



# Crupto Report 2022

The 2022 crypto market report with well-visualized data-driven insights and worldwide investors' attitudes towards a year of volatility, concluded from surveys with 10K+ responses.



## About The Authors



TK Ventures is a venture capital firm focusing exclusively on early-stage decentralized finance, NFT and Web3 projects.

# CoinWire

CoinWire.com is your daily source of cryptocurrency news, updates, featured projects, guides and landscapes.

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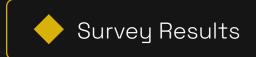
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#### Conclusion & Projection

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Methodology

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### Key Findings

#### I. State of the Market

- After the FTX Crash, Hot Wallets is the most used method to store funds of Investors with 53.6% crypto investors' responses.
- 66% of asked crypto investors have their faith to Binance and their along ecosystem. 7
- BNB Chain is the most trusted blockchain in terms of storing fund on DeFi protocols with 63% responses.
- The number of rounds and the amount raised in 2022 is ~48% higher than this amount in 2021. ✓
- In term of fundraising in 2022, Web3 is the category has the most conducted deals (33%) while most of the money (25%) is invested in Infrastructure.
- 50.4% of Investors have been a victim of Crypto Hacks & Exploits in 2022. 7

- Fake covers for projects to rug pull are believed to be the main causes for most of the hacks, according to 31% of investors. 7
- 64% of Investors think the market is reaching its bottom, however, 43% among them still stay safe & keep the majority of their portfolio in stablecoin. ✓
- 48.9% of investors agree that the crypto market is increasingly influenced by traditional finance & macroeconomics. 7
- Most investors (53.6%) agree that The crypto market will be recognized by financial institutions & governments in the future. ↗

#### II. Blockchain Platform

- The terrible year 2022 has ended with the fact that most Blockchain Platforms have evaporated up to 90% of their value. ✓
- Ethereum, BNB Chain, and Polygon are the blockchain platforms most used by investors while making payments, skin in the game, and storing assets. 

  7
- BNB Chain and Polygon are believed to achieve mass adoption in the next year with 57% and 46.8% of investors' choice, respectively.
- Sui is the New Blockchain platform that people are most interested in (35.4%). 7
- Layer-2 development organizations have already raised ~1.25b so far in 2022. 7
- Compared to Ethereum Layer-1 transactions, Layer-2 transactions reduce fees by 80%-95%. ✓
- Arbitrum, Optimism, Starknet, and zkSync are also highly regarded Layer 2 scaling solutions.

#### III. State of DeFi

- Three out of five investors felt uncomfortable with DeFi security risks & complication. 7
- Surprisingly, only 13% of DeFi Users are skeptical about DeFi regulation of the government in the future. 7
- In 2022, Ethereum, BSC, and Tron are the leading blockchains in terms of TVL. 7
- 58% of the respondents believe regulation and funding will push DeFi to mass adoption. 7
- 59% investors believe that stablecoin is a gateway and a must for crypto, despite the collapse of algorithmic stablecoin.
- Revenue of DeFi has plummeted 55% to \$1.54B. 🗷
- **DeFi's revenue** is focused primarily on the Ethereum ecosystem, led by Uniswap with about \$700 millions in revenue.





### Key Findings (Cont.)

#### IV. NFT & Web3 Gaming

- NFT Market Value has jumped 122 times to \$12.2 billion since 2020. 7
- Although a gloomy market and traders are leaving, total NFT holders increase from 1.5M to 3.7M (Rising ~ 250%). 7
- 4/5 NFT users still have faith in the future of NFT even with the significant decline in 2022. 7
- Yuga Labs dominated the NFT collection, taking all three top 3 positions, generating over \$3.5B worth of trading. 7
- America is the most innovative continent to adopt the new technology - Metaverse into daily life. 7
- People believe **Metaverse will re**shape social lifestyle with a new approach to entertainment and social activities (69% and 65% respectively total choices). 7

- In the last 5 years, not Meta but Microsoft has made the biggest attempt to dominate the metaverse via patents (158 patents, July 2022). 🖊
- The majority of worldwide investors (78%) believe "Play-To-Earn" is the most common term for Web3 games, which is one of the biggest factor prevents Web3 Gaming transition. 7
- Risk of speculation is believed to be the main reason why tradition gaming companies rejects blockchain and NFT, according to 78% of investors. 7
- 67% of worldwide investors anticipate that traditional game publishers will be highly interested in Web3 gaming in the future. 

  ✓

#### V. Web3 Evolution

- 89% of worldwide investors have often heard or heard a lot about Web3. 🖊
- Worldwide investors expressed continual confusion about Web3 in 52% of cases, with American investors expressing the greatest confusion. 7
- 51.4 % of investors think current Web3 mostly hype, in which American crupto users take the majority. 7
- Russia, Ukraine, China, USA are the top countries by value sent to or received from drug-focused darknet markets. 7
- Asia and North America are currently the havens for money laundering and the biggest countries in that region are taking the cake. 7

- "Scam" is the biggest activity over the years, often accounting for 50%+ of all other criminal activities. 7
- Sanctions, Scam and Stolen funds tend to use DeFi more than other activities. 🖊
- Loss of personal information is the biggest concern associated with KYC. 7
- Asian crypto investors are more concerned about "Tracking for crypto behavior" than European ones. 7
- Regulation is at the center of the need to find a common voice between crypto and qovernments. 7
- More than 60% of investors participating in the survey want to apply regulation to the web3 industry. 7











# State of the Market

Market Overview, Notable Events and Fundraising in 2022.

Crypto Report 2022



### 2022 Total Crypto Market Cap



The total Crypto Market Cap closed out 2022 at **\$850B**, which is a **-65% decline** compared to 2021.

However, this is still a 15% recovery from the ATL of 2022 - \$750B.

Q2 saw the worst performance with a decrease of 60%. This is due to the Terra Luna collapse in May 2022.

The -16% decline in Q4 comes from the collapse of FTX Exchange in November 2022.





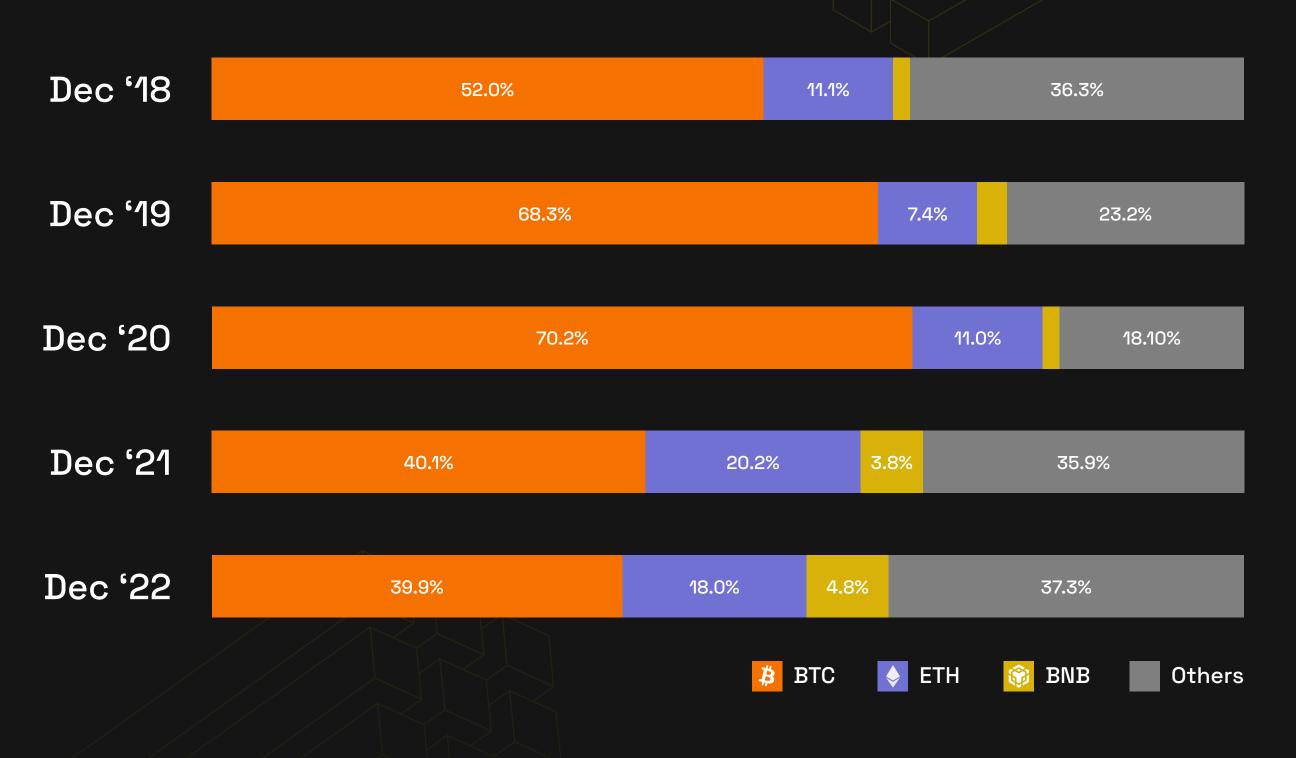
### Total Crypto Market Dominance

Compared to 2021, Bitcoin & Ethereum Dominance slightly decreased, while BNB and Other Altcoins' rises.

In contrast to Bitcoin Dominance decline, Altcoins' has soared since 2020. This indicates that Bitcoin is increasingly losing ground.

Among the Top 10 Cryptocurrency, Solana and Terra dropped out of the list while Dogecoin and Polygon climbed. Ripple & Cardano are two older names still remain despite lack of buzz.

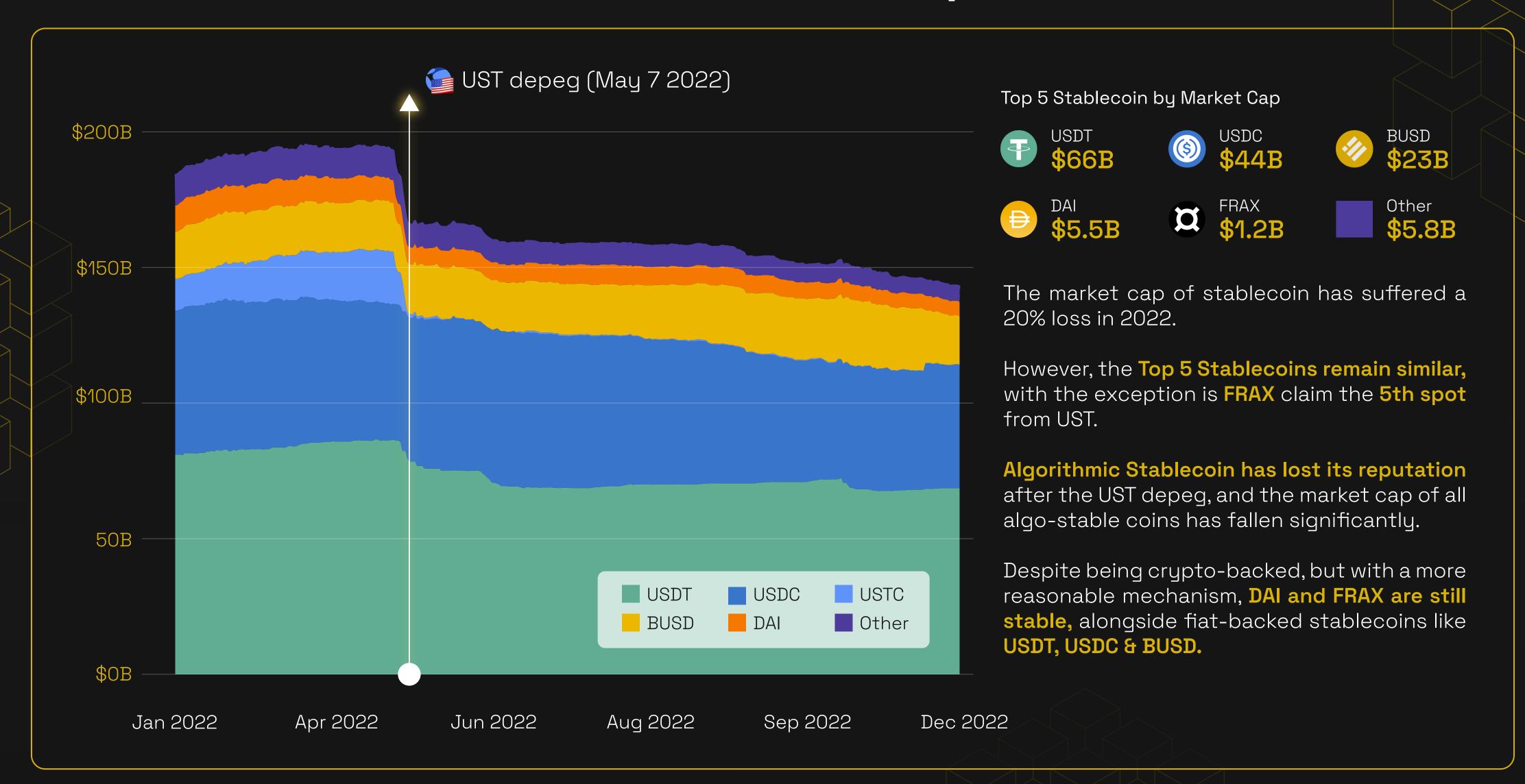
#### **BTC Dominance Loses Ground**







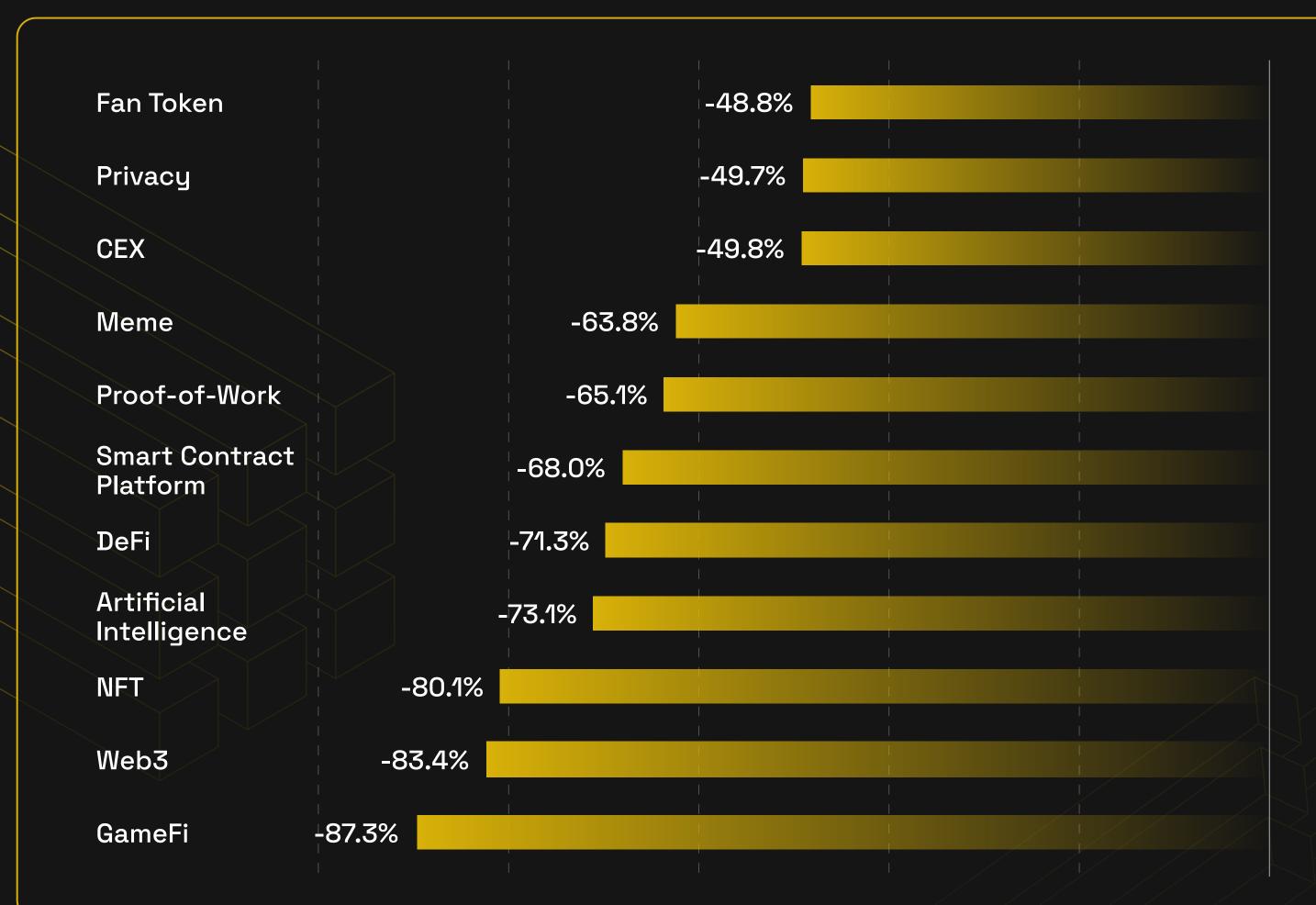
### Stablecoin Market Cap in 2022







### Best Performing Categories



GameFi is currently having the worst performance in 2022 despite being one of the most booming category in 2021.

The most popular and typically regarded as "safe" category - Smart Contract Platforms is having a huge plummet in 2022. The collapse of Terra has contributed the most to this fall.

**CEXes** show their strength in bear market despite having several FUDs during the last quarter of 2022.

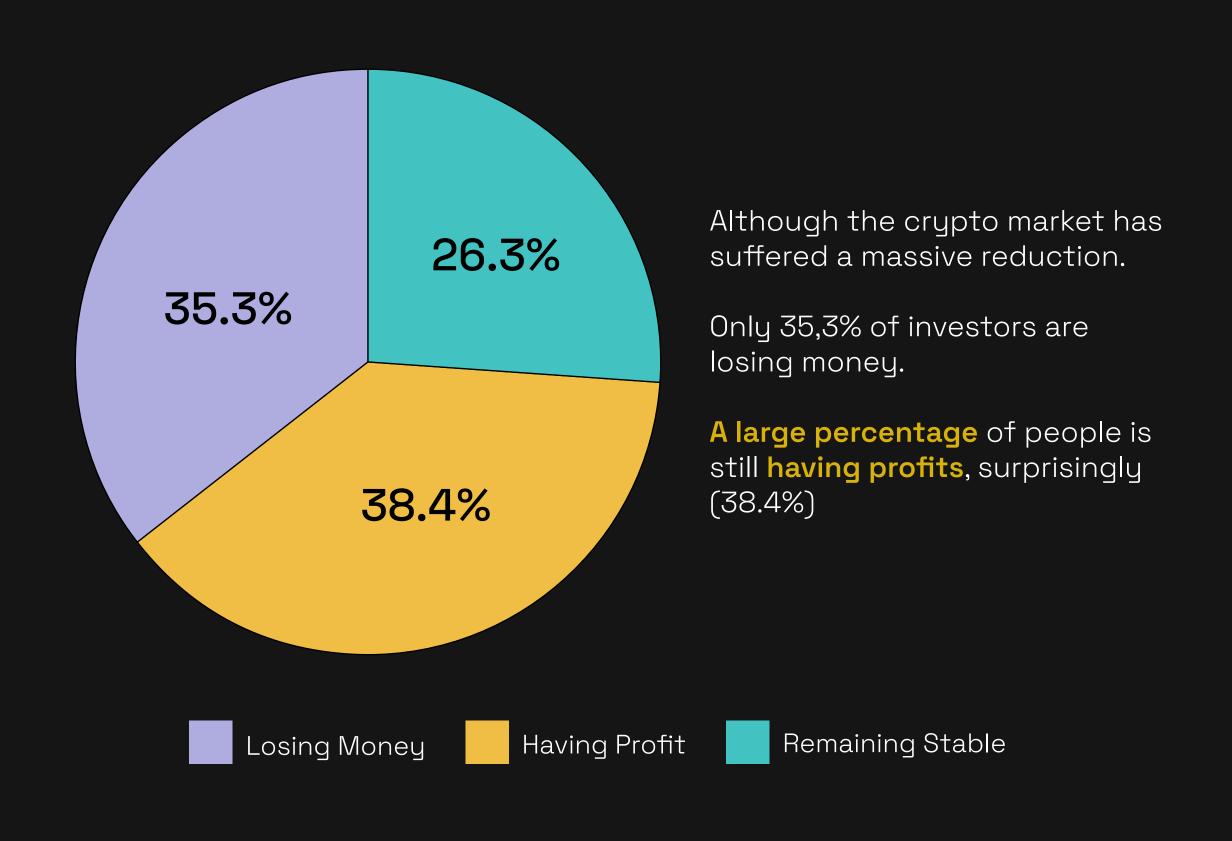
Fan Token is the "least worst" performing category, benefits from the heat of FIFA World Cup 2022 & the promotion efforts of Binance.

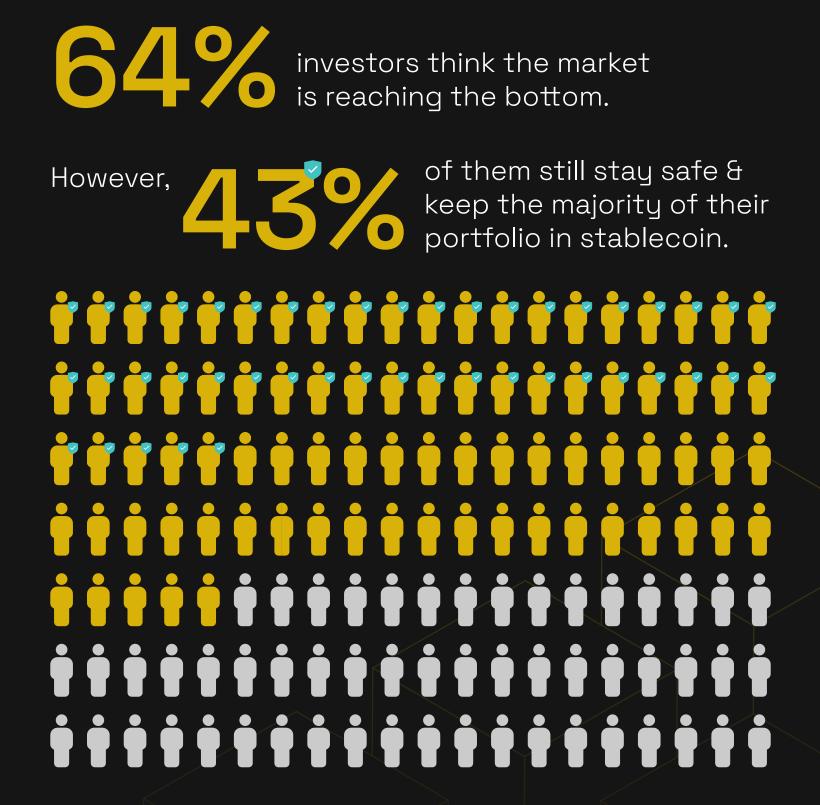




### How do Investors Perform in this Bear Market?

Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.







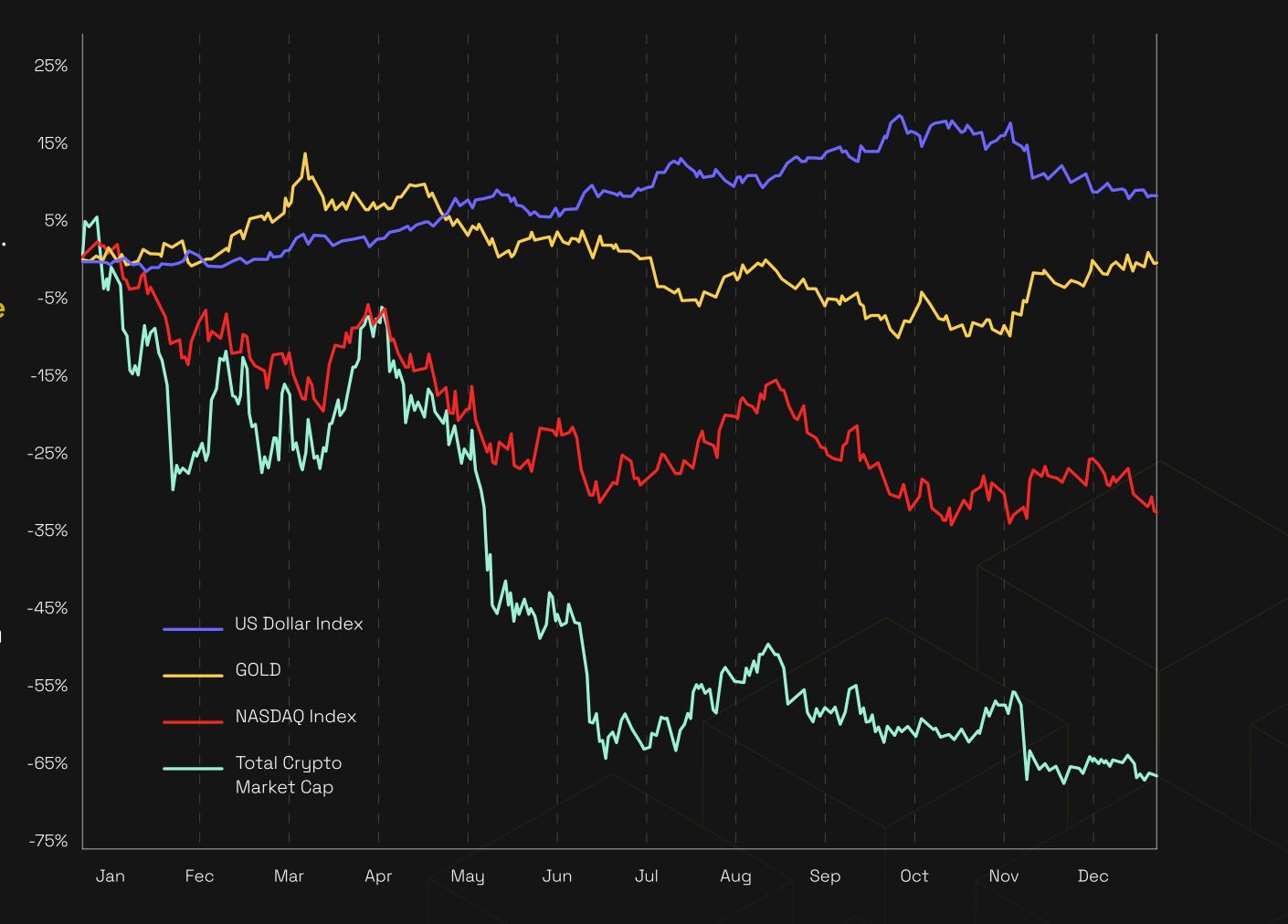
### Bitcoin vs Traditional Assets

2022 is a difficult year for the whole financial market. Both Stock Market and Crypto suffer huge declines, while Gold continues to prove its stability.

The correlation between the NASDAQ Index and the Total Crypto Market Cap is 0.80, while the ATH in 2022 is 0.98. This indicates that Cryptocurrency and Stock Market are having a high connection.

The correlation between Total Crypto Market & Gold is 0.04, which mean no correlation between two markets.

The US Dollar Index shows inverse relationship with Total Crypto Market cap, with the correlation is -0.12. This means Crypto price tends to decrease when DXY increases.





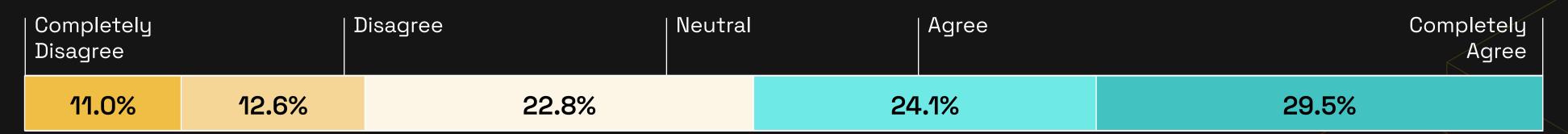


### What do investors think about the connection between Crypto & Traditional Finance?

Is the crypto market increasingly influenced by traditional markets and macroeconomics?

Completely Disagree		isagree	Neutral	Agree	Completely Agree
11.5%	13.2%	26.4%		24.4%	24.5%

Will the crypto market be recognized by financial institutions and governments in the future?



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### Notable Events of Crypto Market 2022









LFG \$1B Reserve Fundraising

Move-to-Earn Trend - StepN

Epic games \$2B Fundraising









Nomad Bridge \$190M Hack

3AC, Celsius Bankrupt

stETH depegged

LUNA - UST Colllapse









Ethereum's Merge

Elon Musk and T????????

FTX Bankrun

CEX Proof of Reserve





### BTC 2022 Performance

In 2022, the financial market has been well-affected by the one and only factor: Inflation.

All the risk-on assets in the world have experienced such a year of decreasing, and \$BTC is not an exception.

Bitcoin welcomed 2022 with a major correction, which is the continuation of the crash on Dec 4th, 2021.

Then, it spent the whole year trying to find its bottom, and the BTC price is still in its journey.

The decrease in price of BTC has created one of the most hazard bear markets ever.

The 2022 bear market had already surpassed 425 days, 61 days longer than the 2017 winter.









### Terra: From Hero ...



In late February 2022, Luna Foundation Guard - an organization backed up by Terra had announced that they are gonna establish a \$1B reserve to stabilize the peg of UST.

The reserve's portfolio includes BTC, USDT and other Layer 1 native tokens.

Terra, at that time, was considered as a pumping machine to the crypto market, pushing the whole market forward, especially a 27% growth in BTC price.

Lately, LUNA had finally achieved its new ATH at \$114, and the rest is only memories...







### Terra:... to Zero

Starting from May 07, 2022, the UST pool on Curve had shown mixed signals about the liquidity, resulting in the slight depeg of UST.

However, UST was able to secure its peg right away the next few hours. Then, everything about LUNA and UST got worse and worse.

LUNA and UST was sentenced to death by its own pride - their mechanism, which was called "The Death Spiral".

More LUNA was minted to back up UST, but more LUNA meant the unstoppable decrease in price of LUNA.

Then, the minted LUNA was not enough to back UST and the loop continued.

Finally, when the loop had done, LUNA and UST, once was ranked the #9 capitalization of the crypto market and had \$24B as stablecoin, now all went down to zero.









### stETH: Correlated asset is no longer correlated



stETH is a financial instrument of ETH staked on Lido Finance for preparing for the Merge.

However, some institutions seem like they have too much leverage on these DeFi platforms.

Three Arrow Capital and Celsisus were two of the institutions, which had to file for bankruptcy.

The price of stETH shall always be traded at 1:1 to ETH, however, at the climax of selling, it depegged for almost 7%, trading at 0.93 ETH.

ETH price also experienced a heavy decline at the same time, reaching the 2022 low for just about 3-digit-number - around \$886.







### The Merge: The Long Awaited Events

In 2022, the crypto market has its own luck to experience one of the most important events of Ethereum - when Ethereum would shift the consensus mechanism from PoW to PoS.

This upgrade was considered essential for the sustainable development of Ethereum as well as crypto in the long run.

This event had **created such a hype** back to the market after such a prolonged sell off Q2.

Right after the announcement for the fixed block for the upgrade, ETH has witnessed a double growth in only 1 month, leading the whole market at that time.

Another coin which has the direct benefit from the Merge is its brother Ethereum Classic - ETC with 300% growth.

When it comes to the Merge event, the miner of the Ethereum network has two options. One is to sell their infrastructure, or Two, they can try another network to contribute and ETC is the one.

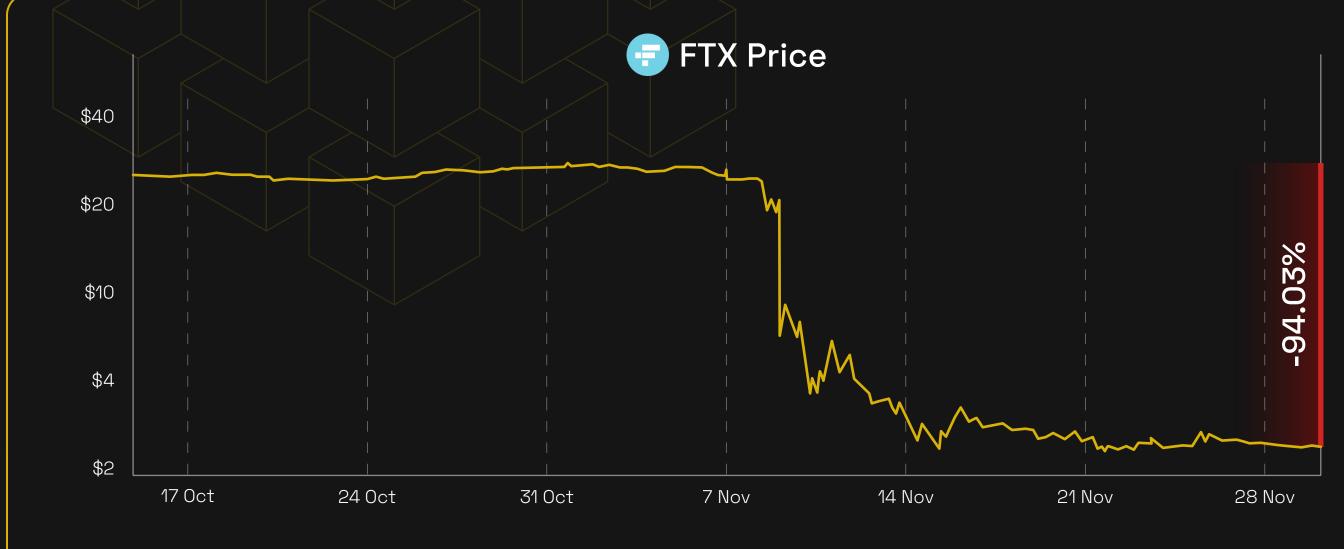








### FTX Bankrun: Nothing is too big to fail





Have you ever wondered that the term "Too big to fail" does apply in the crypto market? The answer is no. Nothing is too big to fail in this crazy market.

FTX at that time was a CEX, handling top 3 trading volumes of the entire crypto market.

However, with the sophisticated financial instruments, FTX and Alameda Research - a Venture Capital behind FTX had messed all things up.

When FTX seemed like they would not be able to process all the withdrawal requests of users, FTX started to halt the deposit/withdrawal gate.

In a blink of an eye, \$FTT decreased, and later that day \$FTT was only at \$1, experiencing 95% decline from the start of the event.

Dramatically, there was more than \$150B wiped out of the market that day, and \$BTC finally plumbed to a new low in 2022 around **\$15,476**.

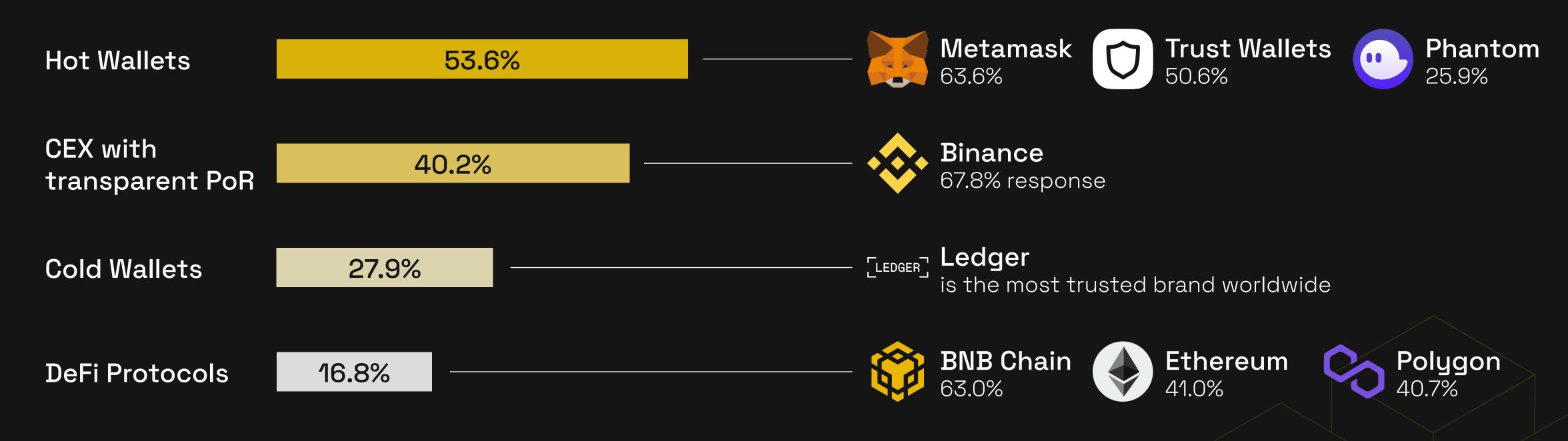






# Where do Investors store their Fund after the FTX crash?

Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.



#### Hot Wallets & CEX

are the two most common places to store cryptoassets

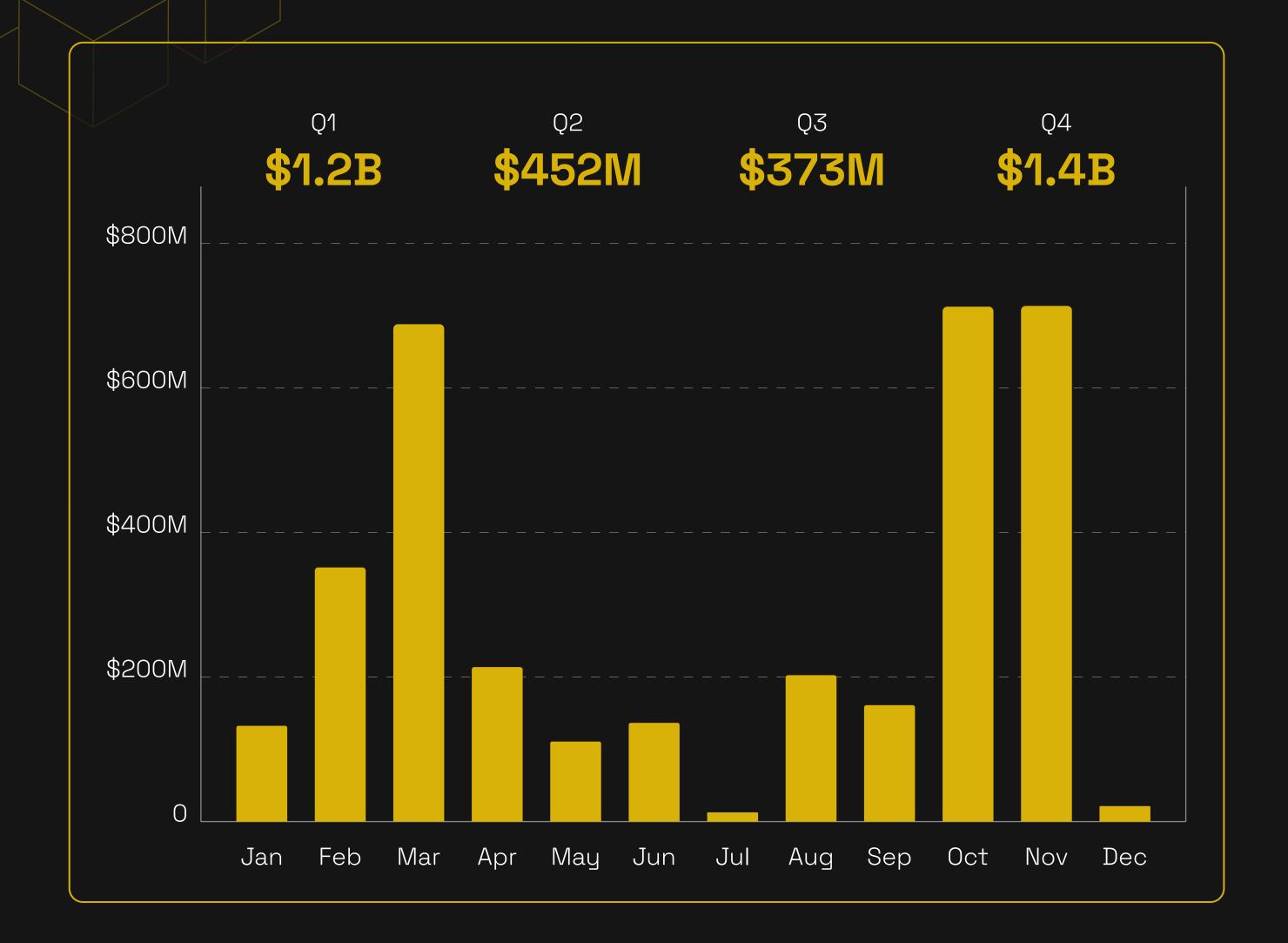
#### Two-third

of asked crypto investors have their faith in Binance and their along ecosystem





### 2022 - A Year of Hacks







130+

\$1.8B+

Number of hacks & exploits in 2022

has been stolen from **Cross-Chain Bridges** 

\$1.4B+

90%

Total Stolen Funds across 13 hacks in October & November only

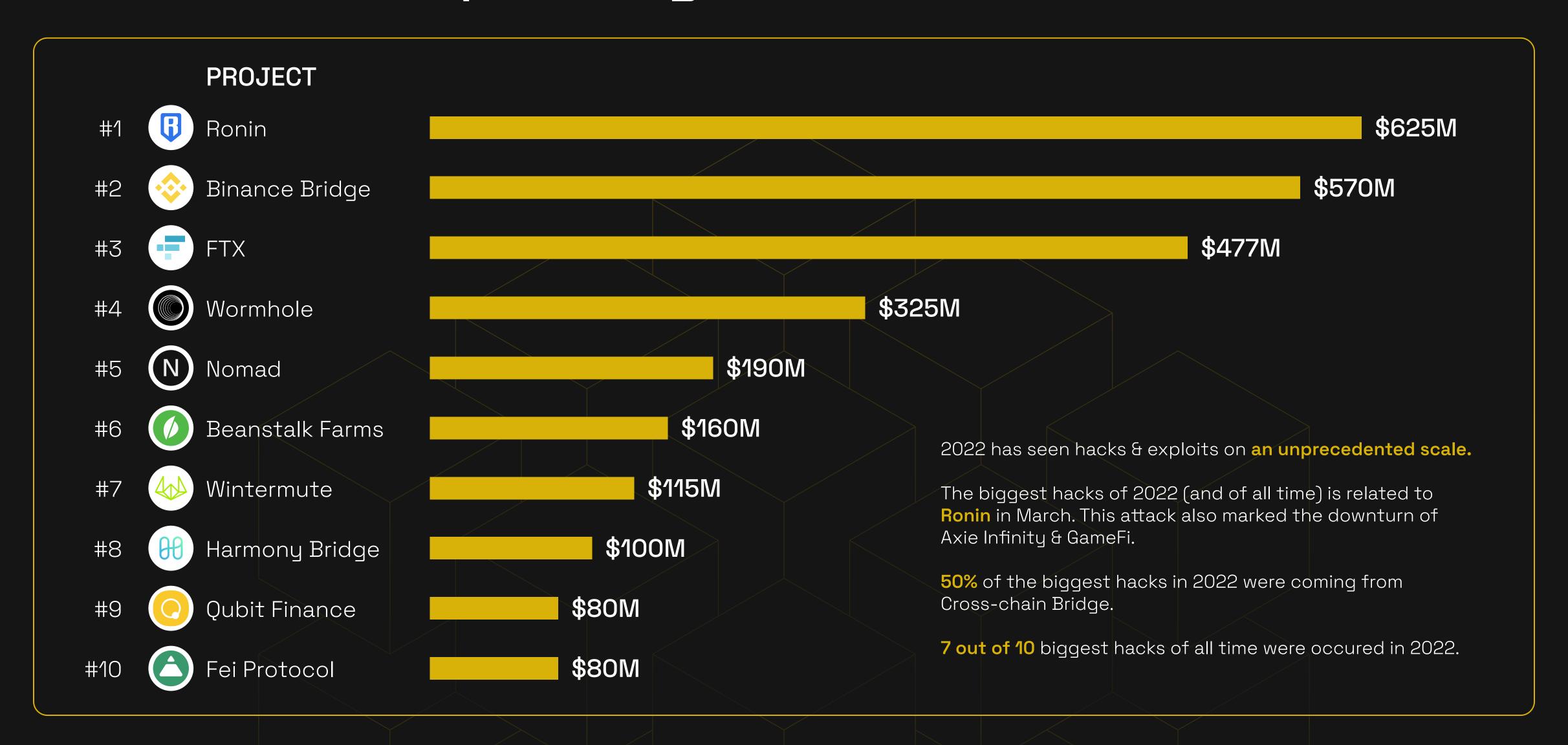
of the hacks are related to **DeFi** 







### Top 10 Largest Hacks in 2022









### What are Investors' Opinions about Crypto Hacks & Exploits?

Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

have been a victim of Crypto Hacks & Exploits in 2022







think Hacks & Exploits are related to technical faults & loopholes in protocols



>1u Exp.

think all Hacks & Exploits are fake covers for projects to rug pull their users



### Fundraising Overview

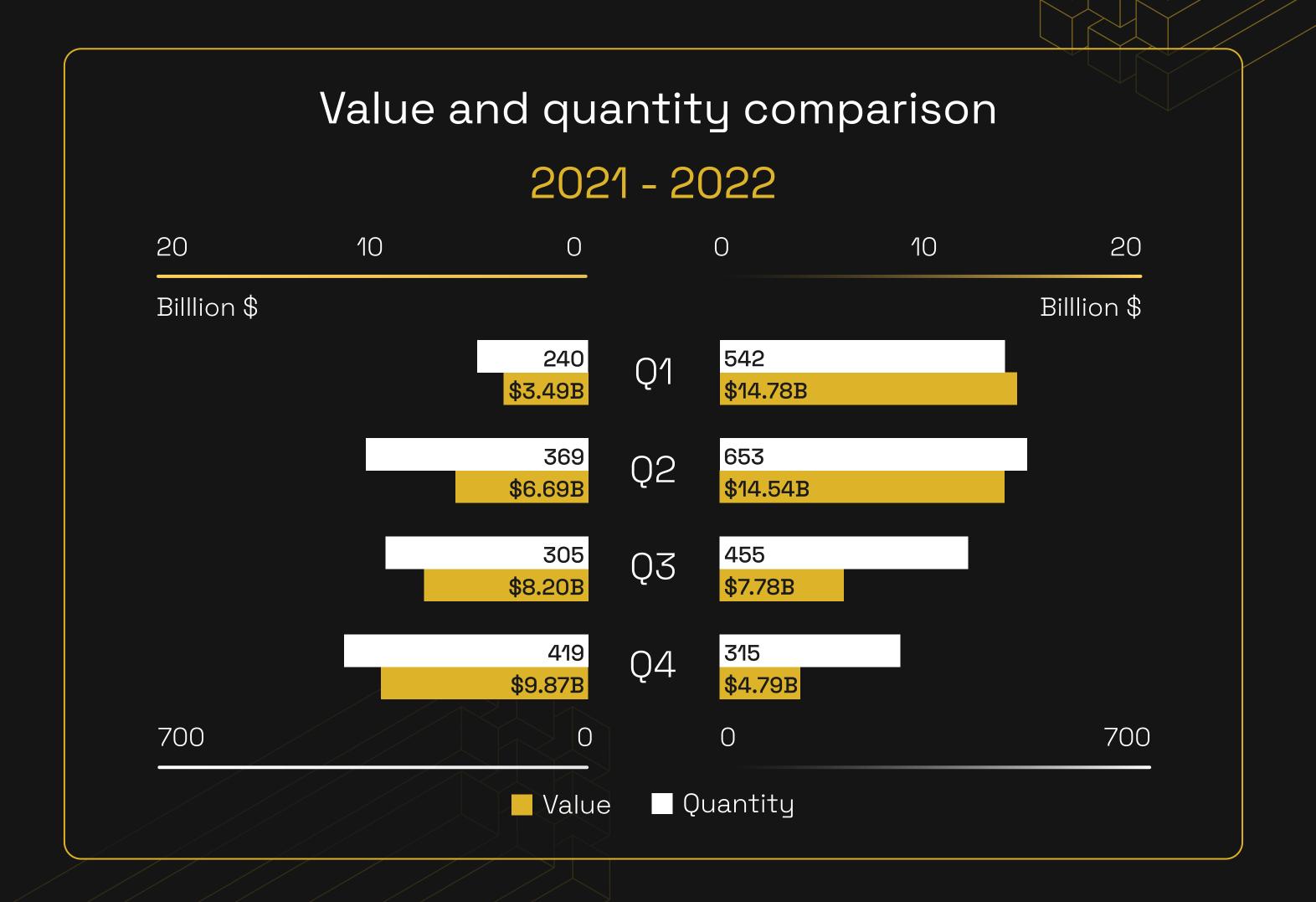
### Rounds

1965 🔺 47%

### Raised

\$41.89B • 48%

Although 2022 is a downtrend year, the number of projects calling for capital as well as the amount of money raised in the first half of 2022 alone is almost equal to the whole year of 2021.



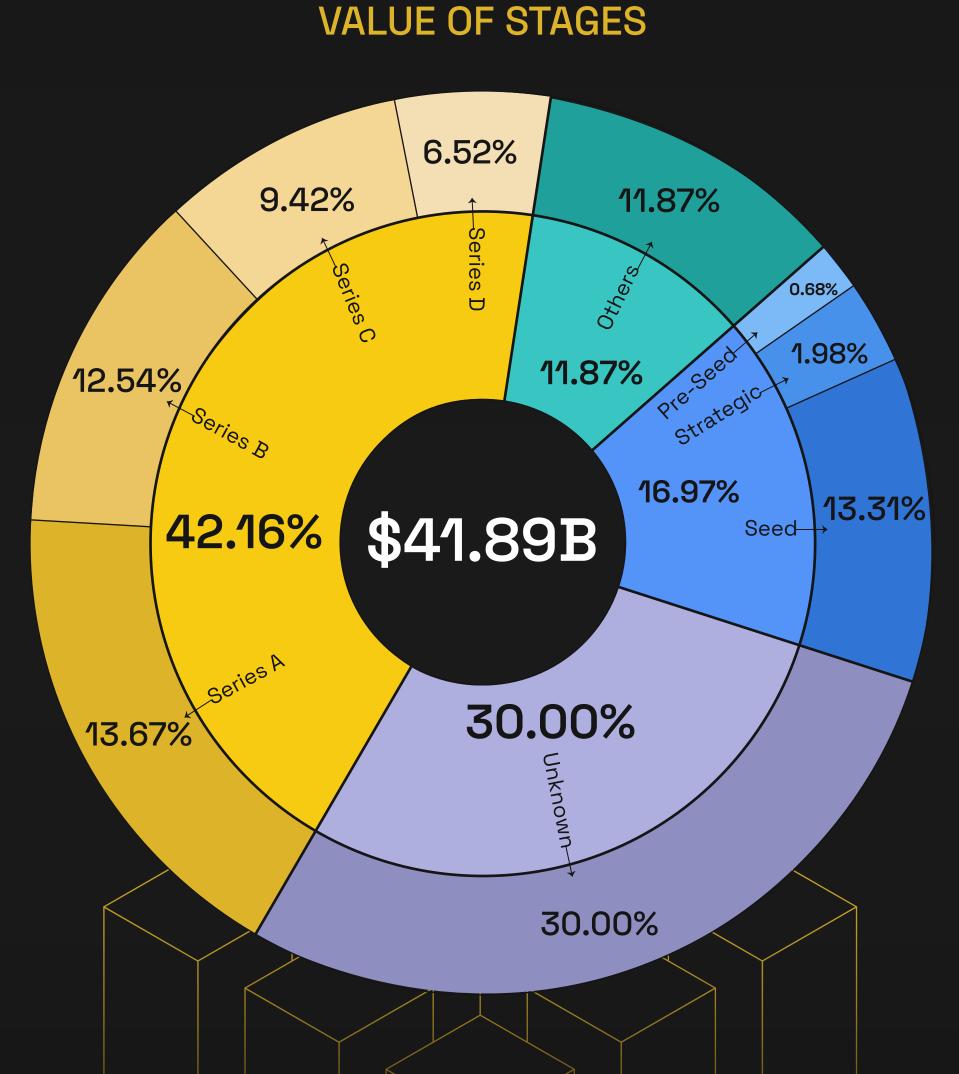






### Fundraising by Stages

Early Stages (Pre-Seed, Seed, Strategic)	ROUNDS  1110
Series Rounds (A,B,C)	404
Undisclosed	367
Others	84

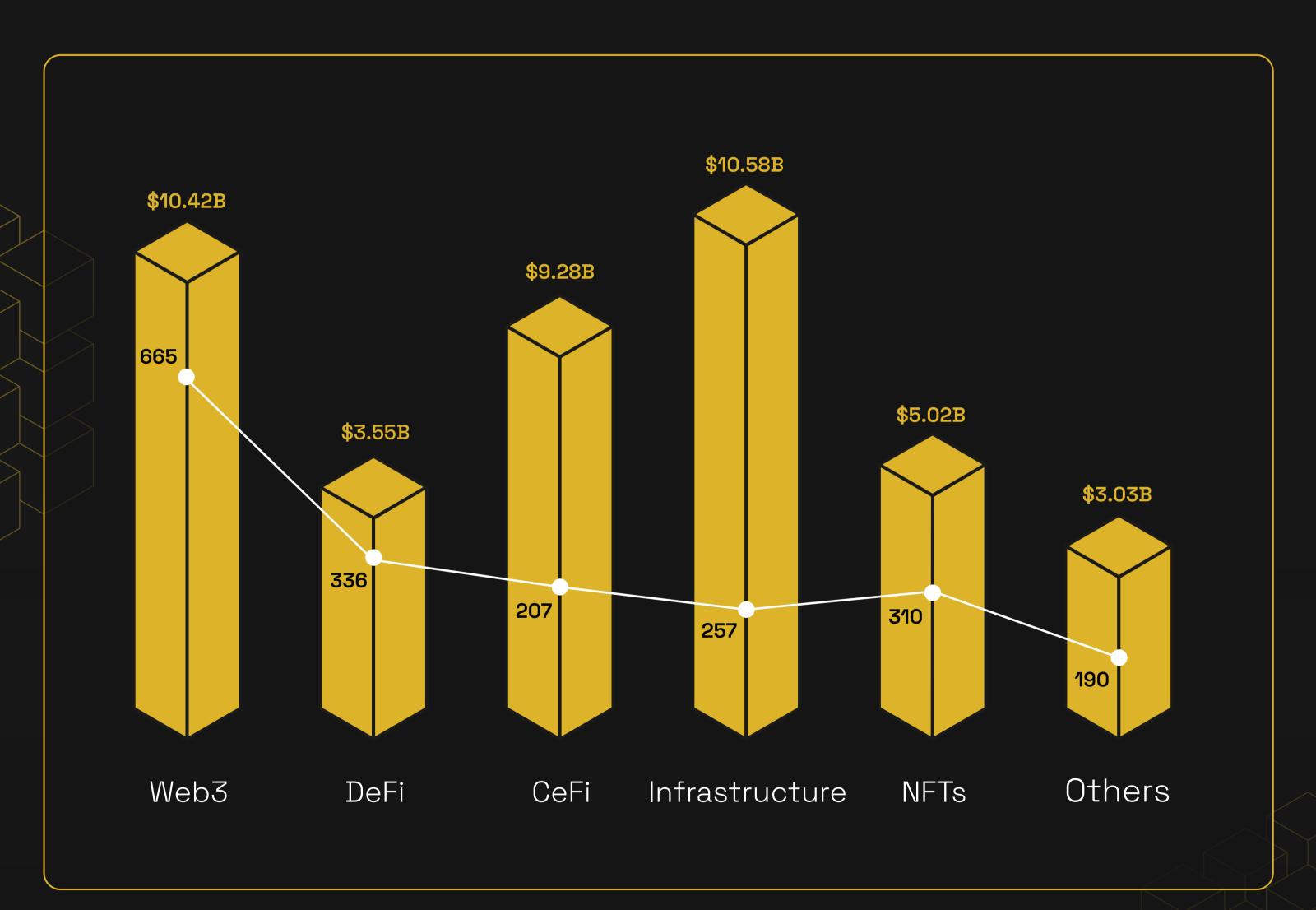


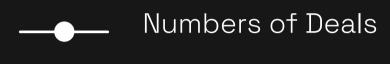






### Fundraising by Categories





Deal Value

Although Web3 has the largest number of deals, Infratructure is the category that is invested with the largest amount of money.

According to Crypto Rank, NFTs has the highest average public round ROI (+49%) while **DeFi** is the worst performer with -67% ROI.



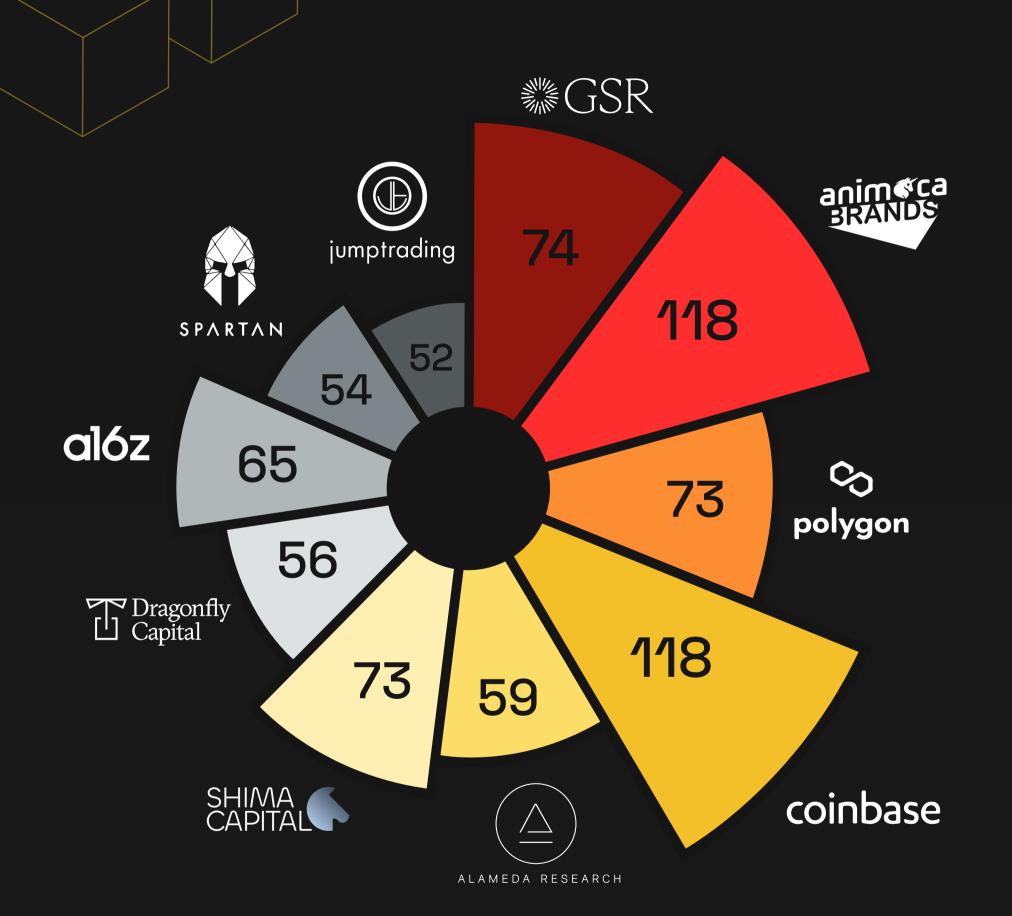








### Top VCs ranking by Number of Deals



	CeFi	DeFi	Infrastructure	NFTs	Web3	Others
anim (Ca BRANDS	1%	7%	3%	36%	53%	1%
coinbase	10%	25%	15%	10%	34%	5%
₩GSR	3%	42%	14%	4%	31%	7%
Co polygon	1%	3%	7%	27%	53%	8%
SHIMA CAPITAL	1%	29%	8%	21%	36%	5%
alóz	0%	8%	26%	11%	45%	11%
△ ALAMEDA RESEARCH	5%	29%	10%	17%	36%	3%
Dragonfly Capital	9%	34%	16%	9%	29%	4%
SPARTAN	0%	26%	9%	26%	35%	4%
(I) jumptrading	4%	40%	15%	10%	27%	4%

Leading the interest of VCs in 2022 is Web3, followed by DeFi and NFTs.

Animoca Brands and Coinbase are two top active investors with different investment tastes. While Animoca invests mainly in Web3 and NFTs, Coinbase distributes its portfolio fairly evenly across different segments.

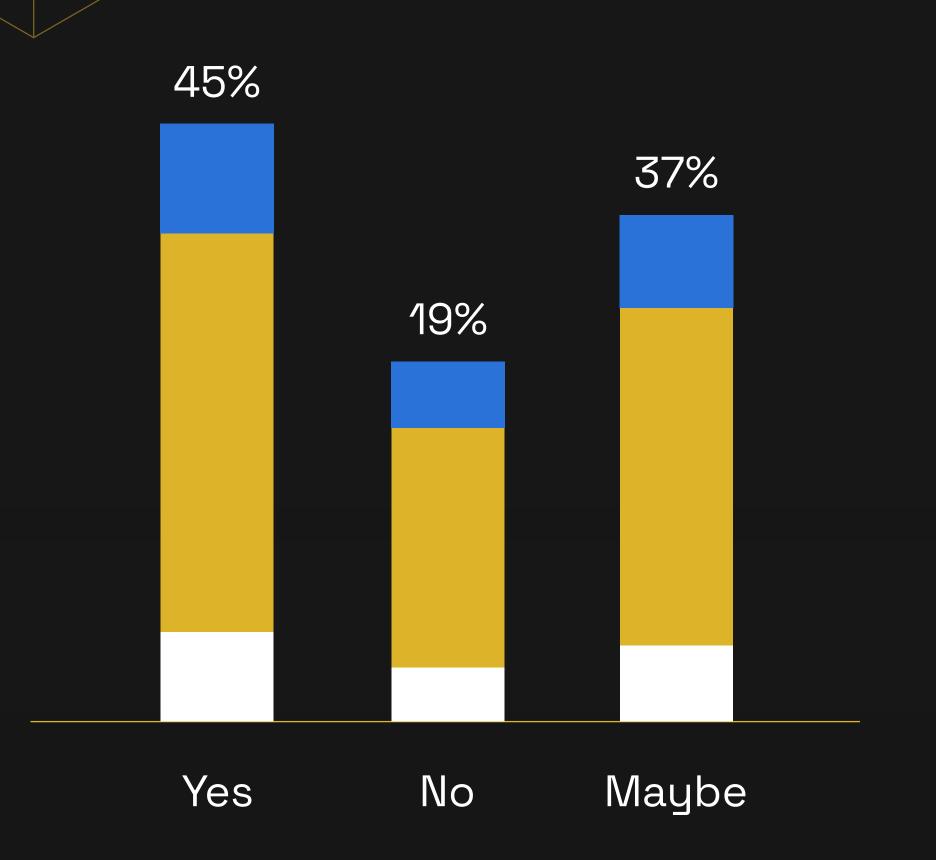






# Will crypto users invest in projects with big VCs as backers?

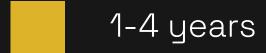
Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.



45% of respondents tend invest in projects with large VCs as backers while 37% of these are hesitant.

This is quite understandable because the respondents mostly have 1-4 years of experience in the market, and the past year has proven the saying "Nothing is too big to fail".



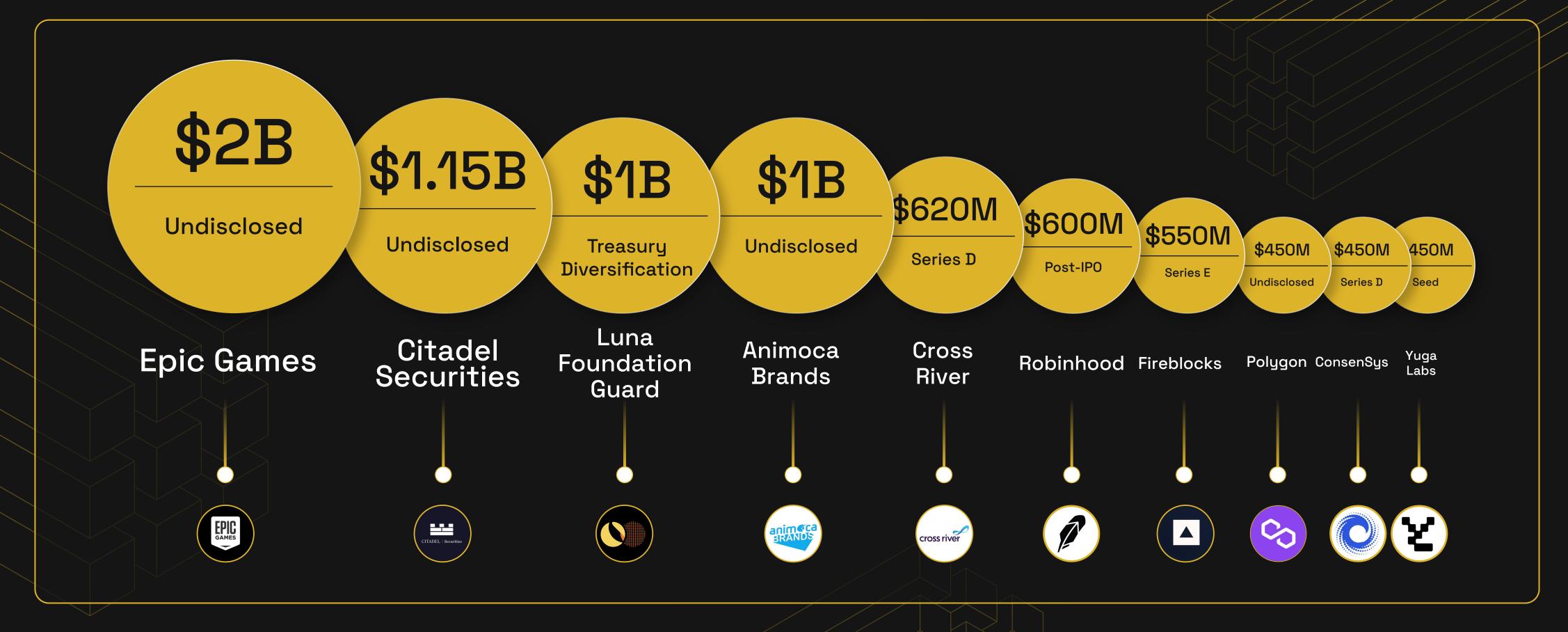








### Biggest Deals in 2022



- The biggest deal raised this year is 2 times bigger than the biggest deal in 2021 (FTX: \$900M Series B). However, the total value of the 10 largest deals in 2022 is just over 24% of the total 10 largest deals in 2021.
- This year VCs have invested their capital allocation in different projects because the mechanisms of unlocking and vesting tokens are aimed at the long-term goals of the projects.

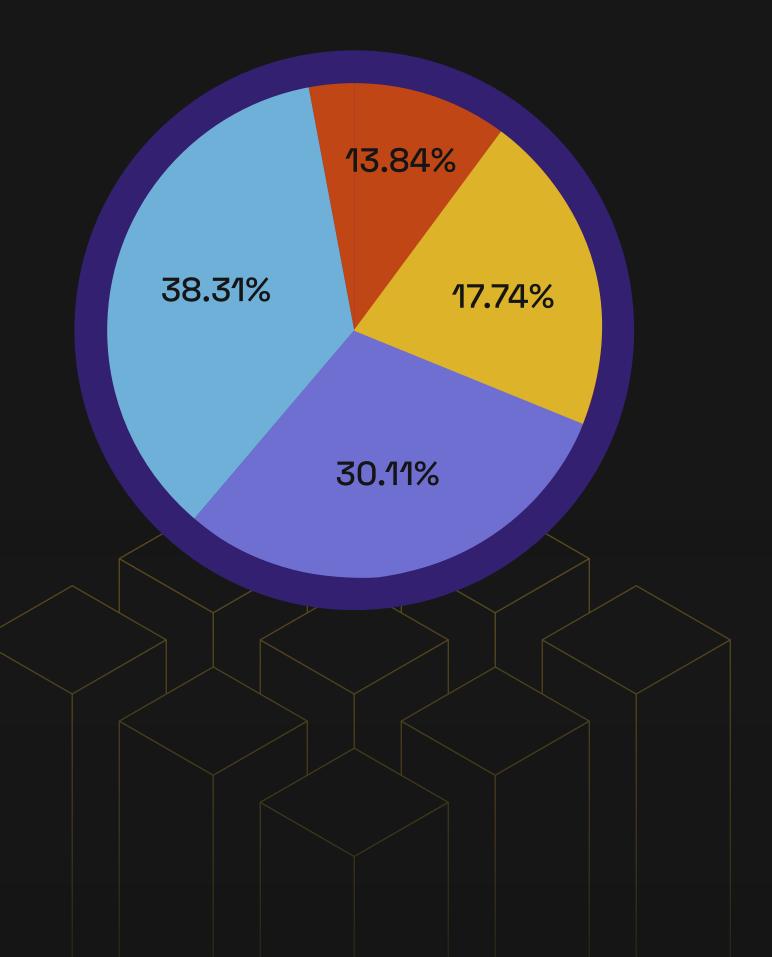




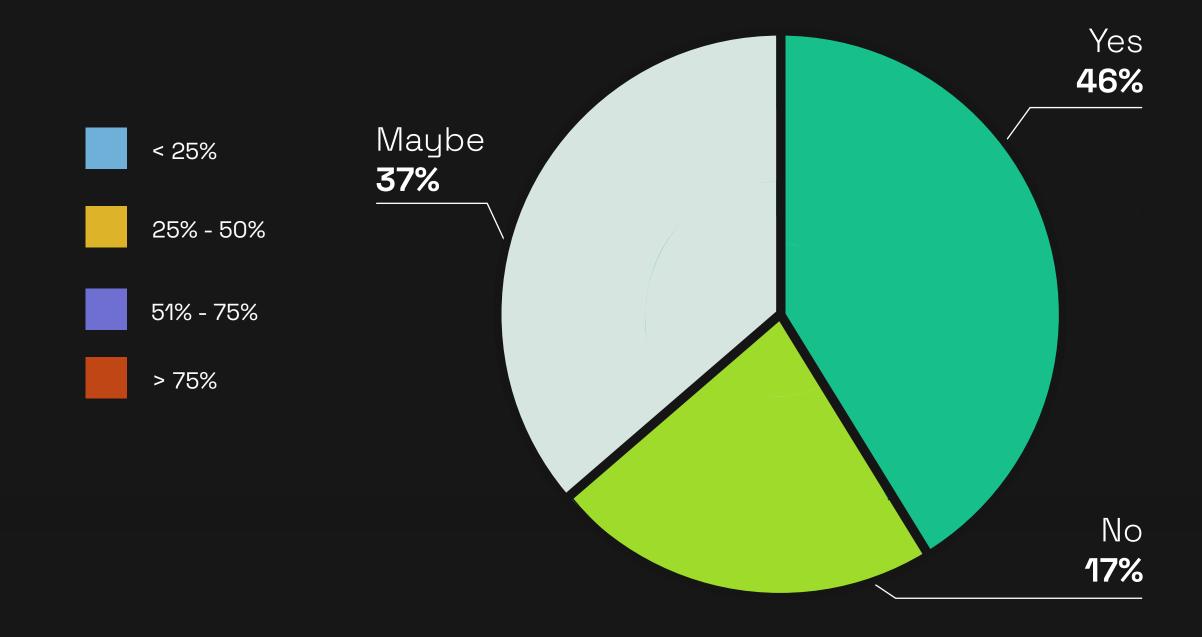
### Retail investors' Portfolio Allocation

Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

#### RETAIL INVESTORS' PORTFOLIO ALLOCATION



#### A LARGE FUNDED PROJECT WILL BE A PROTENTIAL PROJECT



MOST INVESTORS THINK PROJECTS THAT RAISE LARGE AMOUNTS OF FUND IS POTENTIAL

Interestingly, survey data shows that most retail investors allocate 25-50% of their portfolios to cryptocurrency. This is also the largest group of investors who think that projects that raise large amounts of capital will be potential projects in the future, while 17% investors disagree with this view, 37% of them still suspect.



### Conclusion & Projection

The cryptocurrency market in 2022 has been an emotional roller coaster, with investors experiencing both market collapses and short-term growth events.

Despite the overall downtrend in the market, the amount of money being raised has continued to increase, indicating that many players in the industry remain optimistic about the future of cryptocurrencies.

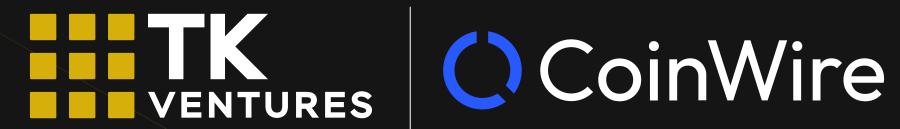
However, the year was not without its challenges, as several high-profile hacks and collapses rocked the industry and had wider implications for the global financial system. The increasing scrutiny and regulation of the cryptocurrency market is likely to come to a head in 2023, as different parties clash over the best way to govern this rapidly evolving space.

The financial market as a whole is facing a number of challenges, including inflation and rising interest rates from the FED. However, it is expected that the top of the hiking process will be reached in 2023, potentially leading to a mini uptrend in the market similar to the one seen in 2019.

It is important to note that these projections are subject to change and should be considered carefully before making any investment decisions.







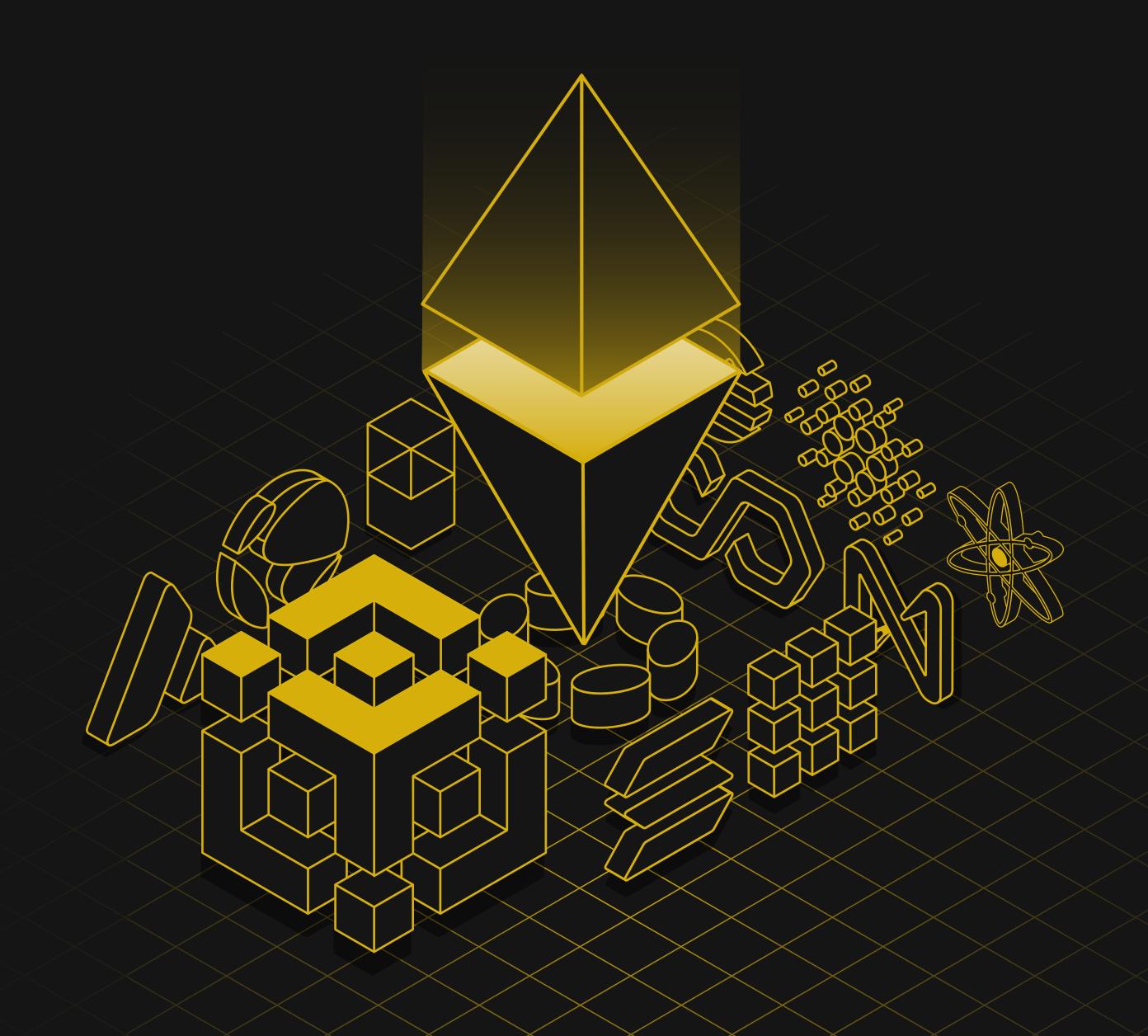




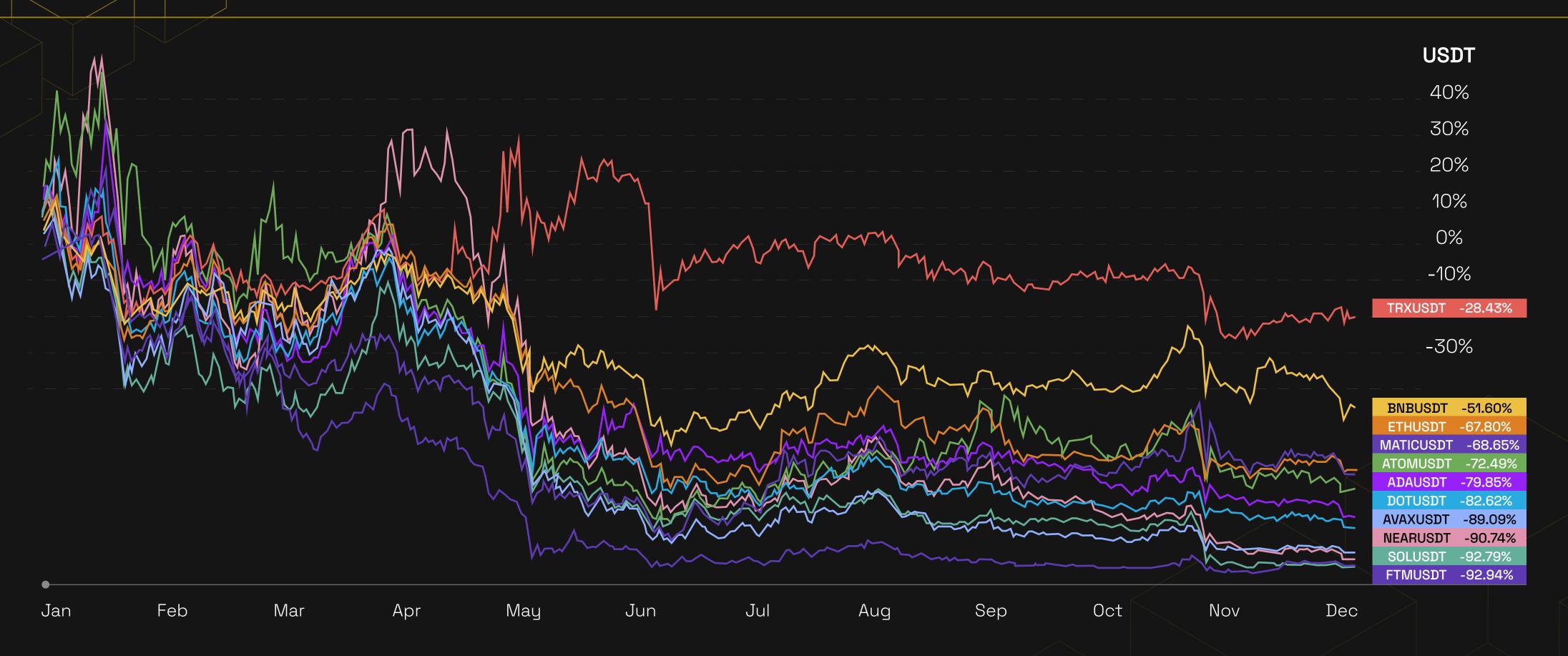
# Blockchain Platforms

Layer 1 overview, New Blockchain Platform and Ethereum Scaling Solutions.

Crypto Report 2022



### Native Token Price Performance in 2022



The terrible year 2022 has ended with the fact that most Blockchain Platforms have evaporated 20 - 90% of their value with hundreds of billions of dollars in market capitalization. But their ecosystem is still developing and growing in different directions, different sectors to attract more users and surpass Crypto Winter. Let's dive in!



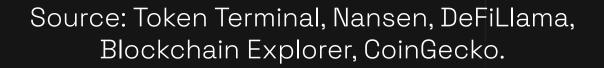




### Top EVM Chains Key Metrics

	<b>Ethereum</b>	BNB Chain	Polygon	Avalanche	Fantom
Financial					
Price	1200	250	0.8	11.8	0.2
% Change	-70%	-54%	-64%	-89%	-91%
Circulating Market Cap	\$148.2B	\$39.9B	\$6.9B	\$3.7B	\$561M
% Change	-67%	-55%	-62.45%	-86.61%	-91%
Total Revenue	\$4B	\$43.5M	\$5M	\$97.5M	\$7.2M
Network					
Daily Active Users	412K	1.08M	350K	59K	60K
% Change	-2.50%	33.60%	169%	192%	86.80%
Average Daily Transactions	1.1M	4.27M	2.95M	444K	795K
% Change	-13%	-30%	-13%	292%	198%
Transaction Fees	\$4.6B	\$435M	\$27M	\$97.5M	\$24.2M
% Change	-53%	-51%	190%	152.70%	187.30%
Ecosystem and Development					
Total Value Locked	\$45.72B	\$6.89B	\$1.35B	\$1.84B	\$630.68M
% Change	-75%	-67%	-80%	-90%	-91%
Active developers	240	24	60	45	12
% Change	26.50%	12.30%	104%	31.40%	-17.30%





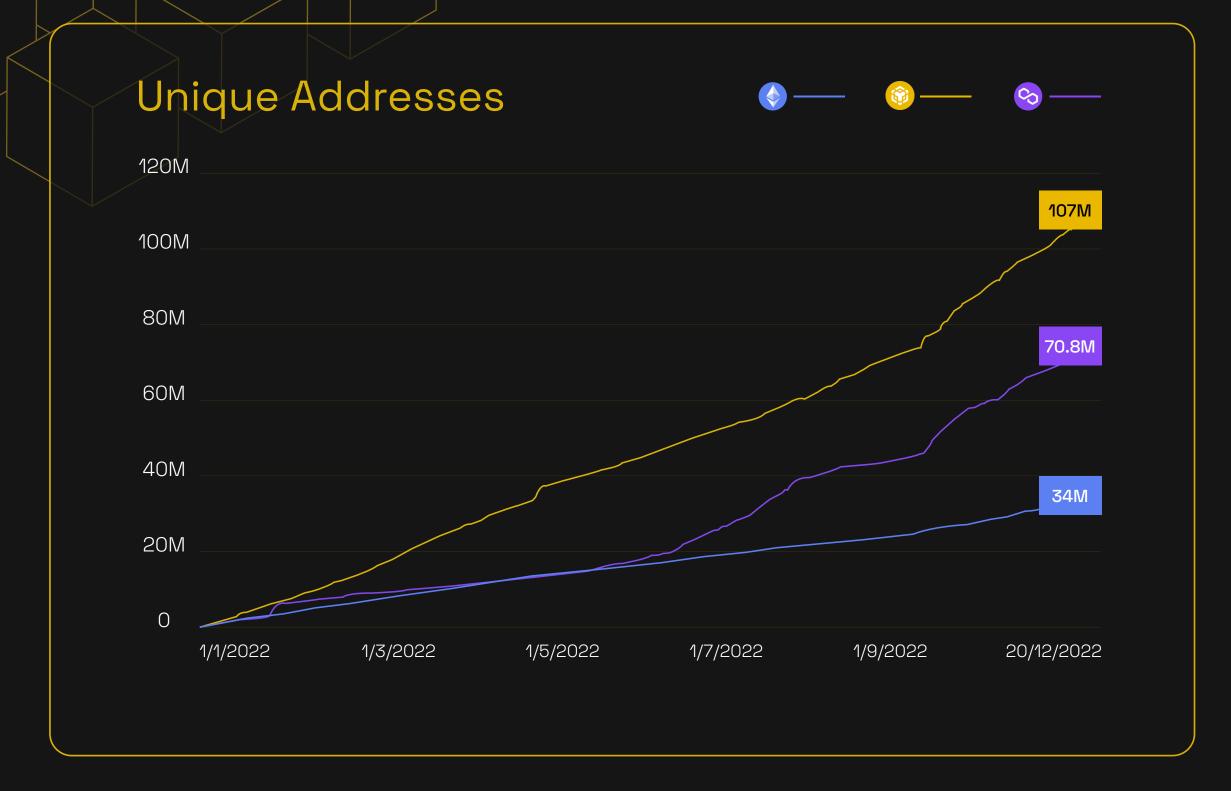


### Top Non-EVM Chain Key Metrics

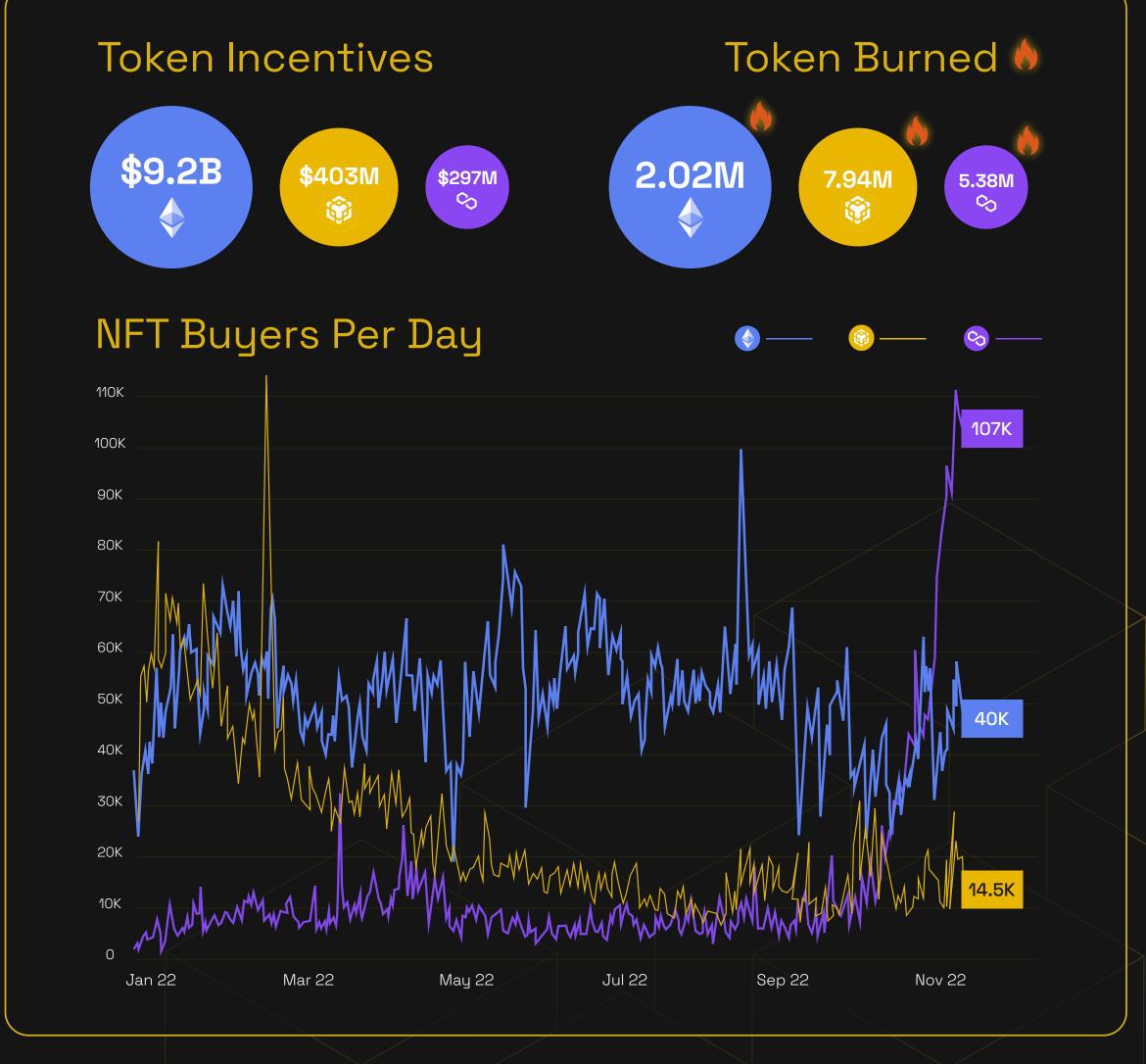
	Solana	Near	Cardano	Algorand	Cosmos
Financial					
Price	11.8	1.3	0.26	0.17	8.6
% Change	-93%	-91%	-80%	-90%	-74%
Circulating Market Cap	\$4.4B	\$1.13B	\$8.9B	\$1.24B	\$2.5B
% Change	-92%	-87%	-80%	-88%	-66%
Total Revenue	\$12.4B	\$43.5M	\$5M	\$97.5M	\$17.5K
Network & Ecosystem Developm	ent				
Total Value Locked	\$506M	\$92M	\$65M	\$173M	\$1.45B
% Change	-96.00%	-23.00%	_	-26%	
Transaction Fees	\$24.7M	\$3M	\$8M	\$361M	\$876K
% Change	-17%	194%	-6%	-45.00%	36%
Active developers	96	77	148	34	142
% Change	17%	50%	-2%	6%	56.60%



### Competition of 3 Most Popular Blockchains



- BNB Chain has attracted so many users that the Number of Addresses surpasses Ethereum (237M vs 217M).
- Polygon closed 2022 with a boom on NFT Space. Buyers per day reached ATH ~ 4 times yearly average.



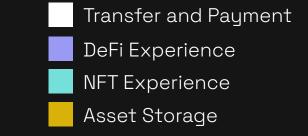


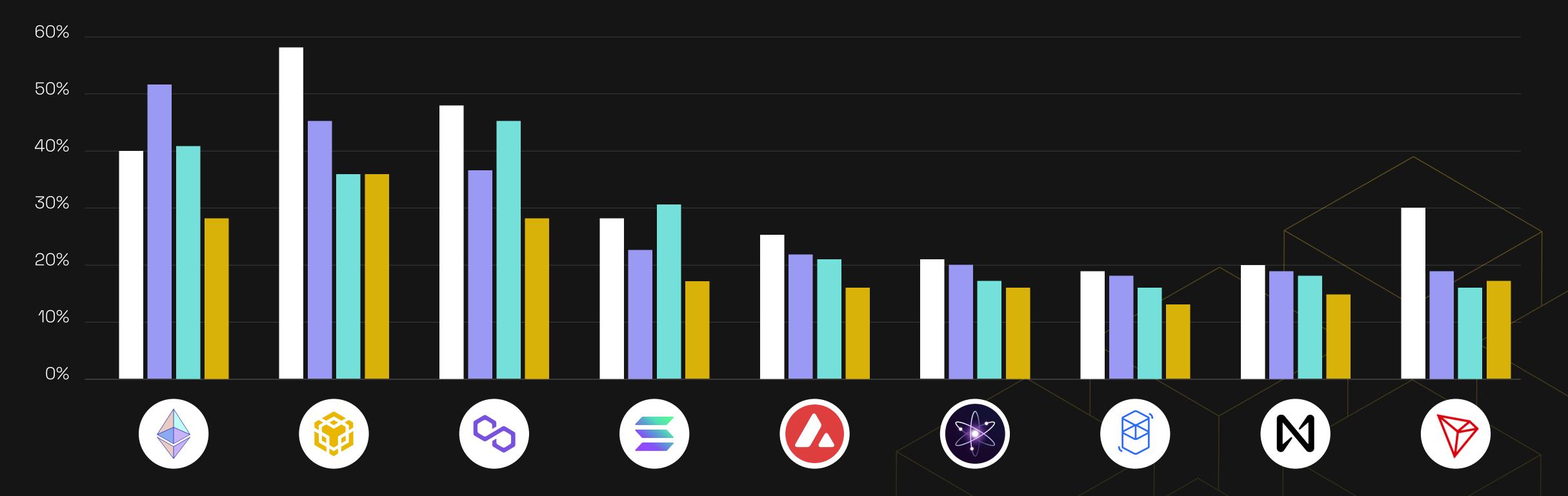


### Which Blockchain Platform do Investors Use the Most?

- 58% of Investors use 🍪 BNB Chain to Transfer and Payment
- **52%** of Investors use 🔷 **Ethereum** to DeFi Experience

- 45% of Investors use 💝 Polygon to NFT Experience
- 36% of Investors use 🍪 BNB Chain to Store Assets



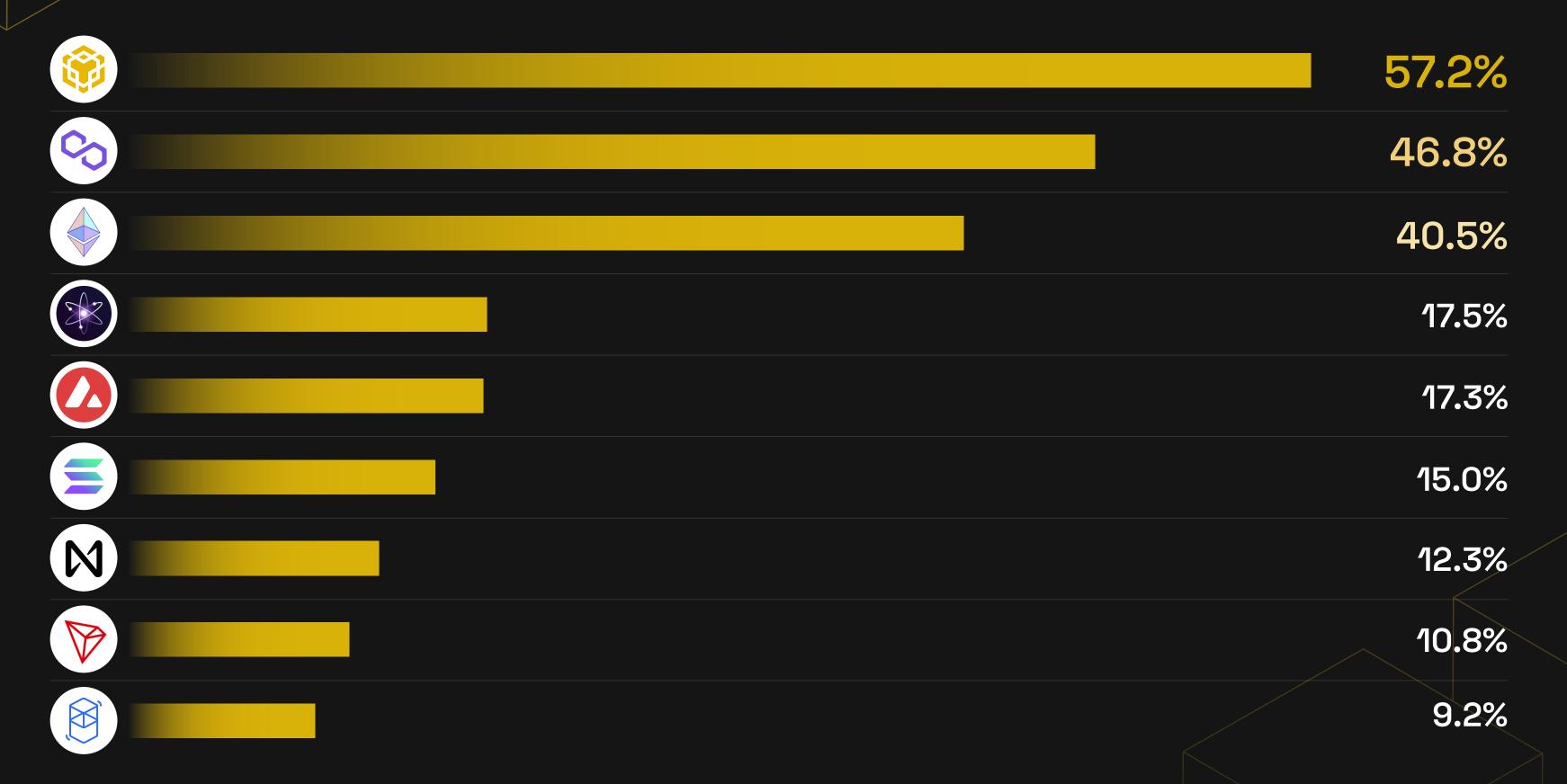


Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.





# Which Blockchain Platform do Users Think will Achieve Mass Adoption in the Next Year?



57.2% think **BNB** Chain is the Blockchain Platform that will achieve mass adoption in the next year.

Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.





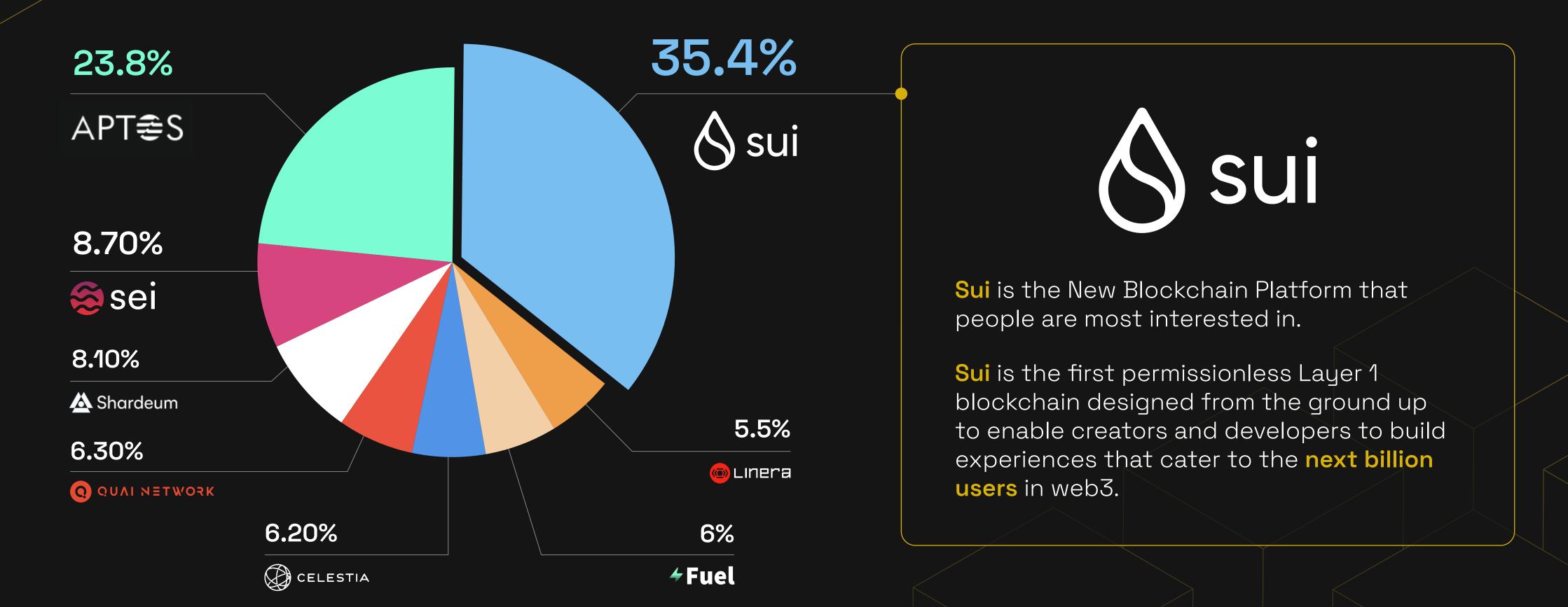
### New Layer 1 Blockchain Platform

	Blockchain	Funding Raised	Type	Consensus	TPS	Programming	Virtual Machine	Node Requirement	Investor
	APT€S	350M	Monolithic	DiemBFTv4	160000	Move	MoveVM	CPU: 8 cores RAM: 32GB Storage: 1TB	BINANCE andreessen jump horowitz ju
	🖒 sui	336M	Monolithic	Narwhal & Bullshark	120000	SuiMove	MoveVM	CPU: 2 cores RAM: 8GB Storage: 50GB	Elightspeed coinbase jump_  +++
	<b>\$</b> sei	5M	App Chain	Tendermint	18000	Cosmos SDK	CosmWasm	CPU: 8 cores RAM: 32GB Storage: 1TB	Multicoin Capital S DELPHI DIGITAL  GRS coinbase  +++
	CELESTIA	56.5M	Modular	Pluggable	n/a	Cosmos SDK	EVM- Compatible	CPU: 4 cores RAM: 8GB Storage: 250GB	<b>BINANCE JUMP</b> CAPITAL  BainCapital  SPARTAN [placeholder]  +++
	<b>≁Fuel</b>	81.5M	Modular	n/a	n/a	Sway	FuelVM	n/a	COINFUND  CAPITAL  COINFUND  +++
	@ QUAI	10M	Monolithic	PoW 2.0	7500	n/a	EVM- Compatible	CPU: 4 cores RAM: 16GB Storage: 100GB	Alumni Ventures POLYCHAIN CAPITAL
	© Linera	6M	Monolithic	n/a	n/a	n/a	n/a	n/a	andreessen kima kima ventures  TRIBE CAPITAL
<u>k</u>	Shardeum	18.2M	Monolithic	PoQ + PoS	n/a	Solidity & Vyper	EVM- Compatible	n/a	SPARTAN Jane Street STRUCK Deutsche Forschungsgemeinschaft CoinGecko





### Which New Blockchain Platform are Investors Most Interested in?



Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.







### Ethereum Scaling Solutions Overview

The Situation

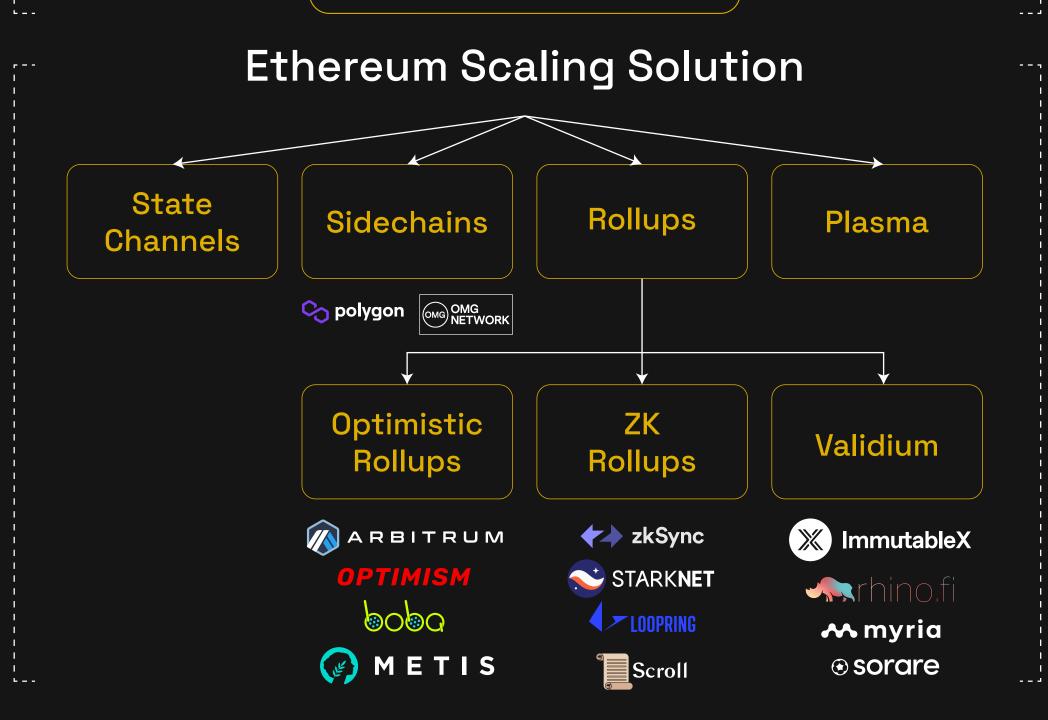
Blockchain Platforms (Layer-1s) changes to the blockchain network's base protocol that improve scalability. To improve scalability, the main goal of scalability is to increase transaction speed, and transaction throughput, without sacrificing decentralization or security.

Layer 1

**Sharding**Ethereum upgrades toward ETH 2.0

Off-chain scaling: Off-chain solutions are implemented separately from Ethereum. Some solutions, known as "Layer 2 solutions", derive their security directly from Layer 1 Ethereum consensus.

Layer 2



On-chain scaling: requires changes to the Ethereum protocol. Sharding is currently the main focus for this method of scaling.

#### Why are so many Scaling Solutions needed?

- Prevent single points of failure and reduce network congestion.
- Different solutions can work together, exponentially increasing transaction speed and throughput
- Both Layer 1 and Layer 2 scaling has distinct costs and benefits.

Therefore, the future of scaling will involve a combination of Layer 1 and Layer 2 solutions.





### Comparing Layer-2 Scaling Solutions

	Sidechains	Optimistic Rollups	ZK Rollups
Notable Project	Co polygon	<b>ARBITRUM</b>	<b>★</b> zkSync
Consensus mechanism	PoS	The protocol of the mainnet	The protocol of the mainnet
TPS	65,000 TPS	4,500 TPS	2,000 TPS
Benefits	Permanent once created	EVM compatible	No withdrawal delay
Time for finality	2.1 seconds	1 week	~10 minutes

#### Overall

Basically, Sidechains are a bit easier and appear to be a **reasonable choice** as it is faster compared to Optimistic Rollups and ZK Rollups.

#### Key Takeaway

Optimistic Rollups have the short term advantage of EVM compatibility, which means Ethereum smart contracts can be deployed directly on these chains.

So DeFi-based platforms use them. Their week-long finality time prevents seamless nteraction with L1.

NFTs, crypto gaming, and many DeFi apps are incompatible. **ZK rollups** are expected to win all use cases in the medium to long term.





### Comparison of zkEVM Solutions Landscape

	Scroll	polygon zkEVM	<b>≠</b> zkSync	<b>StarkNet</b>	
Testing Phase	Private pre-alpha testnet	Public testnet	Public testnet	Alpha mainnet	
Testnet Launch	Q4 2022	Q4 2022	Q1 2022	Q2 2021	
Mainnet Launch	2023	Early 2023	Q4 2022	Q4 2021	
Open-Source Code	Yes	Yes	No	Partially	
Language Support	Solidity	Solidity	Solidity Vyper LLVM Support	Cairo Solidity (via transpiler)	
EVM Compatibility	Bytecode-Level	Bytecode-Level (via interpreter)	Language-Level	Language-Level	
IARK or STARK SNARK		SNARK + STARK	SNARK	STARK	

- zkEVMs address Ethereum scalability while maintaining smart contract compatibility.
- Polygon offers full EVM compatibility, including bytecode and Solidity, unlike competitors who only support language level compatibility through transpilation.





### Layer 2 Solutions Highlight Events in 2022

Sidechains

Rollups



- polygon raised \$450M
- polygon Supernets
- polygon Nightfall Mainnet Beta
- Green Blockchain Summit 2022
- polygon zkEVM Public Testnet



- Ether's Phoenix
- A New Chapter
- Introducing the **OPTIMISM** Collective
- A Summer of **OPTIMISM**
- OP Airdrop #1
- Introducing the **OP Stack**
- The Citizens' House: 10m OP to Public Goods



#### AnyTrust Chains

- The ARBITRUM Odyssey
- Postponed the ARBITRUM Odyssey
- **///** arbitrum nova: LIVE
- ARBITRUM Nitro: LIVE



- zkSync 2.0 Public Testnet
- Dynamic Fees Milestone
- Project Registration for zkSync 2.0 Mainnet Alpha
- Baby Alpha has arrived
- Open Source is freedom
- Accouncing \$200M to Accelarate the Mission



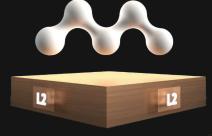
- STARKNET Alpha
- STARKNET Token Design
- STARKNET Alpha 0.10.0 released to Mainnet
- STARKNET Token is Deloyed on Ethereum
- STARKNET Open Sourcing Cairo 1.0
- STARKNET Roadmap

#### Overall

- L2 might become more necessary as crypto and blockchain attract substantial real-world adoption.
- 2022 will probably be the year when we know for sure if ZK rollups can become functionally **complete**, **feasible**, and **competitive**.

### Key Takeaway

- Layer-2s technologies have started to be used in Blockchain Layer 1, such as **zkBNB**, a solution that uses ZK-rollup technology to **expand** the network.
- This will give users a better experience and faster transaction speed, or they can switch to blockchain gaming, NFTs like Myria's Layer 2.









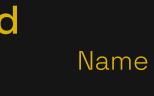


### Ethereum Scaling Solutions by On-chain Data

### Total Value Locked & Market Share

Optimistic Rollup technology tend to gain tremendous attention and TVL.

Arbitrum leads all other Layer-2s.































TVL	\$2.3B	\$1.1B	\$391M	\$86.3M	\$82.2M	\$72.6M	\$53.9M	\$34.8M	\$17.9M	\$17.2M	\$11.8M	\$7.9M	\$6.3M	\$4.9M
Market Share	54.2%	26.88%	9.23%	2.04%	1.94%	1.99%	1.27%	0.82%	0.48%	0.41%	0.28%	0.19%	0.15%	0.12%
Technology	Optismistic Rollup	Optismistic Rollup	ZK Rollup	Optismistic Rollup	ZK Rollup	Validium	ZK Rollup	ZK Rollup	Validium	Validium	Optismistic Rollup	ZK Rollup	Optismistic Rollup	ZK Rollup

#### Transaction Fees & Cost Savings

Layer-2 scaling solutions are already delivering fee reductions on the order of ~80% -95% compared to Ethereum layer-1 transactions.

Network	Ethereum	ARBITRUM	OPTIMISM	<b>★ zkSync</b>	LOOPRING	6060
Payment Fee	0.32	0.02	0.05	0.02	0.01	0.05
Swap Fee	1.62	0.07	0.07	0.05	0.3	0.15
Cost Reduction vs Ethereum (Payment)	N/A	93.75%	84.38%	93.75%	96.88%	84.38%
Cost Reduction vs Ethereum (Swap)	N/A	95.68%	95.68%	96.61%	81.48%	90.74%

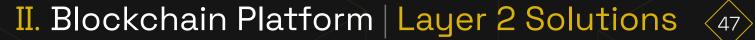
#### Key Takeaway

Optimistic Rollups currently dominate the Layer 2 landscape but general purpose ZK-rollups are coming and can become the preferred layer 2 solution as they offer faster finality and may also offer privacy features.

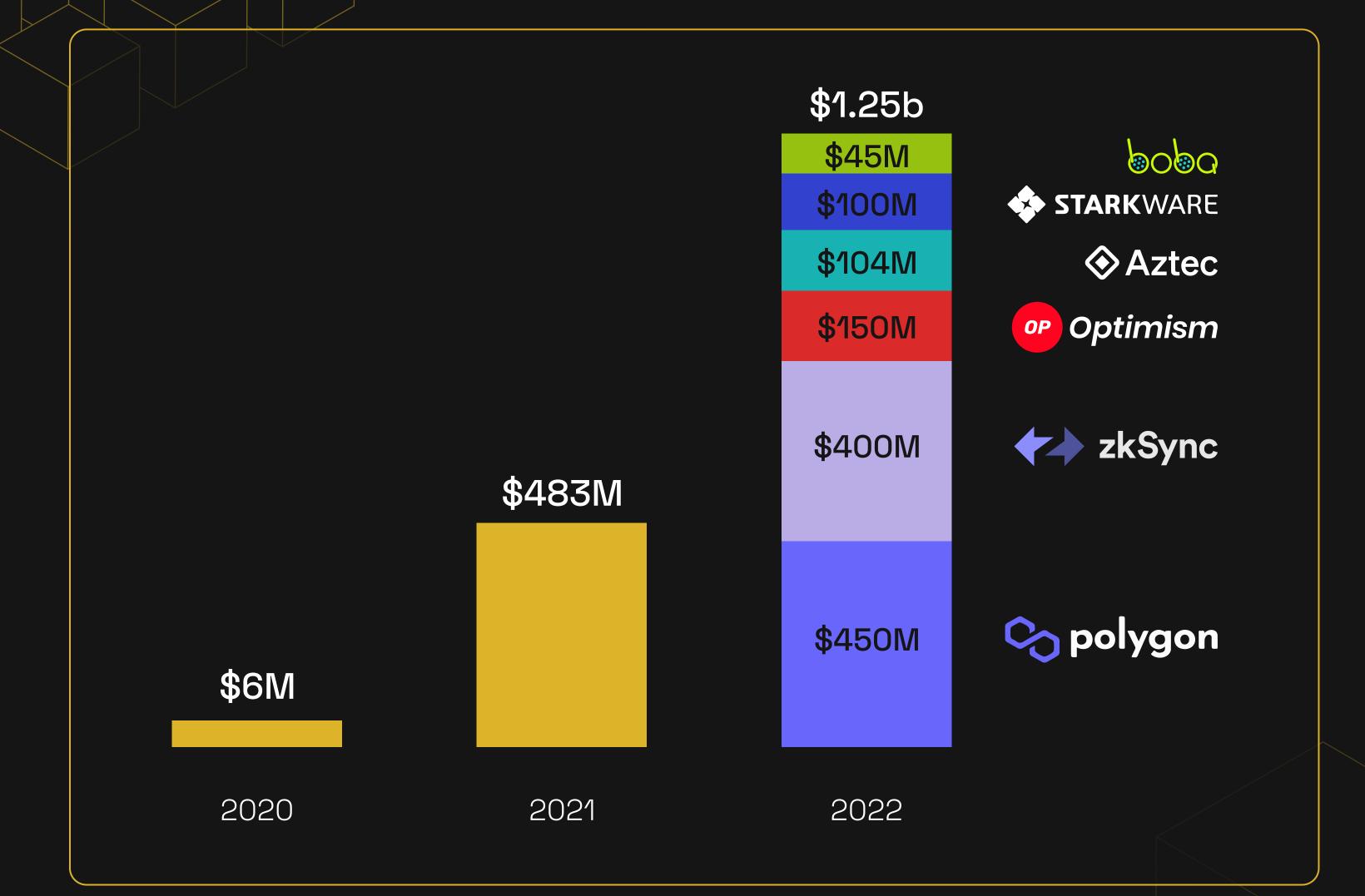








### Increased Investment into Layer-2 Technology



#### Overall

Layer-2 development organizations raised \$483 million in venture funding in 2021 and have already raised ~1.25 billion so far in 2022.

(Total funding amount of Layer 2 in 2022 triples than that of 2021)

#### Key Takeaway

Many are likely increasing headcounts and investing in their core protocol technology which could accelerate their ecosystem growth.

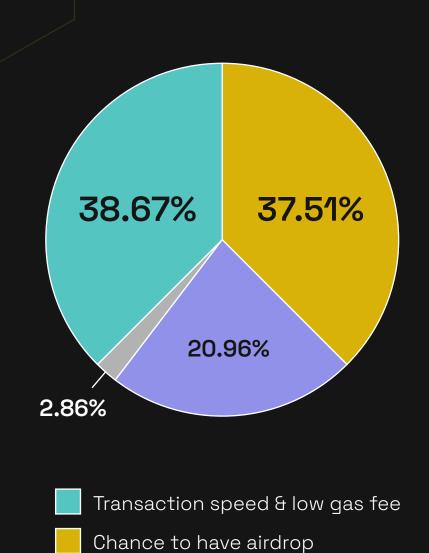
Over the coming months and years, all signs point to networks employing both Optimistic and ZK-Rollups seeing material adoption.

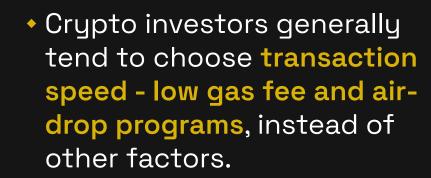




## Crypto User's Attitude Towards Layer 2 Scaling Solutions

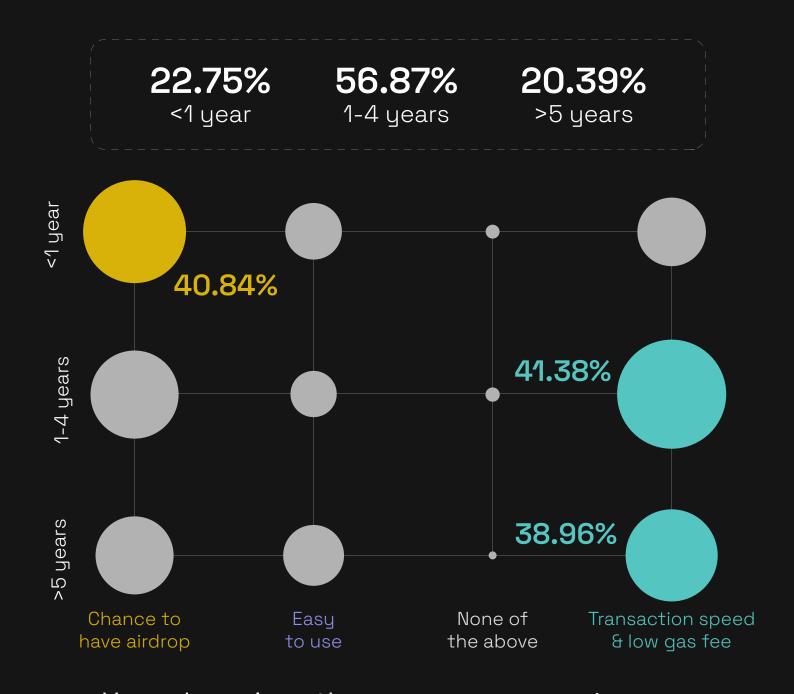
Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.



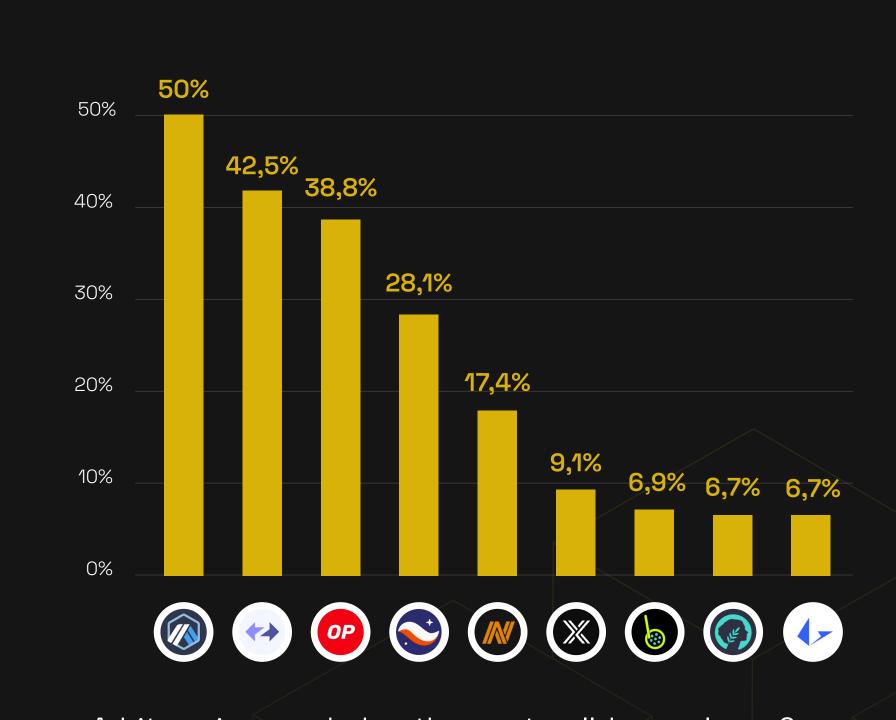


Easy to use

None of the above



- Users have less than one-year experience seems to prefer airdrop programs.
- Users that have over one-year experience expect both transactions speed - low gas fee and airdrop programs.



- Arbitrum is regarded as the most well-known layer 2 blockchain among generations.
- Besides Arbitrum, Optimism, Starknet and zkSync also account for a large percentage as these Layer 2 scaling solutions are highly awared among generations.





### 2023, the Year Layer 2 will take off

#### The future of Ethereum Scaling

- Layer 2 is the future of Ethereum scaling and the only safest way to scale Ethereum; while preserving decentralization. This is so core to the blockchain.
- Layer 2 scaling solutions increase the transaction speed; while reducing the gas fees. Moreover, they create new use-cases that otherwise would be impossible.
- Layer 2 scaling solutions are growing in popularity as users number; meanwhile increasing developer activity will further support in the soon future.

#### The Risks

- The growth of the layer-2 Ethereum scaling could accumulate revenues away from the Ethereum mainnet.
- This migration could potentially lower staking yields for Ethereum validators, which eventually cause risks to the security of the entire Ethereum network.
- Fraud proofs could be occured within a set time. Therefore, withdrawals from Layer 2 to Layer 1 could take a longer time than expectation.
- Finally, as the number of Layer 2 scaling solutions is increasing, it is difficult for users and even developers to choose the right destination for focusing on.











Nova





Metis





Loopring





**ImmutableX** 

rhino.fi

Boba Network







### Conclusion & Projection

2022 has been a challenging year for the whole crypto market and blockchain platforms are not exceptions, but it has also been a time for Layer-1 and Layer-2 projects to demonstrate their capabilities and forge their own development paths. Layer-2 technologies, in particular, have shown strong signs of adoption and product-market fit.

Looking to 2023, it is likely that both Layer-1 and Layer-2 blockchain platform will see significant growth and development, with the emergence of new blockchain-based applications and the wider adoption of blockchain in other industries. However, it is important to remember that Rome wasn't built in a day, and the future of finance isn't going to be built overnight, therefore, patience and perseverance are required.

This trend towards the importance of Layer-1 and Layer-2 technologies is expected to be booming in the coming years and beyond, as they become increasingly integrated into the broader ecosystem.









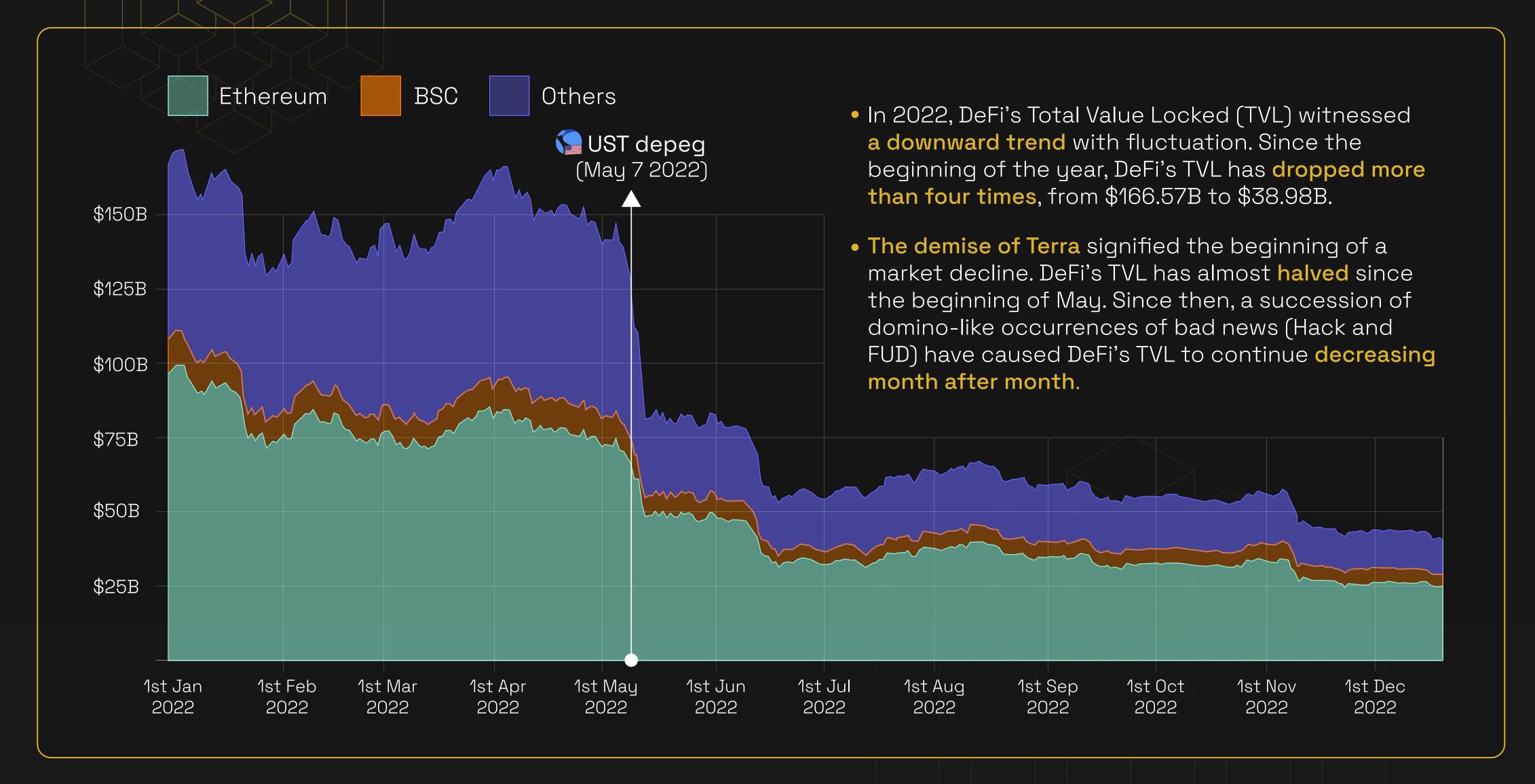
# State of DeFi

Looking back DeFi in 2022.

Crypto Report 2022



### Total Value Locked of DeFi in 2022



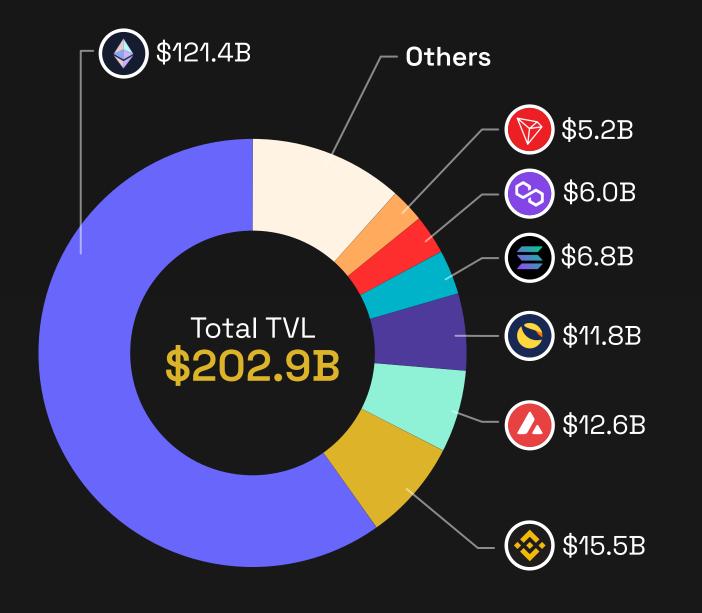


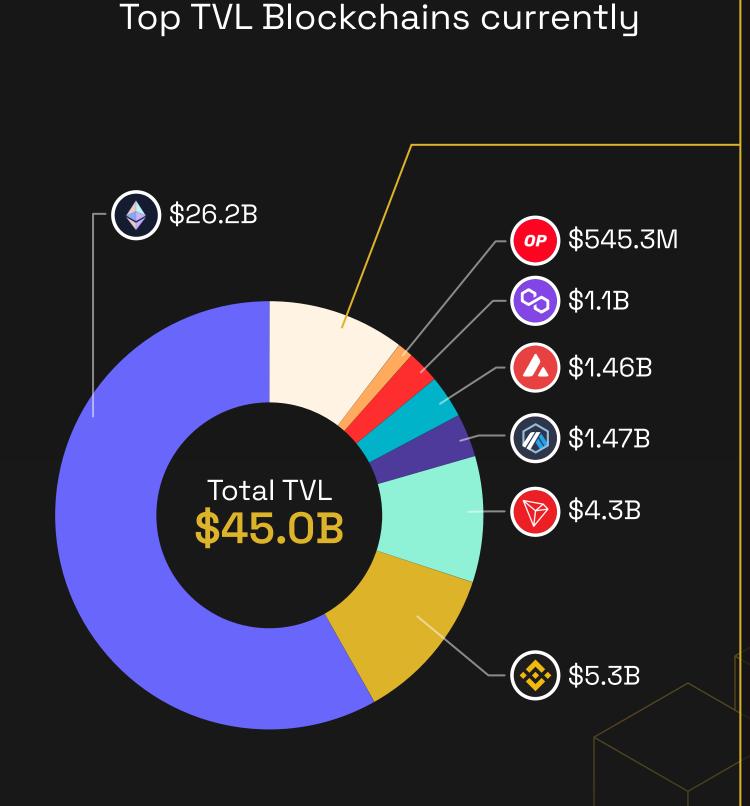


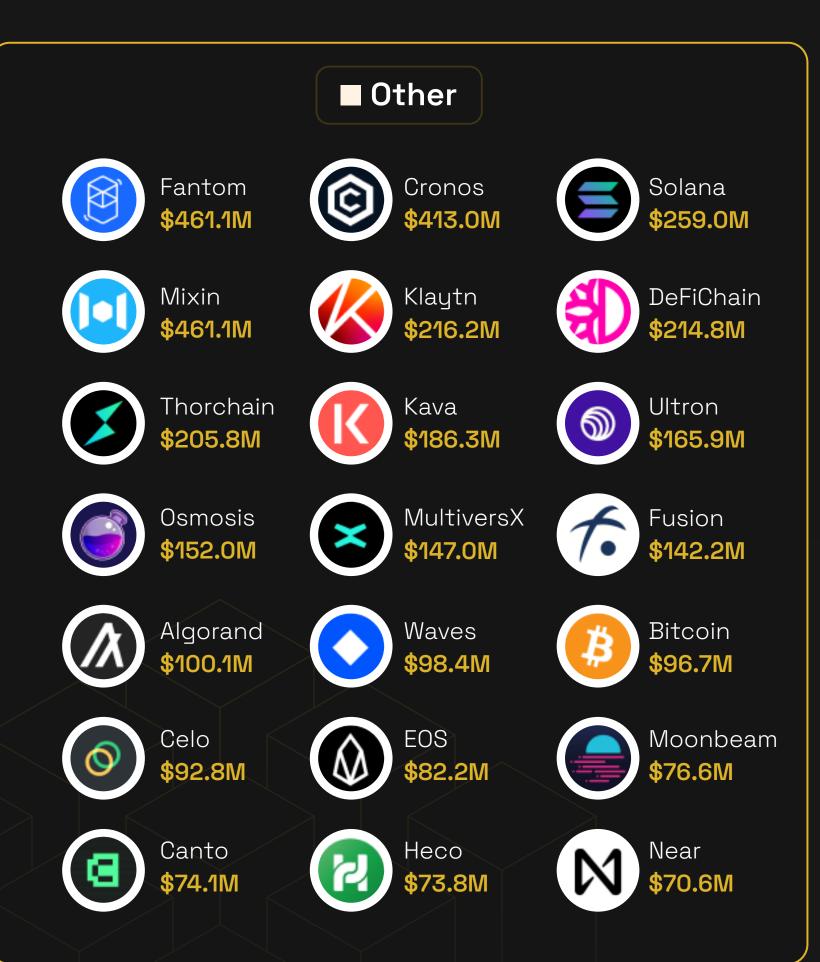


### TVL of Multiple Blockchains Overview

Top TVL Blockchains at the beginning of January 2022







In 2022, Ethereum, BSC, and Tron are the leading blockchains. In which, Tron has climbed four positions to reach third place. Meanwhile, Terra Classic (formerly Terra) and Solana fell out of the top and were replaced by Arbitrum and Optimism.

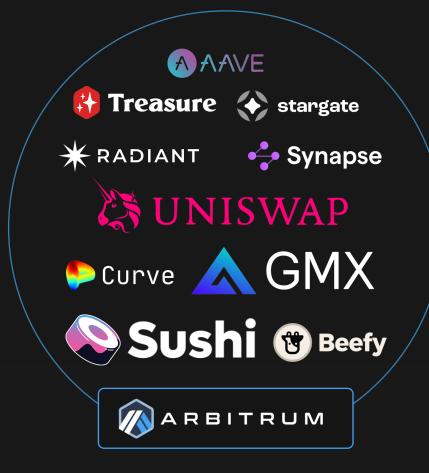


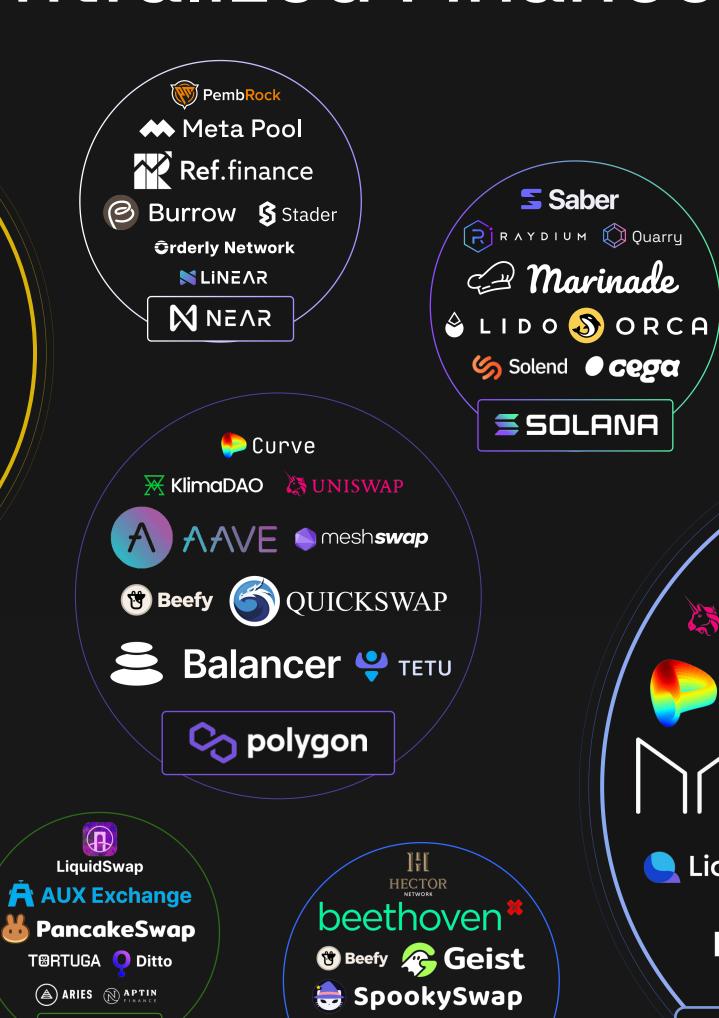




### Decentralized Finance (DeFi) Landscape

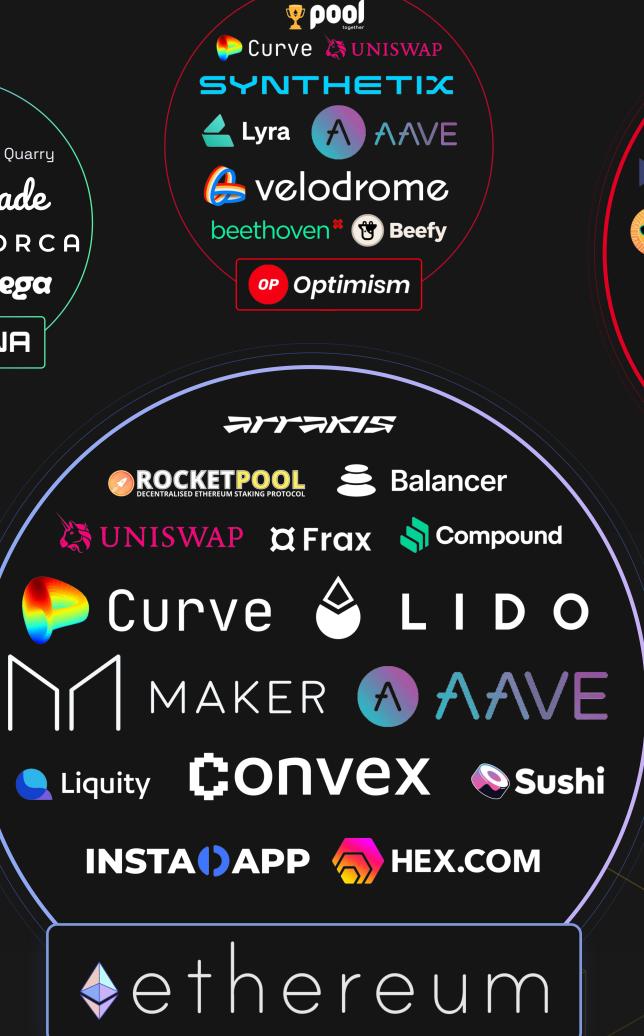






Curve A FHM

APT⋛S













### DeFi Comparison 2021 and 2022

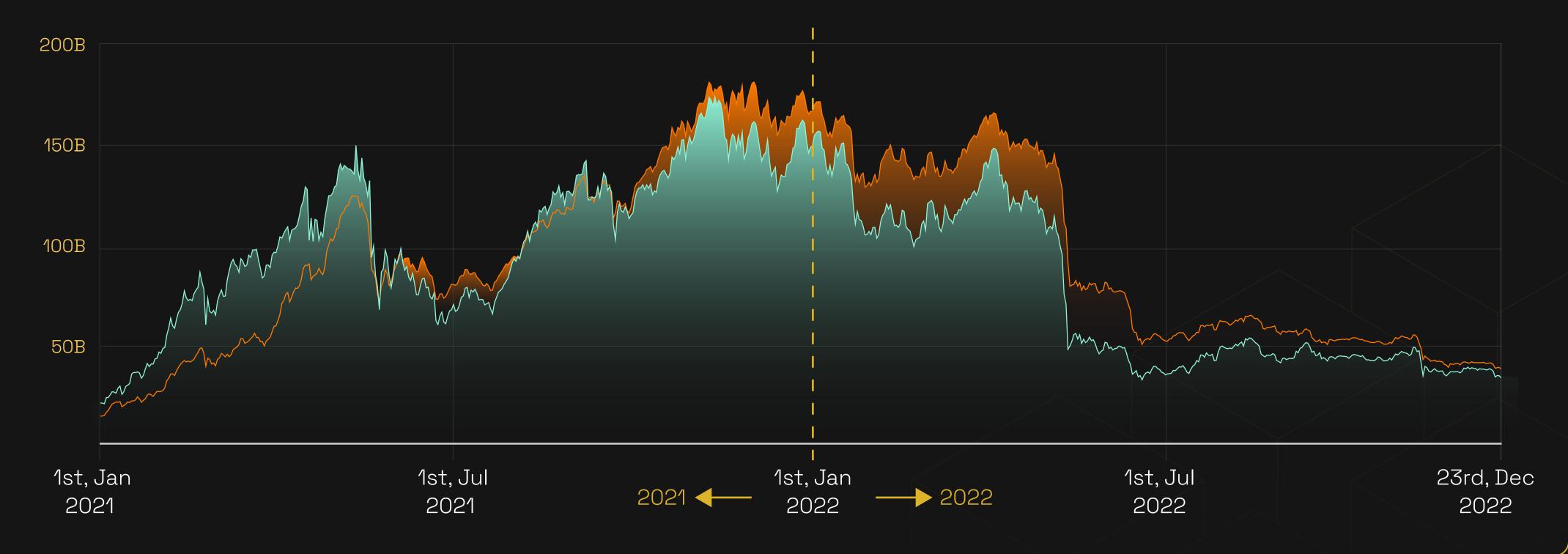
TVL and Market Cap from 2021 to 2022

TVL and Market Cap Have a Correlation.

- If **2021** is a **prosperous** year for DeFi, then **2022** is a **tough** year.
- Market Cap climbed about 7 times, while TVL increased nearly 11 times in 2021. In contrast, TVL and Market Cap both declined by more than **4 times** in 2022.

Market Cap TVL

• In 2022, macroeconomic news (CPI, interest rate) begins to have a significant impact on the whole cryptocurrency market, including DeFi.



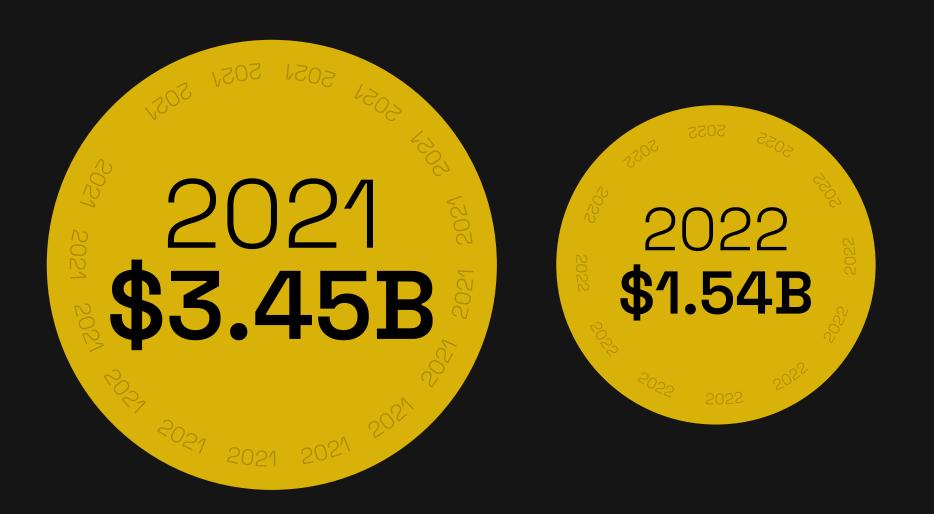






### Revenue and Fundraising of DeFi

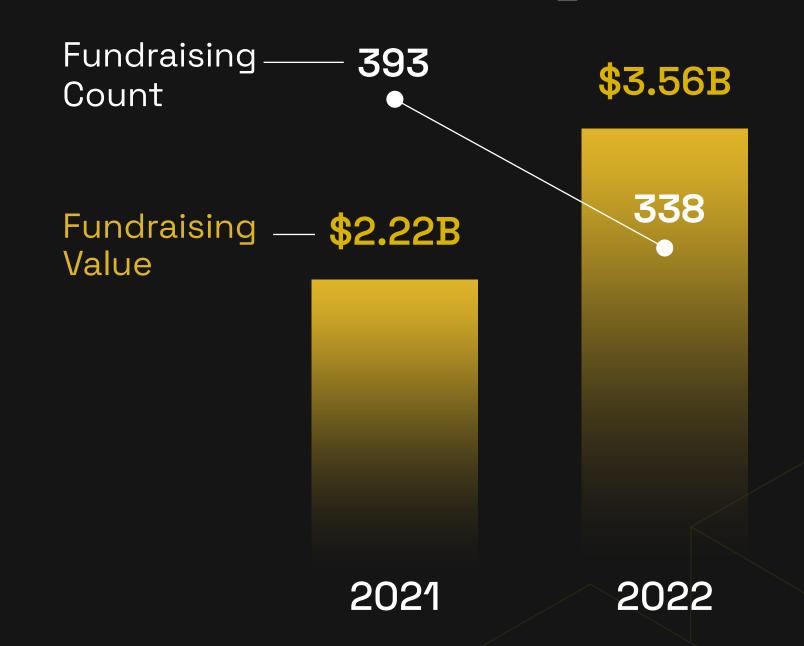
#### Revenue of DeFi



#### • 2022 has been the "Year of the Black Swan" in the crypto market, with numerous DeFi hacks and big failures causing users and investors to lose trust in DeFi.

• Additionally, negative macroeconomic news (CPI, interest rate), war fears, and unfavorable BTC and crypto market volatility impacted DeFi's 2022 revenue and fundraising.

### Fundraising of DeFi



- In comparison to 2021, DeFi's revenue has plummeted by \$1.91B (55%).
- Meanwhile, although fundraising count declined in 2022, fundraising value surged dramatically from \$2.22B to \$3.56B, a 60.36% increase.









### Revenue of Top 10 DeFi DApps in 2022

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
UNISWAP	133	85	87	85	86	63	50	50	42	33	55	13
A AAVE	36	23	20	22	12	5	5.5	15	10	4	6	2
Sushi	48	20	15.5	14	15	7	5	6	4	4	5	2
Curve	22.5	11	12	11.5	20	8	4.6	3.7	3.2	2.2	6	1.1
<b>₩</b> PancakeSwap	17.8	12.3	13.2	14	14.8	6.1	4.7	6.5	4.9	4.9	6.6	0.8
dYdX	39	18	16	14	9	6	8	8.5	6.3	4	7	2
Compound	18	11	12	10	4	2	1.8	2	2	2	1.9	0.7
N/ MAKER	11	7.3	6.7	6.7	4.7	2.6	1.5	1.6	1.1	0.9	1	0.5
1 linch	2.5	1.8	1.8	1.9	8.3	1.5	0.8	0.8	0.3	0.5	0.7	0.1
SYNTHETIX	1.4	1.3	1.8	3.1	1.5	9	7.4	4.6	3.5	0.9	1.2	0.5
▲ GMX	3	2.2	2.6	2.3	2.6	1.8	1.9	2.7	3.9	2.4	5	1.6

Data is in millions

Top Revenue of the Month

- The top revenue projects all have one thing in common: building on Ethereum combined with multichain.
- Although there are not many TVLs and users, derivative projects such as DYDX, Syntheticx, and GMX have impressive revenue.

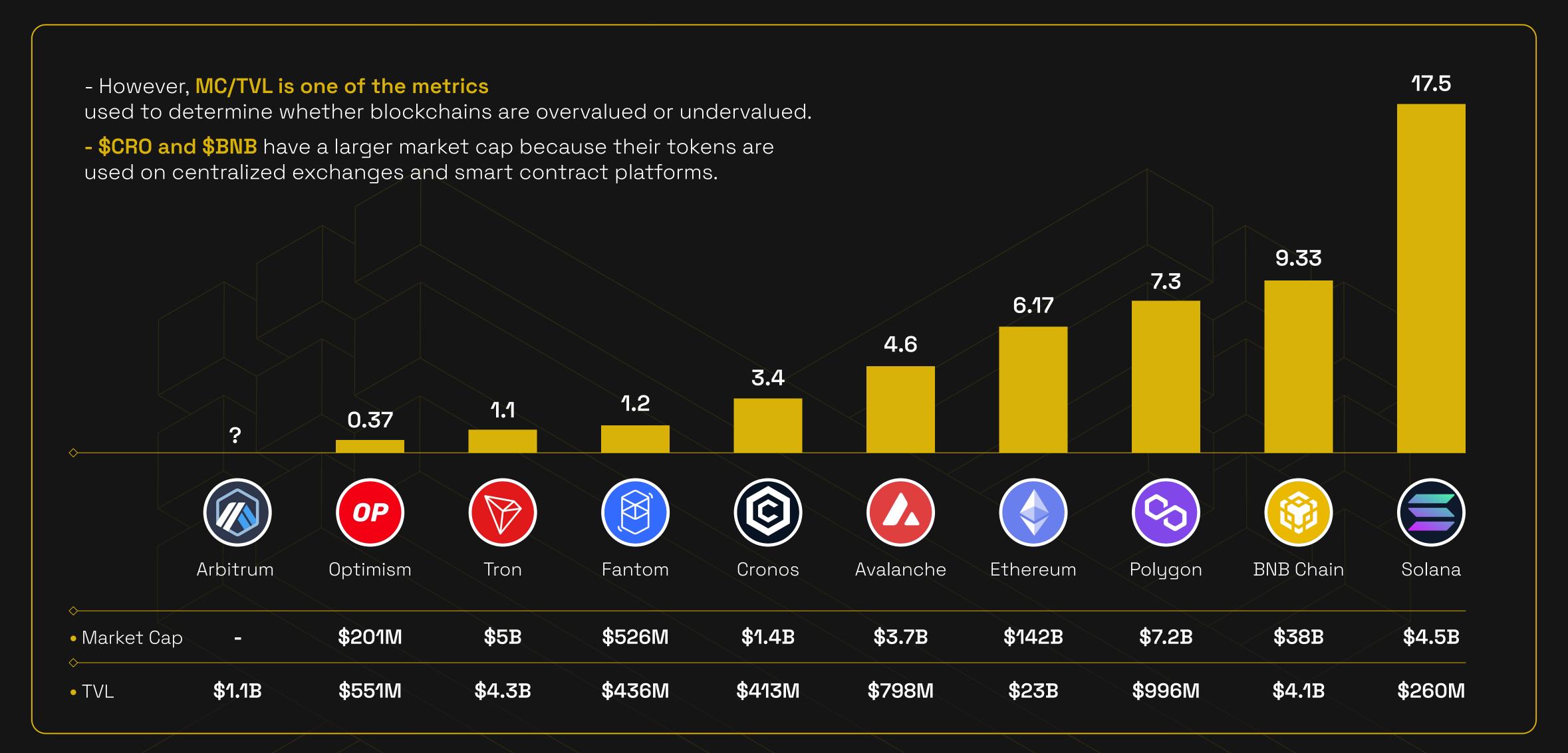
The data was snapped on Dec 18th 2022







### Market Cap/TVL of Blockchain Platform Comparison



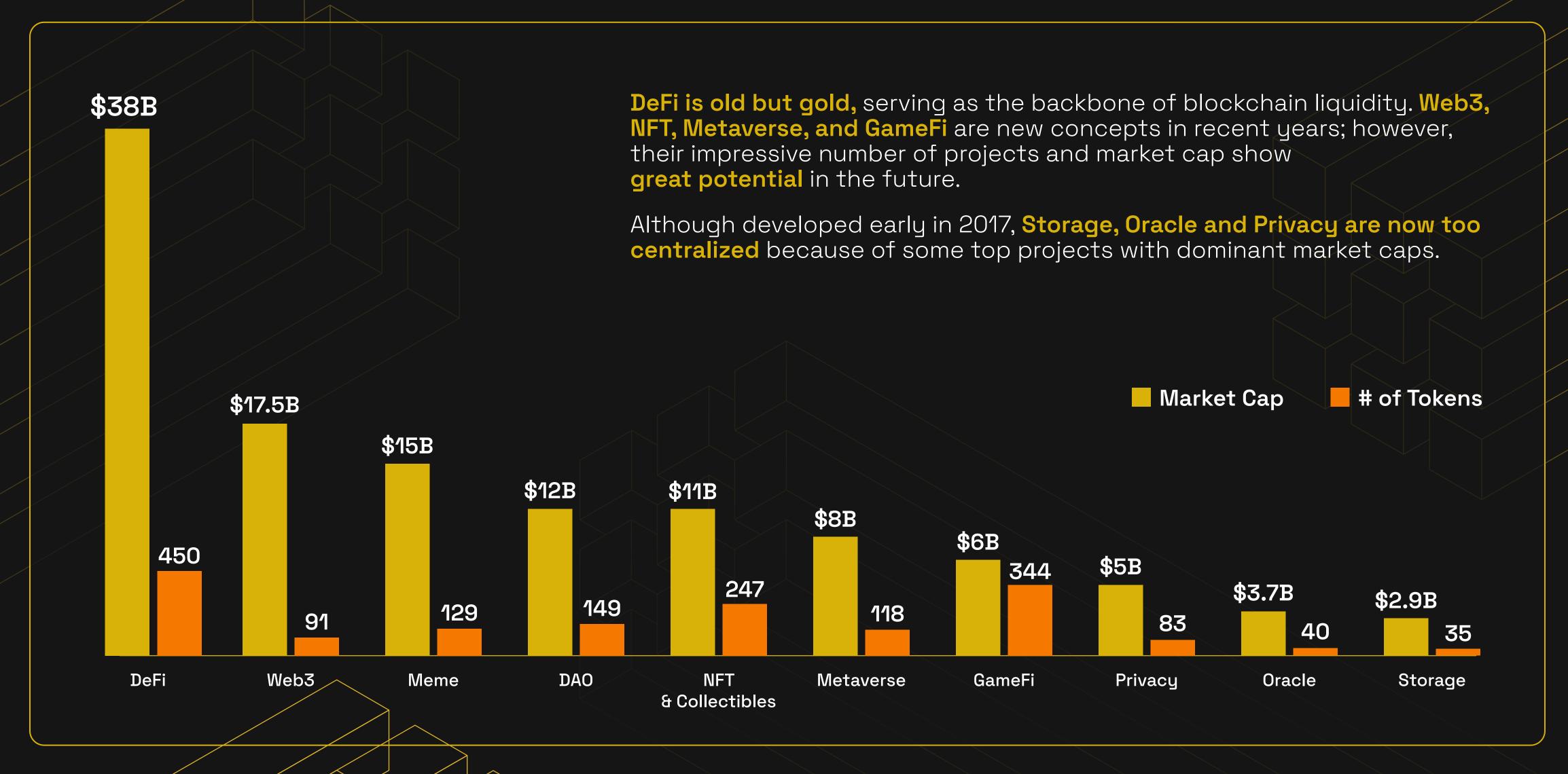








### Market Cap of DeFi & Other Segments Comparison

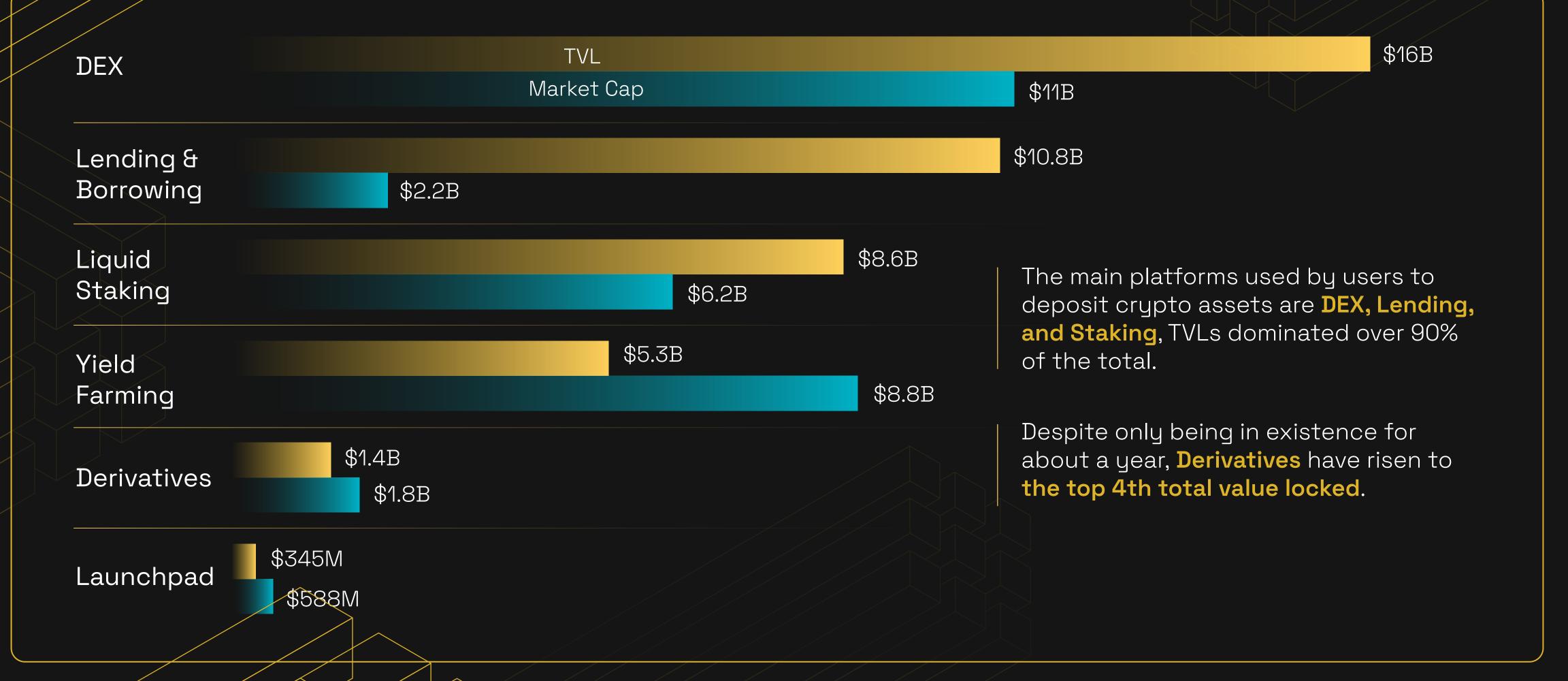








## Market Cap of Industry Groups Under DeFi Sector







### Top Dominant Protocols by TVL on Blockchain Platforms

(TVL includes staking)

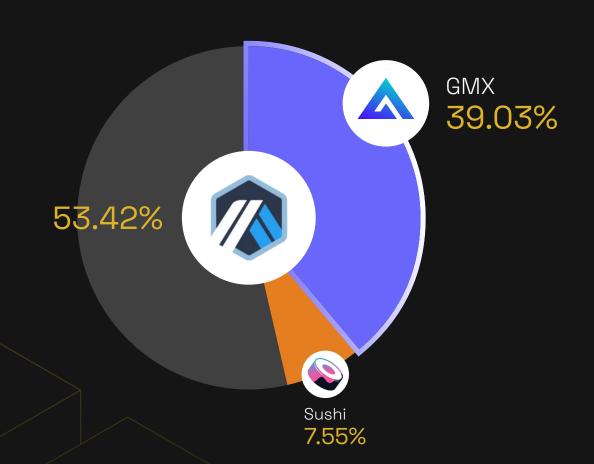
Others MakerDA0 **25.84**% **DEX & Lending** have the most market 48.78%

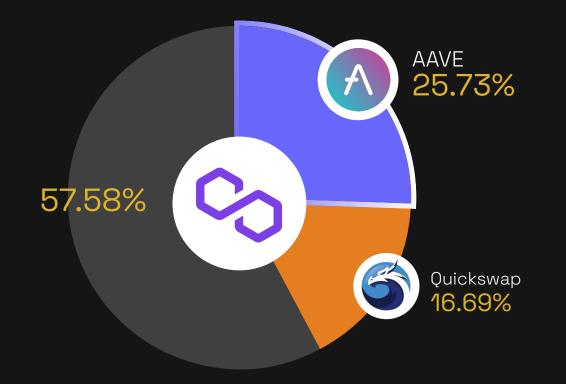
PancakeSwap 53.19% 30.94% JustStables 22.96% JustLend 15.87%

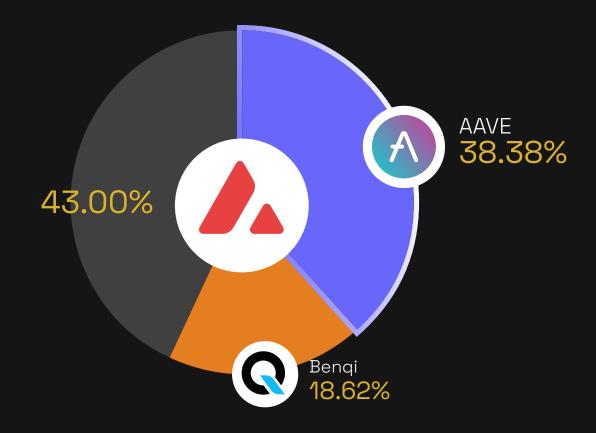
Polygon and Ethereum are more decentralized since the projects on these blockchains have balanced market shares. Each of their top projects represents less than 30%. For example, MakerDAO (Ethereum) 25.84% and AAVE (Polygon) 25.73%

share in each blockchain platform.

In some other ecosystems, the TVL of the top project accounts for more than 50%. This demonstrates the centralization of these blockchains.





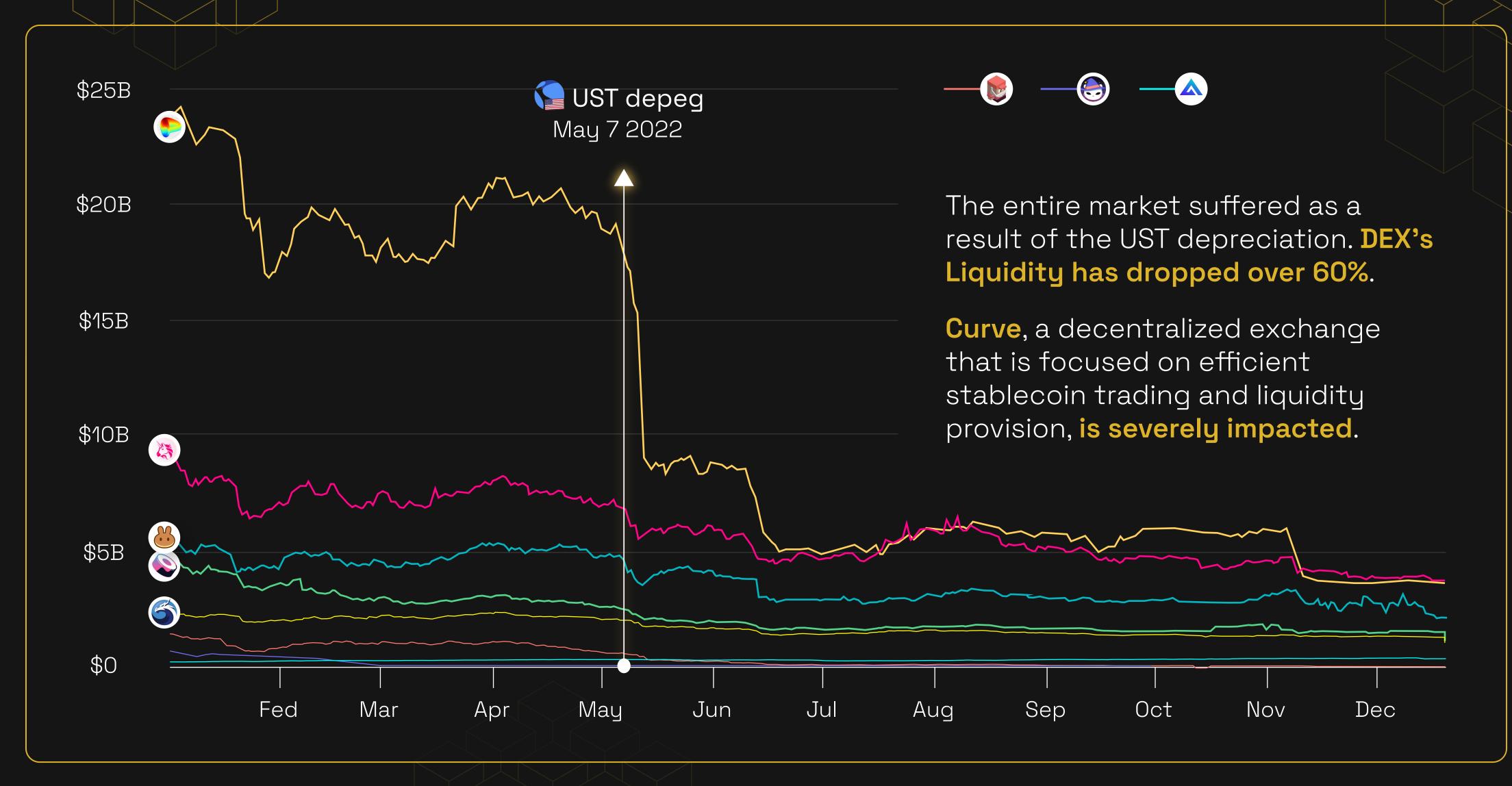








### DEX's Liquidity by Protocol



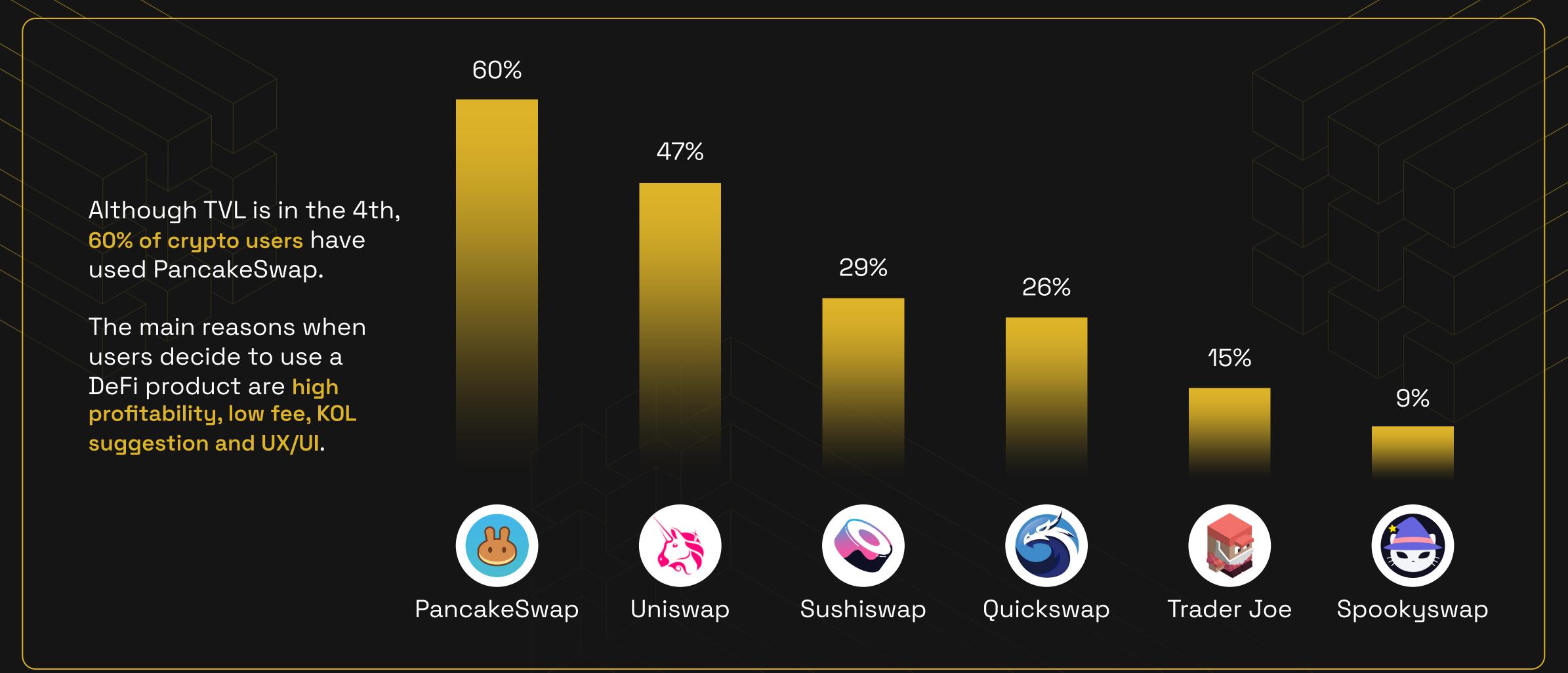






### Top Dexes Preferred by Users in 2022

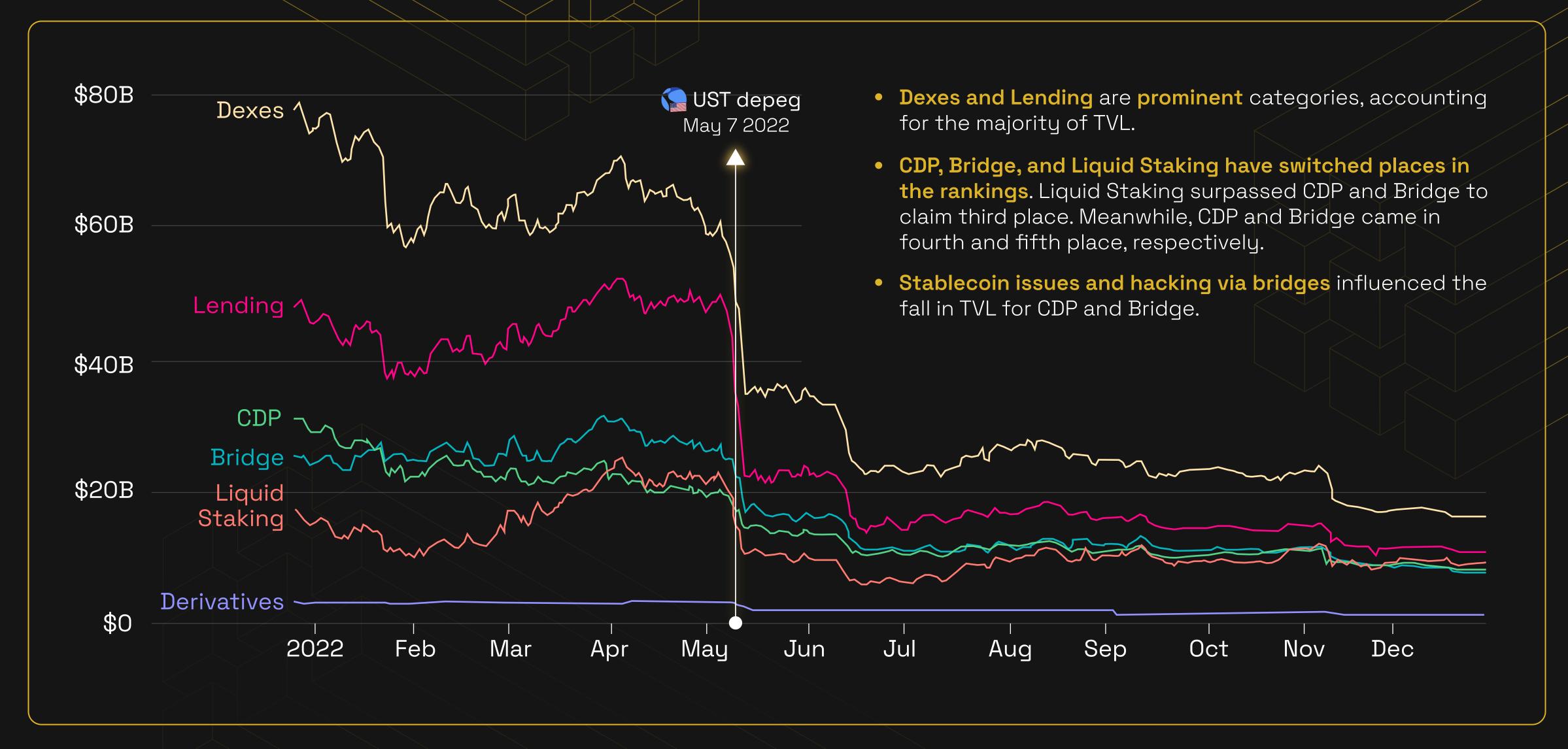
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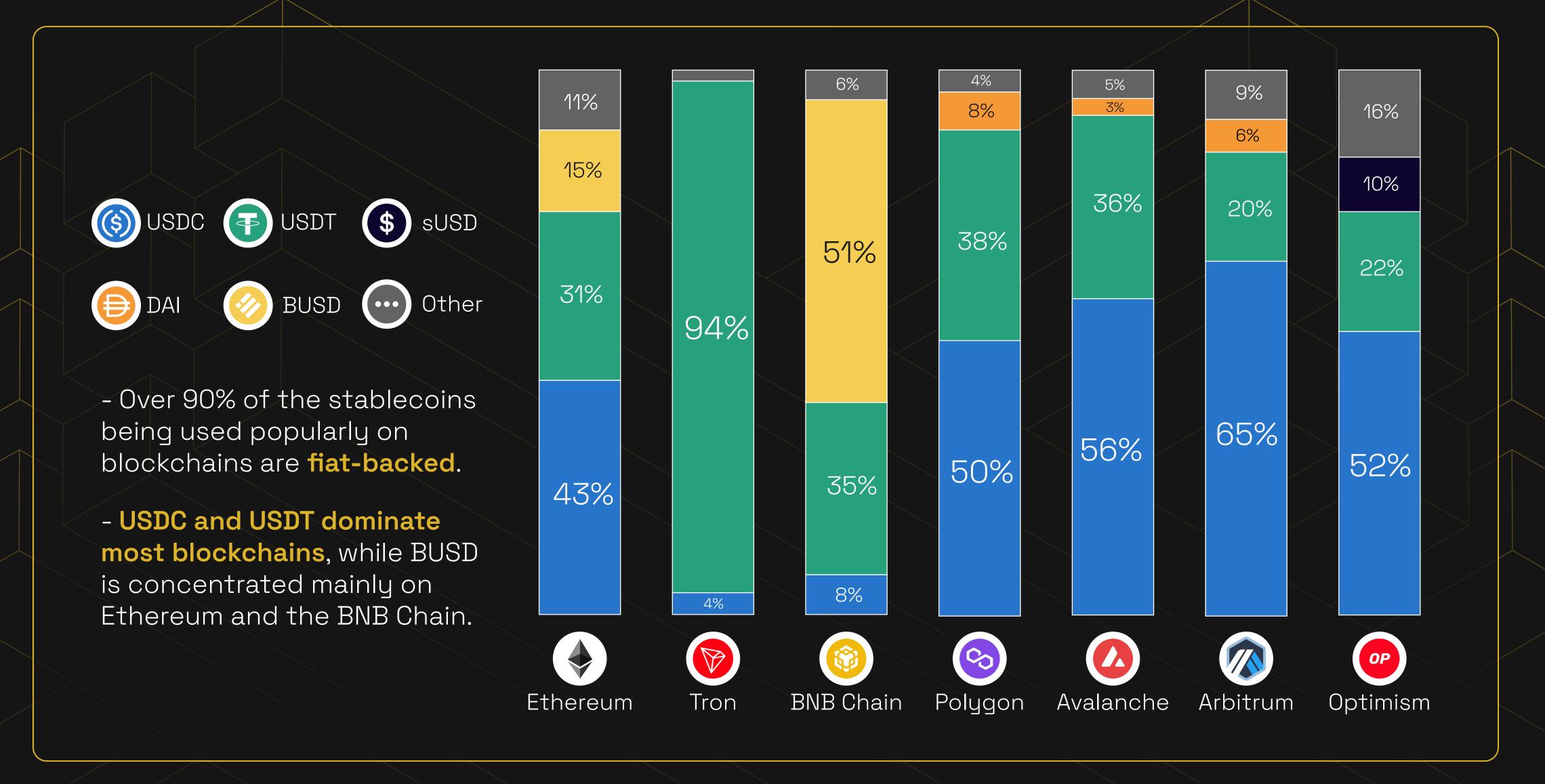
### Total Value Locked of DeFi by Category







### Dominance of Stablecoin on Blockchain Platforms

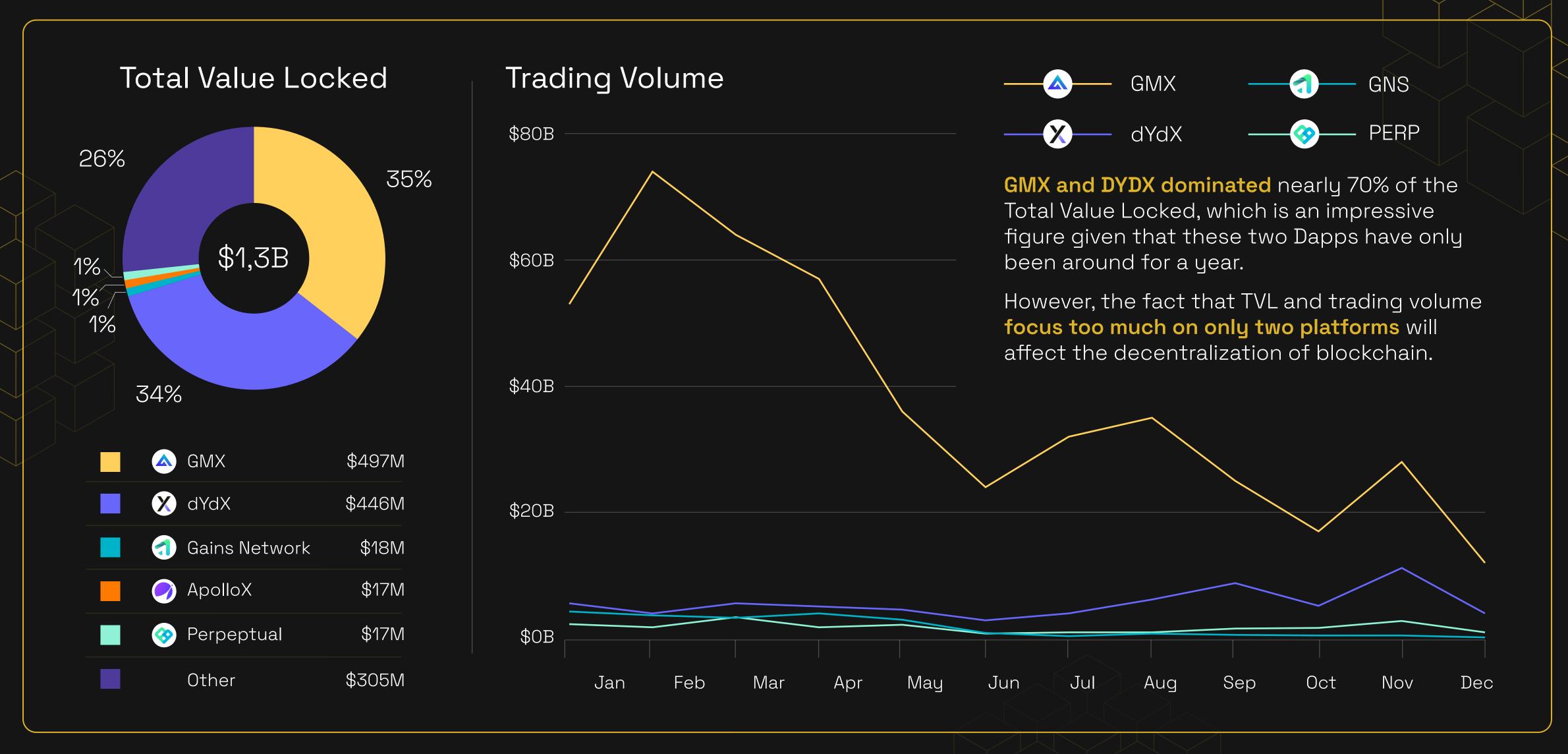








### Top Derivative Protocols with Trading Volume & TVL









### Limitation and Solution of DeFi

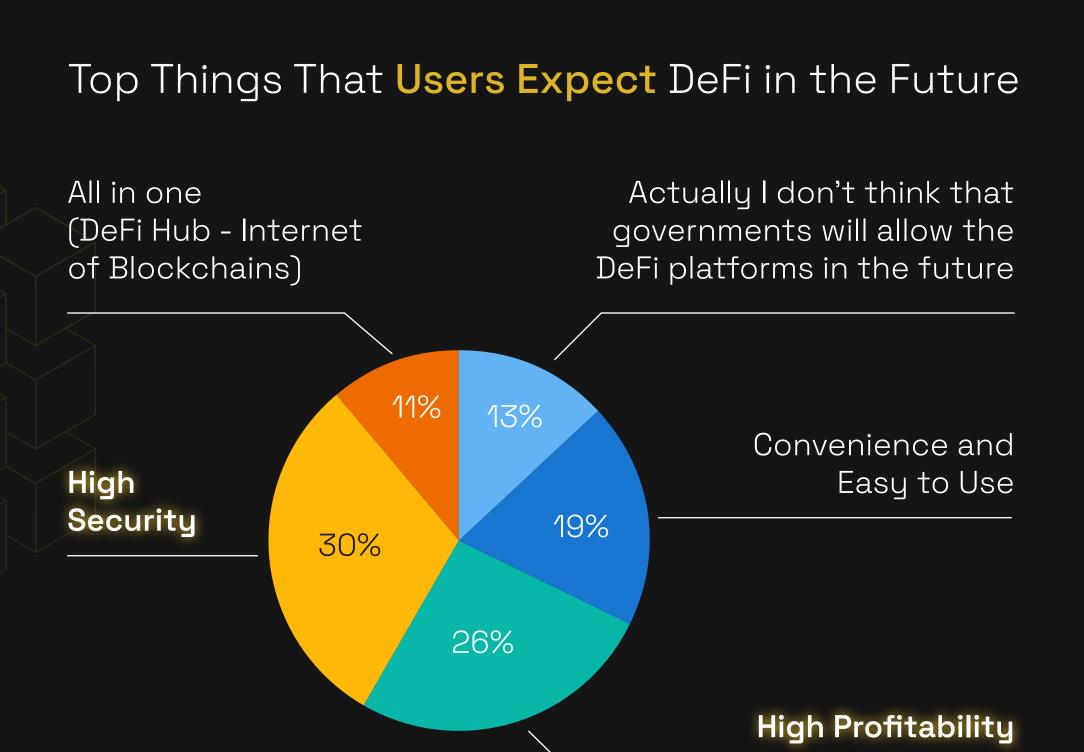
Limitations	Solution
Scalability	<ul> <li>Other Layer-1 Blockchains</li> <li>Layer-2 solutions and sidechains</li> </ul>
Liquidity	<ul> <li>Fiat on-ramps/off-ramps solutions</li> <li>Resolve liquidity fragment via Cross-chain bridges/Multichain</li> <li>Attract liquidity via incentives</li> <li>Deepen NFT liquidity</li> </ul>
Centralization	• Decentralized Autonomous Organizations (DAOs)
Capital Efficiency	<ul> <li>Generate real revenues</li> <li>A Reputation System (or Credit System) to maximize DeFi capital</li> </ul>
Regulation	<ul><li>Know Your Customer (KYC)</li><li>User protection</li></ul>
Lack of Insurance	• DeFi insurance as a vital tool for protecting your digital assets



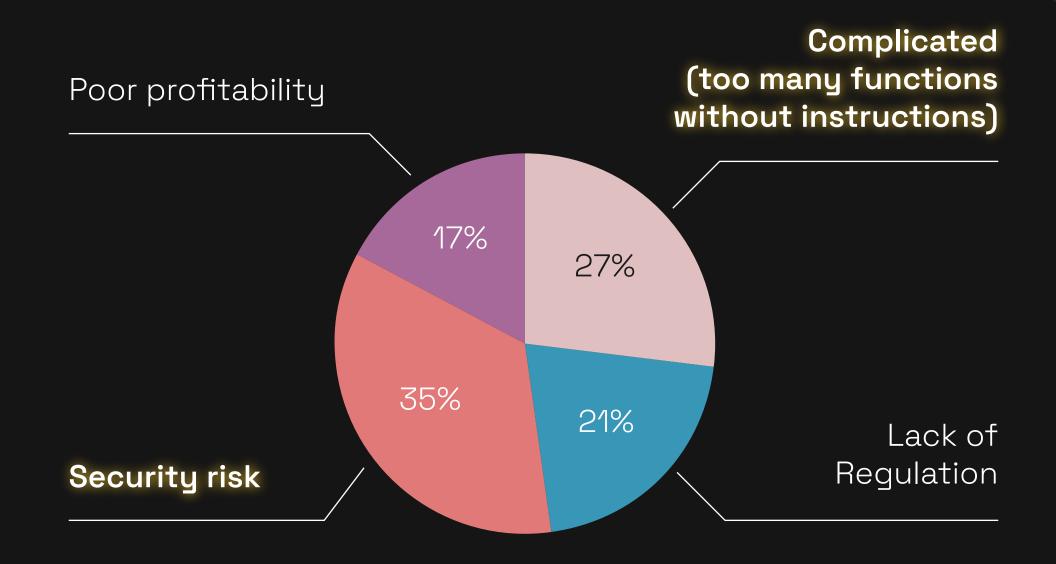


### User Experiences with DeFi Protocols

Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.



## Top Things That Users Feel Uncomfortable about current DeFi Projects



- 1 in 10 crypto investors with 1-4 years of crypto experience is skeptical about DeFi regulation of government in the future.
- More than half (56%) of DeFi investors expect high security and profitability.
- Most users (62%) are concerned about DeFi security & complications.





### Potential DeFi Landscape

#### DEX















Equalizer

Exchange



Wombat Kyber Swap Meshswap

SpiritSwap

Velodrome



LeverFi

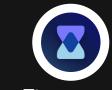


Lending





Venus Protocol V4



Timeswap



#### Liquid Staking



9







Disclaimer:

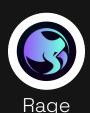
#### Yield



Compound



Driver



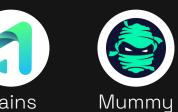


#### Derivatives





Finance



Gains Network

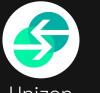


XolloqA Perpetual Protocol



Network





#### Blockchain Platforms





Sui Network

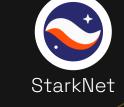
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ZK

Platforms

**+** 

zkSync









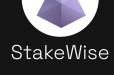


Curve



pStake





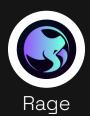
own research when making a decision.

(\$)



Finance







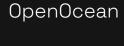
This report does not contain investment advice or recommendations. Every

investment and trading move involves risk, and readers should conduct their

#### Yield













### Conclusion & Projection

While decentralized finance (DeFi) has seen significant growth in recent years, 2022 may prove to be a challenging year for the industry. The rapid pace of innovation in DeFi has also brought with it a range of risks, such as security vulnerabilities, requlatory uncertainty, and liquidity issues. These challenges may lead to setbacks and difficulties for the DeFi ecosystem in the short term.

However, looking to 2023, DeFi may present a golden opportunity for those who are able to navigate the risks and challenges. As the technology matures and becomes more secured and user-friendly, DeFi could potentially become a more viable and attractive option for a wider range of individuals and institutions. Additionally, as the industry continues to evolve and innovate, there may be new opportunities and use cases for DeFi to explore.

Furthermore, the NFT market, which is already worth several billion dollars, may benefit from DeFi by increasing liquidity. This market is crucial to the financialization of NFTs and may accelerate the tokenization of real-world assets into non-fungible tokens.

Finally, it is important to note that the future of DeFi is still uncertain and subject to a range of unpredictable factors. As with any new and rapidly evolving technology, the risks and rewards before participating in the DeFi ecosystem should be taken into careful consideration.





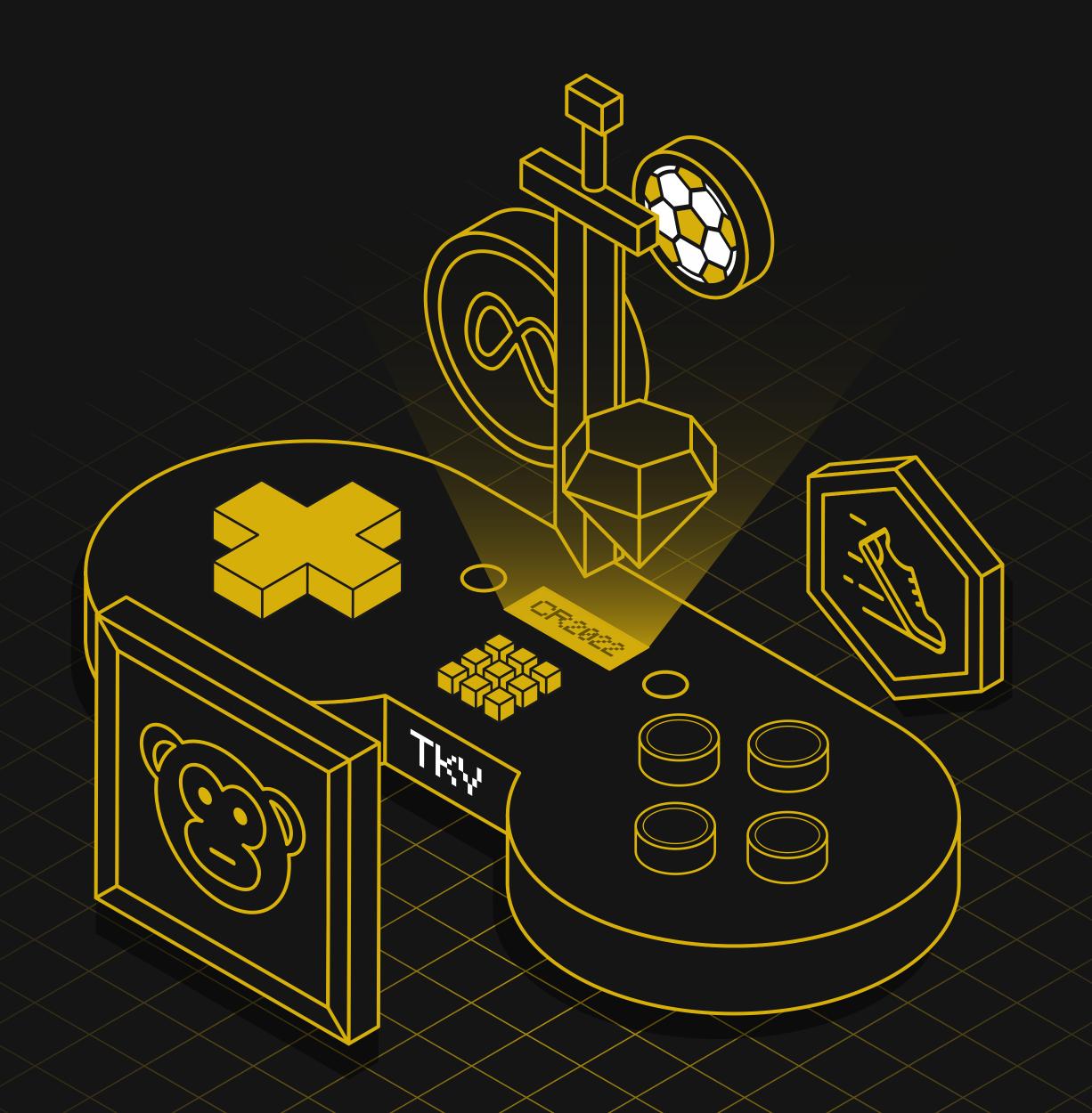




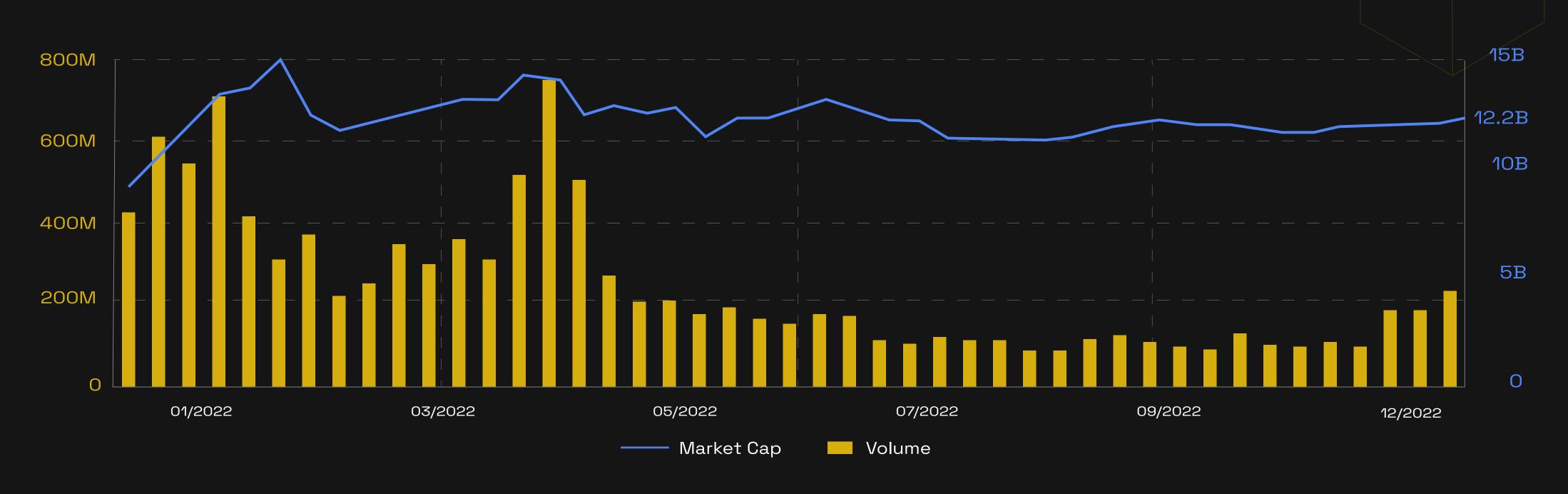
# NE E Web3 Gaming

Looking back NFT - Web3 Gaming in 2022 and Transition of Web3 Gaming.

Crypto Report 2022



### Overall NFT Market



In 2020, the NFT market was valued at \$100 million. By late 2022 this had increased by 122x to \$12.2 billion.

NFT performed incredibly in the first quarter of 2022, peaking over \$800 Million in trading volume in a single week. However, the rest of the year left with gloom.

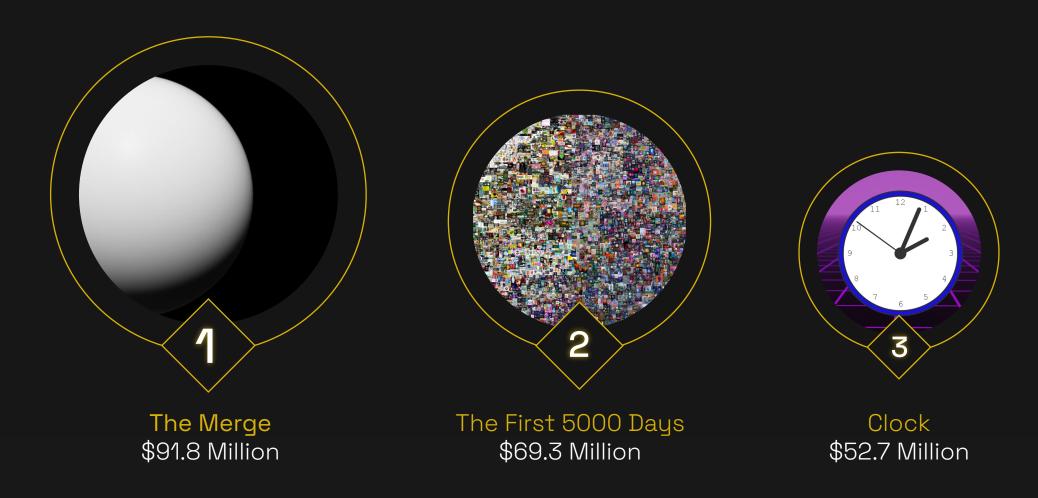
Since Facebook changed the name to Meta, NFT and Metaverse became trending. The demand for NFT rocketed and reached the highest over 150K buyers and seller weekly. At the end of 2022, sellers are taking over the market with gloom (Active buyers and seller decline almost half from peak).







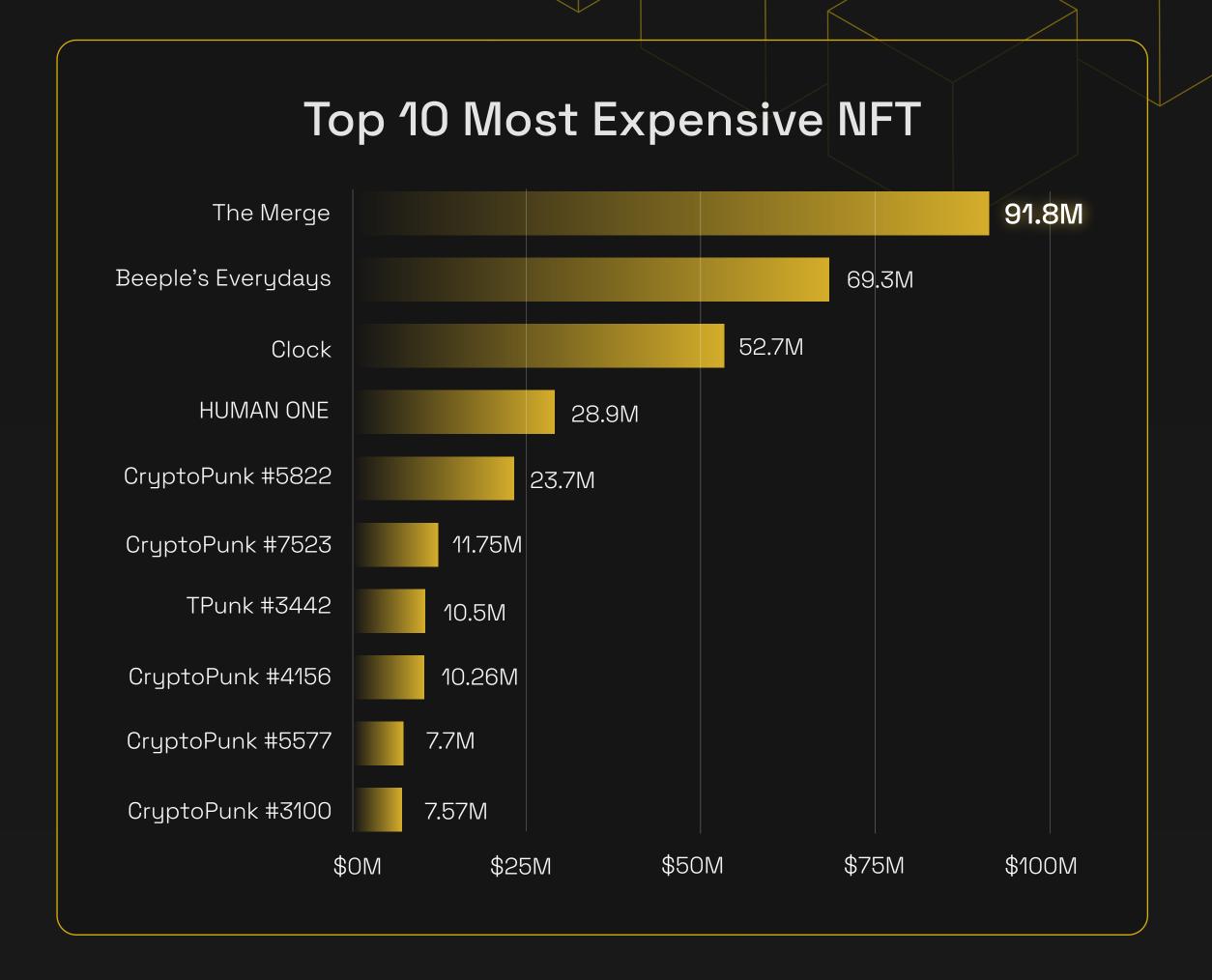
### All of Top 10 Most Expensive NFT Are Sold in 2021 - 2022



### Top 3 Most Expensive NFT

The Merge, created by an unknown artist nicknamed Pak, is the most expensive NFT ever sold, with a hefty price tag of \$91 million.

NFT The Merge consists of 312,686 pieces belonging to a set of interconnected blocks with 28,983 collectors.













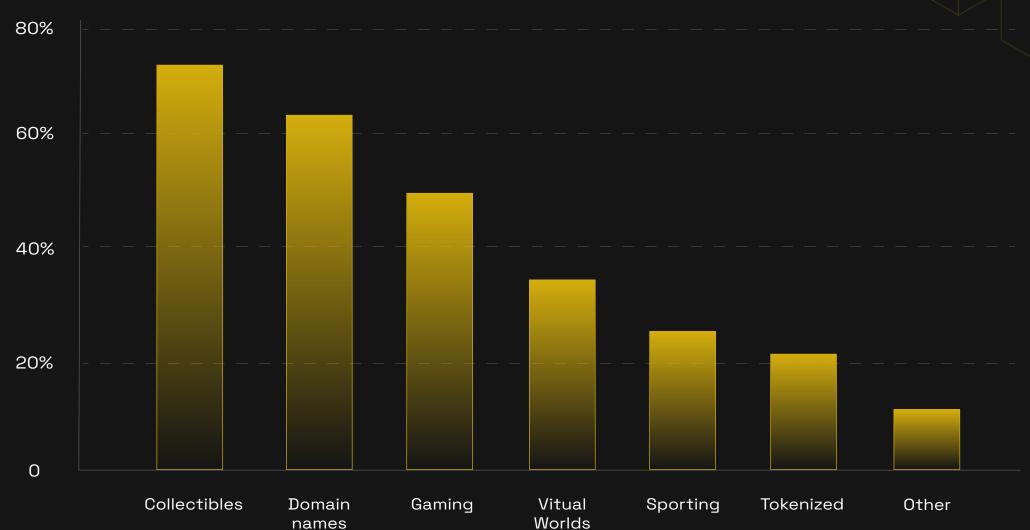
### NFT User's Perspective

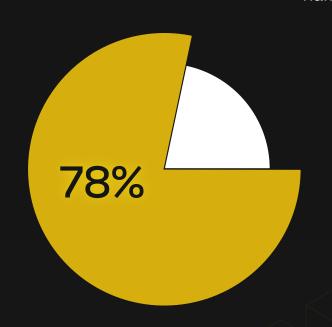
Survey conducted Dec 15-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.



Based on on-chain data, there are 1.88M active traders in the NFT market in 2022 with the decrease in the trend.

Although a gloomy market and traders are leaving, total **NFT holders** increase from 1.5M to 3.7M ▲ (Rising ~ 250%). Collectible is the most favorite reason for using NFT (75%), Gaming and Domain Name are the second and the third respectively.





#### 4/5 NFT users

still have faith in the future of NFT even with the significant decline in 2022.







### NFT Collections in 2022

Survey conducted Dec 15-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

75%

Will definitely buy NFT in the future



Is depends on the situation



Refuse to buy an NFT in the coming years



#### Bored Ape Yacht Club

#### \$1.57 billion

Bored Ape Yacht Club amassed more than \$1.5 billion in deals as excitement kept the collection going through most of 2022.



#### CloneX

#### \$600.5 million

The vibrant, anime-inspired collaboration between the Nike-owned Web3 studio RTFKT and popular artist Takashi Murakami, has continued to grow this year, producing slightly over \$600 million in trading volume.



#### Mutant Ape Yacht Club

#### \$1.14 billion

Despite the significantly lower average costs for this set, Mutant Ape Yacht Club managed to surpass \$1.1 billion in sales this year.



#### CryptoPunks

#### \$575.2 million

Even Punks were free to mint at launch, five years later, they still topped half a billion dollars worth of annual trading.



#### Otherside

#### \$1.1 billion

Otherside is easily the largest new NFT launch of 2022, with the initial mint and secondary sales producing \$561 million in value within 24 hours.



#### Doodles

#### \$391.6 million

Doodles has generated over \$391 million in secondary trading activity this year, with a high of \$122 million in January.



#### Azuki

#### \$849.9 million

Azuki launched in January and prospered for months until the NFT market imploded in May, amassing around \$850 million worth of trading to date.



#### Sorare

#### \$318.1 million

Despite falling NFT price, Web3 fantasy soccer game Sorare maintained pretty constant sales throughout 2021, eventually totaling roughly \$318 million in trade volume so far this year.



#### Moonbirds

#### \$613.4 million

Moonbirds, a collection of 10,000 pixel owl avatars that swiftly produced \$280 million in minting and trading within two days of launch.



#### **Axie Infinity**

#### \$291.1 million

Axie churned up billions of dollars in trading in 2021 as its token awards enticed millions of participants to acquire NFTs and participate, but progress stalled in 2022.

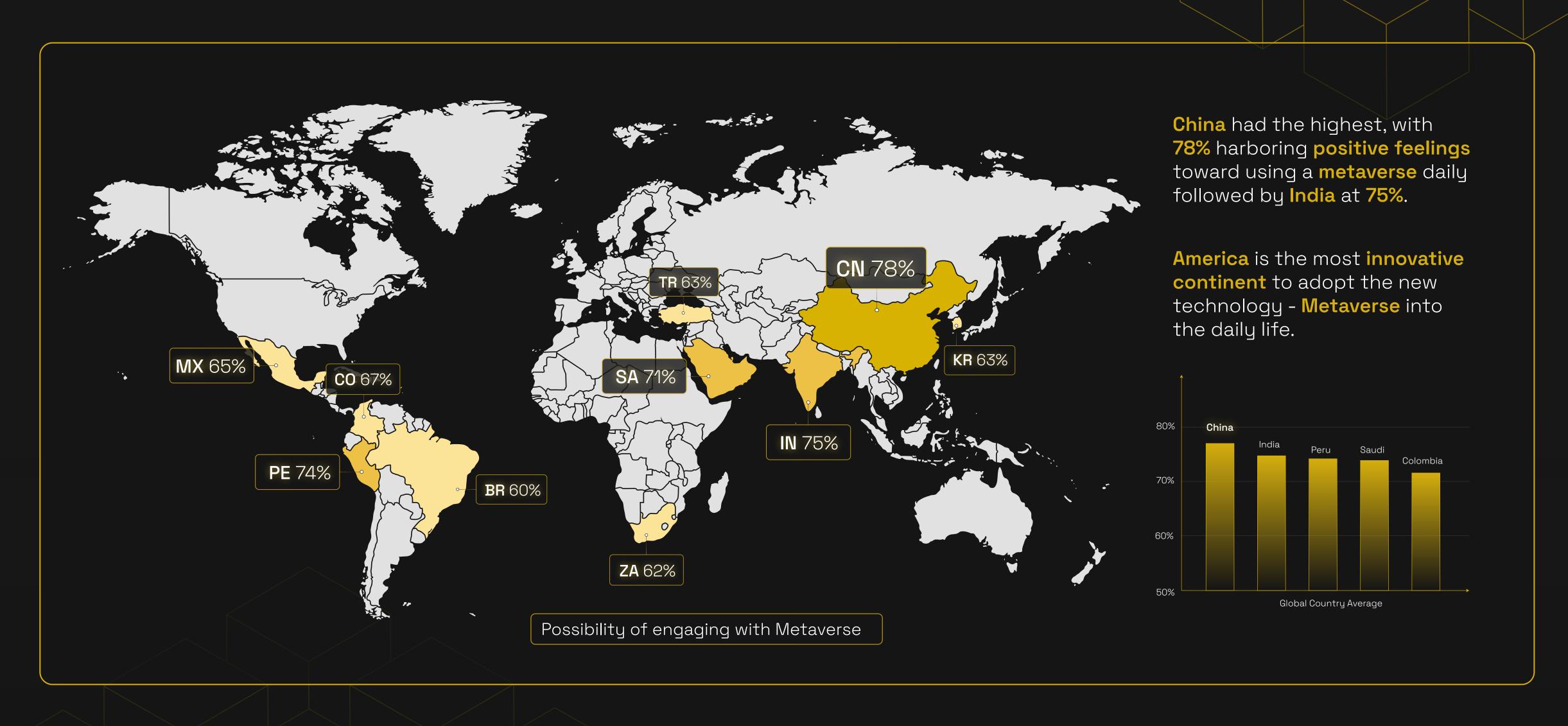








### Metaverse Adoption



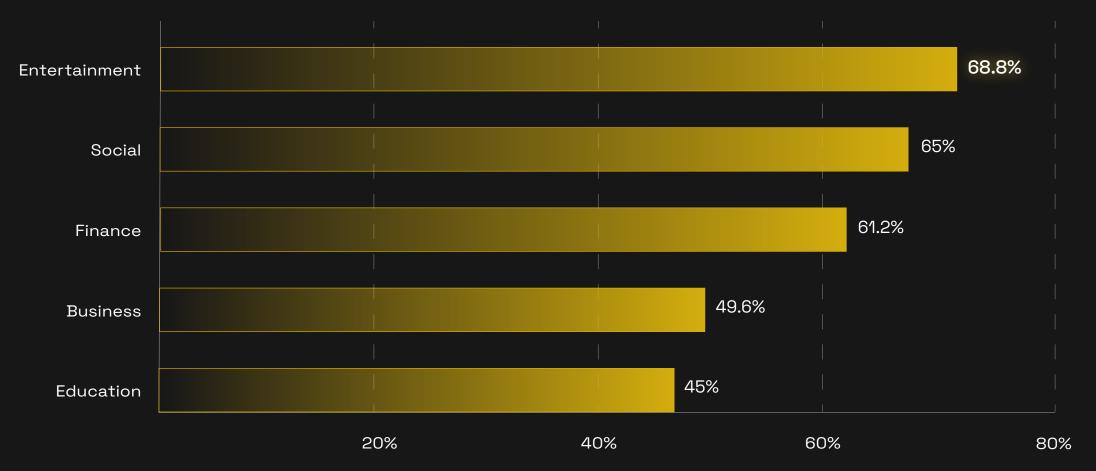




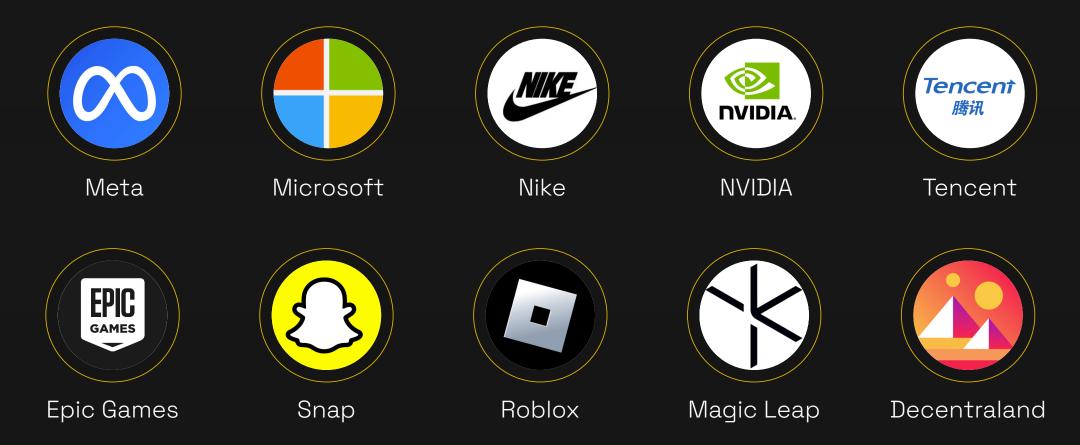


### Metaverse Trend

Survey conducted Dec 15-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.



People believe Metaverse will reshape social lifestyle with a new approach to entertainment and social activities (69% and 65% respectively total choices).

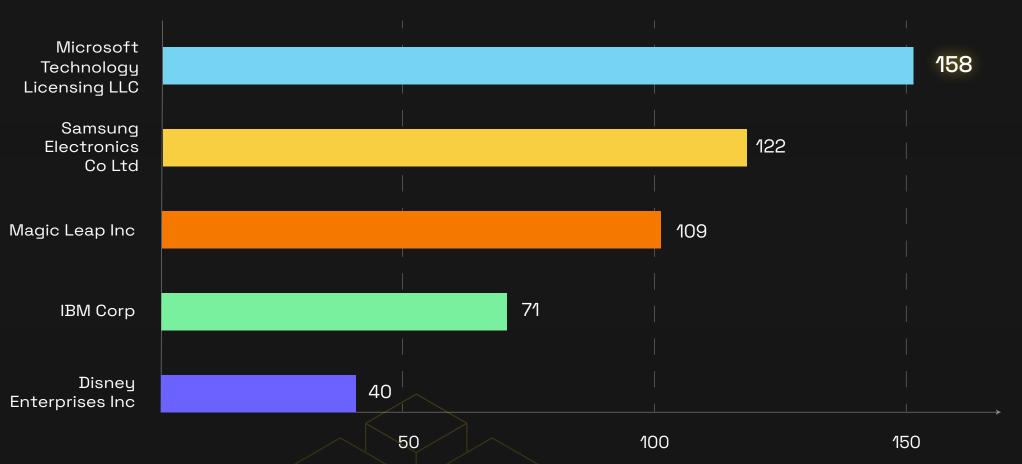


The market size of the metaverse is over \$38.5 billion.

53% of companies investing in the metaverse invest in cryptocurrencies.







In the last 5 years, not Meta but Microsoft has made the biggest attempt to dominate the metaverse via patents (158 patents, July 2022).







### Fan Token

Survey conducted Dec 15-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

Source: Fan Market (ap

#### Platforms:





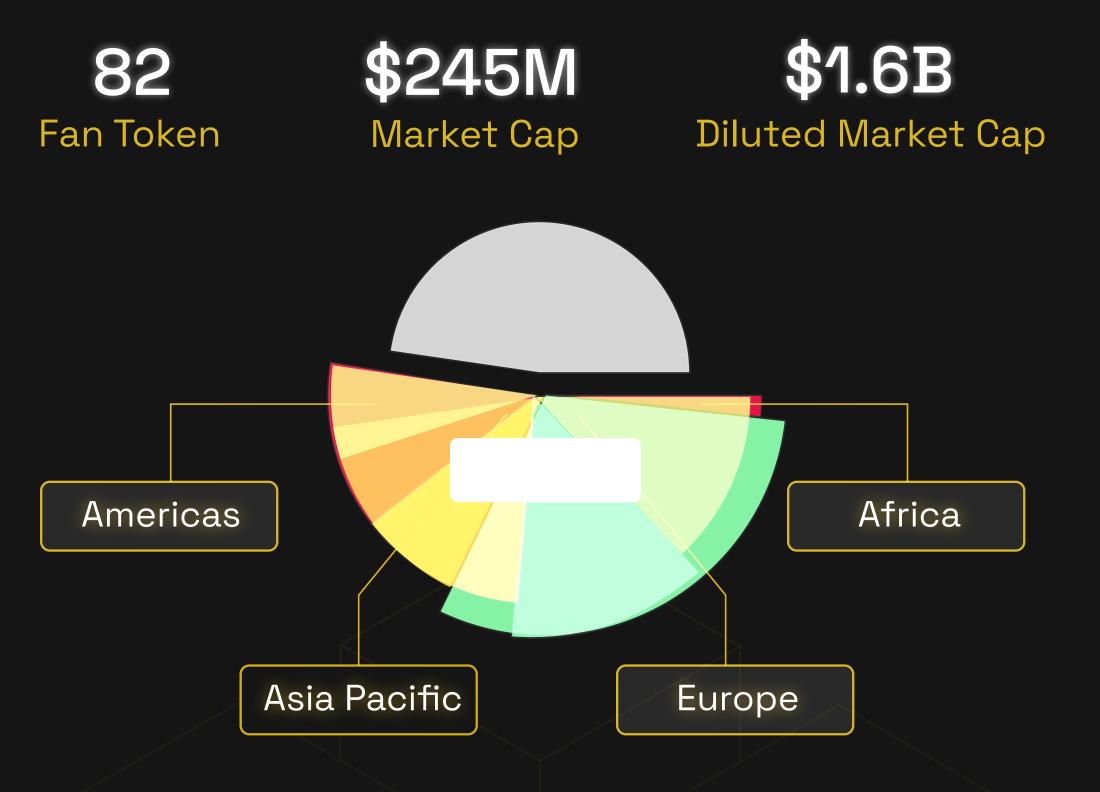


#### As a Team As a Fan

- Support the teams you love
- Influence team decisions through Fan Voting Polls
- Unlock Fan Badges to win special rewards and privileges
- Be first to buy limited edition NFTs
- Score experiences that money can't buy

#### As a Team As a Fan

- Launch your token swiftly
- Receive rewards by referring fans
- Engage your fans with Blockchain powered solutions
- Connect with fans like never before



Europe originated Modern football and the region is the most believing in the Fantoken with 60% of total participants.







### State of Web3 games 2022 Overall Statistics

Market Cap

\$5.3B

Number of Games 2,161

- In Q4 2022, Total Volume was \$442M, a significant 95% drop from the year's beginning (\$8.8B), while Total Transactions were still at a high level.
- Total Active Users peaked in Q1 at 124M users before **steadily** declining by 36% to 79M users.

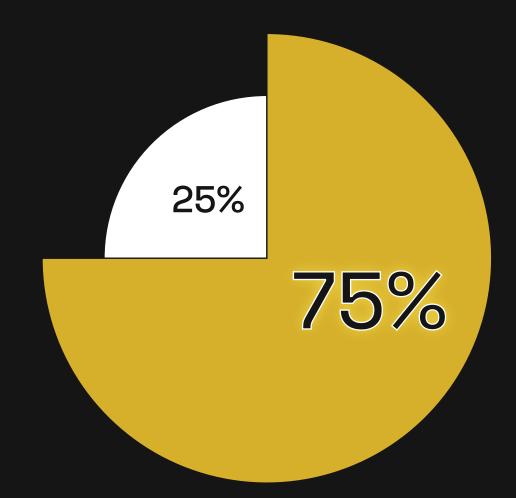
	Q1	Q2	Q3	Q4		
Total Active Users	123.86M	112.37M	86.54M	78.78M		
Total Transactions	1.89B	2.1B	2.15B	2B		
Total Volume (\$)	8.81B	2.87B	819.29M	441.98M		





## State of Web3 games Looking Back At 2022

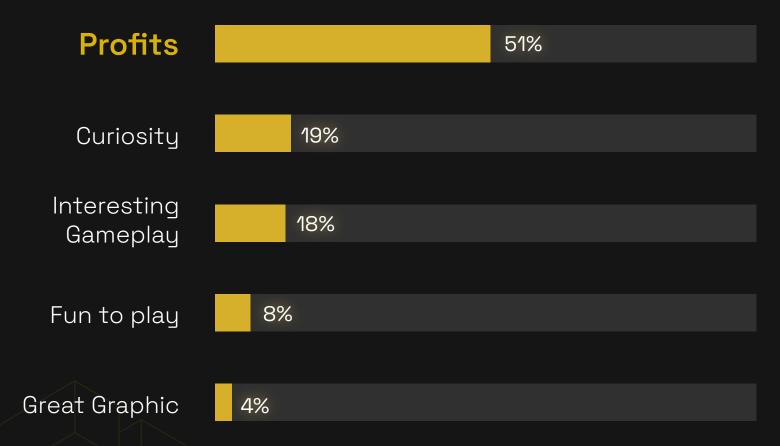
3 in 4 investors worldwide joining cryptocurrency because of GameFi



• The number of people who invested in GameFi grew quickly; **75%** of investors worldwide got into cryptocurrency because of Web3 games.

The biggest motivation for investing in Gamefi is still profits

Reasons to participating in GameFi



• Most people who played Web3 games were crypto-native users, and as expected, their main reason for joining was to make money.



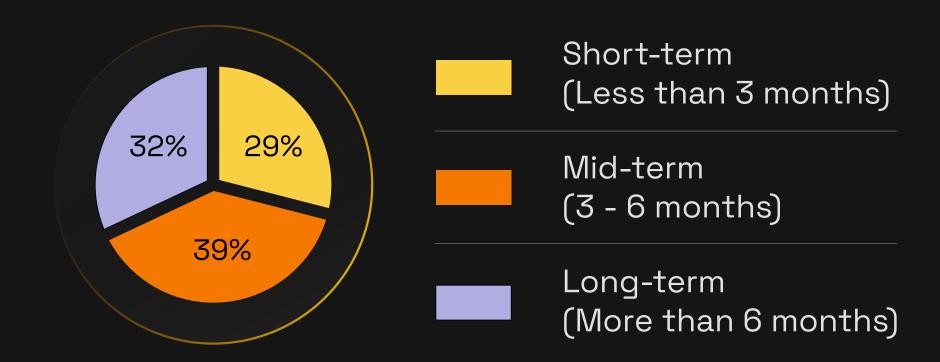




### State of Web3 games (Cont.)

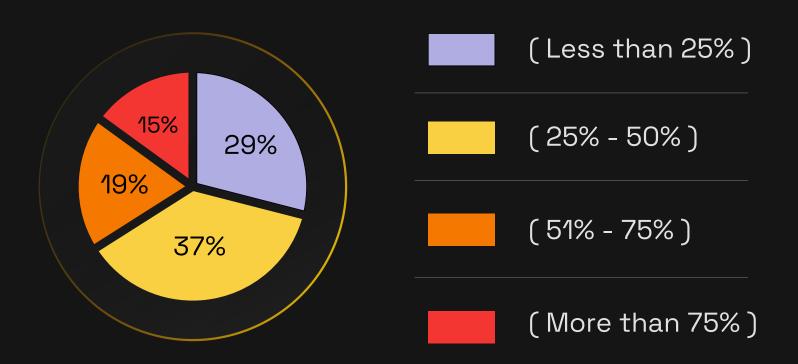
### Looking Back At 2022

#### GameFi Investments Styles



- 68% of investors have short- and medium-term (<6 months) investments in Web3 games.
- 71% of investors put more than 25% of their net worth into Web3 games.

#### GameFi Investments Allocation



→ These facts back up the argument that the majority of people who participate in Web3games do so for profit; they do not want to stick with a game for a long time; instead, they just roam from game to game looking for short-term speculative opportunities.







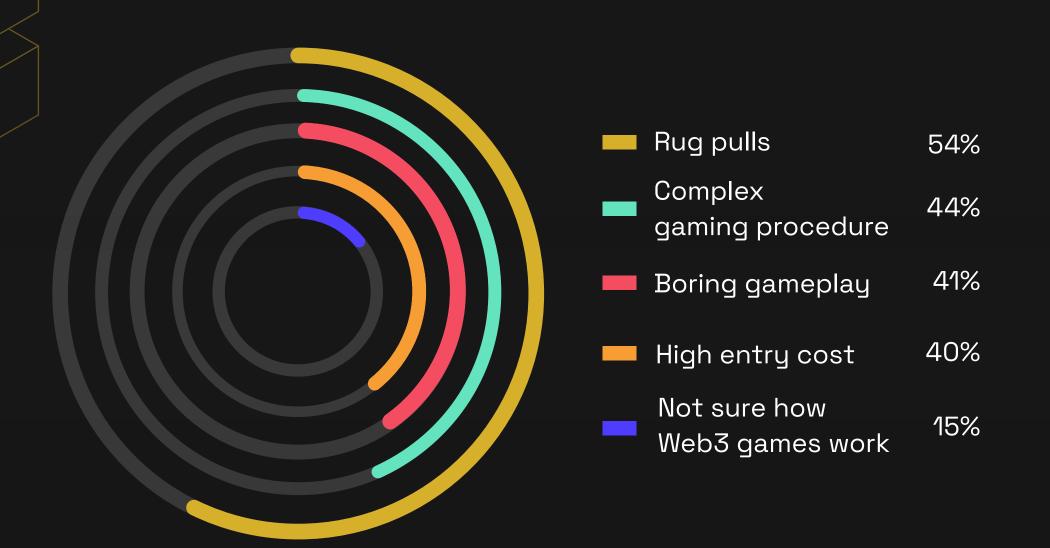


### State of Web3 games (Cont.)

### Web3 Gaming Limitations Rug Pulls & Ponzi schemes

The survey conducted Dec 16-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

### Factors Preventing Worldwide Investors from Participating in current Web3 Games



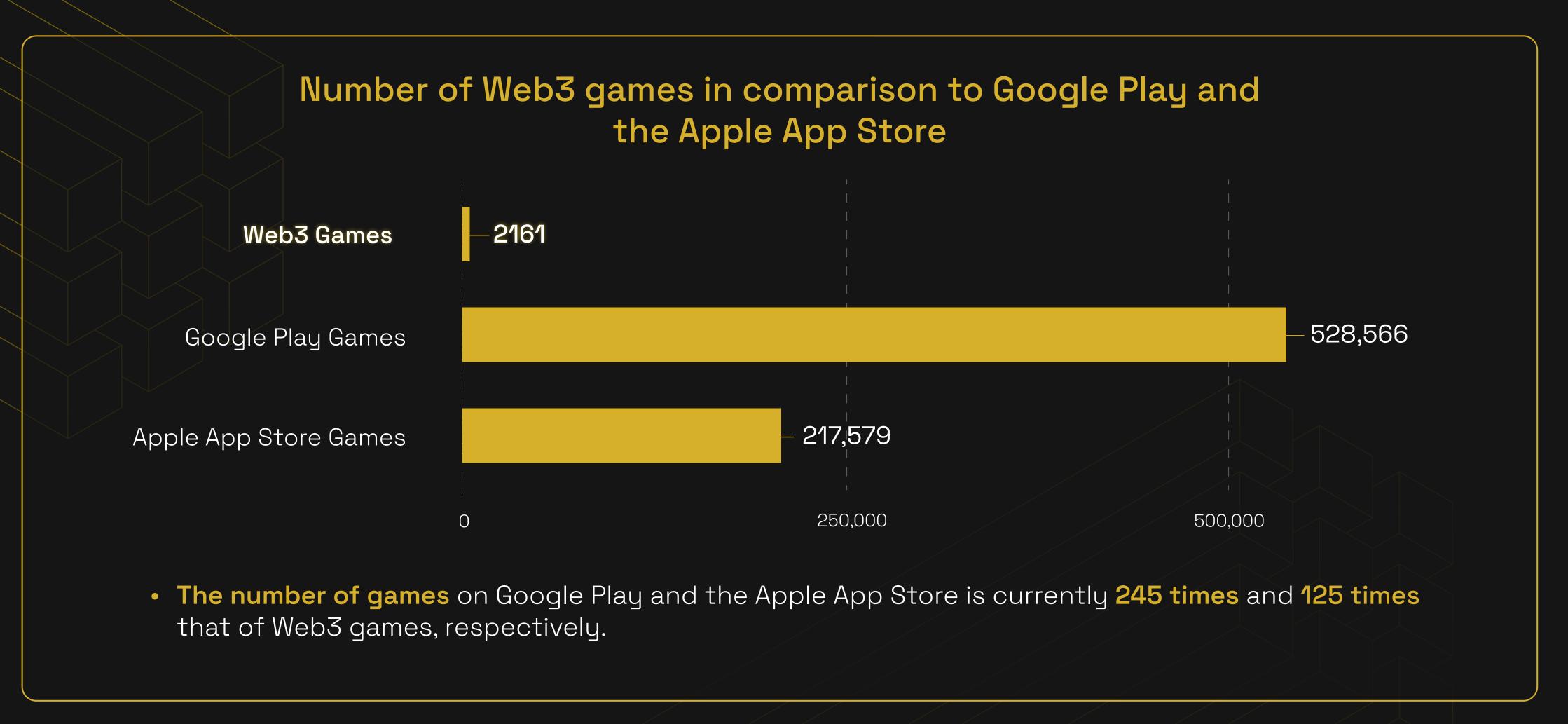
• 54% of investors avoid Web3 games because they 're afraid of rug pulls and Ponzi schemes, while 45% believe the games are too complex (wallet setup, minting NFTs, buying tokens, etc.).

→ The effort to make these games as decentralized as possible has led to a lack of oversight, which allows fraudsters to profit from the scams they design in the name of GameFi projects.





### Corrrelation Between Web3 Gaming & Traditional Gaming



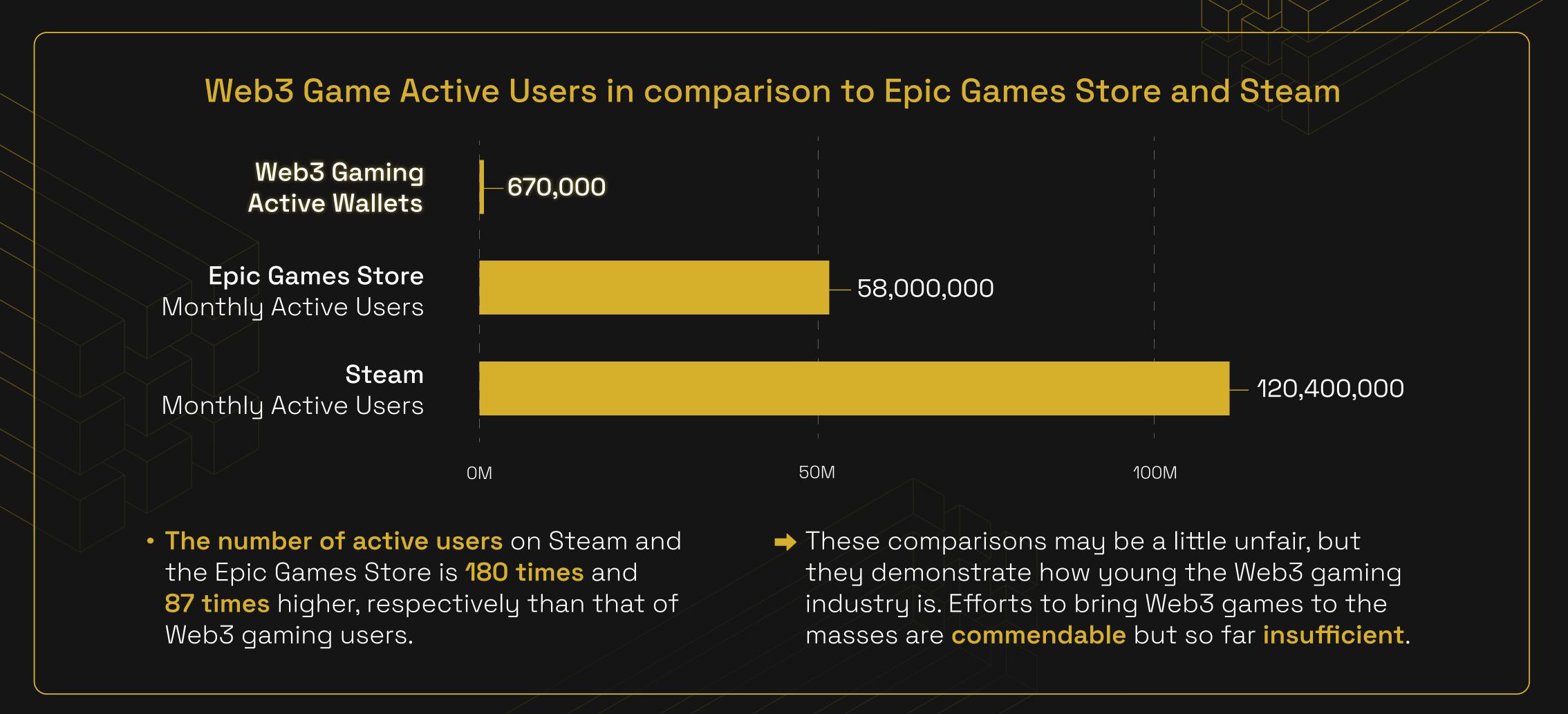








# Correlation Between Web3 Gaming & Traditional Gaming (cont.)



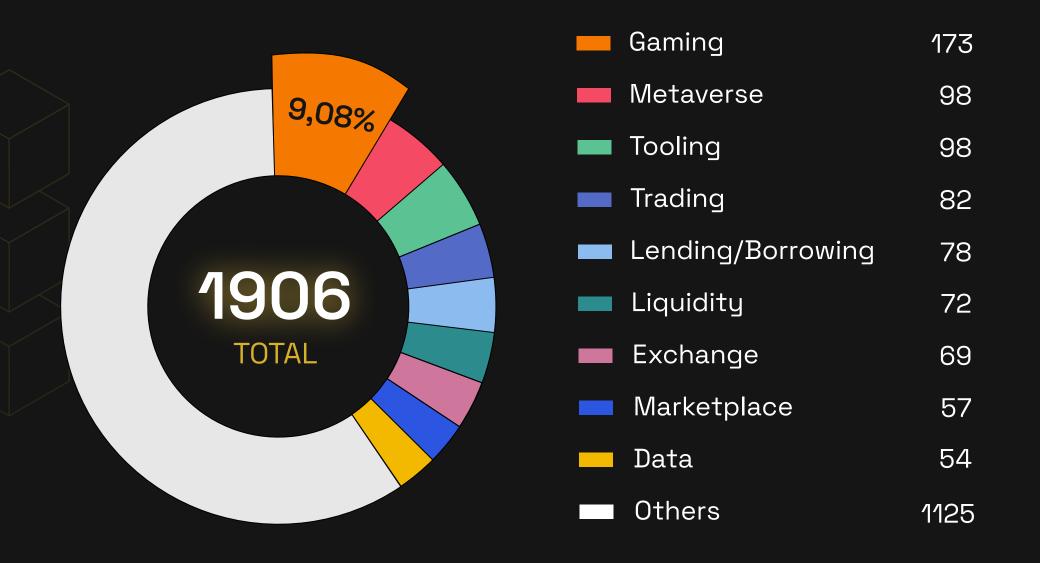




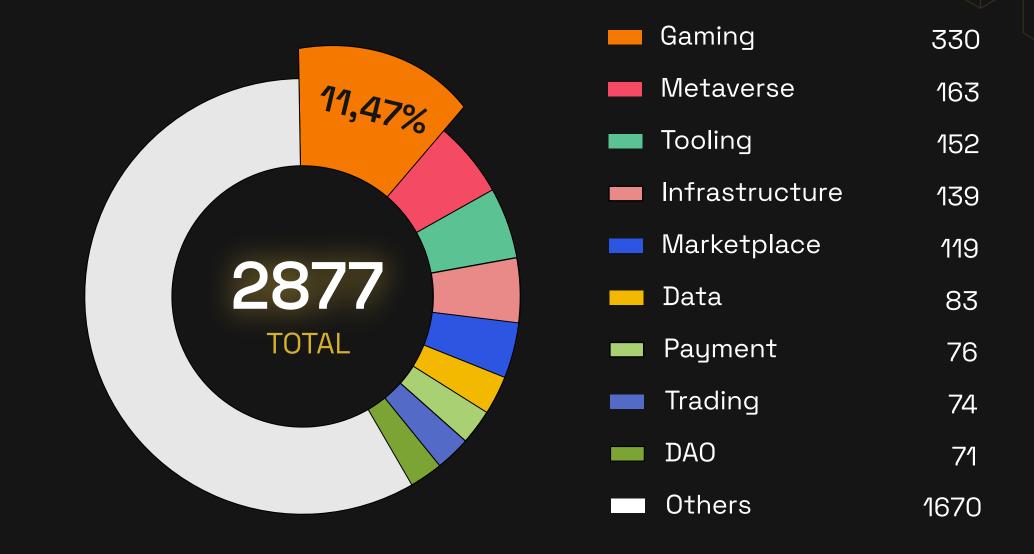


### Web3 Gaming Fundraising 2022

#### 2021 Number of Deals by Category



#### 2022 Number of Deals by Category



- 330 (11.5%) of the 2,877 deals made in 2022 are in the Web3 gaming sector.
- According to Footprint data, Web3 gaming has the greatest investment market share, followed by Metaverse (5.67%), Tooling (5.28%), and Infrastructure (4.83%).

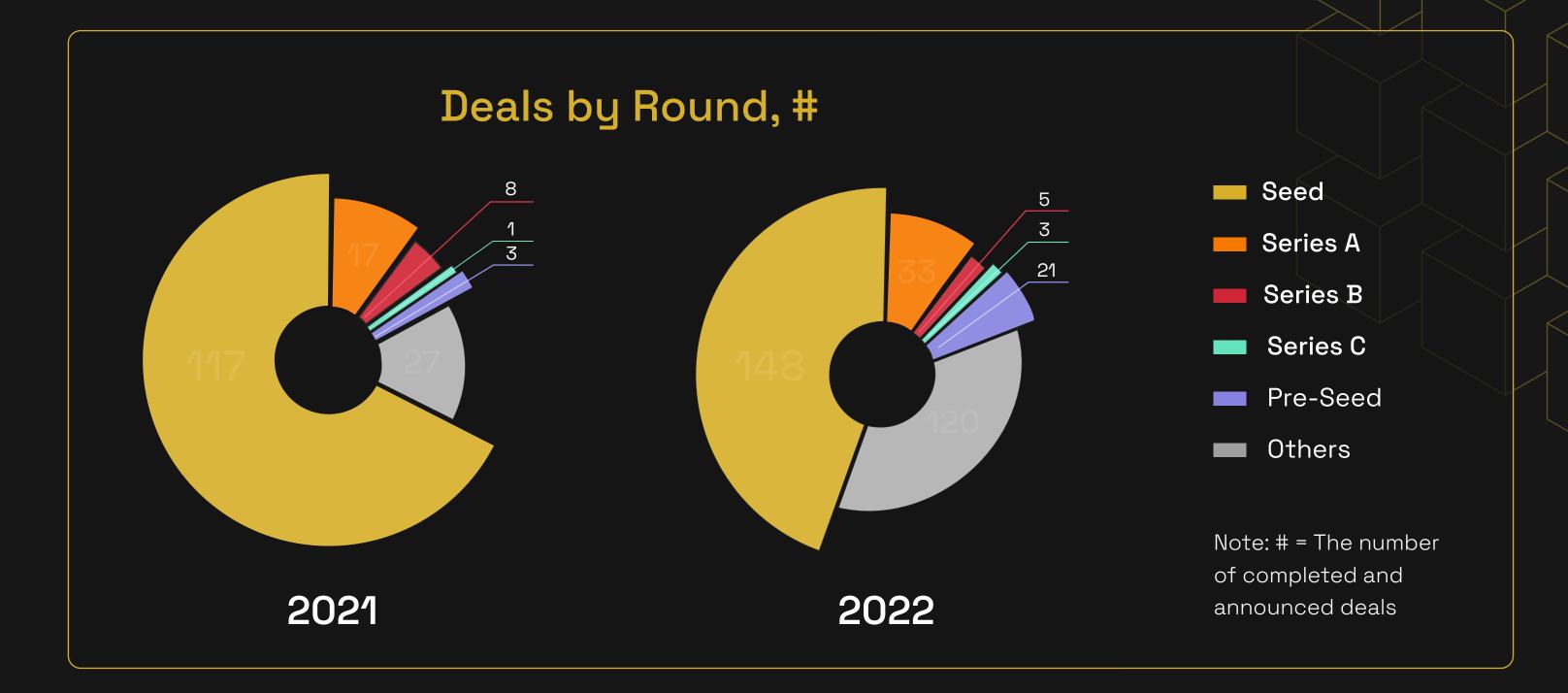






### Web3 Gaming Fundraising 2022

In 2022, Seed gaming deals reached 148, accounting for 45% of the total deals (330), a 26% increase over the previous year's 117 deals, while Seed deal value reached **\$806M**, an increase of **74%** year-over-year.



Deal Value by Round \$

	Seed	Series A	Series B	Series C	Pre-Seed	Others	
2022	805,790,000	693,350,000	230,550,000	375,000,000	38,750,000	2,264,550,000	
2021	461,890,000	401,400,000	2,001,000,000	150,000,000	6,820,000	696,350,000	

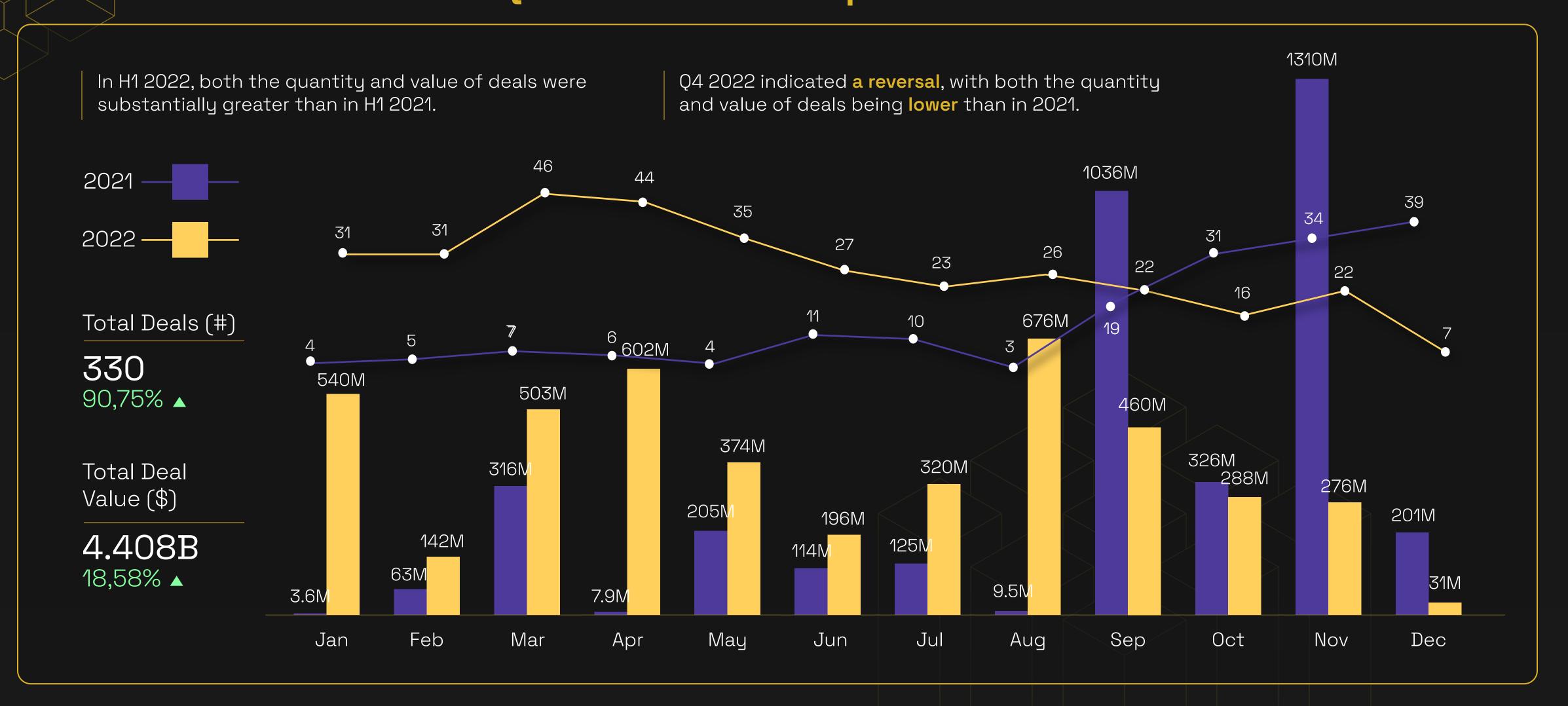
Others include Undisclosed round, Strategic round, ICO, Pre-IDO, Equity Financing, Debt Financing







### Web3 Gaming Fundraising 2022 (Cont.) Value and Quantities Comparison 2021 - 2022

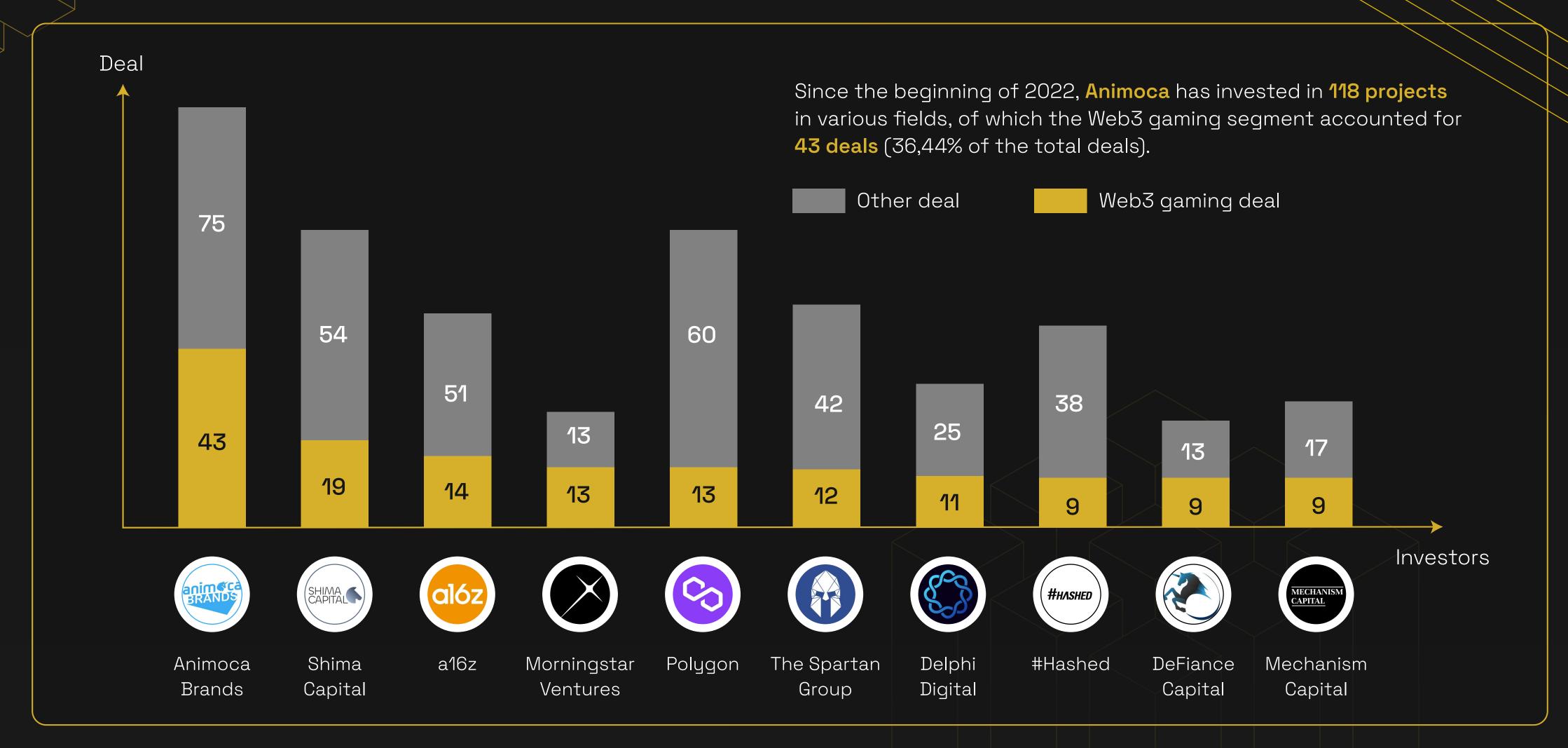








### Web3 Gaming Fundraising 2022 (Cont.) Top 10 investors in the Web3 gaming space 2022









### Potential Web3 Games

#### RPG



ninokuni

Blankos

Block Party



Stella Fantasy



Illuvium



VulcanVerse Treeverse

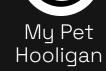


WILDCARD

Aurory



Legions





Arena Sword



METAPIXEL

G

Guild

OfGuardians

BitCraft

Galaxy Fight Club

BKITME

Big Time





#### Shooter



Undead

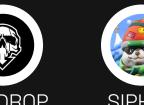
Blocks



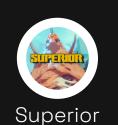
SHRAPNEL











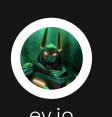
Gunstar

Metaverse

Blast

METALCORE

Delysium





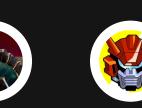








Game





Citizen

Conflict



Galaxies



#### Strategy



WAGMI Games

6

Planet Mojo

Skyweaver



Alice

Cross

The Ages

Splinterlands

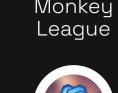
Game



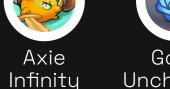
of Mavia



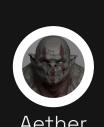












Games





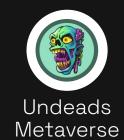
Decentral



Othersidemeta Games



















#### Criteria:

- The game is supported or participated by traditional game companies.
- The game has a huge and active community, followed by many KOLs.
- Polkastarter's GAM3 Awards 2022 Winners.
- Gameplay.
- Streamability.

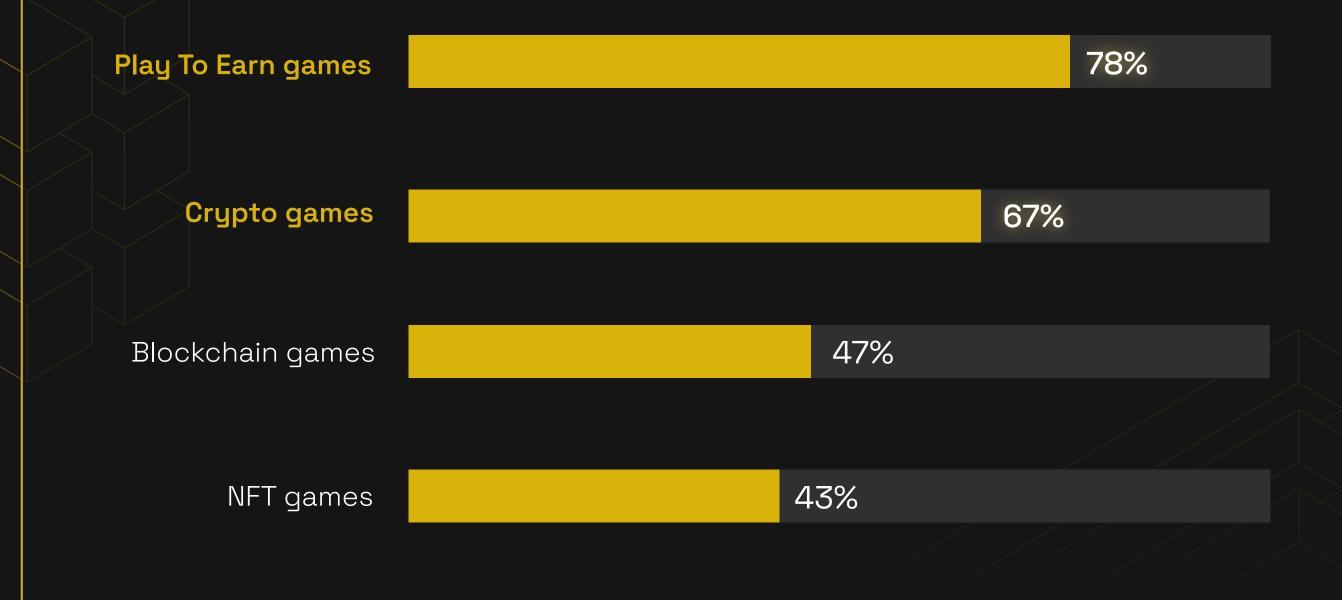




# Web3 Gaming Mass Adoption Barriers to Mass Adoption of Web3 Gaming Concept "Play-to-Earn"

The survey was conducted Dec 16-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

### The most common descriptors for Web3 Games



- The phrase "Play-to-earn" is most commonly used to describe Web3 games.
- The hesitation of traditional gamers can be attributed to the term "Play-to-earn" continuing to carry a bad reputation due to design problems in the economics of digital games that have caused the rapid crash of some GameFi tokens.



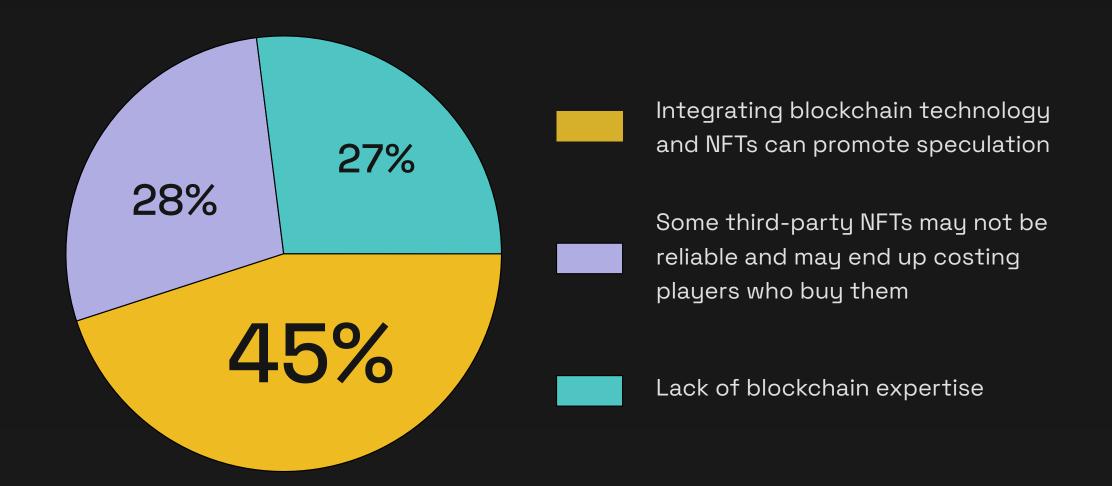




# Web3 Gaming Mass Adoption (Cont.) Barriers to Mass Adoption of Web3 Gaming Risk of Speculation

Survey conducted Dec 15-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

The reasons why traditional game firms do not integrate blockchain technology and NFT



• Potential speculation is believed to be the biggest reason why traditional game firms are hesitant to integrate blockchain technology & NFT into games.

→ This is also why Mojang, the creators of the popular game Minecraft, announced a prohibition on integrating blockchain technology and NFT into any in-game content.



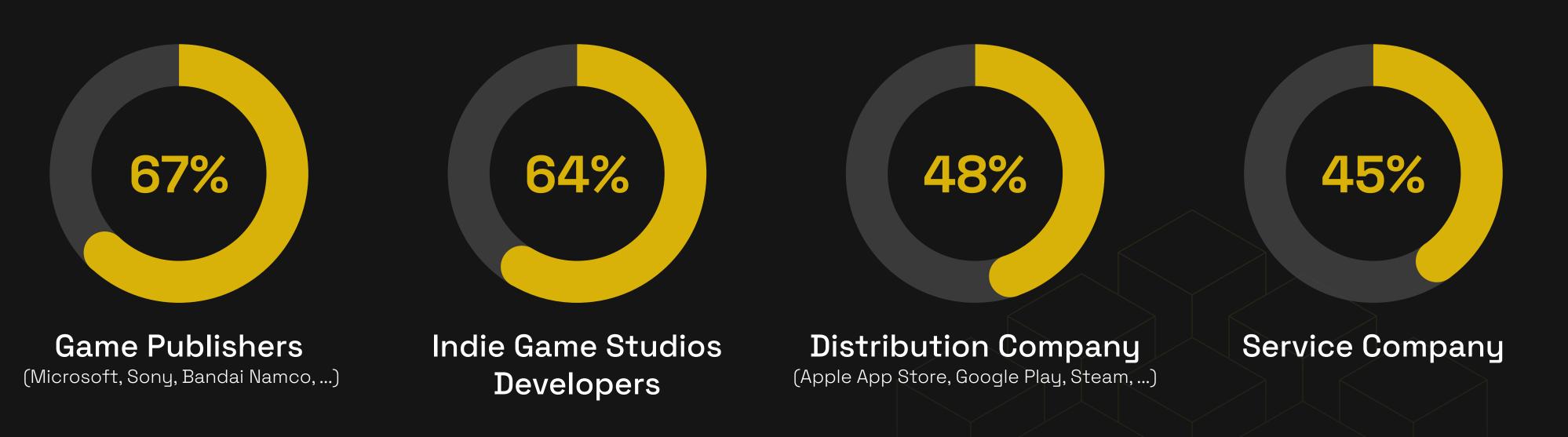




# Web3 Gaming Mass Adoption (Cont.) Traditional Corporations Are Moving Into Web3 Gaming

The survey was conducted Dec 16-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

### Kinds of Tranditional Companies would be Interested in the Web3 Gaming Industry



- The traditional companies with the greatest interest in the Web3 gaming industry are most likely to be game publishers and game studios.
- In fact, there are many traditional corporations that have entered the Web3 gaming space in 2022.



### Web3 Gaming Mass Adoption (Cont.)

### Web2 Companies Are Entering Web3 Gaming Space

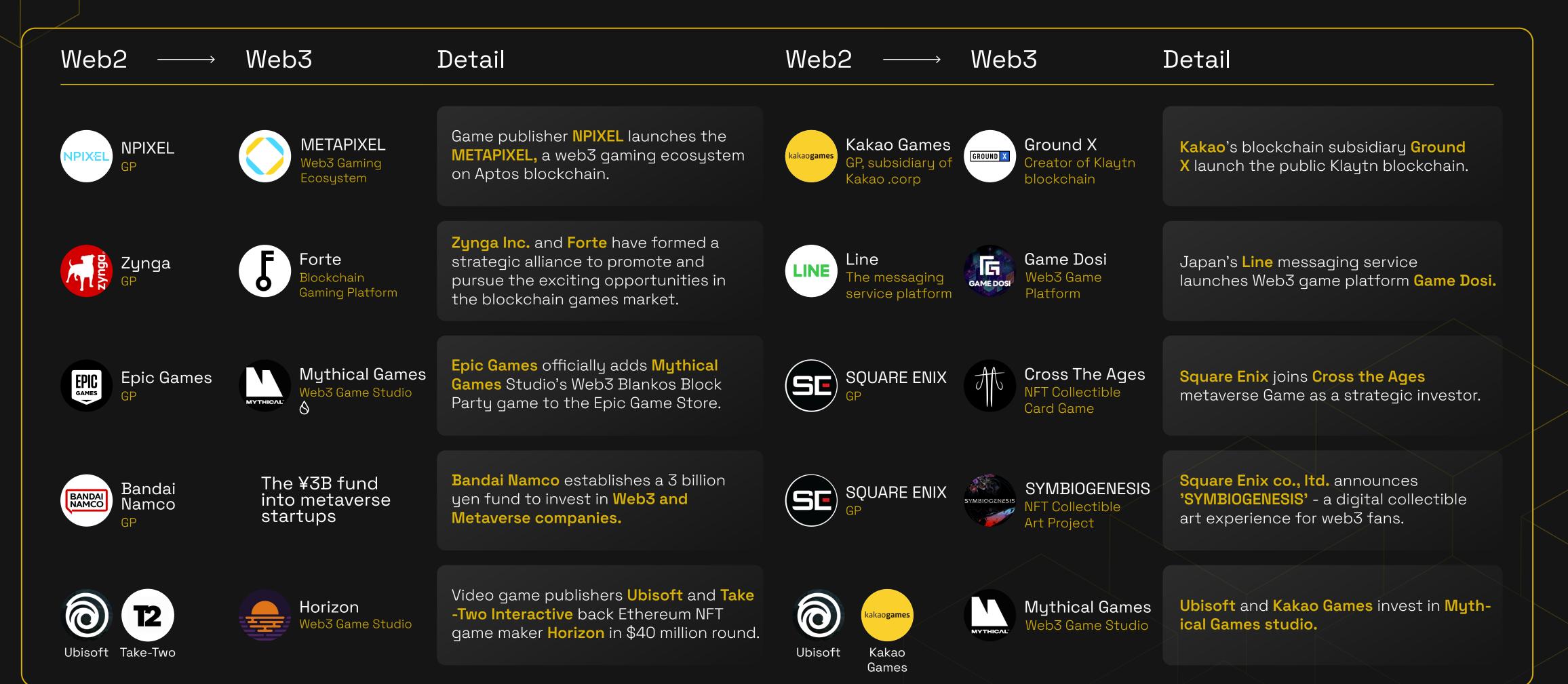
Web2 Web3 Detail Web2 Web3 Detail Neowiz Corporation partnered with Netmarble, one of the titans of mobile **NEOWIZ** Netmarble Polygon to launch the Web3 gaming games in Korea, releases flagship web3 qame, Ninokuni. platform, Intella X. Netmarble F&C subsidiary Metaverse KRAFTON, Inc. signed a business Mysten Labs World is picking Mysten Labs to be the Solana agreement with Solana Labs to support Netmarble Krafton blockchain partner for Grand Cross: Labs the design and marketing of blockchain Metaworld. -based games. Mysten Labs NCSoft invests \$15M in Mysten Labs for NCSOFT Nexon Co., Ltd. is the lead investor in Nexon Web3 gaming infrastructure. Oasys' strategic funding round. Com2uS Holdings have been selected Nerdystar, Line Games' investment arm LUXON as Master Content Providers to provide Com2Us Line Games LINE GAMES in Korea, has raised US \$10.8 million for world-class game content for the C2X Luxon, its blockchain gaming platform. platform. Gaming blockchain **WEMIX** is developed Ring Games enters the Web3 gaming WEMADE Ring Games by **WEMADE**, a Korean game publisher **WEMADE** segment with the project Stella Fantasy. known for the MIR4 title.





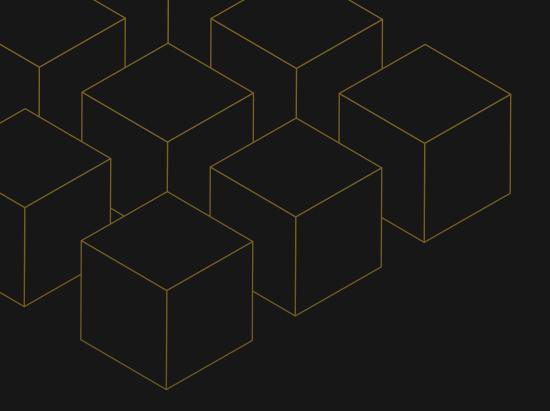
### Web3 Gaming Mass Adoption (Cont.)

### Web2 Companies Are Entering Web3 Gaming Space









### Conclusion & Projection

In conclusion, the NFT market in 2022 has faced concerns about sales flatlining, but overall, it remains robust and continues to thrive. NFTs have also become a crucial part of the emerging metaverse, and are becoming increasingly integrated into social life.

The Web3 gaming sector, while still in its infancy with a small market share in relation to the overall gaming industry, has also shown promise and potential. The growing interest from traditional companies in the space suggests that Web3 games may see a boost in the future.

Looking to 2023, it is likely that the NFT market will continue to grow and mature, and the use of NFTs in the metaverse and in gaming will become even more prevalent. The Web3 gaming sector may also see increased innovation and adoption as traditional companies bring new ideas and resources to the space.











# Web3 Evolution

Web3 Awareness, AML, KYC & Regulators.

Crypto Report 2022



### How Did the Crowd Hear about Web-3?

We asked 7,126 crypto investors if they had heard of the term Web-3 and got a response



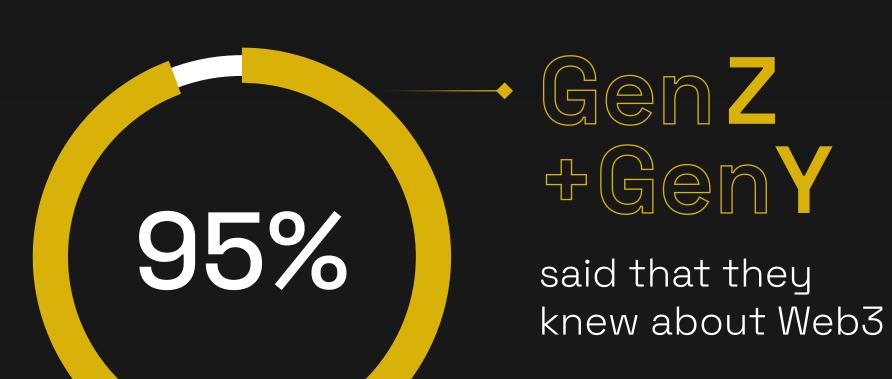
→82.68%

Crypto Investors with less than 1 year of market experience think they know about Web-3.

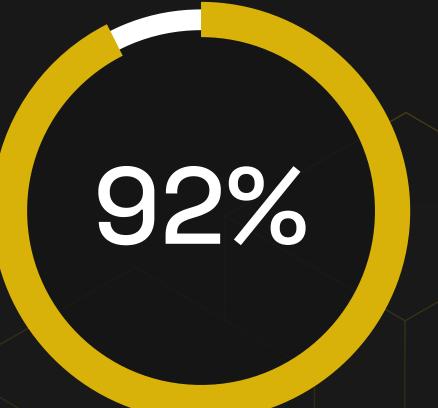
This figure for Crypto Investors with over 1 year experience is

90.43%





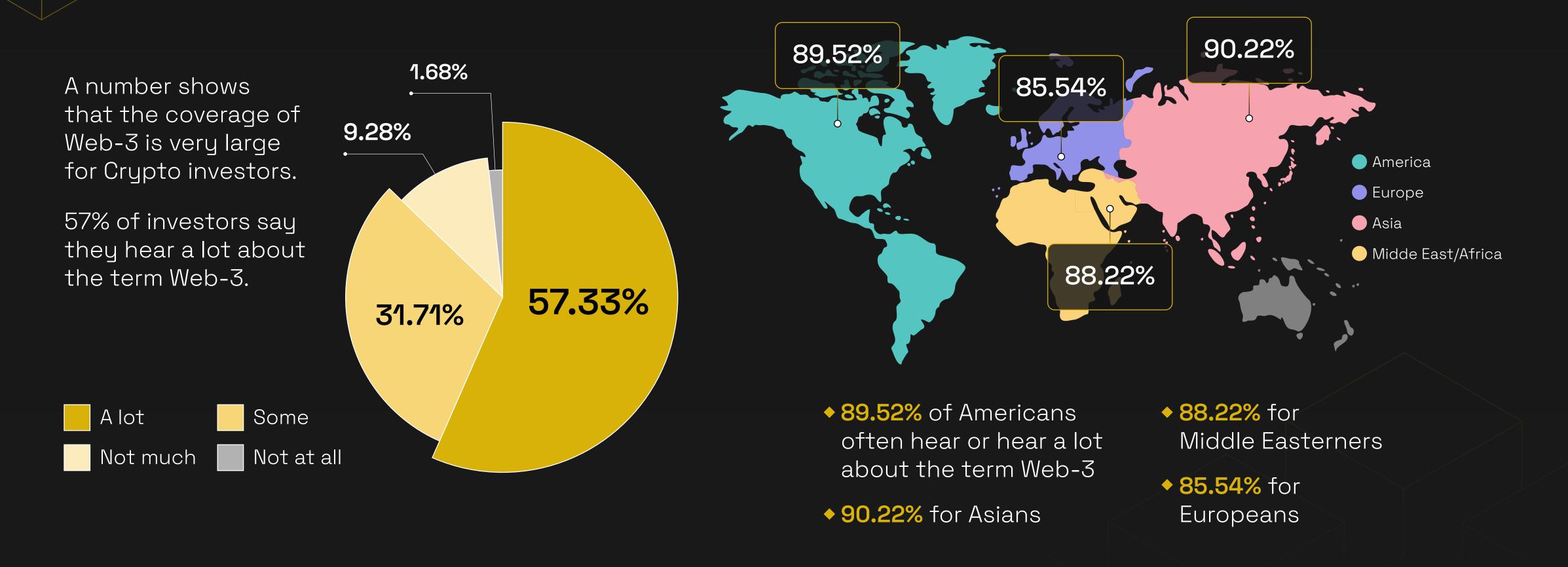
This number with







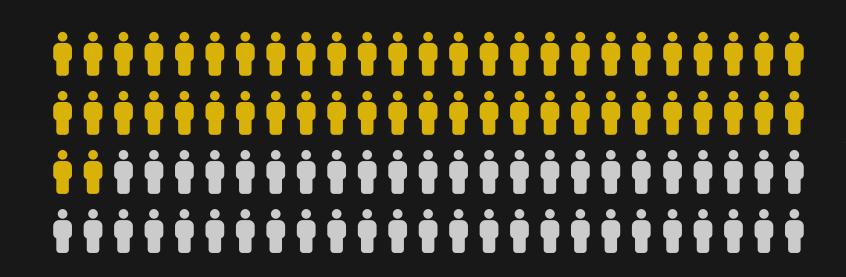
### How Much Have the Crowd Heard about Web-3?







### Are People Getting Confused about Web-3 Terminology?



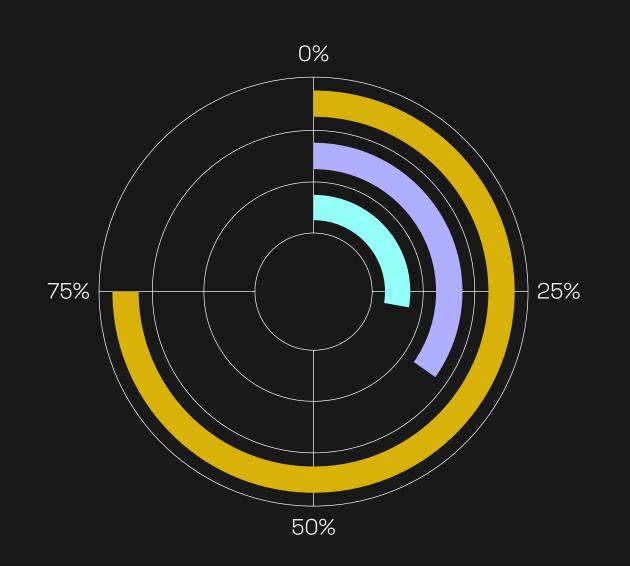
52% of crypto investors say they are confused about the term Web-3.

#### In which

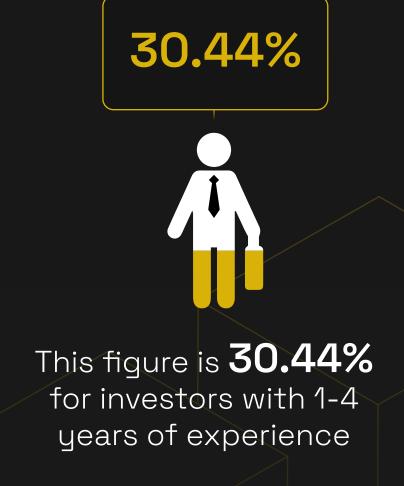
75% Americans are confused about the definition of web3.

This number is **35%** for Asia, and **27%** for European.





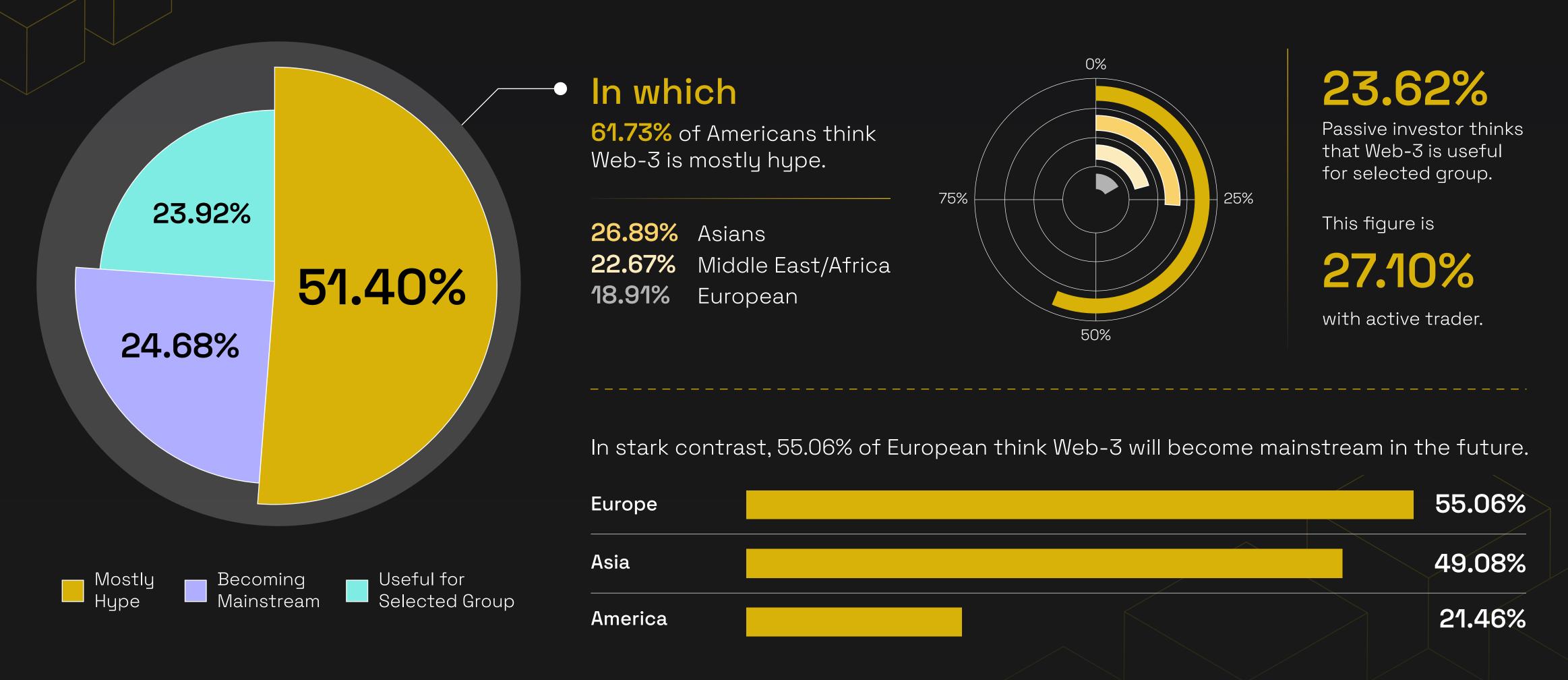








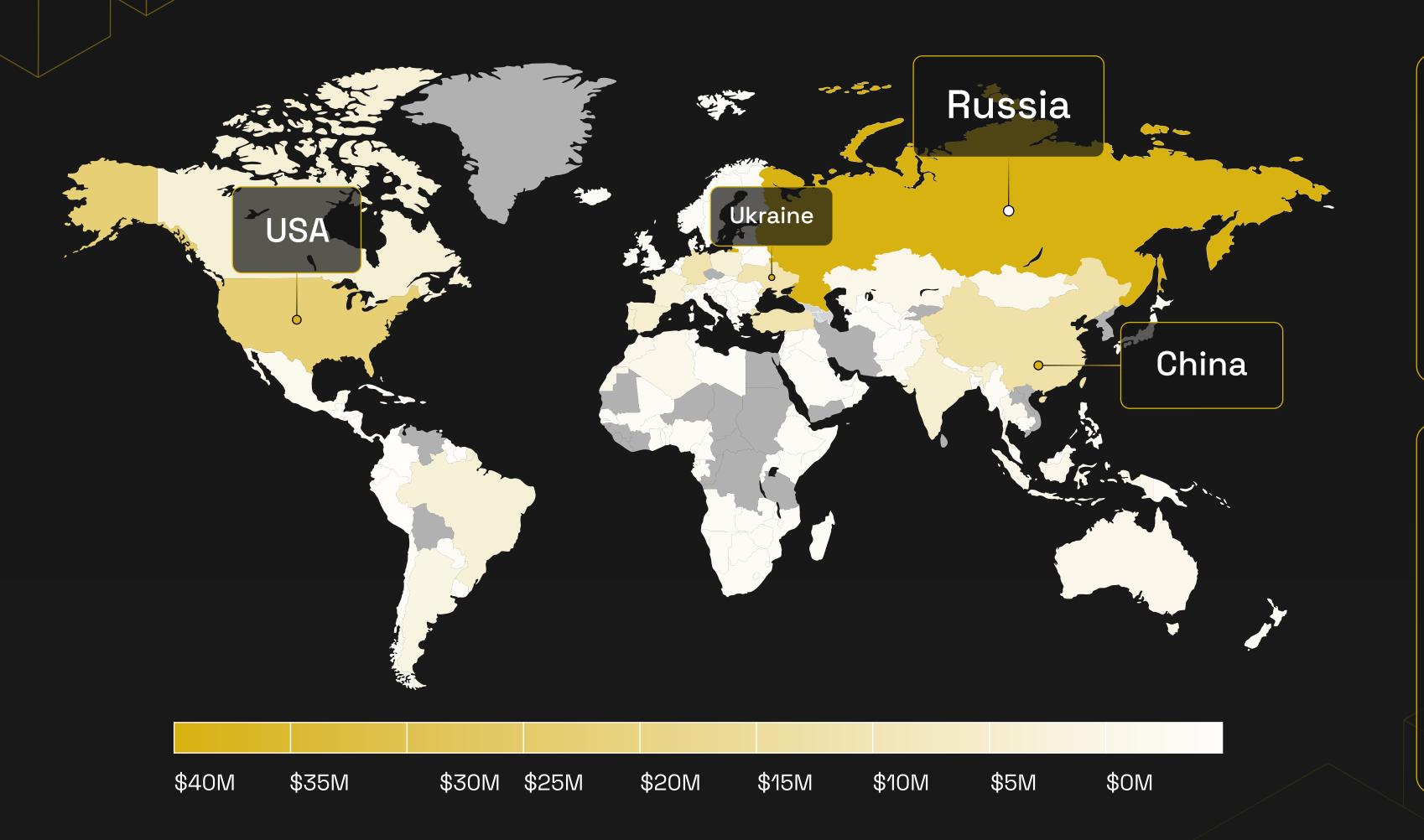
### What do the Crypto Investors across the World Think about Web 3?







### Estimation of Regional Exposure to Ransomware Funds



Russia, Ukraine, China, USA are the top countries by value sent to or received from drug-focused darknet markets.

Asia and North America are currently the havens for money laundering and the biggest countries in that region are taking the cake.

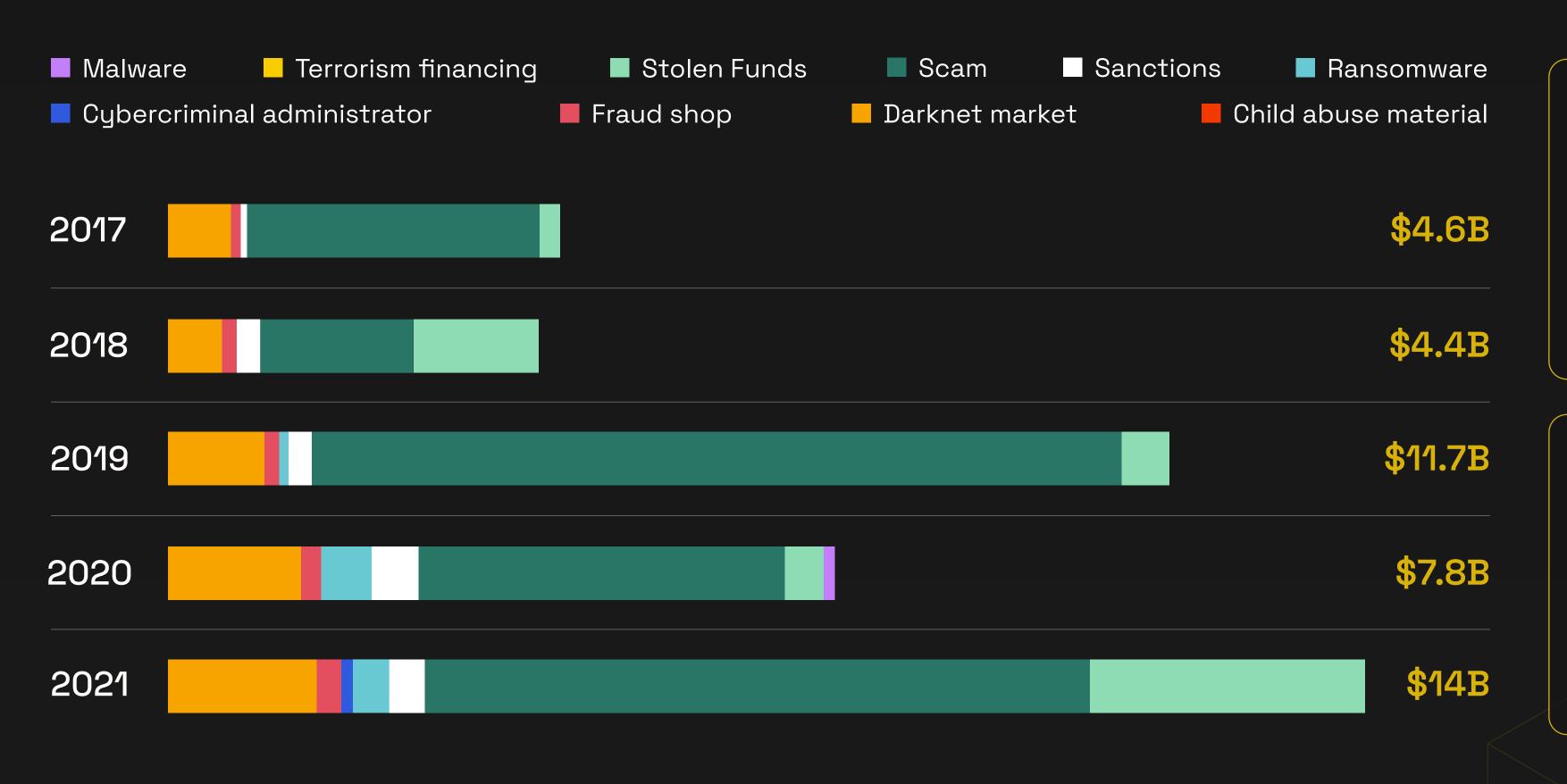








### Total Cryptocurrency Value Received by Illicit Addresses over Years



"Scam" is the biggest activity over the years, often accounting for 50%+ of all other criminal activities.

"Stolen funds" increases sharply in 2021 and is also a very popular keyword in 2022. Predicting the number of 2022 will be a large number.

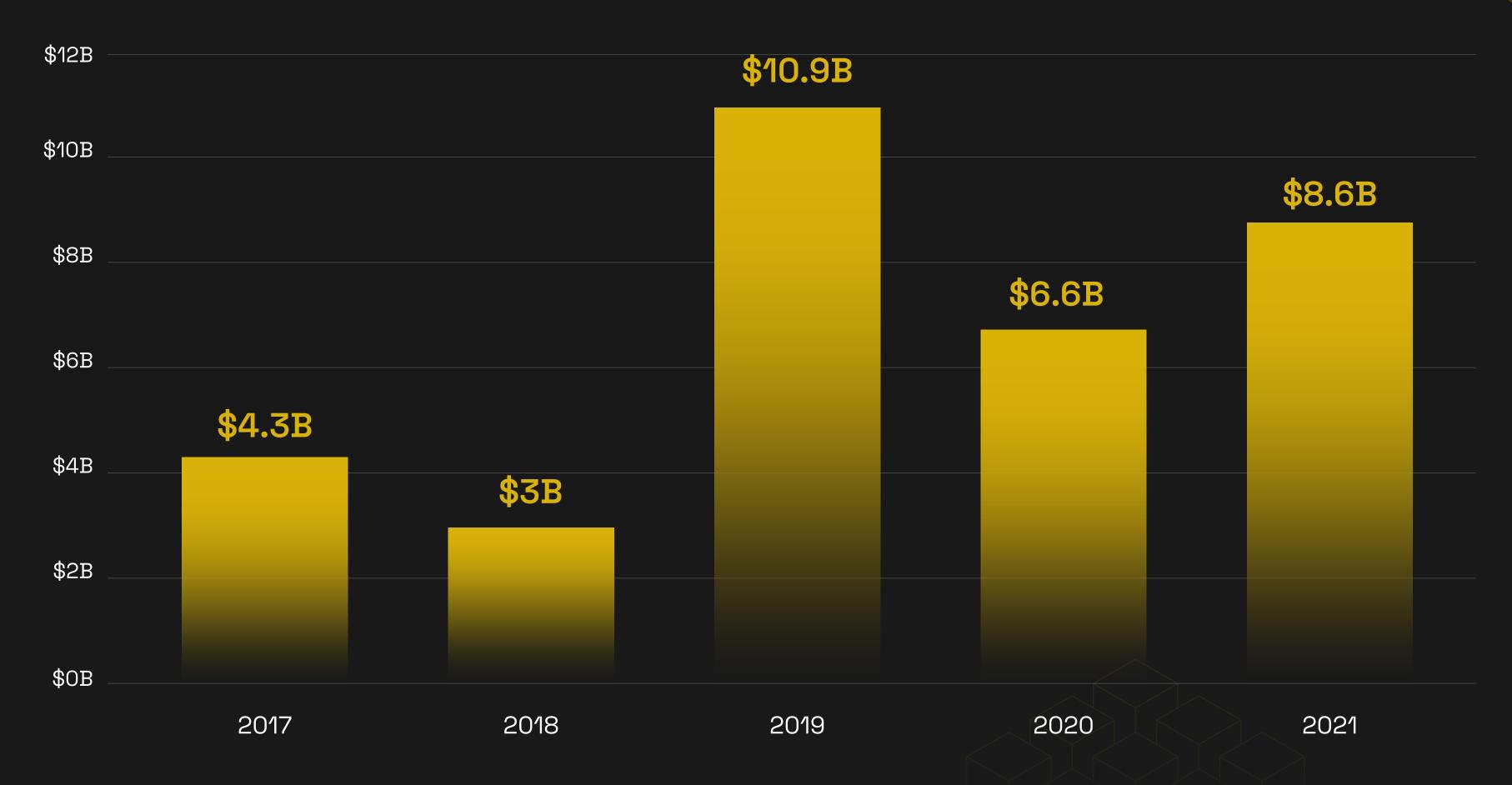
Note: "Cybercriminal administator" refers to addresses that have been attributed to individuals connect to a cybercriminal organization, such as a darknet market.





## Total Cryptocurrency Value Laundered over Years

When crypto becomes popular, the value of money laundered tends to increase over periods.



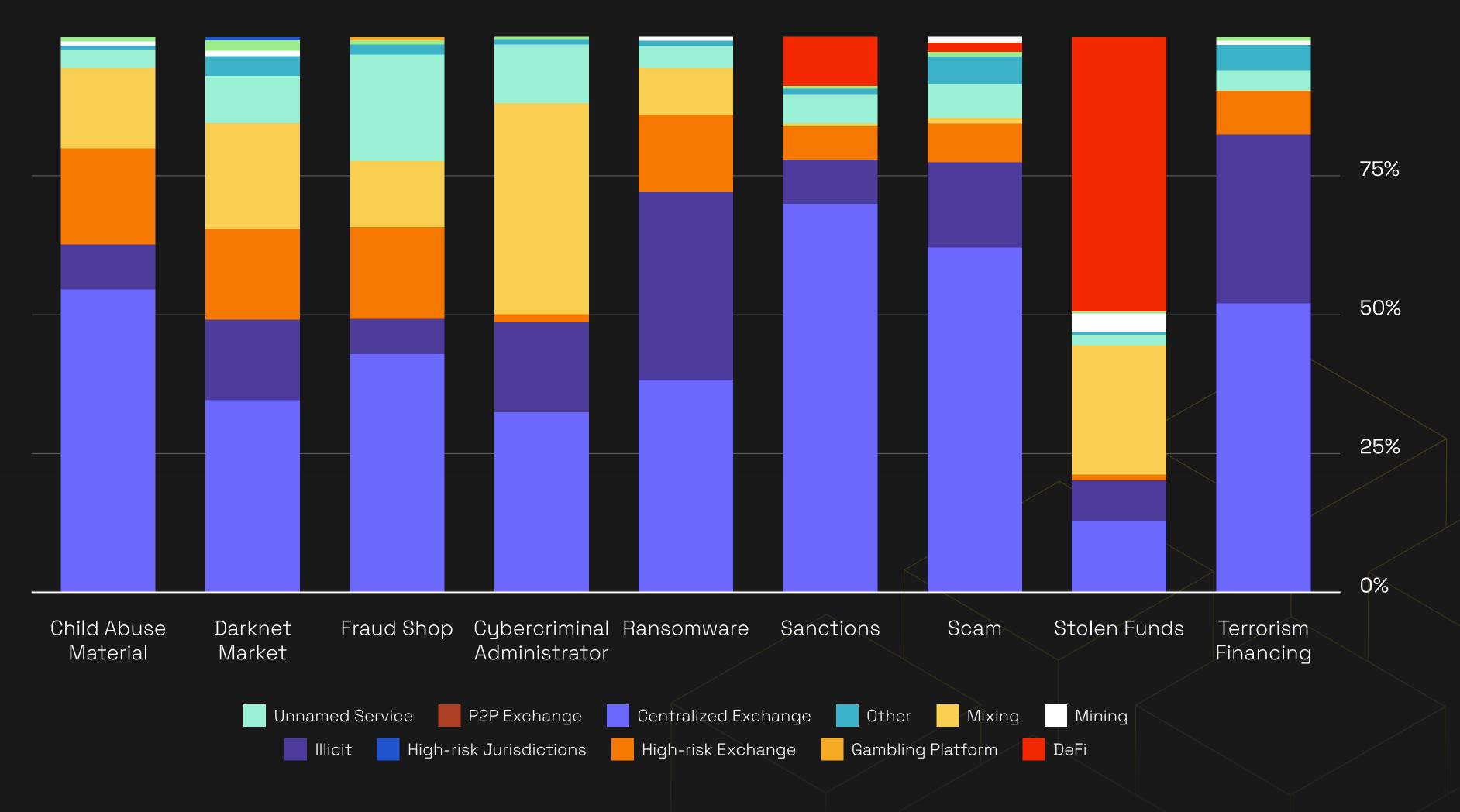




# Destination of Funds Leaving Illicit Addresses by Crime Type

CEXes, Illicit, Mixing and High-risk exchange are favorite destinations of dirty money.

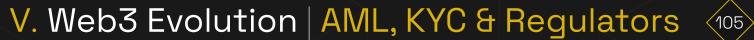
Sanctions, Scam and Stolen funds tend to use DeFi more than other activities.





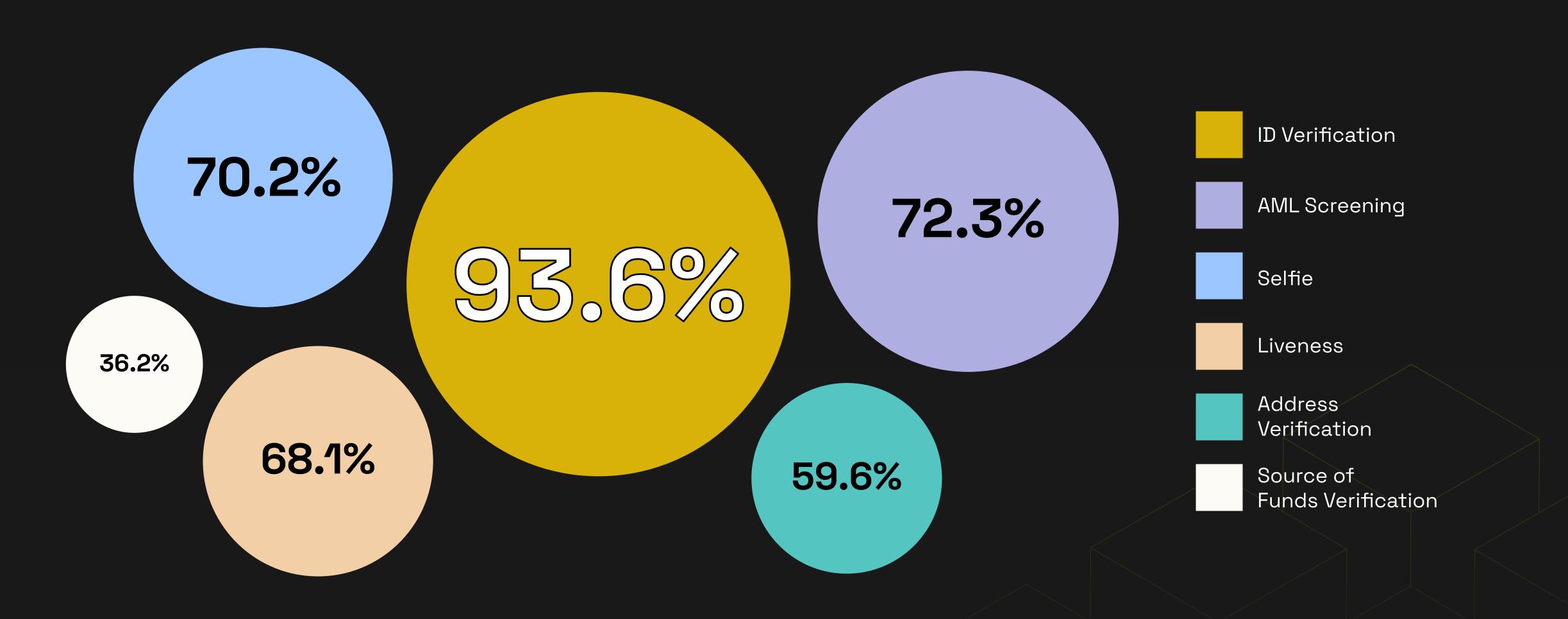






### Identity Verification Requirements within Businesses

Current KYC is still largely based on information outside the physical world.







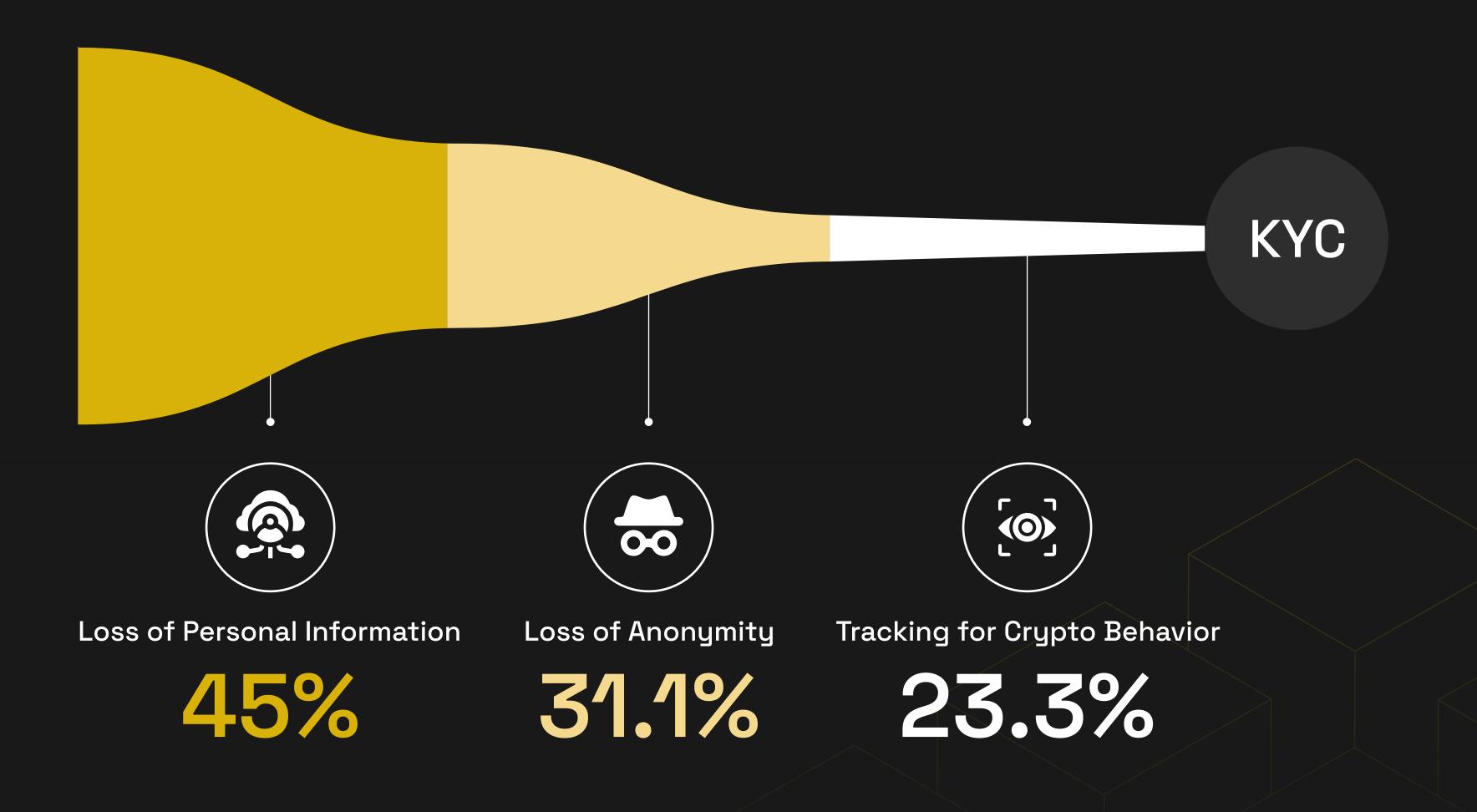


### What is the most Concern associated with KYC?

Survey conducted Dec 15-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

Loss of personal information is the biggest concern associated with KYC.

Surveyors in Asia concern "Tracking for crypto behavior" more than surveyors in Europe.

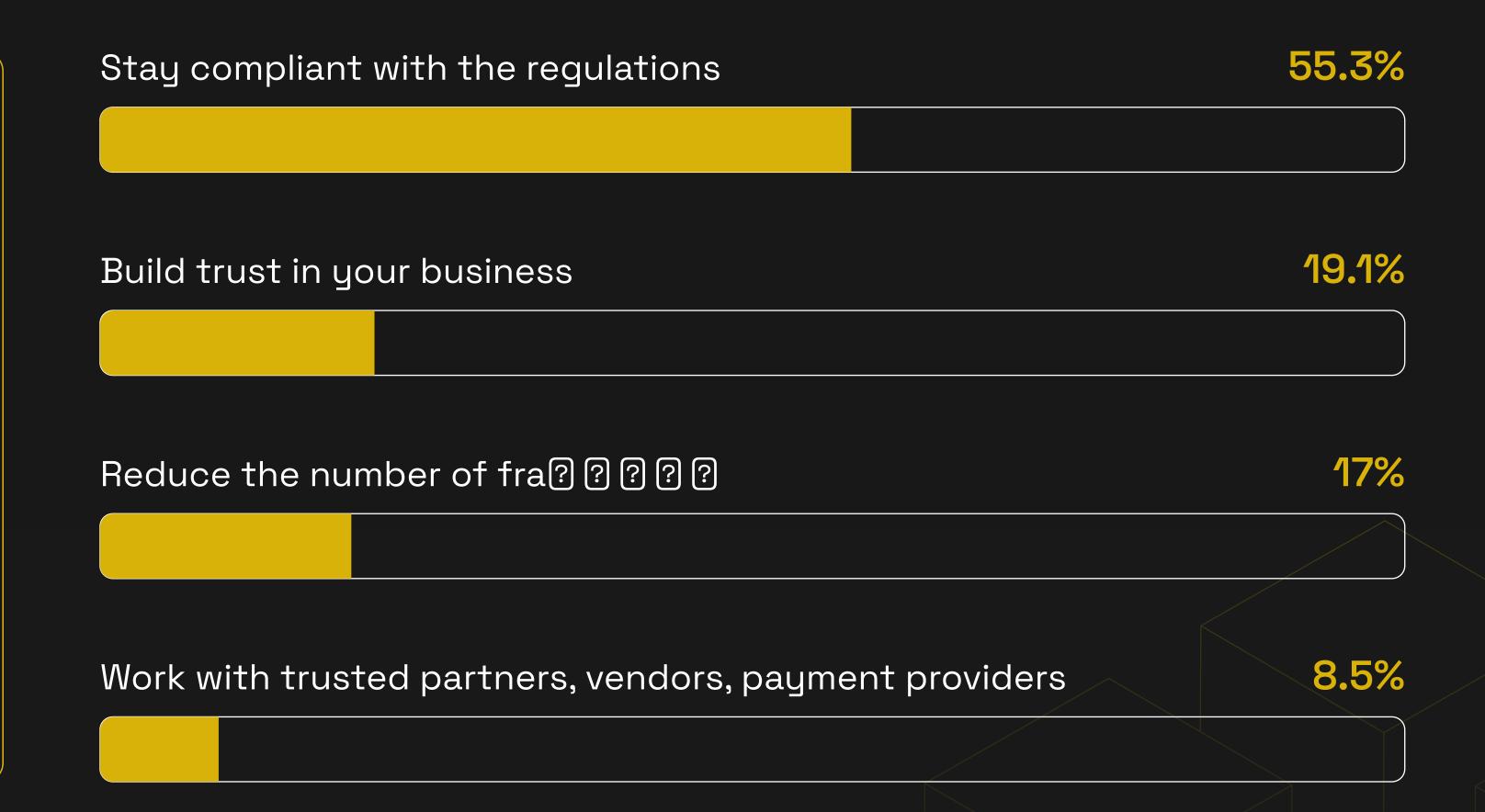






### The Main Goal of Using an Identity Verification Solution

Regulation is at the center of the need to find a common voice between crypto and governments.

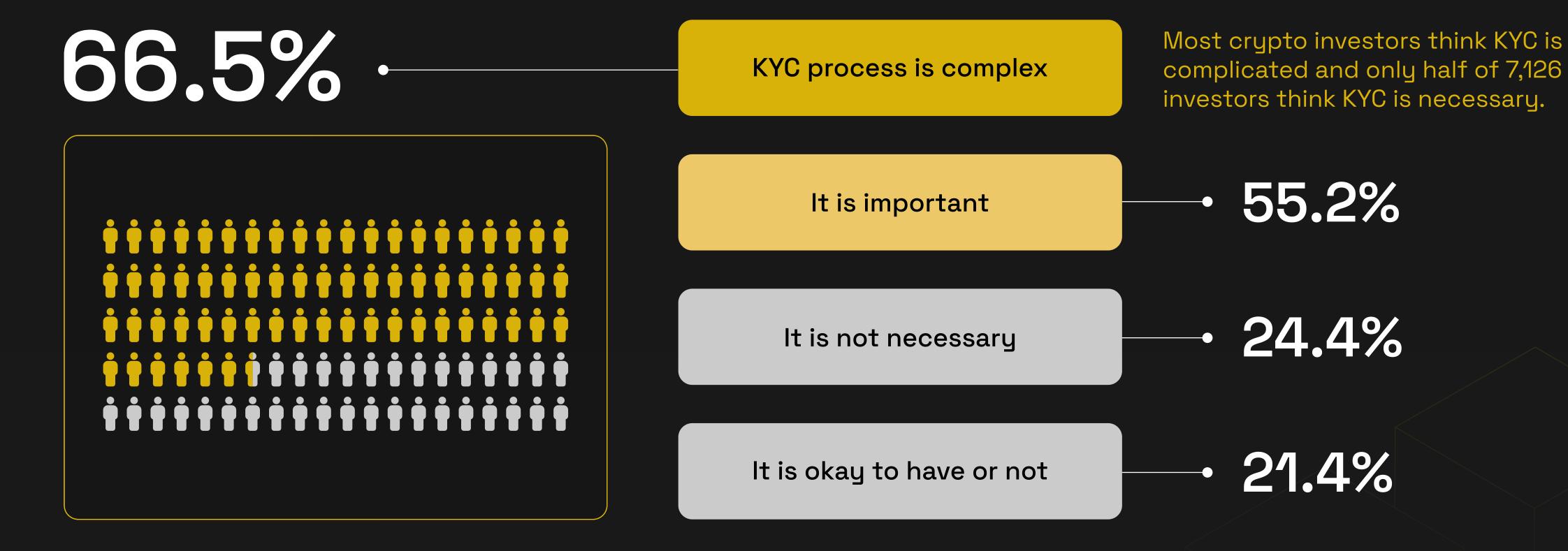








#### What do Investors think about KYC?



Survey conducted Dec 16-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.





# The Current State of KYC between CEXs

Coinbase is an exchange that has very strict KYC steps, as well as a limited number of withdrawals.

FTX is the easiest exchange in terms of KYC requirements.

Tier 1 and Tier 2 reflect the KYC process required in most countries. However, KYC may vary depending on the user's region of residence. For example, some countries require Tier 2 KYC verification checks.

		<b>♦</b> BINANCE	<b>∓</b> FTX	K KUCOIN	BYBIT	<b>C</b> coinbase
Requirements	Email	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Requirements Features	Trade	×	×	<b>✓</b>	<b>✓</b>	×
	Withdrawal Limit	×	×	1 BTC per day	1 BTC per day	×
Requirements	Email	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	Name	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	ID Info Input	<b>✓</b>	×	<b>✓</b>	<b>✓</b>	<b>✓</b>
	Photo ID	<b>✓</b>	×	×	<b>✓</b>	<b>✓</b>
	Selfie Check	<b>✓</b>	×	×	<b>✓</b>	<b>✓</b>
	Proof of Address	×	×	×	×	<b>✓</b>
Features	Trade	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	Withdrawal Limit	1 BTC per day	1 BTC per day	1 BTC per day	1 BTC per day	1 BTC per day
Requirements	Email	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	Name	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	ID Info Input	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	Photo ID	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>/</b>
	Selfie Check	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>V</b>	<b>✓</b>
	Proof of Address	<b>✓</b>	<b>✓</b>	×	<b>V</b>	<b>✓</b>
	Occupation	<b>✓</b>	×	X	×	<b>✓</b>
	Source of Funds	×	<b>✓</b>	×	X	<b>/</b>
Footures	Trade	<b>✓</b>	<b>Y</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Features	Withdrawal Limit	\$2M/ day	No limit	200 BTC/ day	100 BTC/ day	\$50,000/ day







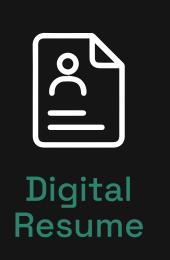
### Web3 Credential

# Definition & Use Cases

Web3 credentials are the next iteration of traditional credentials, and differ from traditional credentials in that they are not controlled by centralized authorities and are issued through a different medium, a Web3 medium, in the form of tokens.

There are three mediums by which Web3 credentials are issued: Non-Fungible Tokens, SoulBound Tokens, and Verifiable Credentials.







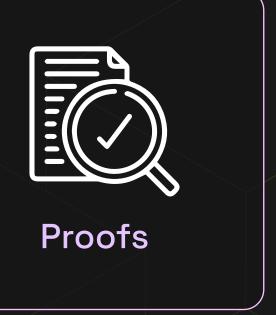










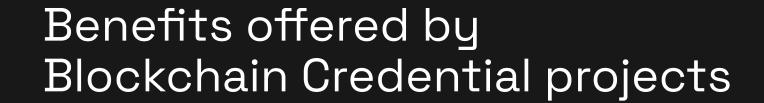






### Web3 Credential Benefits - Projects said vs Users said

Based on the results, the Blockchain Credential project can partly determine the focus of future development: Full Data Control, Ownership, Efficiency & Portability.



Full Data Control & Ownership

- Efficiency & Portability
- Decentralization
- Composability
- Verifiability

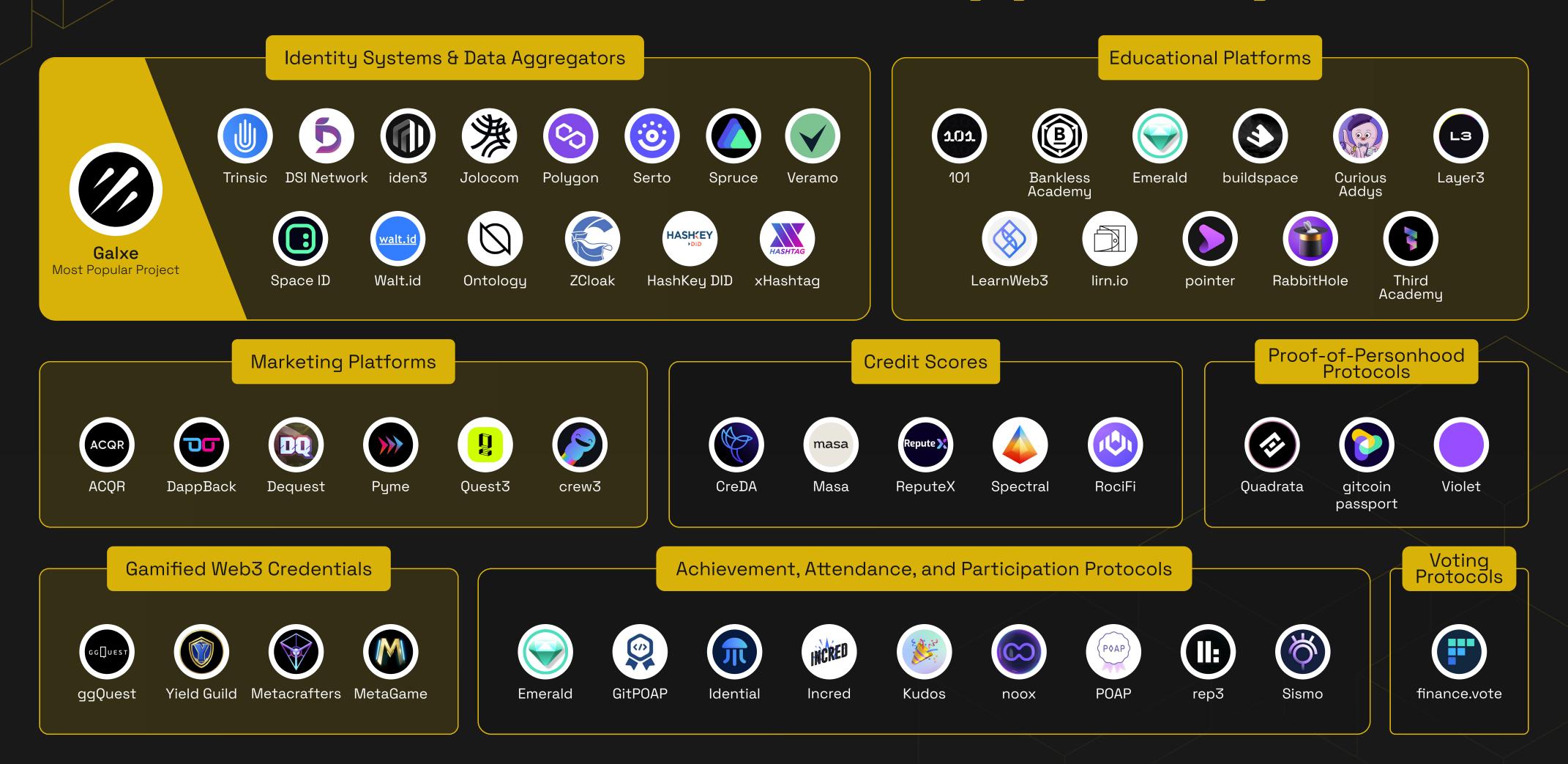
Benefits that users find most important

61.0% They give me data control & ownership

- Quick to use on multiple platforms/dapps
- 36.9% I am not completely controlled by a centralized organization
- 33.4% Physical loss is automatically fixed as all Web3 credentials
- High verifiability and can not destroy thanks to NFT technology

#### The Current Web3 Credential Landscape

There are 4 directions that are widely applied on web3 projects: Educational Platforms, Gamified Web3 Credentials, Identity Systems, Marketing Platforms







### Crypto Regulation at a Glance

Legislation / Regulation in place

Regulatory process not initiated

Process initiated or plans communicated

China, Qatar, and Saudi Arabia have not officially established crypto regulations.

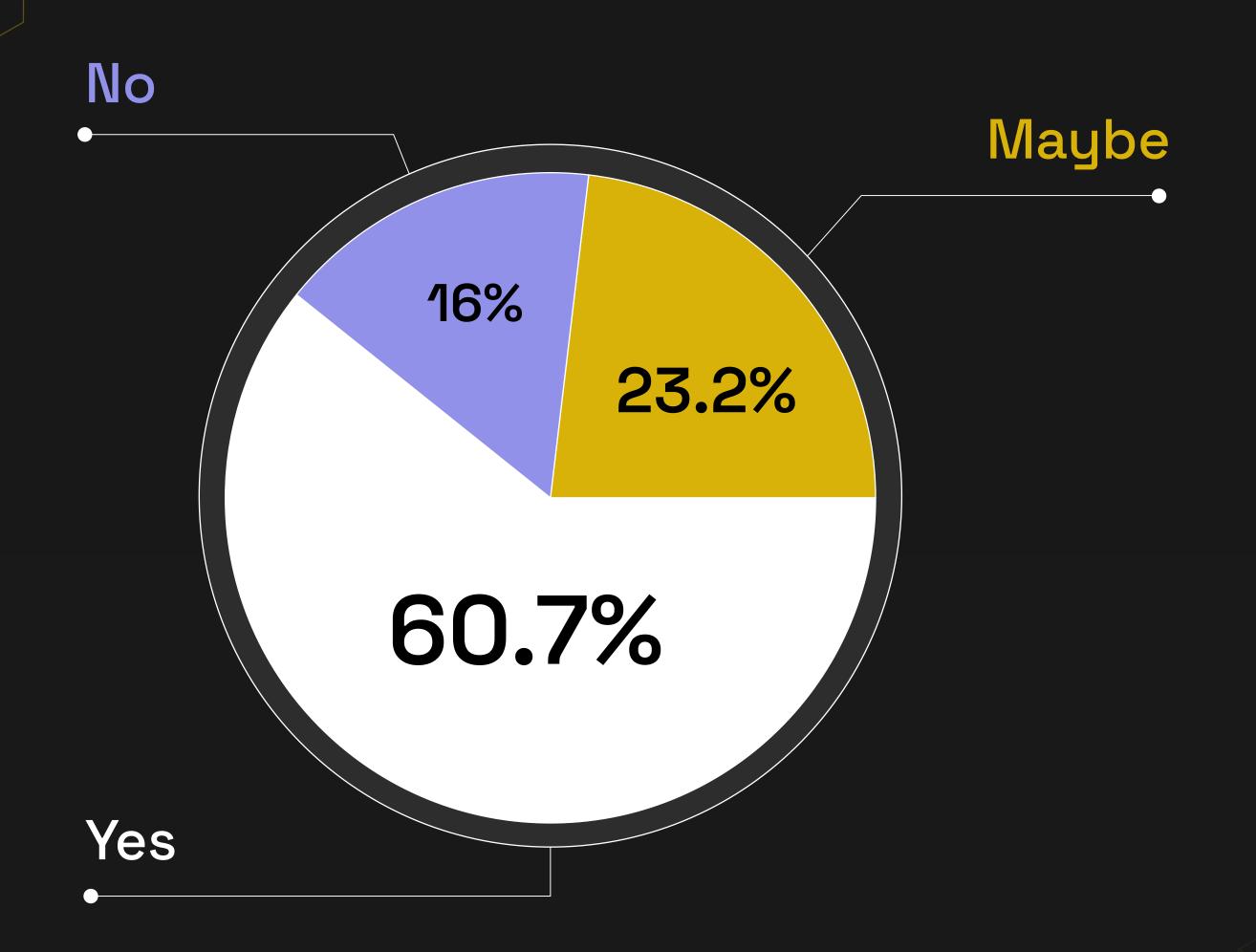
Jurisdiction	Regulatory framework	AML / CTF	Travel rule	Stablecoins (payments)	Jurisdiction	Regulatory framework	AML / CTF	Travel rule	Stablecoins (payments)
United States		<	$ \checkmark $		Bahrain		<		
Bahamas	<	<	<	<	Kuwait		$\triangle$		
Canada		<		$\bigcirc$	Jordan	$\triangle$	<		
Cayman Islands	$ \checkmark $	<	<	<	Oman	$\triangle$			
Panama	$\bigcirc$	$\bigcirc$			Qatar	×			
United Kingdom	$\bigcirc$	<	<		Saudi Arabia	×			
Austria	$\bigcirc$	<	$\bigcirc$	$\bigcirc$	Turkey		<b>⋞</b>		
Denmark	$\bigcirc$	<	$\triangle$	$\triangle$	United Arab Emirates	<	<b>⋄</b>	<b>⋄</b>	
Estonia	<b>⋞</b>	<	$\bigcirc$		China (Mainland)	×			
France	<b>⊘</b>	<	<		Hong Kong	<	<		$\bigcirc$
Germany	$ \checkmark $	<	<		India		$\bigcirc$		
Gibraltar	$ \checkmark $	<	<	<	Malaysia	<b>⋞</b>	<b>₩</b>	<b>₩</b>	
Hungary	$\bigcirc$	<			Singapore	<b>⊘</b>	<b>₩</b>	<b>⋞</b>	$\bigcirc$
Italy		<	$\bigcirc$	$\bigcirc$	Taiwan	$\triangle$	<	<b>⋞</b>	
Luxembourg		<	$\bigcirc$	$\bigcirc$	Japan		<	<b>₩</b>	
Switzerland	<	<		<	Australia	$\bigcirc$	<		
Mauritius		<	$ \checkmark $	<	South Africa	$\bigcirc$	<		$\bigcirc$
					New Zealand	$\bigcirc$	$\bigcirc$		$\bigcirc$





### Crypto Investor's Desire to Apply Regulation to Web3

Survey conducted Dec 16-26 2022, among a representative sample of 7,126 crypto investors worldwide, with an unweighted margin of error of up to +/-2 percentage points.

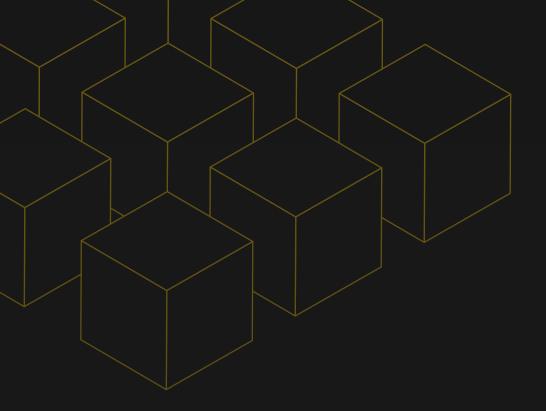


Although more than 60% of investors participating in the survey want to apply regulation to the web3 industry, at the same time, up to 1/3 of the survey respondents are still wondering about this.

Crypto was once considered a "kingdom" that was independent of government and regulations. It seems that many still want that to continue, so the number of drunk "No" and "Maybe" still makes up a lot of the survey.







#### Conclusion & Projection

Money laundering speed and KYC speed are probably in an intense race.

Those who steal money from users are becoming more and more sophisticated, FTX can be considered an example. Projects are also making more and more efforts in promoting KYC to prevent illegal activities as well as being able to get closer to the legalization of crypto.

Hopefully in the near future crypto users will be more aware of asset appropriation activities so that they can be more cautious in protecting personal assets.







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### Methodology

This report draws data from the following credible sources:



#### and following surveys:

#### Market Survey 2022:

Survey conducted Dec 15-26 2022, among a representative sample of 10,267 crypto investors worldwide in TK Media Ecosystem (1.3M followers), with an unweighted margin of error of up to +/-2 percentage points. All invalid and spam answers were excluded.

#### Web3 Survey 2022:

Survey conducted Dec 16-26 2022, among a representative sample of 7,126 crypto investors worldwide in TK Media Ecosystem (1.3M followers), with an unweighted margin of error of up to +/-2 percentage points. All invalid and spam answers were excluded.

**Limitations:** 

Because these surveys were conducted using self-reporting method, some possible issues such as introspective ability, response bias as well as exaggeration can influence the results.







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Elon Musk



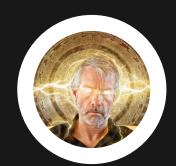
Vitalik Buterin



CZ Binance



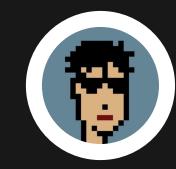
Andre Cronje



Michael Saylor



Charles Hoskinson



Carl From The Moon



Ben Armstrong



Route 2 Fl



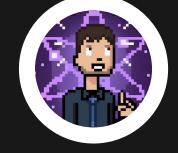
The Data Nerd



Koroush AK



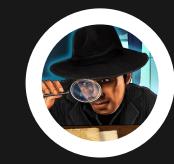
ZachXBT



Liam Connor



Wu Blockchain



The DeFi Investor



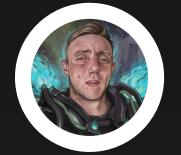
Smart Liquidity



The DeFi Edge



Teng Yan



Crypto Danny



POSTHUMAN ∞ DVS



TochiXYZ



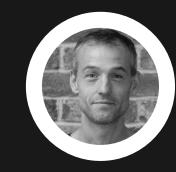
Alexander Jacobi



CryptoDinduz



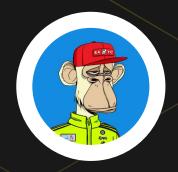
DoubleYou



RobinHunt



Elite Crypto



Harry Liu



Subli



Maria



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Cosmos Ecosystem



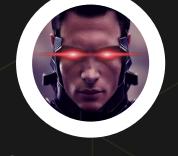
web3 is going great



Cosmos Hoss



**Dave Cosmos** 



SHIB Knight



blocmates.





### Special Thanks

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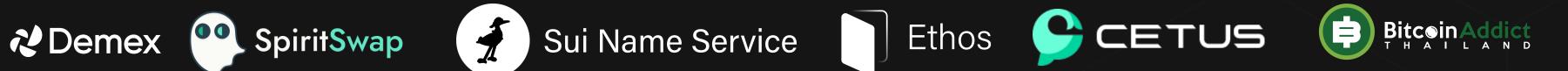






















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