



CONFERENCE REPORT

Token2049 Dubai 2024

BULLISH INSIGHTS TEAM

April 18-19, 2024

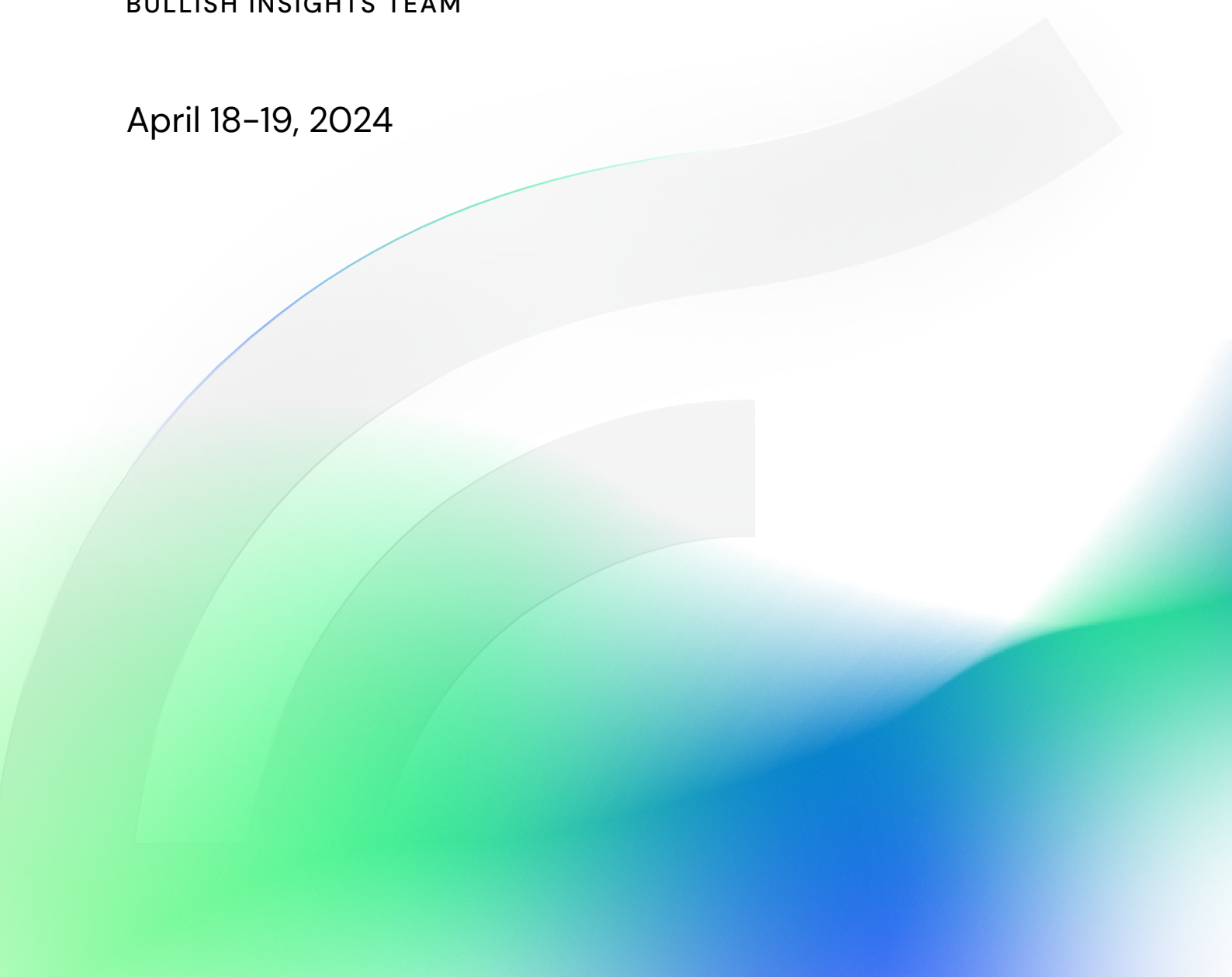


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Summary

Day 1

On Day 1 of the conference the session titled “The Future of Liquid Staking and Restaking,” various experts discussed the evolving landscape of Ethereum staking. Marin Tvrđić from Lido DAO addressed the topic of liquid restaking, noting Lido’s cautious approach due to the newness of the technology and its yet-to-be-proven robustness. He mentioned Lido is indirectly involved through stETH, highlighting the interconnectedness of liquid staking protocols. Mike Silagadze from EtherFi stressed that the distinctions between liquid staking and restaking are likely to merge in the future, especially with changes in Ethereum’s reward structures. Mohak Agarwal of Claystack introduced the concept of upgradable modules in their restaking protocol, emphasizing the importance of adaptability in this space. The panelists debated the future convergence of liquid staking and restaking, with Marin Tvrđić expressing concerns about the risks and unknowns in restaking, and Brian suggesting that diversifying assets in restaking protocols could mitigate some risks.

Paolo Ardoino of Tether outlined the significant growth and resilience of Tether (USDT) in his keynote. He highlighted how Tether has become a crucial pillar of trust in the cryptocurrency market, with its holdings in U.S. Treasury bills

making it a major global entity in terms of U.S. debt ownership. Ardoino proudly noted Tether’s profitability and its operational achievements, particularly in terms of user safety and scam prevention. Ardoino also discussed Tether’s role in providing a stable monetary solution in inflation-ridden economies like Argentina, Turkey, and Nigeria. By offering a stable and accessible medium of exchange, Tether has become a lifeline for many in economically volatile regions. The keynote also touched on Tether’s ventures into Bitcoin mining and its investments in geothermal mining in El Salvador, signaling Tether’s commitment to sustainability and its strategic diversification.

In the panel The Network State of the Union, Balaji Srinivasan introduced the concept of network states, proposing a decentralized, digital-first approach to nation-building. He likened the emergence of network states to startups, emphasizing potential profitability and the ability to attract citizens worldwide. Srinivasan argued that network states could offer viable alternatives to traditional states, especially for those disenfranchised by current geopolitical structures. Drawing parallels with historical shifts in global power dynamics, Srinivasan illustrated how the decentralization seen in the digital age echoes earlier periods of political fragmentation and reformation. He

suggested that the rise of network states could be seen as a natural progression in the evolution of societal organization, driven by technological advancements and changing human needs.

Day 2

On the second day of the conference, the session entitled “Announcement Telegram” featured prominent speakers including Pavel Durov, CEO of Telegram, Paolo Ardoino, CEO of Tether, and Andrew Rogozov, Founder and CEO of The Open Platform. Pavel Durov emphasized Telegram’s commitment to privacy, freedom of expression, and developer freedom. He highlighted the platform’s extensive user engagement, with 360 million monthly users interacting with mini apps, and discussed upcoming features aimed at monetizing and rewarding content creators and developers through a revenue-sharing model. Paolo Ardoino announced the launch of USDT on the TON blockchain, underscoring the synergy between Telegram’s expansive user base and Tether’s stablecoin utility. Andrew Rogozov focused on the versatility and user-friendliness of the Telegram wallet, which supports both custodial and self-custodial asset management and is integrated with the TON blockchain.

During his keynote at the “Crypto, AI and Global Macro” session, Arthur Hayes, CIO at Maelstrom, discussed the future of Bitcoin, predicting its rise beyond \$70,000 and emphasizing the need for a renewed belief in driving the cryptocurrency market forward. He explained his

concept of ‘real yield’ as the difference between the 10-year government bond yield and GDP growth, highlighting how governments prefer negative real yields for political gain through public spending. Hayes criticized the financial repression tactics used by central banks like the Fed, which involve quantitative easing to maintain negative real yields by purchasing government bonds. He advocated for Bitcoin as a superior investment option to gold in this financially repressed environment, citing its performance and resistance to confiscation. Hayes concluded that with ongoing government spending and negative real yields, Bitcoin and other cryptocurrencies will likely continue to appreciate, especially as long as real yields remain negative.

Another key session titled “The Rise of DePIN: Redefining the Compute Landscape” featured discussions by Richard Muirhead, Raulen Chai, Trevor Harries-Jones, Ahmad Shadid, and Ariel Seidman on the decentralized computing platform DePIN. The panelists discussed various aspects of decentralized computing, such as the rapid deployment capabilities, token-based incentive models, and the challenges of scaling and regulatory compliance. Ahmad Shadid, in particular, highlighted the efficiency of deploying clusters on their platform, which significantly reduces setup time compared to traditional services like AWS. The session also addressed the practical applications and growth of decentralized networks in areas such as autonomous vehicle mapping and AI processing, emphasizing the role of token economics in balancing supply and demand within the network.



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APRIL 18, 2024

Day 1

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Navigating the Legal Landscape: Perspectives on Global Crypto Regulation

SPEAKERS

Richard Teng | CEO at Binance

Matthew Roszak | Co-founder and Chairman at Bloq

Perianne Boring | Founder and CEO of The Digital Chamber (Moderator)

What do you have to get right this year?

Richard

It's not one-dimensional. I have a strong team behind me to grow. There isn't one top priority; there are several. Firstly, users. We are a user-focused platform, and it's about the consistency of action. In the past six years at Binance, we prioritized user experience, security, etc. Secondly, regulation is important. When I was in Abu Dhabi, we were one of the first ones to look into regulation, but the landscape has changed recently. I'm looking forward to working with regulators. Thirdly, we are still in crypto's nascent stages. We want to work with global partners to embrace crypto adoption. If we can do those three things well, we will be successful.

Matt

There's a bunch of innovators who get really big, then become trillion-dollar networks and think about responsible tech. It's now finding its footing in the traditional world.

How do geopolitical events affect crypto?

Richard

It can impact both negatively and positively. Three years ago to now, you have BlackRock, Fidelity coming in, saying Bitcoin is superior to gold. Over the weekend, when there were tensions, traditional markets were closed for trading, but crypto was open for trading. When you look at the global agenda, my hypothesis in 2017 for mass adoption to take place was that you need two dimensions: clear regulation and institutional embracement. They bring in expertise in product structuring, new liquidity, new users. From now on, the pace of adoption will be much faster. It's not just the US approving; you have seen Hong Kong approving the spot Bitcoin ETF too.

Matt

Considering how Wall Street considers bitcoin, the way you hold cash is like holding bitcoin. People start to look at bitcoin as an almost cash alternative.

Where are the global crypto hubs going to be located?

Richard

I don't have a crystal ball, so I can't make that prediction. But if you look at global jurisdictions and where crypto adoption is the fastest: one is younger demographics—today's young adults hold more crypto than stocks. This represents the future. The second dimension is when you see financial inclusion lowered. In many parts of the underdeveloped world where you can't make payments and remittances where crypto fees are much lower, many lives have been transformed. People in these jurisdictions are holding stablecoins from hyperinflation in their domestic currency. I think these regions will continue to do well. UAE and Dubai are attracting talent, fundraising, etc.; these will be important crypto hubs in the future. The community is very vibrant here now. We worked closely with VARA to get the license in 2021. I'm confident this place will be an important global hub for crypto. It depends on which new jurisdiction can embrace it.

Matt

In my early days, I spent a lot of time in Asia as that was where a lot of the builders were, and San Francisco years ago was a flyover town

because all the action was in Asia. Then, after the crackdown in Asia, it pushed some of that to Dubai and Abu Dhabi who have been forward-leaning, engaging with the industry, and a thought leader in this space. Japan, for example, had regulators after Mt. Gox blew up, who had the advantage to understand and educate themselves around it. They had reporting and disclosures, segregated accounts implementing rules without stifling innovation. When you think where innovators in this space go, it's hard to see historically people say we will move to Helsinki; in crypto, you can say I'm moving to Dubai and uproot and go.

What are your views on stablecoins?

Richard

The regulators are getting involved more. You will see regulators step in more. It will provide more clarity around stablecoins. I have seen a lot of chatter about the US and other jurisdictions around the banking and custody side.

Matt

People are thinking about how to build a more resilient stablecoin that won't depeg. Algorithmic versus collateralized stablecoins, for example, these models will evolve. 🚀

The Network State of the Union

SPEAKER

Balaji Srinivasan | Founder, Investor, and Author, The Network State

The concept of a network state

is that we started new currencies, and now we ask, can we start a new country? Starting new countries is both possible and profitable. Network states are decentralized countries. How do we reach 1 million citizens? We can do it like a normal startup: get people to co-live around the world, start small, then build out a decentralized country. Most UN countries have fewer than 10 million citizens. UN membership has grown over time; in the past 30 years, it has quadrupled. If cryptocurrencies can rank alongside fiat currencies, then can crypto countries rank alongside fiat countries? Yes, they can. Sufficient traction means diplomatic recognition. For example, El Salvador adopted Bitcoin as a national currency. It is possible, so why is it preferable? There are powerless people looking for alternatives to failed states and ambitious people who see an opportunity in frontier societies. Why are they profitable? Annual revenue per user (ARPU) data shows that platforms like WeChat, LinkedIn, and TikTok

have millions of users but low ARPU, whereas the US and China have high ARPU and hundreds of millions of people. Network states could be small, in the millions, but high in ARPU.

History is running in reverse; if you go backward in time, you had the Spanish flu, and now you have COVID-19. Back then, America shipped goods to China, and now China ships goods to America. Previously, Russia was the senior partner to China, and now China is the senior partner to Russia. In the past, the West dominated GDP, but now non-Western countries dominate GDP. Ideologically, the US is disintegrating in its alignment of views. As the British, French, and Soviet empires fell, new independent states gradually rose. If we go back before 1945, we see lots of independent states. You see a rise in independent states as we go backward in time. In the past, the world was decentralized; by the 1950s, the world started centralizing, and now we are experiencing re-decentralization. We are only at the beginning of decentralizing. ✨

There are powerless people looking for alternatives to failed states and ambitious people who see an opportunity in frontier societies.

Bitcoin ETF & Institutional Flows: Insiders Insights on What Lies Ahead

SPEAKERS

Giovanni Vicioso | Global Head of Crypto Products at CME Group

Roger Bayston | EVP Head of Digital Assets at Franklin Templeton

Evgeny Gaevoy | Co-founder and CEO at Wintermute

Henri Arslanian | Co-Founder and managing partner at Nine Block Capital Management (Moderator)

Were you surprised by the Bitcoin ETF flows?

Roger

We were pleasantly surprised with the success. ETFs have been around for decades, and it was the biggest, most successful launch in ETF history. We are seeing a lot of different investors coming into the space now.

What was the impact on the futures market?

Giovanni

It's been a tremendous impact. I think the market anticipated it would be successful, but not as successful. Futures tend to move first. We have been waiting for Bitcoin ETFs to launch. We had in the back of our mind that ETFs would be the next natural progression. In terms of volume, we are averaging in the billions a day, and a lot of that is from the hedging side. During the 3-4 PM New York window, we are averaging 1 billion in volume in that hour alone because of when the reference rate gets published at 4 PM.

We are noticing a lot more participants trading our options to hedge that weekend risk. In our case, we are not just a crypto exchange and cover 6 other asset classes, so we cannot say we will move to a 24/7 trading time.

Roger

The success of the ETF will have people start looking into the industry. If you are taking adviser fees, you will be looking at where people are growing. It's a big tipping point for people in the industry in general. We have a future vision of how we can add value in things like portfolio diversification. Can we get it in a form where the assets are like the broker-dealer accounts?

When you pitch to advisers and funds the 401Ks, what are they saying?

Roger

Every journey starts with one step, and now we have these network economies that fit in this delivery mechanism. It will take some time

for education to step up. Transfer agency and record keeping were key things we looked into using blockchain technology for. We are finding regulators outside the US that are a lot more friendly, like Hong Kong.

Do you believe the same players will dominate the CEXs?

Evgeny

Maybe some regional and global players will dominate. It would be a default view. I am hopeful we will see more fractioned markets, especially on the DeFi side, and that is what we are building towards.

Giovanni

I think there will be some consolidation among the centralized exchanges.

Roger

When there is realization these networks, there will be much more adoption and higher price action, quite frankly.

You have to have a spirit of R&D, try things to get outcomes. In asset management, nobody really steps forward; they just look at each other and ask what did you do?

The rate of borrow for USDT is extremely high on the crypto side versus the traditional side. When do you think this funding rate arbitrage will close?

Evgeny

You have to make a choice where you deploy your capital. Binance is closed for a lot of US, for example, so to close the funding gap is harder. You will need more market participants to come in to close that gap. It's a big degree of regulators for market participants to come in. The more liberal the regulators, the more market participants will be able to join.

Where do you see the future of DeFi?

It's a function of two things. If DEXs will scale, DyDx, for example, is now much more decentralized. We need to see how much throughput it can handle and battle test it. Second, we see hostile regulation around the world, especially when it comes to self-custody. If you cannot self-custody, it kills the point behind DEXs.

Giovanni

When you look at the interest in crypto, it's still relatively new. There are a lot of these platforms out there, but reliability and trust are issues. In order for TradFi to adopt these, then these points need to be addressed. When you look at Bitcoin, it grew from word of mouth. On the regulatory front, we also need to be global, and there shouldn't be this regulatory arbitrage.

Roger

Our communication with the regulators has found that the focus has been on the asset itself. After some time and education and collaboration understanding what the networks can be doing. When we spoke to the SEC about our tokenized money market fund, the conversation we had was that with the right tool sets the SEC can observe the surveillance a lot easier, and we know they have the right tool sets. Let's understand what these technologies deliver for us rather than the volatility and speculation..

I was surprised Franklin Templeton offered staking services.

Roger

It helps with a partner at the top of the firm. Jenny Johnson is a risk-taker; she began to understand the technologies probably far more than other

peers have. You have to have a spirit of R&D, try things to get outcomes. In asset management, nobody really steps forward; they just look at each other and ask what did you do? We will follow. We changed the corporate logo with the laser eyes with 5 million views on that.

Where are you getting talent and how do you convince people to work for a TradFi firm versus crypto native?

It's important to get people in for the vision of crypto, not because it's a bull market and they want to make money. We have been adding people since 2018, even in the bear market, and it's been important for us to get the right culture. We are competing with fintechs, HFTs so it is hard. We are looking for culture alignment, crazy working hours, and the right work ethic. This 24/7 aspect is real, so seven days a week.



Roger

Giving permission to your own employees to explore. Giving them the ability to expand to something new. You gain from that industry wisdom, giving them the permissions to do things is important. We have been taking long-standing employees who see a vision for something new and letting them do that.

Giovanni

CME has been around for a while, but we are always innovating. In terms of talent, we are a relatively small organization covering 6 different asset classes. We have been adding people to the team, and I have been seeing applications come in from the traditional space as well as the crypto space. It is a very collaborative space. 

The Future of Liquid Staking and Restaking

SPEAKERS

Marin Tvrđić | Lido DAO

Mohak Agarwal | Claystack

Brian Crain | Chorus One

Mike Silagadze | Co-Founder of EtherFi

Marcin Kazmierczak | RedStone Oracles (Moderator)

Will Lido enter liquid restaking?

Marin

When you grow, you have responsibilities to stakers. There is an expectation to take risks and innovate, but it is a delicate situation. Restaking was only launched less than a month ago; it hasn't been battle-tested. We need to observe before established protocols can move in. There are 17 liquid restaking protocols, and 9 take stETH for restaking. With stETH as an underlying asset, I can say that Lido is already in the restaking ecosystem.

EtherFi is a leading restaking protocol. What is your focus and upcoming trends?

Mike

I think the categories of liquid staking and restaking are really one category. In a year or two, there's just going to be one category. The rewards curve on Ethereum proposal change will mean no incentive to do vanilla staking, and restaking will be the norm. We will see a flood of AVS's.

Mohak

We launched the restaking protocol last year, and what we want to do is to make our modules upgradable. Eigenlayer will have many layers of upgrades, and we want to make our code immutable. We currently have four modules.

How does running nodes for liquid staking differ from liquid restaking?

Brian

Liquid staking is pretty simple; we were part of Lido from the start. It's basically the same. Liquid restaking is very different because you have all these new AVS's, and we want to onboard as many as we can. It is more similar to what we do in other ecosystems. However, the challenges around liquid restaking are significant since there is no slashing at the moment, and no downside to onboard whatever, then the quality might not be that high. The AVS from security and maturity is a challenge. We have to balance between fast support for many things but we don't onboard things like closed source software.

Do you believe liquid staking will all be liquid restaking later?

Marin

I don't have a crystal ball, but you need to look at the asset collateral and understand the risk-reward position. With liquid staking, we fully know the risk, but with liquid restaking, we do not. You inherit slashing risks and add additional conditions not automated not on-chain. The problem is that it is slashed by a multi-sig. When that is resolved, then it is lucrative in scaling and adding a bunch of AVS's. If all L2s put their sequencer fee profits into restaking, then APR would be 1.5% with the current ETH staked. A lot of things need to fit in place; I don't think one will replace the other.

Using other assets outside of ETH for restaking, do you believe it is a good path forward?

Brian

It certainly is going to happen. The interesting question is what you are doing? If there is no slashing, then there is no capital at risk. I'm not aware of any protocol that increases their capacity for slashing. Cosmos was still at 5%, Anatoly talked about 100% for Solana, but they started at zero, and today it's still at zero. EigenLayer, who knows. On the security side, it's the reputation of the node operators. If some node operator gets slashed, then they don't put up collateral for that. Incentives from Eigenlayer's side, there is not much incentive, and the AVS's, of course.

How much value has Chorus One slashed?

Brian

Zero.

How about Lido?

Marin

Twice, always covered for the issuers. 64 ETH the first time and then less than that the second time. With Lido, you can't insure that amount of funds; there are levers the DAO has to make users whole, but it is still not enough when we think about scaling Ethereum staking. There is always still a risk.

Mike

It's not apples to apples. Ethereum is robust, battle-tested versus AVS's much younger. The risk is there. If ETH goes up 2x, you use USDC as collateral, then you don't want to use ETH for slashing. It matters how you match the slashable security to the thing you are securing.

The challenges around liquid restaking are significant since there is no slashing at the moment, and no downside to onboard whatever, then the quality might not be that high.

Will EtherFi be on Karak?

Mike

We aren't picking winners, but if there are multiple restaking solutions, then we can look into it..

What do you see in a year's time for the project?

Marin

Community staking module will be a large milestone to scale a large number of node operators along with dual governance. Other things I can't speak about yet, something to anticipate.

Mohak

Expanding into home stakers.

Brian

Scaling the number of networks we support. There's a lot of things launching with protocols asking for support. Wesupport 55 .

Mike

We started off as a liquid restaking protocol, but we want to launch a suite of integrated products, starting with our staking product and continuing into our cash products. So, you never have to off-ramp to traditional finance. 🚀



Tether: More Than A Stablecoin

SPEAKER

Paolo Ardoino | CEO, Tether, Keynote

The Tether team had a simple idea: let's put a dollar on top of the blockchain. What changed was the execution the team made over the years. While other players have come and gone, Tether has been a pillar of trust. We went from \$0 to \$109 billion. There's been a lot of FUD over the years. In the world we have been pressured by competitors, communities, and regulators, but we always proved we are built differently. We were able to redeem our reserves in a very short span of time. We have been tested many times with redemptions. We have proved it for ten years. We made \$6.3 billion in profits in 2023, making us the most profitable company per employee in the world. We have close to \$90 billion in US T-bills, which is more than the UAE, Australia, and Spain. If Tether were a country, we would be in 20th place in the world for being a top holder of US debt. We are now over 106% overcollateralized. The profits we made were

decided to be kept in the company to further back the stablecoin. We want to prove that this industry is creating something different. You don't have to lend out other people's money to make a buck. Traditional institutions are upset with us because of this. Our industry is facing pushback from these institutions. Over the years, we have been questioned about our banking relationships. We are using Cantor Fitzgerald. We have been constantly thinking about how to make our product safer for our customers. We blocked \$1.1 billion in scams and work proactively with the community as well as law enforcement in freezing these funds. We have already recovered \$100 million of these funds. If you want to work with strong banking partners, you should use the tools in the best way possible. 3 billion people in the world are unbanked, with 5 billion people living in countries with high inflation.

We made \$6.3 billion in profits in 2023, making us the most profitable company per employee in the world.

These people have small earnings; they don't have big savings accounts, and it's not profitable enough for banks to bank them, so they are left unbanked. Dollar access is a key point for them. They turned to Tether, and that's how we got so big. People found our product useful, easy to use, and they started telling their family and friends. Last year, USDT had over \$10 trillion in volume. Argentina, Turkey, and Nigeria are big markets for Tether. If you work hard in Argentina or Turkey, you are poorer at the end of the year compared to the beginning of the year despite working the whole year because of inflation. The banking in Argentina does not allow them to hold dollars, and they are tired of the poor economic choices of their government. Remittances are one of the

biggest use cases, with stablecoins being able to facilitate that. You may have seen news of Tether investing in Bitcoin mining. The majority of Bitcoin mining back in the day was in China, and people were complaining; now a lot of it is being done in the US. From a geopolitical and stability of Bitcoin's perspective, it is a problem. We are providing tools for different countries for mining. We invest our own profits in Bitcoin mining to ensure bitcoin mining is distributed around the globe and not concentrated. In El Salvador, we look at geothermal mining through renewable energy. These investments are done separately from the stablecoin. We are keeping it separate. We are building tools like open-source P2P development platforms. 🚀



APRIL 19, 2024

Day 2

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Monad: Accelerating Ethereum Execution Keynote

SPEAKER

Mr. Keone Hon | Co-Founder, Monad

Monad is a new EVM L1 that focuses on performance and portability. We have over 10,000 transactions per second (tps) with one-second finality. It's important to have certain hardware requirements so that everyone can run a node.

Asynchronous Execution

Blockchains mostly have interleaved execution, where consensus and execution are interleaved. Consensus takes up most of that time. The idea is to move execution out of the hot path and focus solely on consensus. After consensus completes, things happen in parallel. The important thing to note is that when we change the architecture, we can expand the execution section and have a much larger execution budget. Asynchronous execution involves running execution post-consensus, ensuring nodes come to consensus on transaction ordering prior to execution.

Parallel Execution

With Ethereum, transactions are linearly ordered and serially executed. Parallel execution is a straightforward algorithm. Optimistic parallel execution runs many transactions simultaneously. If inputs are unchanged, it's a commit; otherwise, it re-executes. If you have

five transactions, the smarter approach is to run them on separate cores. We step through the pending results, and if there are bad inputs, we reschedule the work. Re-executing a transaction is very cheap because the execution cost is just reading states from SSDs. Committing in order and re-executing if needed ensures that every transaction is executed at most twice. If many re-executions occur, the first execution pulls state dependencies from the SSD to the cache. The second execution is fast because the state is cached. We need to pull a lot of states, which links to the third part.

Monad is a new EVM L1 that focuses on performance and portability. We have over 10,000 transactions per second (tps) with one-second finality.

Parallel State Access

Hardware has advanced significantly: modern SSDs have high bandwidth but high latency, about 1 million IOPS a second for a very

reasonable cost. It is important to saturate the bandwidth by doing many look-ups in parallel. Ethereum data lives in a Merkle Patricia Tree (MPT), which is embedded in another database level such as LevelDB or PebbleDB. Both use an LSM tree under the hood. The problem is each node is stored under a different tree structure, resulting in a quadratic amount of work to see

under the hood. Navigating to one leaf in the MPT requires the lookup of many MPT nodes. We introduced MonadDB, a custom state store that stores the MPT structure natively on disk. It avoids “read amplification” and many other optimizations, e.g., bypassing the file system. MonadDB alleviates the costs of state access. 🦅



Crypto, AI and Global Macro Keynote

SPEAKER

Arthur Hayes | CIO at Maelstrom

We're not stopping at \$70,000 for BTC; we need to re-believe in what we are doing and driving the market forward. When we talk about real yield, I have my own belief: it's the 10-year government bond yield minus GDP growth. When the government lends, it should be compensated for the nominal growth of that economy. The rate of return should reflect the benefits that the economy derives from the expenditure, and as an investor, you should be a part of that yield. A positive real yield means an investor earns a profit. Governments, however, prefer negative real yields, as politicians who deliver goods to the public get re-elected or supported. Therefore, if possible, politicians want to spend as much of the public's money as they can. If real yields are negative, then government spending is profitable.

Financial Repression:

Use the banking system to buy government bonds at high prices, i.e., negative real yields. Prevent savers from moving capital outside of the domestic financial system. Central banks, with the Fed in the US being the most significant, employ quantitative easing. They are all engaged in some form of QE, which involves printing base currency to buy

government bonds and push down their yields. They push rates into negative territory to make these purchases more feasible.

I track the 10-year US Treasury versus the Fed balance sheet. Historical data shows two main periods where positive interest rates correlated with positive growth. The orange line represents the Fed's balance sheet. As real yields consistently stay negative, the Fed's balance deficit grows. The US has been able to finance itself with negative real yields since 2009.

If real yields stay negative, Bitcoin and crypto will continue to grow in fiat terms.

How can savers earn a positive real yield when they are financially repressed? Options like gold are heavy and easily confiscated by governments. Bitcoin, on the other hand, is weightless and hard to confiscate. Bitcoin is probably one of the best-performing assets in history. Comparing Bitcoin against gold post-2009 shows that Bitcoin has performed exceptionally well.

We are forward-looking in markets. The government projects a 6% deficit over the next ten years. They are not going to stop printing money and are incentivized to continue spending to get re-elected. In China, GDP growth is a political variable. They print more money and project the amount of debt. Having a recession in an election year statistically decreases your chance of getting re-elected.

Real yields will stay negative, and the Fed and US Treasury will intervene in financial markets using printed money. If real yields stay negative, Bitcoin

and crypto will continue to grow in fiat terms. When real yields go positive, then it's time to dump crypto. Until then, we "Left Curve" it!

US party politics are tribal, with one of the most polarized political systems. Each party wants to generate growth, and the easiest way to do that is to print more money so they can stay in office. It doesn't matter who wins the election; this will continue—the government will continue to print. 🏹

Navigating the New Frontier of Memecoins in the Exponential Age

SPEAKERS

Alex Kruger | Asgard Markets

Santiago Roel Santos | Investor

Ran Neuner | Crypto Banter (Moderator)

Is Doge still just a memecoin?

Alex

A lot of memecoins also serve as political satire. It's not either/or. The combination of the two makes them accessible. There's a more scalable community with a memecoin than with an NFT collection. I would argue that the ultimate memecoin is Bitcoin. A memecoin can be created out of anything.

Ran

I think everything is a meme until there is utility and proof that it has real users. That's why, to me, Doge is no longer a memecoin.

Santiago

Doge has transcended, as if Elon is using it to make a financial mockery of the current financial system. Bonk combines meme and functionality.

Alex

CryptoPunks are punks because they don't pretend to be anything other than art.

What would be the price impact if Elon said he's not integrating Doge into Twitter?

Alex

Minus 40%. Elon has been talking about Doge but hasn't even hinted that it would be used. In the near term, there may be price action, but long term it's a different story. We bought the original picture of Doge as an NFT and fractionalized it. That has value because people like it.

How do you feel about memecoins being seen as a form of gambling?

Alex

Gambling and speculation are different to me. Gambling involves going 100x leverage where you speculate on everything. For me, there is a distinction. People forget that in the early days, Bitcoin was a memecoin. When you transact value, there is a strong signal, but if you are not, then there's nothing there. Crypto is a global, untethered market, and you are letting the market run its course and come up with a price in real time. The conflict in Iran and Israel

over the weekend meant the markets were closed, but crypto was open for that. People were reacting in the crypto market ahead of the equity market.

How can retail investors protect themselves from snipers?

Santiago

You have snipers dumping on you, then you have VCs dumping on you..

Alex

It's about MEV; it's an MEV issue. It's a structural issue we have. Memecoins bring us back to ICOs, which is a fairer game for speculation than the

construct of private rounds. There's a bonding curve mechanism with memecoins on Solana, which I think is one of the fairest ways to initially allow participants to express their interest.

How will DeFi evolve in relation to memecoins?

Alex

You can borrow against your memecoins in some cases. There are tons of volumes on memecoins. I think there is a huge market to lend against them. They are more volatile, yes, I agree, but I would argue you could still borrow against them.



The Rise of DePIN: Redefining the Compute Landscape

SPEAKERS

Raullen Chai | Co-Founder at IoTeX

Trevor Harries-Jones | Board Member at Render Network

Ahmad Shadid | Founder and CEO at io.net

Ariel Seidman | Founder at Hivemapper

Richard Muirhead | Managing Partner at Fabric Ventures (Moderator)

What are the positive touchpoints on DePin?

Raullen

Where is the capital coming from? You will want to try something yourself. The magic about crypto is that IoT networks have huge upfront costs, but with DePin, this happens on day one where small initial capital can go from proof of concept to something real.

Trevor

It comes down to abstraction for us. They use fiat to pay rendering charges. On the crypto side, it comes down to choosing the right tokenomics model. We upgraded our chain recently and upgraded incentives on the crypto side.

Ahmad

Deploying a cluster takes 15 minutes, but for us, it takes 30 seconds. It gives an incentive because on AWS, there is this time that's gone, but with a token system, you can emit rewards small enough to incentivize people to stay on the network.

Grab bought 100 of these devices and figured out who were the right drivers, and distributed them to these drivers and split the tokens with them. He had the capital, and the drivers might not have had the capital. On the car rentals side, this guy bought 1,000 car rentals and has helped the map grow in a cost-effective way, rewarding the person putting capital at risk.

Is there matching supply and demand?

Ariel

We are working with an autonomous vehicle company. Say Phoenix, they want the location mapped. In order to get to 98% confidence, we introduced a boost; if you take a 5-10 minute detour and hit the intersection we were interested in, you would earn more. There was a lot of coverage a week for 3,000 locations. If you are in this area, take a small detour and earn a little bit more.

Trevor

Typically, you start with getting enough compute supply, but for us, it was providing incentives for nodes to stay. We reached a million GPU and moved that up again as we went into AI.

What are the challenges from a regulatory perspective?

Ariel

Europe has strong privacy regulations. Processing all the data and setting privacy masks. People's bodies, cars, license plates, etc., are all private.

Trevor

Decentralized GPUs definitely help. Being able to issue in different locations is a real benefit. On the data side, for us and our users, they are angry at centralized companies trading their data.

Ahmad

Regulation for DePin is coming fast.

What is your preferred L1 to build on?

DePin carries a similar spirit to memecoins. DePin's problem is that scaling is slow. There is a steep curve to scale. How can we educate the market? That is the biggest challenge for DePin.

Trevor

Solana, Helium moved over, and that was good. Low cost and high frequency are what we are after. Leveraging the low-cost system to do that.

Ariel

We love Solana and from our perspective, the fewer resources we spend on engineering, the better. The rest of the team can focus on value and community. We are starting to move some back data itself to the blockchain. When I got in the car yesterday, it ended up taking me 3 hours to get here rather than the quoted 40 minutes. We will know about the flood areas because we have eyes all over and understand where the blocks are. We will get that data on the chain.

Ahmad

I think AI will be 30% of the token market cap soon in the next two to three years. 🚀

Announcement Telegram

SPEAKERS

Pavel Durov | CEO at Telegram

Paolo Ardoio | CEO at Tether

Andrew Rogozov | Founder and CEO at The Open Platform

Ariel

The reason we love blockchain is the technology and freedom. Our logo symbolizes the ability to move in three directions in three ways: freedom to communicate privately, to express yourself publicly, and to build your apps and businesses. We believe in giving people the freedom to build. We allow more freedom to developers than all social media apps combined. We want blockchain because it allows us to give the power back to the people. Out of 900 million monthly active users, 360 million interact with mini apps every month. We haven't introduced chatbots yet, so imagine how many more will come. Telegram is the sixth largest and most used app in the world. Other apps sell user data to advertisers without sharing any ad proceeds. Telegram does not sell your data to advertisers. We would never prevent a direct link of users. We believe in sharing. We believe in giving back to the community. 50% of revenue from ad revenue goes back to the owners. We want to offer many communities the

We are announcing the launch of USDT on TON.

benefit of this revenue-sharing model. In the next few weeks, we will introduce tips for creators, where 70% of the revenue from tips will go to the creators. Merchants can get 100% of the revenue from physical goods and services. 40 payment providers will be integrated. In a few weeks, we will also allow people to buy digital goods and services where developers will get 70% of the revenue. Owners get 95% of the revenue from usernames and anonymous number NFTs. It is fair to everyone; everyone is equal in this. We allow users to sign up and log in using their blockchain wallets. These anonymous number NFTs have utility. With anonymous numbers, we experienced something we didn't expect. The price increase for these was 33x with \$350M in sales. We will tokenize Telegram stickers. Artists will get 95% of the revenue from stickers and emoji NFTs.

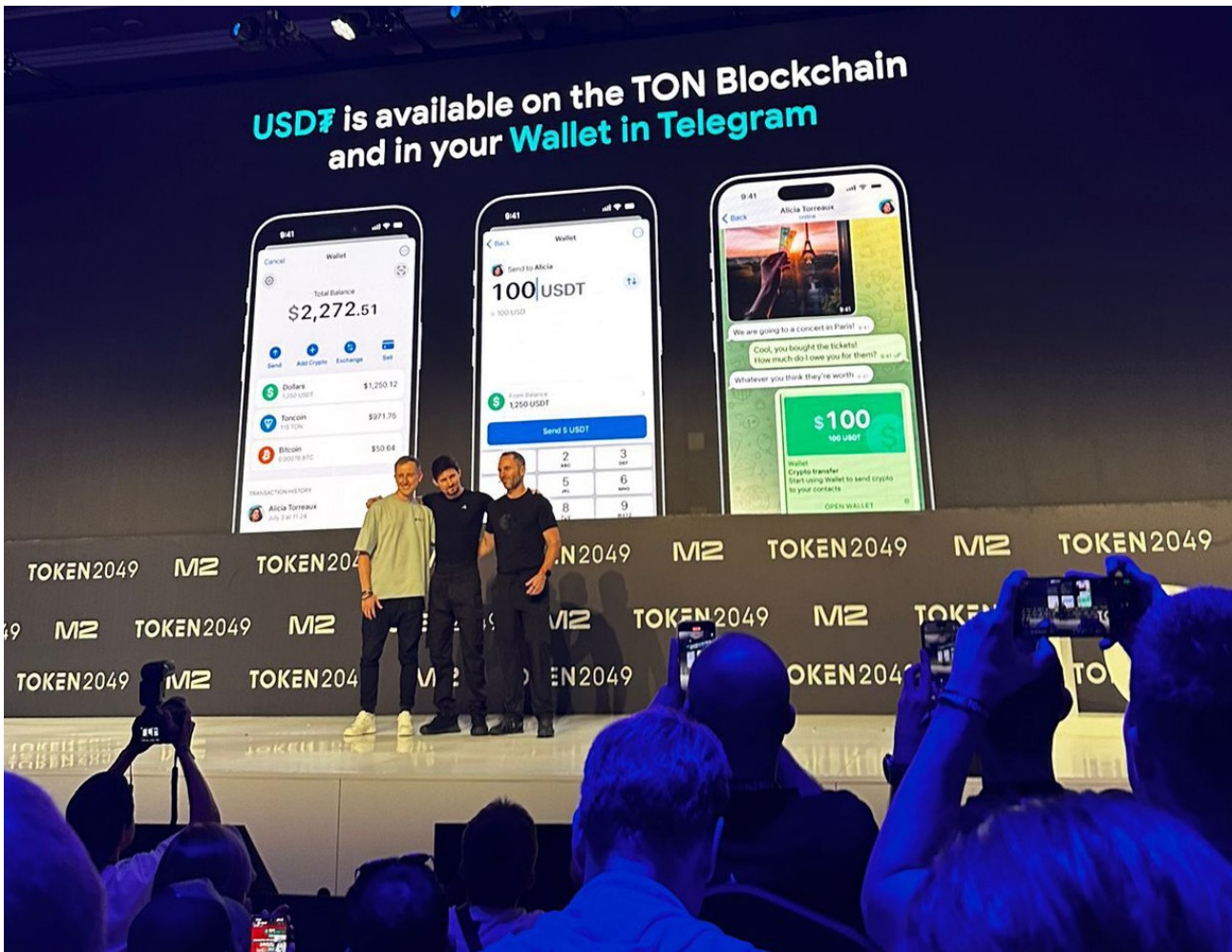
Andrew

We built the Telegram wallet with a simple mission: to put crypto in everyone's wallets. Mini apps are an advantage with instant launch without having to download or sign up. For builders, it is a cross-platform. It has advanced notifications across all devices via Telegram messages. The wallet has simple onboarding and native app

experiences, both custodial and self-custodial asset management on TON. The self-custody wallet allows users to connect any mini app to the wallet with TON Connect and store TON-based tokens and collectibles in Telegram. With wallets, you need killer use cases. It's a viral social game to onboard millions of users to Web3.

Paolo

How can we grow our current user base into a new ecosystem and expand freedom? We are announcing the launch of USDT on TON. There are so many chains asking us to integrate USDT on their chain. Telegram, similar to Tether, has a small headcount but achieves immense things.



Author's Note



Sylvia To

Director, Head of Token
Partnerships & Research

Thank you for taking the time to review this report. Despite navigating through the challenges of geopolitical conflict and significant floods in Dubai, we successfully attended the conference to gather these insights. The contents of this document reflect a synthesis of thought leadership and emerging trends in the dynamic realm of cryptocurrency. This report was meticulously prepared, involving detailed observations and precise transcription of the conference sessions, ensuring it serves as an accurate resource for those unable to attend and a concise refresher for attendees.

While we endeavored to capture the speakers' perspectives as faithfully as possible, some paraphrasing was necessary to enhance clarity and conciseness. We hope this report offers a thorough overview, sparks further discussion, and deepens your comprehension of the discussed subjects.

Your feedback is highly valued and will be instrumental in refining future reports. For more information about Bullish or to subscribe to our daily Bullish Insights on Telegram, please reach out to us at institutions@bullish.com

About us

Bullish

Launched in November 2021, Bullish is a leading regulated and audited institutional digital assets exchange with total trading volumes exceeding \$500 billion. From day one, Bullish was built with the objective of being an institutional-grade platform, prioritizing compliance, audit and governance frameworks. We believe that the era of digital assets is only in its infancy, and we're building boldly with that future in mind.

The genesis of Bullish's DNA can be traced back to the anticipation of two pivotal factors within the digital assets space:

1. The growing importance of compliance and regulation; and
2. The imminent entry of institutional players

To address these two core theses, we first obtained a Distributed Ledger Technology (DLT) license under the Gibraltar Financial Services Commission (GFSC) in order to be a regulated exchange from day one. Recognizing that transparency and compliance are key pillars of trust, we further bolstered our commitment by engaging Deloitte & Touche, a Big Four accounting firm, who has been our auditor since 2020.

Second, we pioneered a cutting-edge technological innovation by integrating the high performance of a central limit order book (CLOB) with deep, deterministic liquidity from our automated market maker (AMM) technology. This combined source of liquidity creates a deeper and more reliable orderbook that operates independently from external price feeds and is tailored for institutions.

Our proprietary order book combines Automated Market Making instructions (AMM Instructions) and standard bids and offers. The unique combination of a traditional crypto exchange and a decentralized exchange allows for innovations such as:

- Deep, deterministic liquidity with predictable pricing and depth across market conditions
- Near-zero spreads and low transaction fees
- Customizable trading income generated from AMM Instructions, and
- High performance and transaction throughput.



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