Web3 Development Report

Q3'2022: Ethereum Ecosystem and Beyond

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The Big Picture

Prices down, devs up.

Despite Ethereum decreasing 70% in price, developer activity increased by over 40%.

*As measured by verified smart contract deployments

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Q3'22 was the biggest for devs, ever
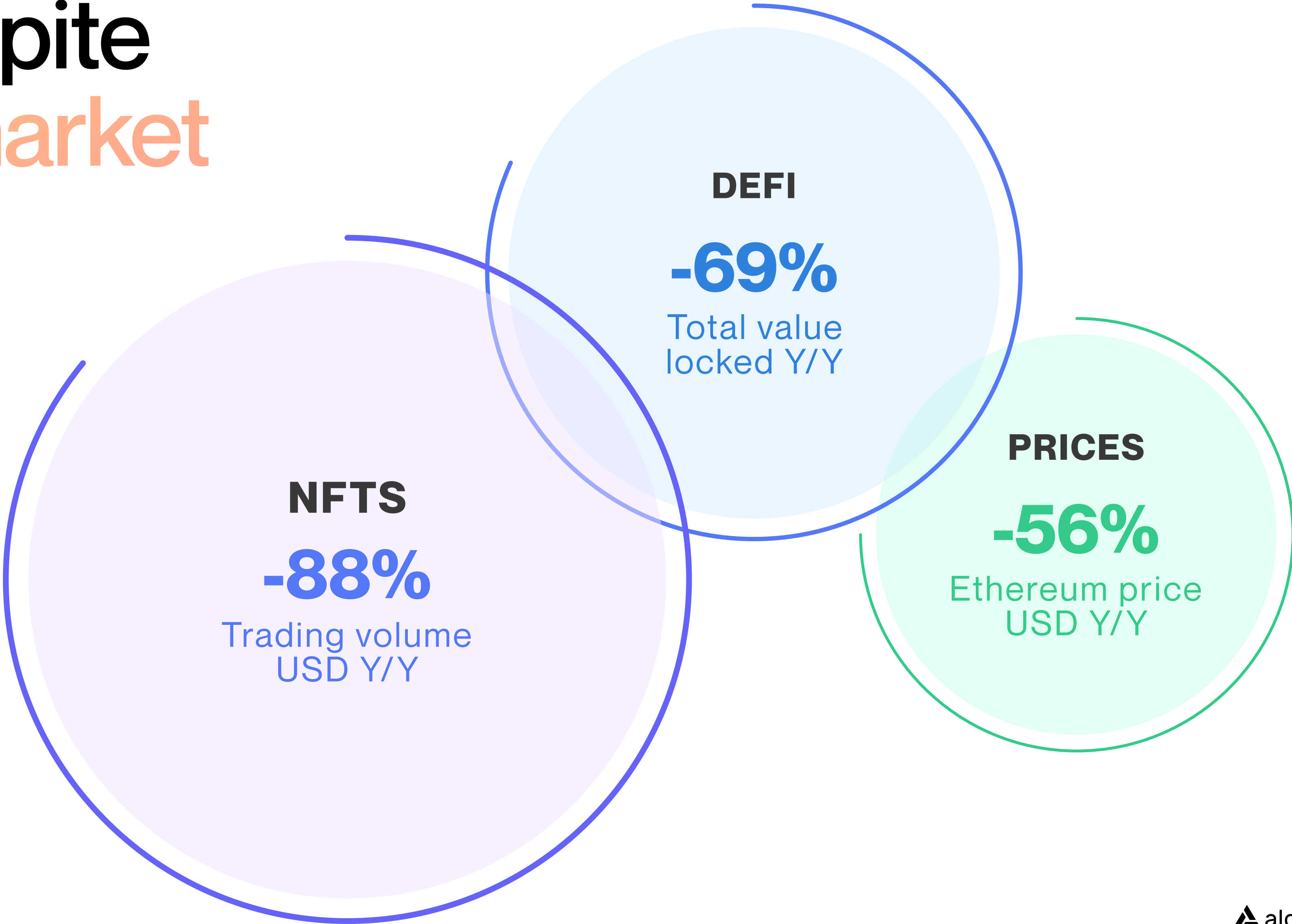
1.5m

Ethereum SDK installs/week

+178% Y/Y

17,375

Smart contracts (verified) /month

+160% Y/Y

12,495

dapps

(12x since 2018)

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This is despite
the bear market

DEFI

-69%

Total value
locked Y/Y

PRICES

-56%

Ethereum price
USD Y/Y

NFTS

-88%

Trading volume
USD Y/Y

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Approach

3 ways to measure developer activity

Libraries	Smart contracts	dapps
Developer tools to easily read/write to the blockchain	Computer programs stored on a blockchain	End-user ready applications with decentralized backends
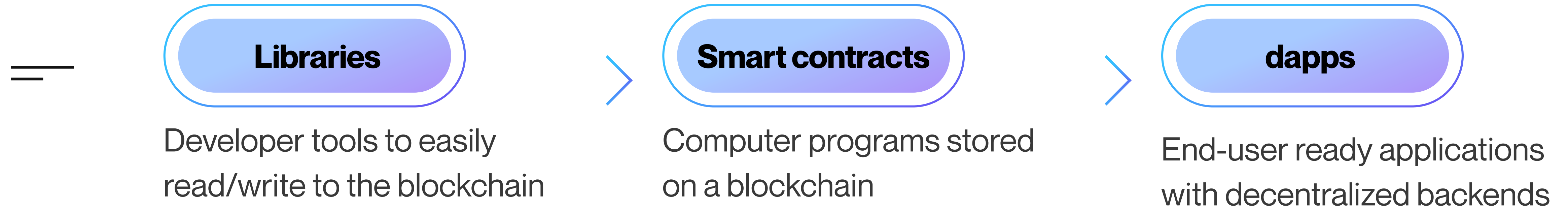
These 3 indicators show us if devs are **building**, **deploying**, and **growing**
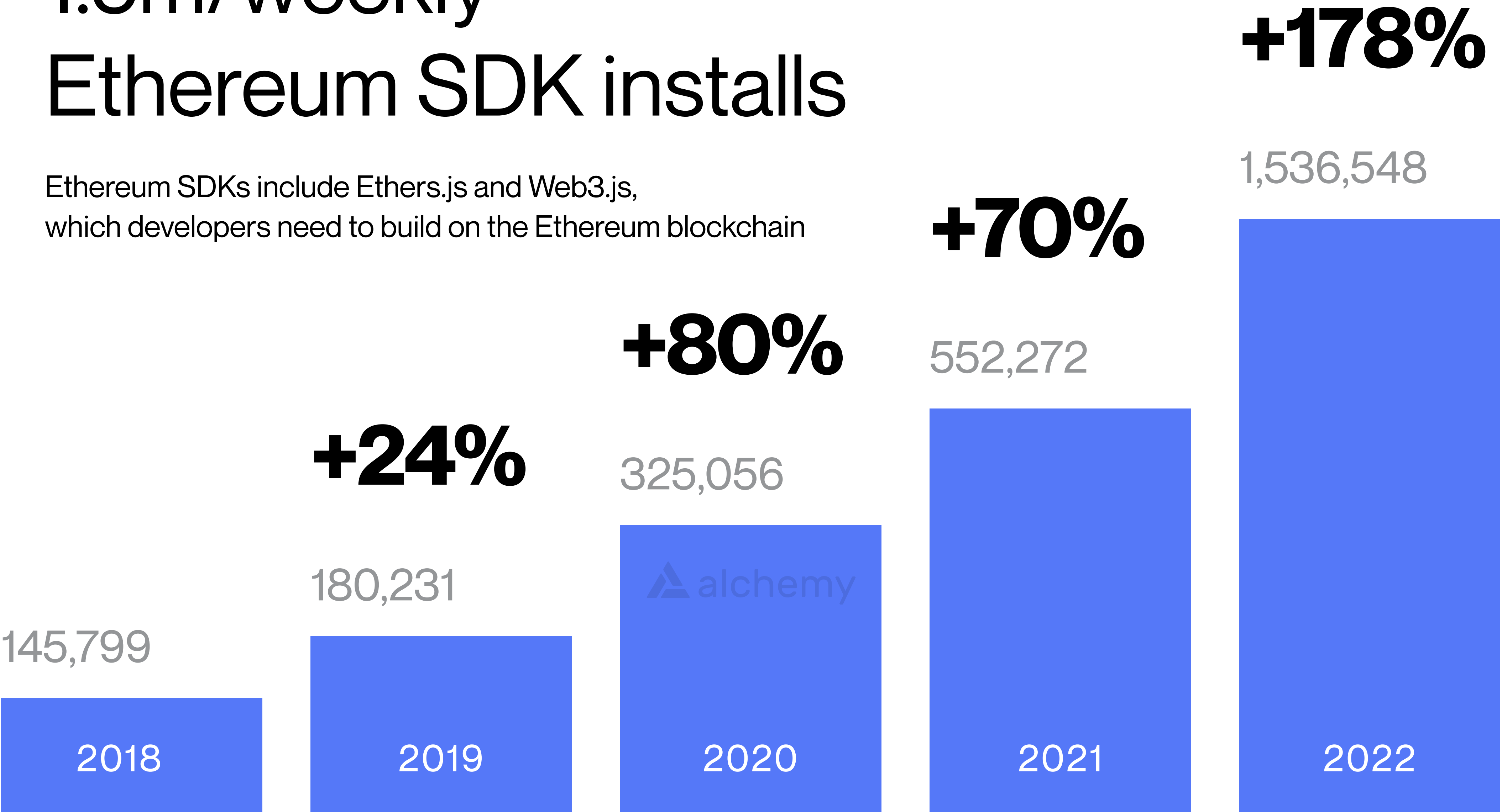
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Ethereum Libraries

Libraries are up and to the right

1.5m/weekly Ethereum SDK installs

Ethereum SDKs include Ethers.js and Web3.js,
which developers need to build on the Ethereum blockchain

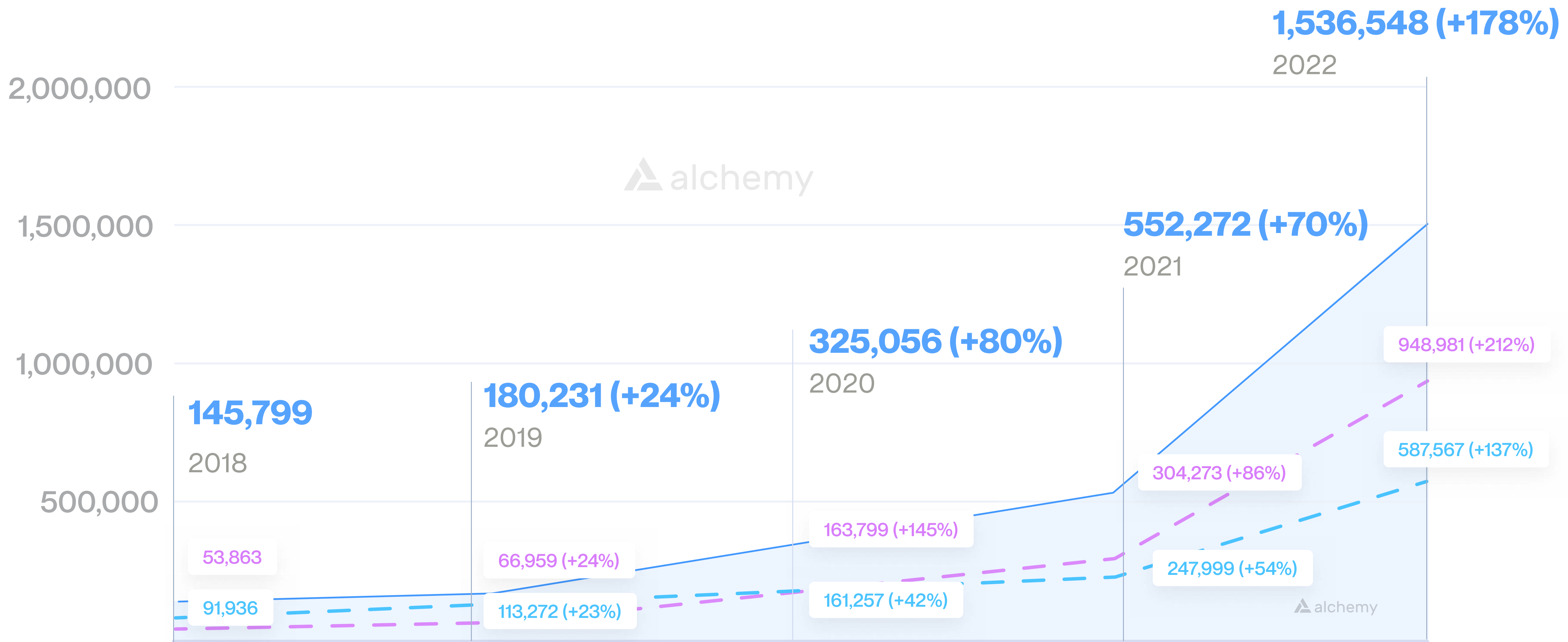**+178%**

1,536,548

+70%

552,272

+80%

325,056

+24%

180,231

145,799

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| 2018 | 2019 | 2020 | 2021 | 2022 |

Weekly downloads
Ethers.js, Web3.js, and Combined

Ethers.js   Web3.js   Total

1,536,548 (+178%)
2022

552,272 (+70%)
2021

325,056 (+80%)
2020

180,231 (+24%)
2019

145,799
2018

2,000,000

1,500,000

1,000,000

500,000

948,981 (+212%)

587,567 (+137%)

304,273 (+86%)

247,999 (+54%)

163,799 (+145%)
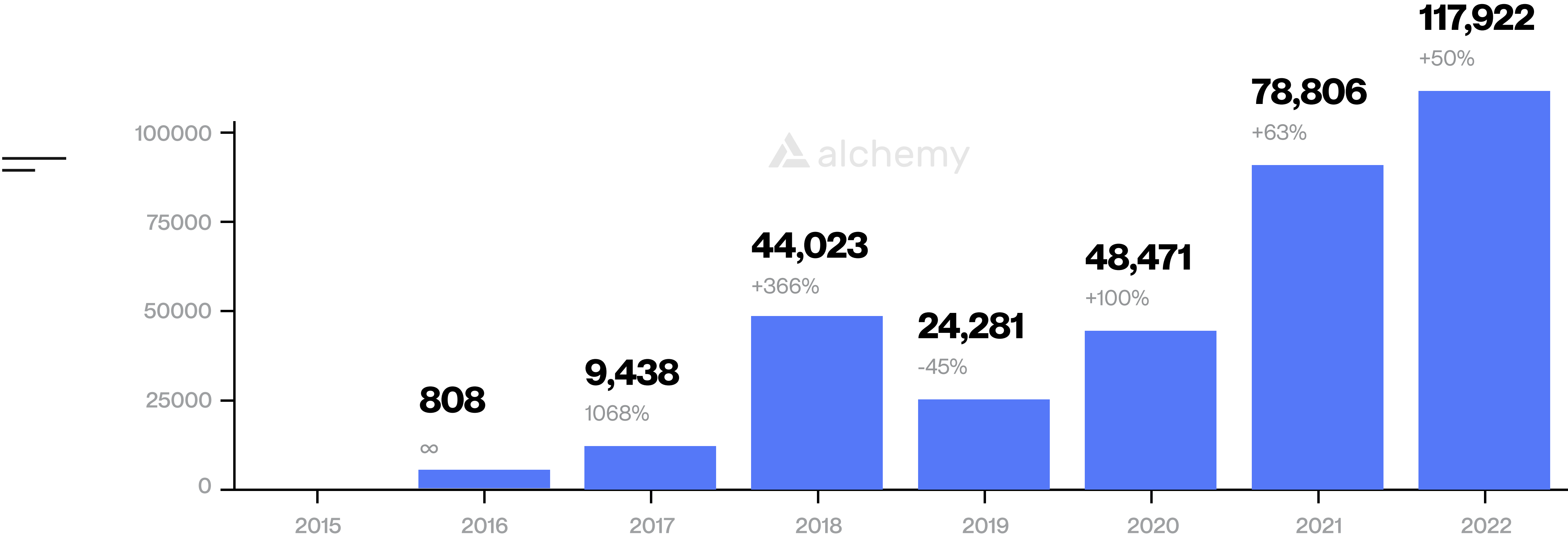
161,257 (+42%)

53,863

66,959 (+24%)

91,936

113,272 (+23%)

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Smart Contracts

Smart contracts are up and to the right

Verified smart contract deployments are up more than 50% in 2022

117,922
+50%

78,806
+63%

44,023
+366%

48,471
+100%

24,281
-45%

9,438
1068%

808
∞

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100000

75000

50000

25000

0

2015   2016   2017   2018   2019   2020   2021   2022

Verified smart contracts were used for measurement of production applications.
The number of total contracts deployed is more than 10X larger.

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117,922
smart contracts were
deployed in 2022

205,827
smart contracts deployed
from 2015 to 2021
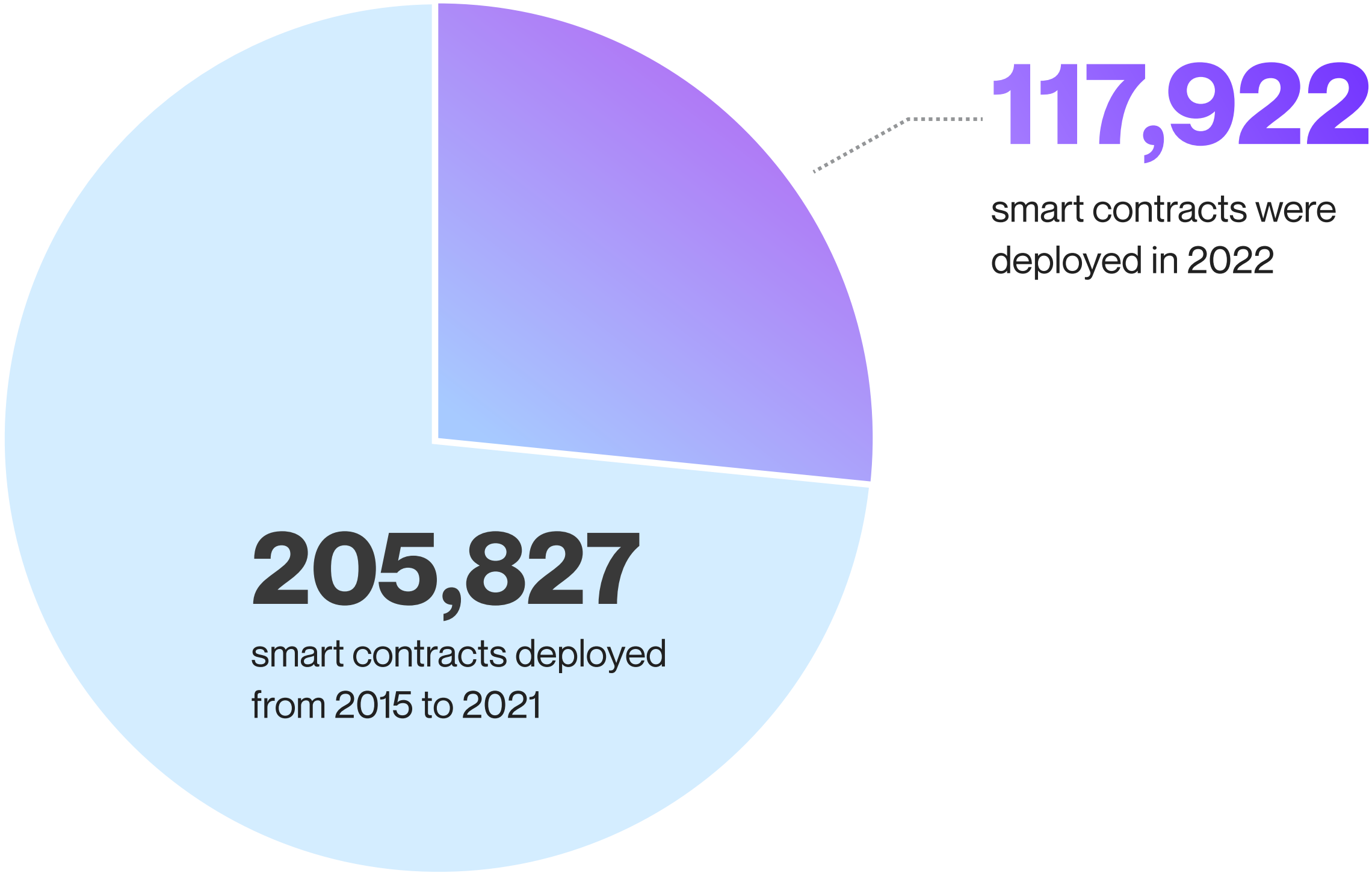
36% of all verified smart contracts were deployed
just this year, making 2022 the biggest year ever

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Monthly verified smart contracts up 2.6x Y/Y

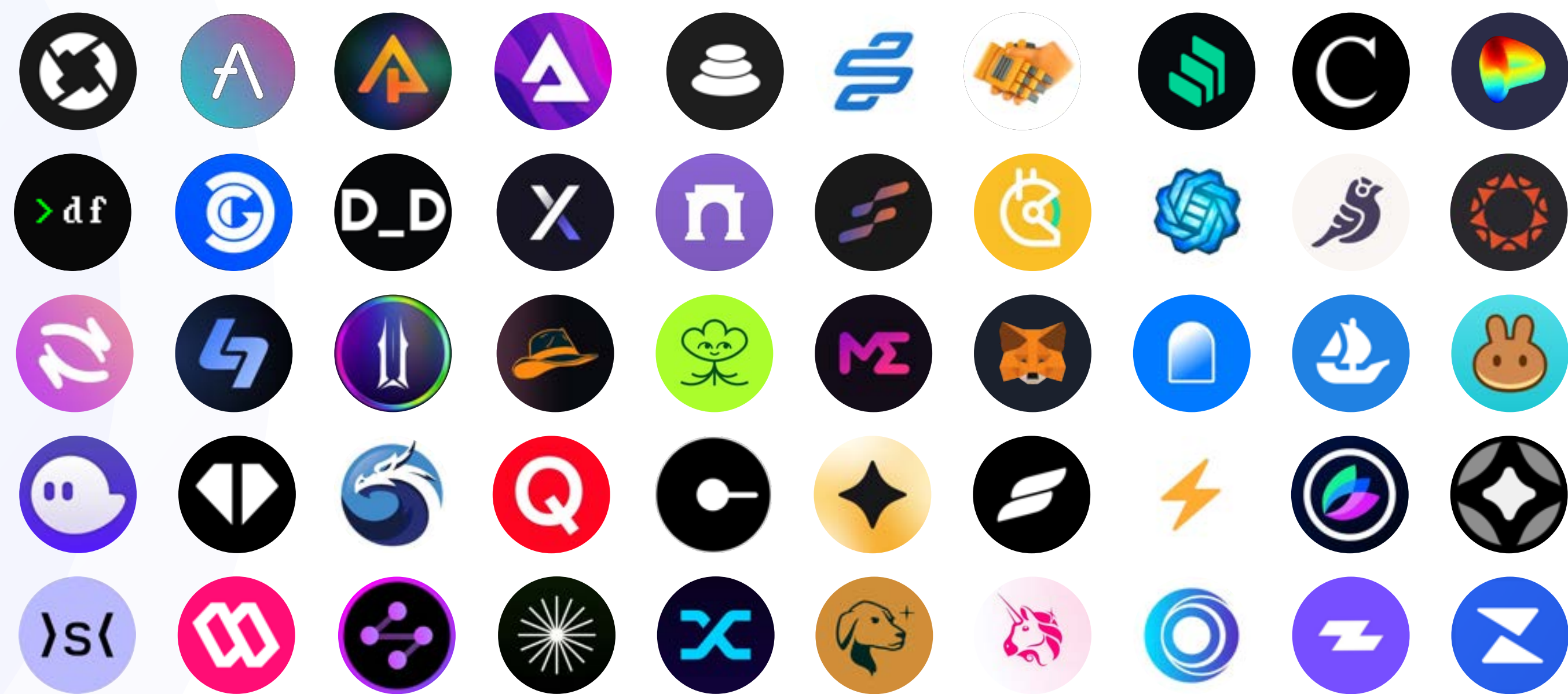New monthly all time highs (ATHs) consistently set

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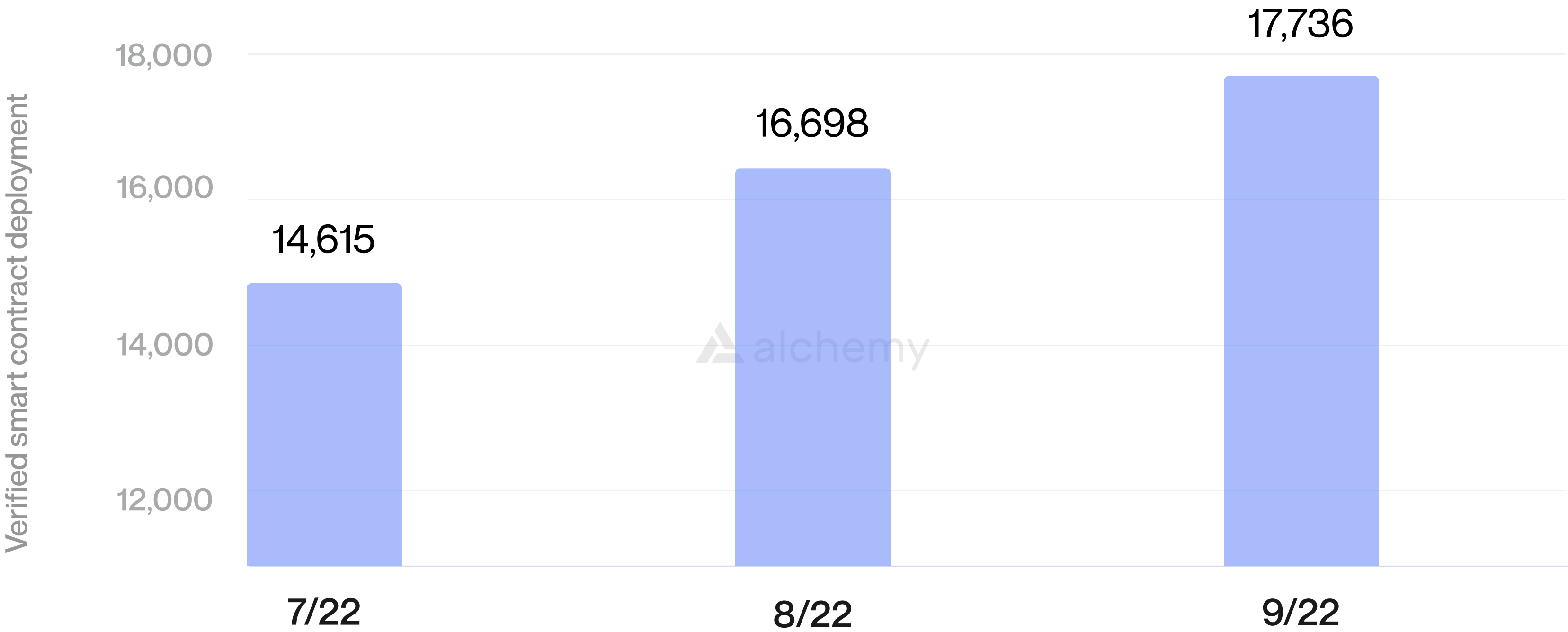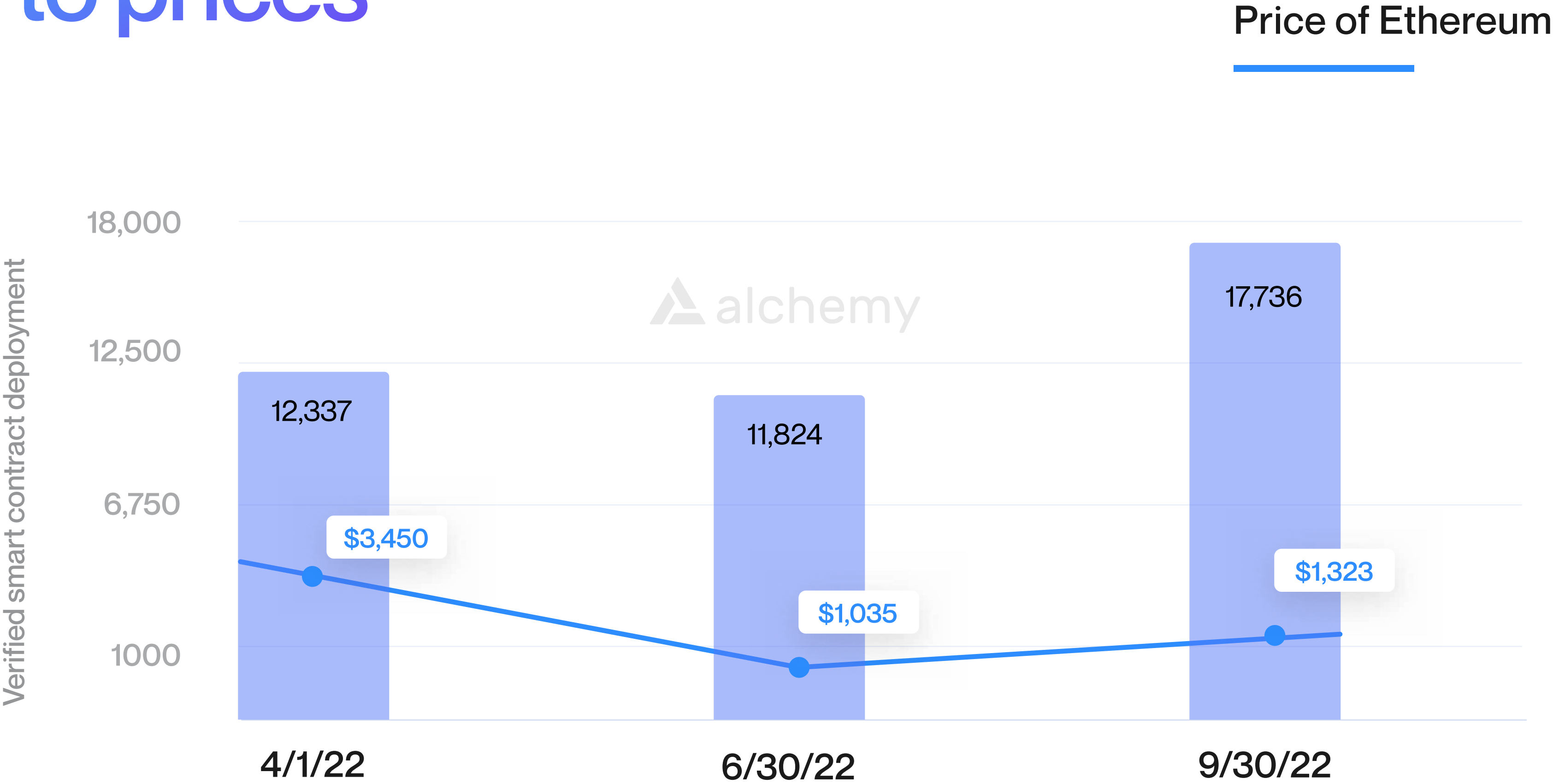
dapps

dapps are up and to the right

More than 12,000 dapps and growing

0x, Aave, Apex, Audius, Balancer, Coherent, CollabLand, Compound, Context, Curve, Dark Forest, Decentral Games, DeveloperDAO, dydx, Farcaster, Fractal, Gitcoin, Gods Unchained, Goldfinch, Helius, Hop, Hyperspace, Illuvium, JonesDAO, Lens, Magic Eden, Metamask, Mirror, OpenSea, Pancake Swap, Phantom, Royal, Quickswap, Quix, Safe, Showtime, Slingshot Finance, Snapshot, Solanart, Stargate Finance, Sudoswap, Sweat, Synapse, Syndicate, Synthetix, Tally, Uniswap, x2y2, Zapper, Zerion

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Beyond Ethereum

Polygon, Optimism, Arbitrum, and Solana

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Polygon

335%

growth in active
developer teams YTD

804%

growth in active
developer teams Y/Y

153%

growth in API
consumption YTD

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Arbitrum

516%

growth in active
developer teams YTD

795%

growth in active
developer teams Y/Y

121%

growth in API
consumption YTD

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OP Optimism

>1000%
growth in active
developer teams YTD

>1000%
growth in active
developer teams Y/Y

>460%
growth in API
consumption YTD

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Solana

>1000%
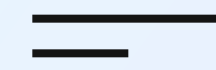growth in active
developer teams YTD

>1000%
growth in active
developer teams Y/Y

>500%
growth in API
consumption YTD

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Additional Alchemy data

2x Archive requests YTD

suggesting more developers are leveraging historical chain data

10x Enhanced API requests YTD

confirming expansions from core node APIs to more advanced infrastructure across DeFi, DAOs, and gaming

10x NFT API requests YTD

suggesting more use of NFTs in user-facing products and analytics

+16k signups in <1 week

for Alchemy University, the new platform for learning how to build in web3

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Data infrastructure is growing

Chainlink

500+ projects

4.2B on-chain data points

The Graph

500+ subgraphs

560B queries

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Billions of data requests YTD

suggesting developers are actively building dapps with diverse use cases

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Social infrastructure is growing

ENS

545,948+ owners

Lens Protocol

86,500+ owners

Farcaster

164,000 casts by 3,405 all-time casters

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Wallet and DeFi infrastructure is growing

WalletConnect

46,250 weekly installs

+13% Y/Y

RainbowKit

26,359 weekly installs

launched 2022

Uniswap v3 SDK

27,841 weekly installs

+280% Y/Y

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Methodology

Methodology

This report strives to provide an accurate and useful representation of web3 development. The following sources were used for data collection purposes: Etherscan (verified smart contracts), DappRadar (dapp count), Github and NPM JS (SDK installations and metadata), CoinMarketCap (token prices), and the Internet Archive (fetching historical versions of aforementioned pages to provide timestamped data sources). web3 Javascript library weekly downloads were used as a proxy for developer activity here. This metric is helpful but imperfect due to the ability for the library to be downloaded multiple times by the same user intentionally or unintentionally. However, it provides one signal for directional guidance. Additionally, the growth of various blockchains on Alchemy is purely relative; certain chains are significantly larger as measured by active teams and daily requests.

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Thank you to the report's sources

Developer Activity: Alchemy

Smart Contracts and Programs: Etherscan and Solscan

Market and Prices: DappRadar, Defi Pulse, CoinMarketCap, Dune

SDKs: Github and NPM

Historical Web Pages: Internet Archive

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As indicated on our website (www.Alchemy.com), we have a business relationship with certain chains including Ethereum, Polygon, Optimism, Arbitrum, and Solana. However, this report is not intended to promote the token of any particular chain.

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THANK YOU

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