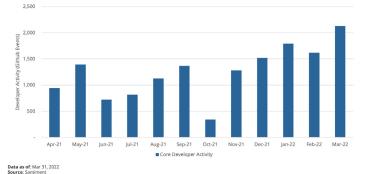


Data as of: Mar 31, 2022 Source: DappRadar

Ultimately the emergence of new DeFi and GameFi apps was fueled by continued growth in developer metrics. QI marked the beginning of Avalanche's highly anticipated GameFi subnet launches. Crabada quickly passed 5,000 users, measured by the number of unique wallet addresses interacting with the application's smart contracts. Daily transactions grew from 60,000 to over 400,000 over QI, measured by transactions made to Crabada's smart contracts. Daily volume generally ranged between \$130,000 and \$1.5 million as measured by the total amount of incoming value to the application's smart contracts. Finally, the TVL in the application's smart contracts neared \$50 million by the end of the quarter. Ultimately, the emergence of new DeFi and GameFi applications was fueled by continued growth in developer metrics.

M E S S A R I Avalanche Core Developer Involvement

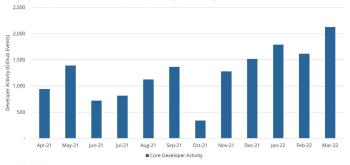
Core developer activity in the Ava Labs Github repository is trending upward through Q1 2022.



The number of unique contracts deployed grew by 60.9% and saw and all-time-high in March. QI developer activity in the Avalanche ecosystem aligns closely with the network's overall TVL growth and recent entry into GameFi. The number of unique contracts deployed grew by 60.9% quarter over quarter and reached an all-time-high in March, just as Crabada and DeFi Kingdoms launched their subnets. The number of unique contract deployers slowed on a month-to-month basis but still managed to grow by 13.1% quarter over quarter. With the deployment of the Multiverse and Culture Catalyst funds, March's surge in contract deployments should continue through Q2 2022.

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Avalanche Core Developer Involvement



Data as of: Mar 31, 2022 Source: Santiment

The growth of events in the Ava Lab's Github repository grew significantly (76.4%) throughout Ql. Given this was the greatest increase to date, the number of events indicates that the network's core team is accelerating the infrastructure buildout.

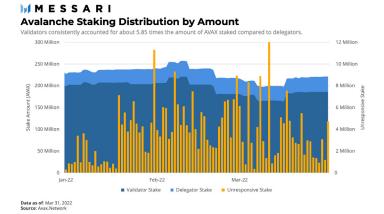
Staking and Decentralization Overview

The security of PoS networks like Avalanche requires users to lock up the network's native tokens and participate in validation duties. A distributed network of validators and active participants can help ensure the network functions as intended.

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Avalanche Staking & Decentralization Overview

Avalanche Quarterly Metrics	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Staking By Amount				
Average Engaged Stake	69.5%	58.0%	61.1%	57.5%
% Change	(3.2%)	(16.6%)	5.4%	(5.8%)
Average Validator Stake	198,005,647	185,795,337	203,949,900	194,306,737
% Change	(9.8%)	(6.2%)	9.8%	(4.7%)
Average Delegator Stake	67,678,893	37,212,007	35,943,051	33,522,206
% Change	25.5%	(45.0%)	(3.4%)	(6.7%)
Average Unresponsive Stake		3,950,913	3,193,323	3,732,365
% Change			(19.2%)	16.9%
Staking By Count				
Average Number of Validators	949	1,014	1,138	1,259
% Change	17.0%	6.9%	12.2%	10.6%
Average Unresponsive Validators		65	57	48
% Change			(12.8%)	(14.9%)
Average Number of Delegators	10,656	15,092	16,459	17,179
% Change	111.7%	41.6%	9.1%	4.4%
Decentralization				
Nakamoto Coefficient	25	28	27	27
% Change	(26.5%)	12.0%	(3.6%)	0.0%

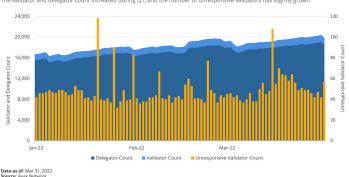


After a downwards trend at the beginning of 2021, engaged stake settled at around 60%, which has been maintained through Q1 2022.

Validator stake was consistently ~5.85x greater than delegated stake. Staking amounts during QI were relatively uneventful, with average stake changes in the single digits quarter over quarter. Such predictability and lack of volatility are generally good for network health. Validator stake was consistently about 5.85 times greater than the amount of delegated stake. The amounts of unresponsive validator stake were higher than average on a few days, but the total amount of offline stake never came close to levels that could compromise the network.

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Avalanche Staking Distribution by Count The validator and delegator count increased during 01, and the number of unresponsive validators has slightly grown

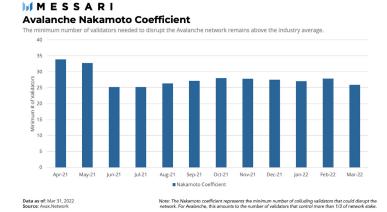


There was a material increase in the average number

of validators and delegators.

Low volatility in staked AVAX combined with an increase in validators and delegators is a sign of healthy decentralization. While the average staking amount was relatively flat, there was a material increase in the average number of validators and delegators. The average validator count grew from 1,138 to 1,259, representing a 10.6% increase in network security participants. The number of average validators joining the network stayed at about 11% growth each quarter. This stability is indicative of a growing, decentralized network.

Each new Avalanche subnet will be required to validate on the Avalanche P-chain. As more subnets launch, the average number of validators should increase in tandem. The average number of delegators also grew from 16,459 to 17,179, representing a 4.4% increase. The number of delegators consistently outnumbered the number of validators, consistent with other PoS networks that support native delegation. The average number of offline validators continued to decline, decreasing by 14.9% over the quarter. Ultimately, low volatility in the network's staked AVAX combined with an increase in validators and delegators is a sign of healthy decentralization.



Avalanche's Nakamoto coefficient - in the upper 20s - is above the industry average.

The Nakamoto coefficient is a metric <u>first introduced</u> by Balaji Srinivasan to quantify the decentralization of blockchain networks. The coefficient represents the minimum number of actors who can collude to disrupt the network. For Avalanche, the Nakamoto coefficient equals the number of validators that control one-third of the network's stake. Avalanche's Nakamoto coefficient hovered in the low 30s to begin 2021 but fell to 25 in June. Since this decline, the coefficient has remained stable in the upper 20s, putting Avalanche above the industry average for other Layer-1 networks.

Competitive Analysis

Currently, the Layer-1 space is a competitive race between new and legacy protocols to achieve the maximum possible network speed at the lowest possible cost and with the greatest degree of security. Each competitor has focused on maximizing these activities while making a range of trade-offs regarding centralization. The ideal blockchain would be fast, secure, widely used, and adequately decentralized.

M E S S A R I Avalanche Key Metrics vs. Top EVM Chains

Q1 2022	A	٠		Ø	8
	Avalanche (AVAX)	Ethereum (ETH)	BNB Chain (BNB)	Fantom (FTM)	Polygon (MATIC
Network Financials					
Price	\$97.33	\$3,282.78	\$428.82	\$1.43	\$1.6
% Change Q1 2022	-15%	-13%	-19%	-45%	-379
Circulating Market Cap	\$25.7 B	\$407.5 B	\$74.5 B	\$3.6 B	\$11.6
% Change Q1 2022	-4%	-7%	-14%	-38%	-34
Total Revenue	52.3 M	2.5 B	177.1 M	17.1 M	9.31
Circulating P/S Ratio	91.2	81.5	123.4	63.0	669.5
Network Usage					
Average Daily New Unique Addresses	10.5 K	102.8 K	244.6 K	12.8 K	112.5
Average Daily Transactions	.9 M	1.2 M	5.6 M	1.0 M	3.1 1
Average Transaction Fee	\$0.67	\$23.54	\$0.35	\$0.19	\$0.0
Ecosystem & Development					
Total Value Locked	\$11.2 B	\$127.0 B	\$13.8 B	\$6.8 B	\$4.7
% Change Q1 2022	-5%	-15%	-13%	38%	-13
Mcap/TVL Ratio	2.30	3.21	5.40	0.53	2.4
Average Daily Verified Contracts	102.1	312.9	1,720.1	149.1	257.
Average Daily Core Developer Activity	61.5	280.5	0.2	11.7	46.
Decentralization					
Number of Validators	1,000+	200,000+	<25	<100	<10
Nakamoto Coefficient	27	3	7	3	

Data as of: Mar 31, 2022 Source: Token Terminal, DeFi Llama, Network Blockchain Explorers Notes: Single point-in-time metrics were measured on the final day of the quarter. Totals and averages are measurements of the entire guarter ending Mar 31, 2022.

We compare Avalanche to the top EVMs by TVL. The core technical advancements, developer activity, and ecosystem growth strategies may separate one Ll from another. Here, we evaluate Avalanche's progress versus the top five EVM compatible chains (including Avalanche) by TVL. The methodology used to derive this peer group is simply by grouping the EVM chains with the largest TVL, seeing as today, DeFi is the sector driving the majority of each network's economic activity.



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Avalanche closed in on BNB market share.

Avalanche experienced the lowest decline in value in terms of market cap and closed in on BNB Chain market share while further separating itself from Fantom and Polygon.

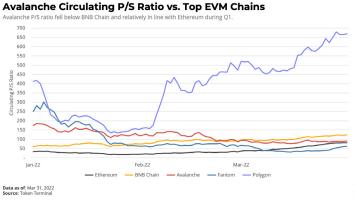
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Avalanche Daily Revenue vs. Top EVM Chains

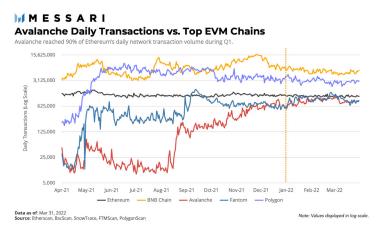


Avalanche's daily revenue trended upward while all other EVMs experienced a decline. Similarly, Avalanche's daily revenue trended upward. At the same time, all other EVM chains experienced a decline, allowing for Avalanche to close in on BNB Chain and further separate from Fantom and Polygon.

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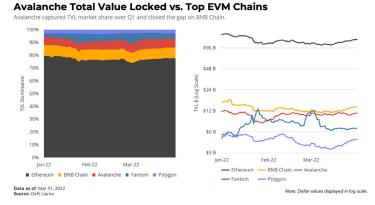


Avalanche's P/S ratio is now more in line with Ethereum's. Avalanche's P/S ratio declined over the quarter, while other chains aside from Fantom experienced an increase in this valuation metric. From a relative valuation perspective, Avalanche is now more in line with Ethereum with a P/S of 91x versus Ethereum's 81.5x.



Both Avalanche and Fantom reached similar levels in Q1 daily transactions. Ethereum has held steady at ~1.17 million transactions per day, with Avalanche now reaching ~74% of Ethereum's average daily transactions. With the incentive programs taking hold and subnet launches on the way, Avalanche has an interesting opportunity to surpass Ethereum over the next quarter.

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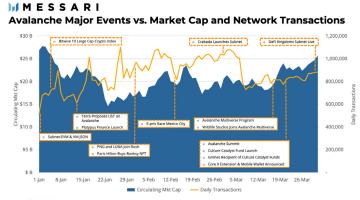


QI was a flat to down quarter for the crypto market, with aggregate TVL decreasing from \$240 billion to \$230 billion. Avalanche's TVL declined at the second slowest rate among the top EVM chains, only trailing behind Fantom. A significant portion of Avalanche's stability came at the expense of Ethereum, BNB Chain, and Polygon, each declining by double-digit percentages. As the above chart illustrates, Avalanche closed in on BNB Chain in this area. The Avalanche Mcap/TVL ratio also ended among the lowest. As a measure of network value relative to TVL, it signifies a closer relationship between the network value and the DeFi economic activity occurring on the network.

Key Events, Catalysts, and Strategies for Ecosystem Growth

QI 2022 proved to be another significant quarter for the Avalanche ecosystem. Indeed, growth strategies and development activity contributed to Avalanche's ecosystem growth, as evidenced by the data presented in the previous sections of this report. The results can be attributed to several key developments:

- The continued deployment of Avalanche Rush
- Deployment of the Blizzard ecosystem fund
- Custom EVM subnet development
- · Introduction of the Multiverse program and Culture Catalyst fund



Data as of: Mar 31, 2022 Source: Token Terminal, Avax.Network

January 2022

Avalanche launched the Subnet-EVM in January.

Avalanche's QI began with the <u>launch of the Subnet-Ethereum Virtual Machine</u>, a custom VM that enables users to easily and rapidly create their own, configurable EVM-compatible blockchain. By the end of the first week of January, Pangolin <u>announced plans</u> to launch its own subnet. During the first week of January, not only was the Avalanche ecosystem gearing up for subnets, it was introducing additional enterprise partners. Ava Labs entered into a <u>strategic partnership</u> with Turkey's electronic vehicle manufacturer Togg to design and build smart contract-based services to improve autonomous mobility.

By the middle of January, Bitwise, a prominent crypto index fund manager, reconstituted

proposal to bring UST to Avalanche with <u>Liquidity Mining Proposal #3</u>. Further ecosystem collaboration came about when Celsius Network announced support for Avalanche, allowing users to borrow against AVAX from a centralized provider. Further, linch, a widely

the Bitwise 10 Large Cap Crypto Index and added AVAX. Days later, Terra passed a

used DeFi aggregator, was deployed on Avalanche.

Bitwise added AVAX to its large cap index.

Spaces and WAGMI launched the first subnets on Avalanche.

Banksy's "Love is in the Air" became a fractionalized NFT on Avalanche.

The Avalanche Andretti Formula E team made its debut at the Formula E World Championship. January concluded with the first subnet launches on Avalanche with <u>Spaces</u>, a website allowing users to store and share links, images, and files all on-chain, and <u>WAGMI</u>, a subnet demo that is a high-throughput testbed for EVM optimizations. Finally, to round out the month, <u>Anchor Protocol</u>, the largest DeFi protocol on Terra, proposed and passed a UST borrowing strategy whereby sAVAX entered the platform as its newest collateral asset.

February 2022

As reported in Q4 2021, one of renowned street artist Banksy's most iconic pieces, <u>Love is in</u> <u>the Air</u>, became a fractionalized NFT on Avalanche. The NFT was made possible by <u>Particle</u>, which partnered with Avalanche to bring fine art on-chain in November. By February, the Banksy NFT generated interest and purchases by celebrities such as Paris Hilton. The Particle Banksy collection would later sell out in March.

Also reported in Q4, a multi-year agreement with Andretti Formula E Autosports marked the first title sponsorship from a blockchain company with a Formula E team with a natural alignment between organizations committed to sustainability. By mid-February, the Avalanche Andretti team made its debut at the Mexico City E-Prix, the Formula E World Championship.

March 2022

March was a pivotal month of Q1. The uptick witnessed in daily transactions was largely due to the launch of the Crabada and DeFi Kingdoms subnets with Crabada running testnet and DeFi Kingdoms live on mainnet. To support the growth and development of subnets, the Avalanche Foundation announced the launch of Avalanche Multiverse, a \$290 million (~4 million AVAX) incentive program. The first subnet to receive incentives through the Multiverse program was DeFi Kingdoms. Subsequently, <u>Wildlife Studios</u> joined the Multiverse program and will be expanding its flagship game, Castle Crush, onto its own subnet, intending to integrate NFTs and tokens into the game. The Crabada and DeFi Kingdoms subnets launched. At the end of March, the sold-out Avalanche Summit took place in Barcelona, Spain, with sponsors including Circle, Terra, and Bridge Tower Capital, to name a few. During this time, the Avalanche Foundation and Web3 social media platform Op3n announced a \$100 million creator fund called Culture Catalyst. The fund intends to help creative projects launch on Avalanche and Op3n. The program's first recipient will be musician <u>Grimes</u>, who plans to create an "intergalactic childrens' metaverse book."

Ecosystem Challenges

Q1 did not present any drastic challenges like those that came with the growing pains of Q4. As reported last quarter, the Avalanche C-chain recorded new highs for daily transactions which caused the network to temporarily experience higher than usual transaction fees. This quarter, network optimizations known as Apricot quickly became apparent as average daily transaction fees declined and stabilized. With that in mind, transaction fees were trending upward towards the end of Q1 as daily transactions increased.

The anticipated solutions to scaling and lowering costs include <u>governance</u>, <u>pruning</u>, and <u>subnet</u> development, which will involve removing a gas limit mechanism, among other optimizations. The launch of subnets is in motion, and the horizontal scaling approach with subnets takes place will influence how transaction fees trend going forward.

The Road Ahead

Avalanche does not have an official public-facing roadmap.	Currently, Avalanche does not maintain an updated public-facing roadmap, so the protocol developments are not prescribed. However, it is expected that Avalanche Rush will continue to drive DeFi growth, Blizzard will support overall ecosystem expansion, Multiverse will drive subnet development, and Culture Catalyst will bring creative talent to the ecosystem.
	It is also anticipated that core platform upgrades will continue. Significant upgrades (Apricot) are being implemented in six phases, following a successful series of Phase 5 in Q1. All phases of Apricot broadly represent one of the solutions (pruning) to the optimizing transaction fees.
User experience improvement is of high priority.	As discussed during the Q4 Analyst Call, user experience improvement is of high priority. As part of this effort, Ava Labs announced details about Core, a free, non-custodial wallet explicitly created for applications on Avalanche with native support for subnets. The first iteration of Core is a browser extension, with the second being the Core mobile wallet expected to be released in early Q2. Ava Labs also announced that the Avalanche Bridge will enable support for Bitcoin, allowing BTC holders to transfer their BTC onto Avalanche securely. Bitcoin support is also scheduled to go live on mainnet in Q2. Ultimately, Ava Lab's goal is to make the user experience as seamless as possible, and the Core wallets and bridge developments are the first steps.
Avalanche on-chain governance is still in development.	Avalanche on-chain governance is also still in development. AVAX will, at some point, be used to provide on-chain governance for critical network parameters where participants can vote on changes to the network and settle network upgrade decisions democratically. Some of these parameters will include factors such as the minimum staking amount, minting rate, and transaction fees.
	While all Avalanche incentive programs may continue to catalyze ecosystem growth and garner more project launches and partnerships, significant technological advancements are critical for the teams developing the Avalanche infrastructure. The continued development of subnets and the launch of Core will play a key role. For subnets to flourish, Core will need to successfully support extended functionality for subnets, such as native bridging.

Closing Summary

Network usage, financial performance, development activity, and network infrastructure continued to grow and stabilize during QI 2022. The growth was fueled by Avalanche Rush, the Blizzard ecosystem fund, the Ethereum Virtual Machine (EVM) subnet development, the Multiverse subnet incentive program, and the Culture Catalyst fund. Additionally, partnerships formed in Q4 with enterprises like Deloitte began implementing business solutions on Avalanche while more partnerships were formed. Altogether, Avalanche showed signs of capturing market share versus top EVM-compatible chains across several key metrics over the quarter.

Across the board, Avalanche experienced growth, and its key metrics stabilized across the network. While the market cap was relatively flat, the network experienced continued uptrends in usage, revenue generation, and a move towards favorable fundamental valuation. Further, continued network adoption was also evident in Avalanche development activity, with unique contracts deployed and contract deployers growing significantly.

Avalanche incentive programs may continue to provide a catalyst for ecosystem growth. These programs may attract more project launches and partnerships, however, significant technological advancements are at the forefront of the teams developing Avalanche infrastructure. Significant developments to monitor going forward will be the continued development of subnets and the launch of Core. For subnets to flourish, Core will need to successfully implement its objectives to support extended functionality for subnets, such as native bridging. Ultimately, as with all Layer-1 networks, tracking the growth of the Avalanche network and its progress towards optimization and user experience will be top of mind looking ahead into the next quarter.

Avalanche experienced growth across the board in QI while key metrics stabilized.

Incentive programs could continue to provide a catalyst for ecosystem growth.

Significant developments to monitor will be the continued development of subnets and the launch of Core.

Appendix

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Avalanche Quarterly Metrics	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Circulating Market Cap ¹	\$2,059,481,956	\$14,324,823,285	\$24,667,095,817	\$25,725,736,66
% Change	(45.7%)	555.6%	72.2%	4.38
Total Quarterly Revenue	\$2,037,487	\$7,149,020	\$30,279,971	\$52,286,903
% Change	41,4%	250.9%	323.6%	72.7%
Total Value Locked (TVL) 2	\$187,666,506	\$3,680,687,692	\$11,826,019,638	\$11,180,809,365
% Change	(3.3%)	1,861.3%	221.3%	(5.5%)
Average Active Daily Addresses 3	3,588	10,330	69,113	92,081
% Change	56.0%	187.9%	569.7%	33.2%
Average Daily Transactions 3	25,321	83,050	473,367	865,485
% Change	125.2%	228.0%	470.0%	82.8%
Unique Contracts Deployed ³	6,457	32,143	79,274	127,558
% Change	208.7%	397.8%	146.6%	60.9%

Data as of: Mar 31, 2022 Source: Token Terminal¹, DeFi Uama², Avax Network³

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Avalanche Network Overview

Avalanche Quarterly Metrics	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Network Usage				
Average Active Daily Addresses 1	3,588	10,330	69,113	92,081
N Charge	96.0%	187.9%	569.1%	33.2%
Average Daily Transactions ¹	25,321	83,050	473,367	865,489
6 Charge	125.2%	228.0%	470.0%	82.8%
Average Transactions Per Second	0.29	0.96	5.48	10.02
Average Transaction Fee 1	\$0.87	\$0.78	\$0.62	\$0,67
% Charge	(29.4%)	(9:8%)	(20.9%)	7,6%
Network Financials				
Circulating Supply 2	172,418,164	220.286,577	243,245,382	267,271,557
% Change	34.8%	27.8%	10.4%	3.9%
Circulating Market Cap ³	\$2,059,481,956	\$14,324,823,285	\$24,667,095,817	\$25,725,736,661
Fully Diluted Market Cap ³	\$8,551,522,444	\$46,940,119,194	\$73,109,635,893	\$69,147,768,394
N Charge	(53.9%)	442.5%	55.8%	(5.4%)
Total Quarterly Revenue ¹	\$2,037,487	\$7,149,020	\$30,279,971	\$52,286,902
% Charge	41.4%	250.9%	323.6%	72.7%
Circulating P/S Ratio ⁸	604.x	267 x	160 x	91 x
% Charge	62.1%	(55.9%)	(40.0%)	(43.0%)
Nominal Staking Yield 2	10.38%	10.08%	9.82%	9.86%
% Change	82.6%	(2.9%)	(2.6%)	0.5%

Data as of: Mar 31, 2022 Source: Avax Network', Messari², Token Terminal³

Note: Single point in time metrics measured on final day of quarter. P/S ratio based on projected annualized revenue using on 20-day moving average.

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Avalanche Ecosystem & Developer Overview

Avalanche Quarterly Metrics		Q2 2021		Q3 2021		Q4 2021		Q1 2023
Ecosystem Total Value Locked (TVL) ¹ 9 Change		\$187,606,506 (7.3%)		\$3,680,687,692 7267.3%		\$11,826,019,638 227.3%		\$11,180,809,30 (5.5%
Top 3 Protocols by TVL								
Protocol TVL	1.	Pangolin \$158,085,513	1.	Bengi \$1,499,429,539	1.	AAVE \$3,078,289,183	1,	AAV \$3,043,485,83
Protocol TVL	2.	Beefy Finance \$1,241,355	Ζ.	Trader Joe \$1,232,486,415	2.	Trader joe \$2,122,167,453	2.	Trader Jo \$1,535,726,28
Protocol TVL	3.	NUA. NUA	3.	Pangolin \$279,786,833	3.	Bengi \$1,565,763,288	3,	Ben: \$1,274,640,95
Development Unique Contracts Deployed ² % Change		6,457 208,1%		32,143 397,8%		79,274 746.6%		127,55
Unique Contract Deployers ² % Change		1,947 424,8%		3,994 105.1%		16,884 322.7%		19.10 13.19
Core Developer Activity (New Github Events) ³ % Change		3,056 (41.7%)		3,308 8,2%		3,138 (5.1%)		5,53 76.49

Data as of: Mar 31, 2022 Source: DeFi Llama', Avax Network², Santiment²

Notes: Single point-in time metrics measured on final day of quarter. Sentiment's "Developer Activity" metric measures number of Github events generated by a project.

M E S S A R I Avalanche Staking & Decentralization Overview

Avalanche Quarterly Metrics	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Staking By Amount				
Average Engaged Stake	69.5%	58.0%	61.1%	57.59
% Change	(3.2%)	(16.6%)	5.4%	(5.8%)
Average Validator Stake	198,005,647	185,795,337	203,949,900	194,306,737
6 Change	(9.8%)	(6.2%)	3.8%	(4.7%)
werage Delegator Stake	67,678,893	37,212,007	35,943,051	33,572,206
6 Change	25.5%	(45.0%)	(2.496)	(6.7%)
werage Unresponsive Stake		3,950,913	3,193,323	3,732,365
6 Change			(19.2%)	16.9%
itaking By Count				
werage Number of Validators	949	1,014	1,138	1,255
6 Change	17.0%	6.9%	12.2%	10.6%
Average Unresponsive Validators		65	57	48
6 Change			(12.8%)	(14.5%)
Average Number of Delegators	10,656	15,092	16,459	12,125
6 Change	171.7%	47.6%	9.7N	4.4%
Decentralization				
lakamoto Coefficient	25	28	27	23
6 Chanjer	(26.5%)	12.0%	(7.6%)	0.0%

Data as of: Mar 31, 2022 Source: Avax, Network

ingle point in-time metrics measured on final days of quarter. Engaged state = instal state / Igenesis supply = staking research - burned feed. Tablemote coefficient uses 1/3 as althreshold needed to comprove the network, CD data for office solidation only includes September.

M E S S A R I Avalanche Key Metrics vs. Top EVM Chains

Q1 2022	A	۲	0	ø	8
	Availariche (AVAX)	Ethereum (ETH)	BNB Chain (BNB)	Fantom (FTM)	Polygon (MATIC
Network Financials					
Price	\$97.33	\$3,282.78	\$428.82	\$1.43	\$1.6
% Change Q1 2522	-15%	-12%	-79%	-45%	-37
Groulating Market Cap	\$25.7.8	\$407.5 8	\$74.5.8	\$3.6.8	\$11.6
W-Change Q1 2022	-2%	-7%	-54%	-38%	-36
Total Revenue	52.3 M	2.5 B	172.1 M	17.1 M	9.27
Croulating P/S Ratio	91.2	81.5	123.4	63.0	6403
Network Usage					
Average Daily New Unique Addresses	10.5 K	102.8 K	248.6 K	12.8 K	112.5
Werage Daily Transactions	.9 M	1.2 M	5.6 M	1.0 M	3.17
Average Transaction Fee	\$0.57	\$23.54	\$0.35	\$0.19	\$0.0
Ecosystem & Development					
Total Volue Locked	\$11.2 0	\$127.0 B	\$13.0 0	\$6.0.0	\$4.7
%-Change Q7 2022	-5%	-75%	-73%	35%	-7.3
Mcap/TVL Ratio	2.30	3.21	5.40	0.53	2.43
Werage Daily Verified Contracts	102.1	312.9	1,720.1	149.1	2573
Werage Daily Core Developer Activity	61.5	281.5	0.2	11,7	46.3
Decentralization					
Number of Validators	1,000+	203,000+	<25	<100	<10
Nakamoto Coefficient	27	3	7	3	

Data as off. Mar 31, 2022
Notes: Single point in-time mentics were measured on the final day of the quarter.
Source: Token Terminal, DeRi Llama, Network Blockchain Explorers
Totak and averages are measurements of the entire quarter ending Mar 37, 2022.



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