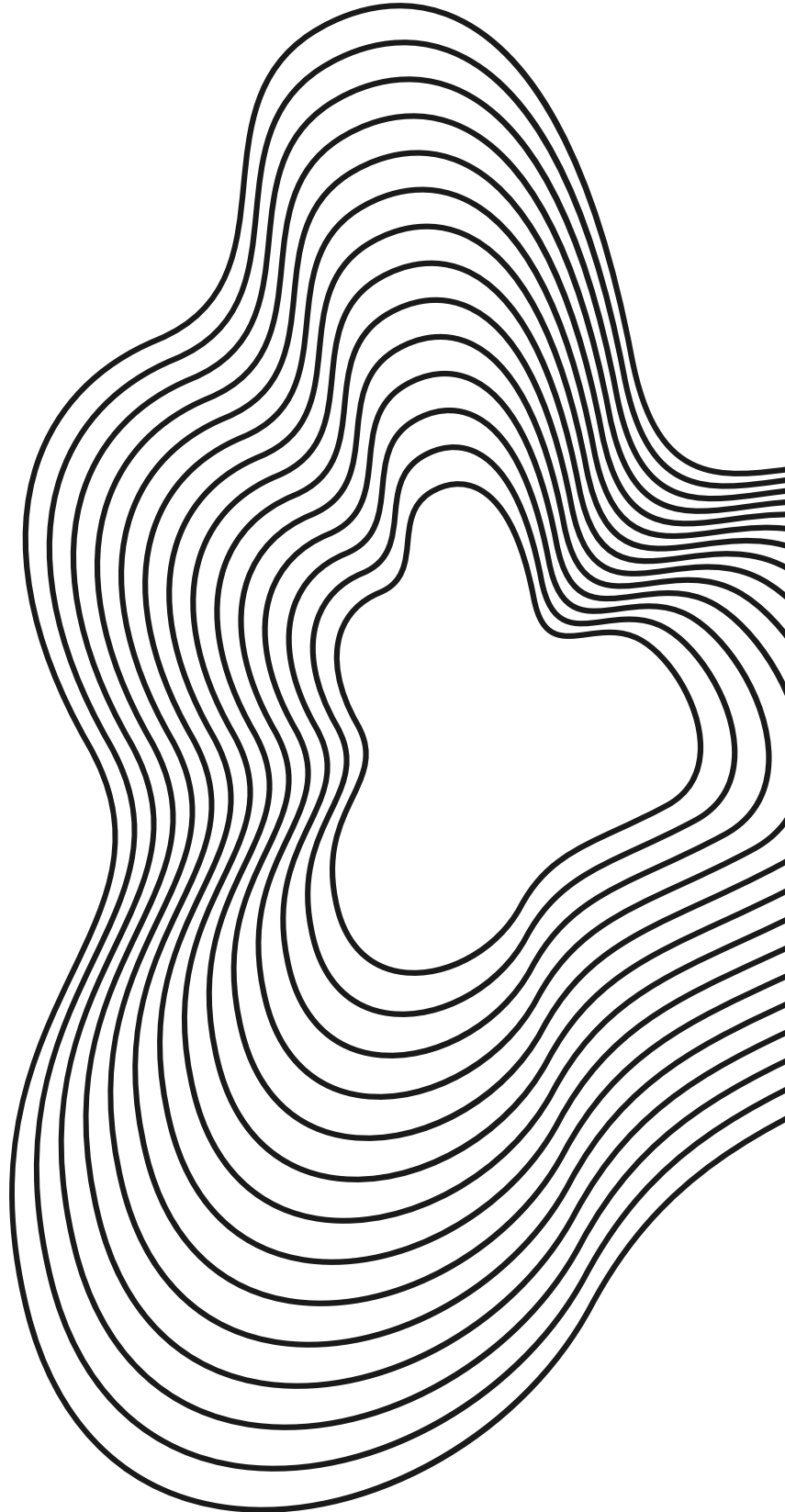




Yearly Report 2024 and Beyond



 @crypto_rand

 cryptorandgroup.com



TABLE OF CONTENTS:

1. The Year in Numbers

2. The Artificial Intelligence Earthquake

- 2.1. Debates and Regulations
- 2.2. AI and Blockchain fusion
- 2.3. AI Crypto Narrative

3. The Year of Regulations

- 3.1. Regulatory events in the U.S.
- 3.2. Regulations in other territories
- 3.3. Challenges ahead

4. Top Narratives Of the Year

- 4.1. DePIN
- 4.2. GambleFI (Gamble Finance)
- 4.3. Polygon zkEVM

5. Best Memes Of the Year

6. What's Next?

- 6.1. Real World Assets (RWA)
- 6.2. Spot Bitcoin ETF
- 6.3. Market Cycles
- 6.4. Wall Street & the FED
- 6.5. Artificial Intelligence (AI)
- 6.6. Regulations
- 6.7. Gaming

7. A Word From The Team



From the ashes of the FTX collapse at the end of 2022 to soaring in 2023, this year has been the year of redemption for the crypto world. We started with BTC at 16K, closing it at 44K. If there was a year for the crypto market to show that it came to stay, it was this one.

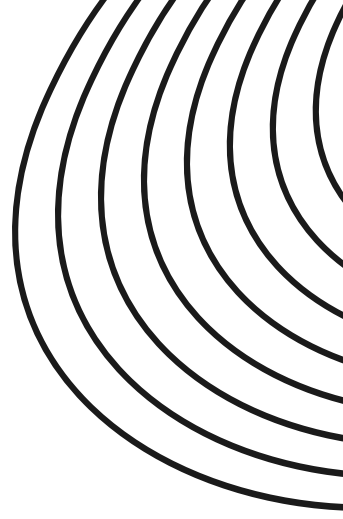
Like some kind of “digital” selection, the best projects and teams prevailed, laying the groundwork for the crypto future.

We have put together a yearbook for all community members as a review of this incredible year and as a thank you for the trust placed in the team. It covers the hottest topics of the year, promises that became reality, and a critical look towards 2024.

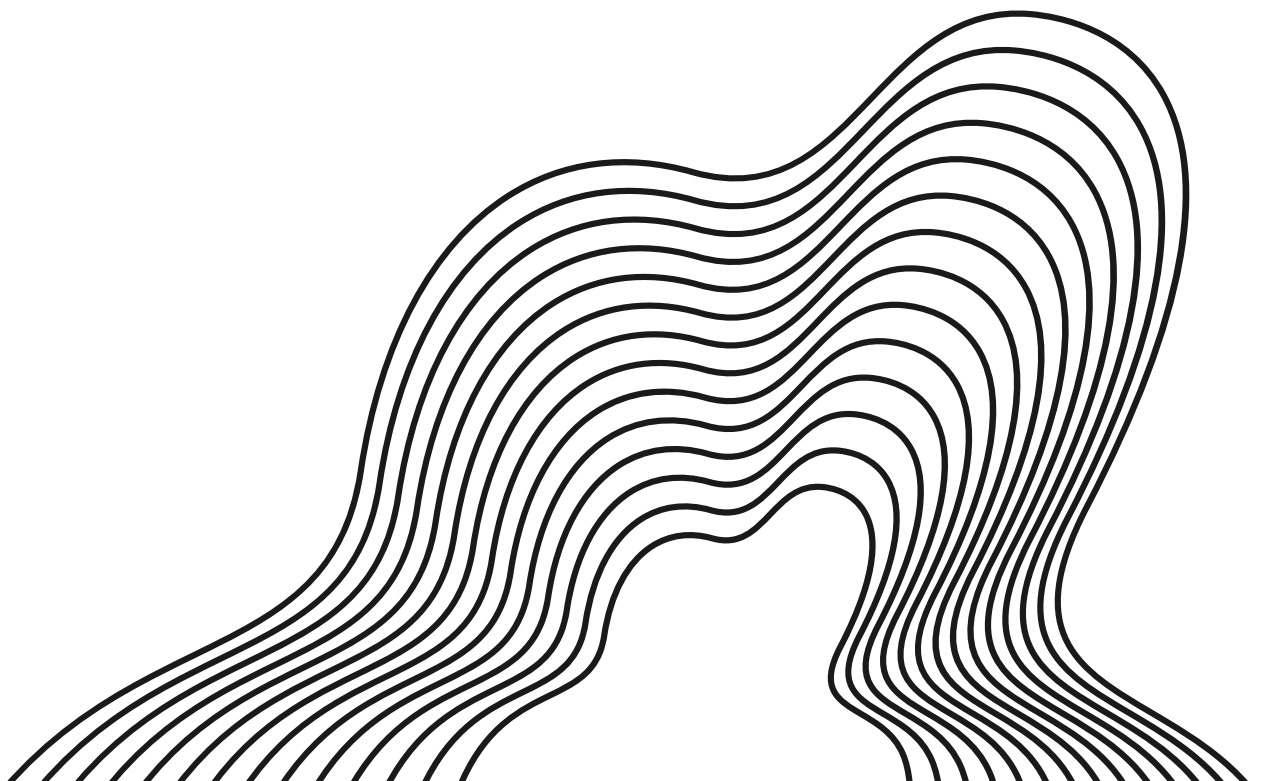
If we consider 2023 the year of the recovery, 2024 will be the year of the takeoff for Crypto with Bitcoin's halving and ETF on the horizon. Exciting times are ahead, and there's no better way to seize them than by being prepared.

We wish you good reading and a wonderful year.

Crypto Rand Group



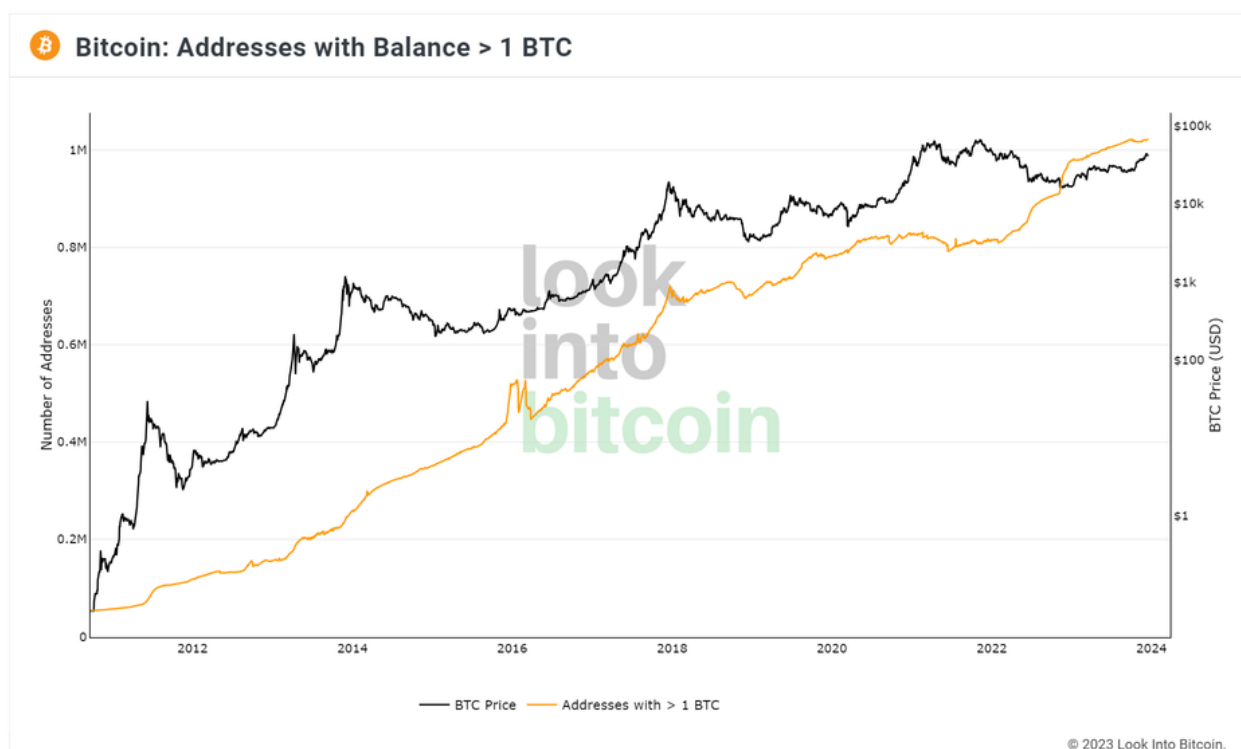
The Year in Numbers 2023



If there is something we love at Crypto Rand Group, it's numbers. We live out of them! So instead of surfing through endless paragraphs of thoughtful analysis. Let's try to **condense the key data** from the whole year in some charts.

Addresses with a balance over 1 BTC.

The number of unique addresses holding 1 Bitcoin or more has been growing steadily since inception. 2023 hasn't been an exception and **we have surpassed for the first time in history the 1 million mark.**

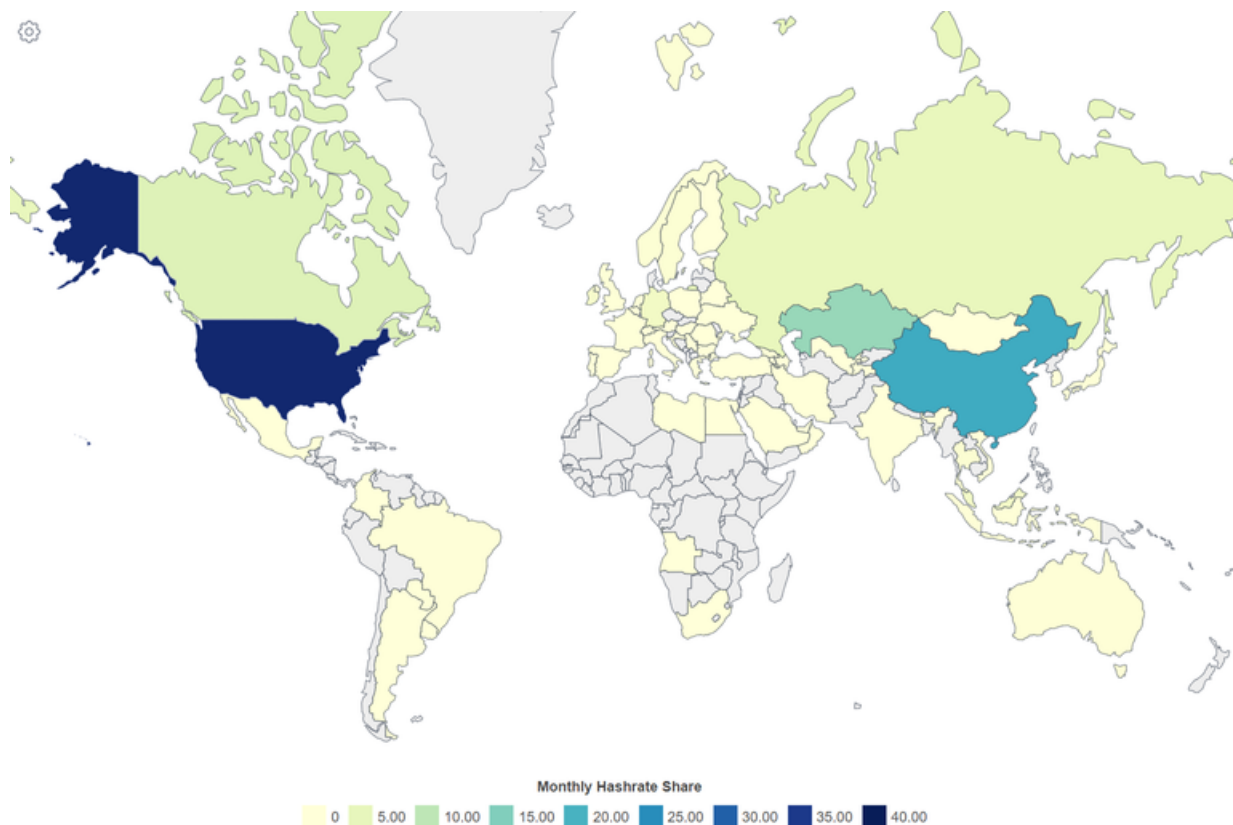


Bitcoin mining by country

The hash rate, which **measures how quickly a computation can be completed on a machine each second**, is used to measure Bitcoin. To create and process a transaction, the network is used.

The amount of money made increases with the hash rate. The following lists the **top Bitcoin mining nations** along with their hash rates:

1. United States: 35.4%
2. China: 18.1%
3. Kazakhstan: 11.23%
4. Russia: 9.55%
5. Canada: 4.68%



Stock to Flow model for Bitcoin

Stock to Flow is defined as the ratio of the current stock of a commodity (i.e. circulating Bitcoin supply) and the flow of new production (i.e. newly mined bitcoins).

Bitcoin's price has historically followed the S/F Ratio and therefore it is a model that can be used to predict future Bitcoin valuations.

One of our favourite indicators clearly points out the incredible opportunity we have ahead. **We remain in the dark blue accumulation range after the bottom bounce.** Primed setup for the upcoming 2024-2025.

Stock-to-Flow Model

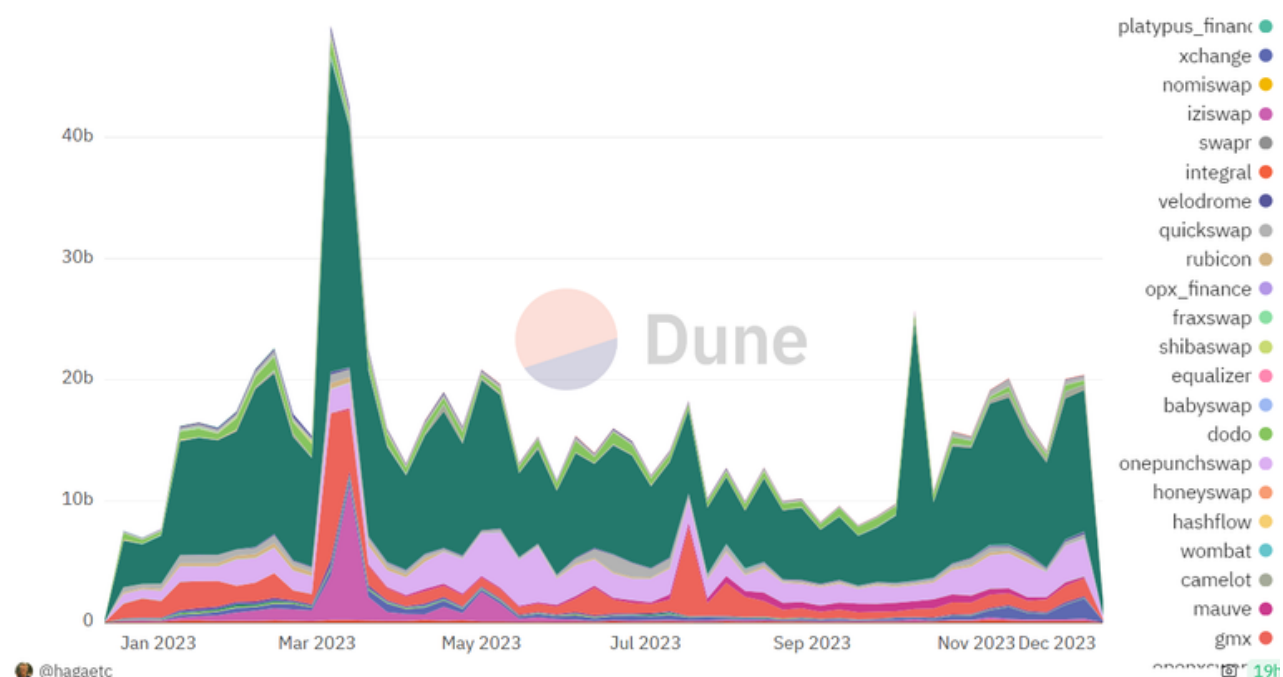


Weekly DEX volume

Here we can see how **the FTX saga** caused a massive **spike in volume** for decentralized exchanges which then returned to normal. Uniswap owned the show as usual with the major share of the market. Sushiswap preserves its market share while Carbon Defi is pushing up during the last months.

The DEX will continue playing a key role as they are an essential part of the crypto ecosystem.

Weekly DEX volume



ETF providers that applied for a spot Bitcoin ETF

Bitcoin futures Exchange-Traded Funds (ETFs) are **pools of bitcoin-related assets** offered on traditional exchanges by brokerages to be traded as ETFs. The intent behind these ETFs is to **give retail and other investors exposure to cryptocurrencies** without needing to own them.

Here we can see a list of the confirmed applicants and their AUM (Assets Under Management)

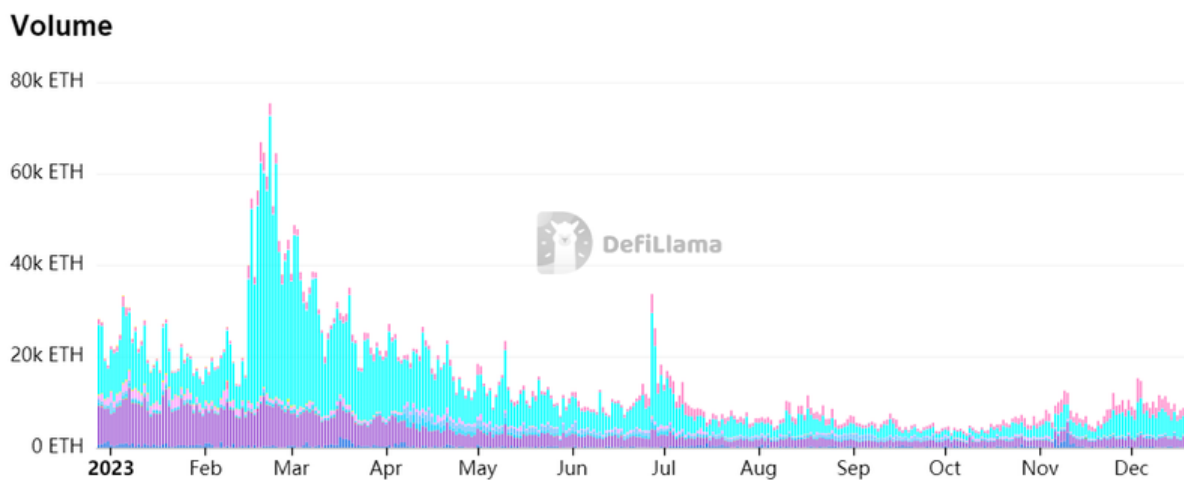
ETF PROVIDERS THAT APPLIED FOR SPOT BITCOIN ETF			
Data source: CryptoRank.io			
 BlackRock	\$8.59T AUM	 Fidelity INVESTMENTS	\$4.5T AUM
 FRANKLIN TEMPLETON	\$1.53T AUM	 WISDOMTREE	\$94.2B AUM
 VanEck	\$76.4B AUM	 GRAYSCALE	\$50B AUM
 GLOBAL X	\$46B AUM	 ARK INVEST	\$6.71B AUM
 galaxy	\$4.6B AUM	 21SHARES	\$2B AUM
 Invesco	\$1.5B AUM	 VALKYRIE	\$1B AUM
 Hashdex	\$440M AUM	 Bitwise	\$100M AUM

[CryptoRank.io](#) [CryptoRank.io](#) [CryptoRankNews](#) cryptorank

NFT marketplaces volume

This **year has been pretty rough** for the NFT market. Despite the March spike, it has seen a steady decline since then. The whole crypto market experienced a bounce since October. Which led to a breach of lots of key resistances, **triggering a bullish reversal** across the board.

But not a single NFT project has been able to catch up with the momentum. The volume during these months remains really low compared with similar stages.

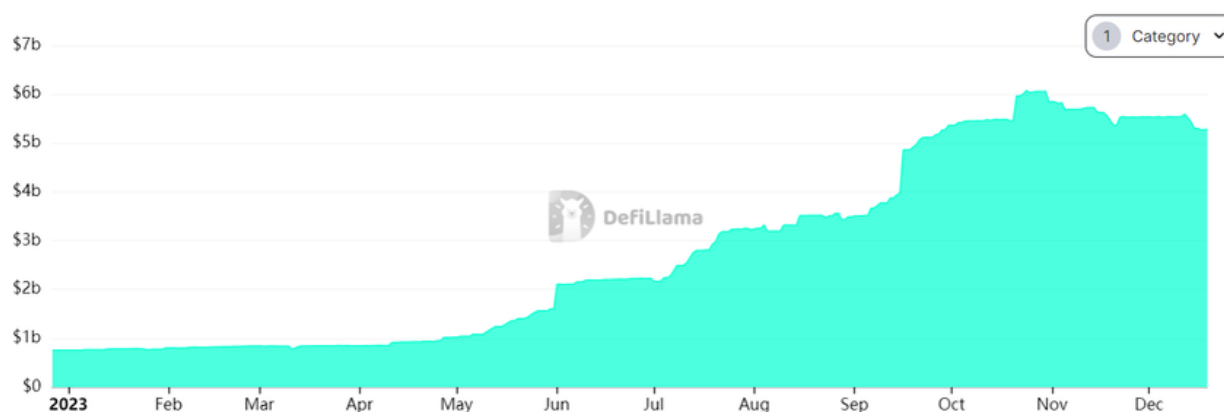


One of the fastest growing narratives: Real World Assets

Along with Artificial Intelligence (AI), **RWAs** has seen one of the best momentums of all the narratives on play. The Total Value locked across all the different platforms reached 56 billion as we speak.

For 2024 we will be providing dedicated coverage of this industry as we truly believe that it's just getting started. To give some perspective: The scale of the **real-world assets market is mind-boggling**. Just look at these valuations:






- Real Estate: \$337 trillion
- Digital Bonds: \$314 trillion
- Investment Funds: \$155 trillion
- Public Equity: \$123 trillion



Average Fee per Transaction on Ethereum and its L2's

This chart really shows the big problem Ethereum faces when it comes to scaling. With almost a \$5 average per transaction fee, it makes it fully impossible for dApps to operate on it. That's why the **Layer 2 solutions are absolutely mandatory.**

Average Fee Per Transaction on Ethereum and Ethereum Layer 2 Blockchains

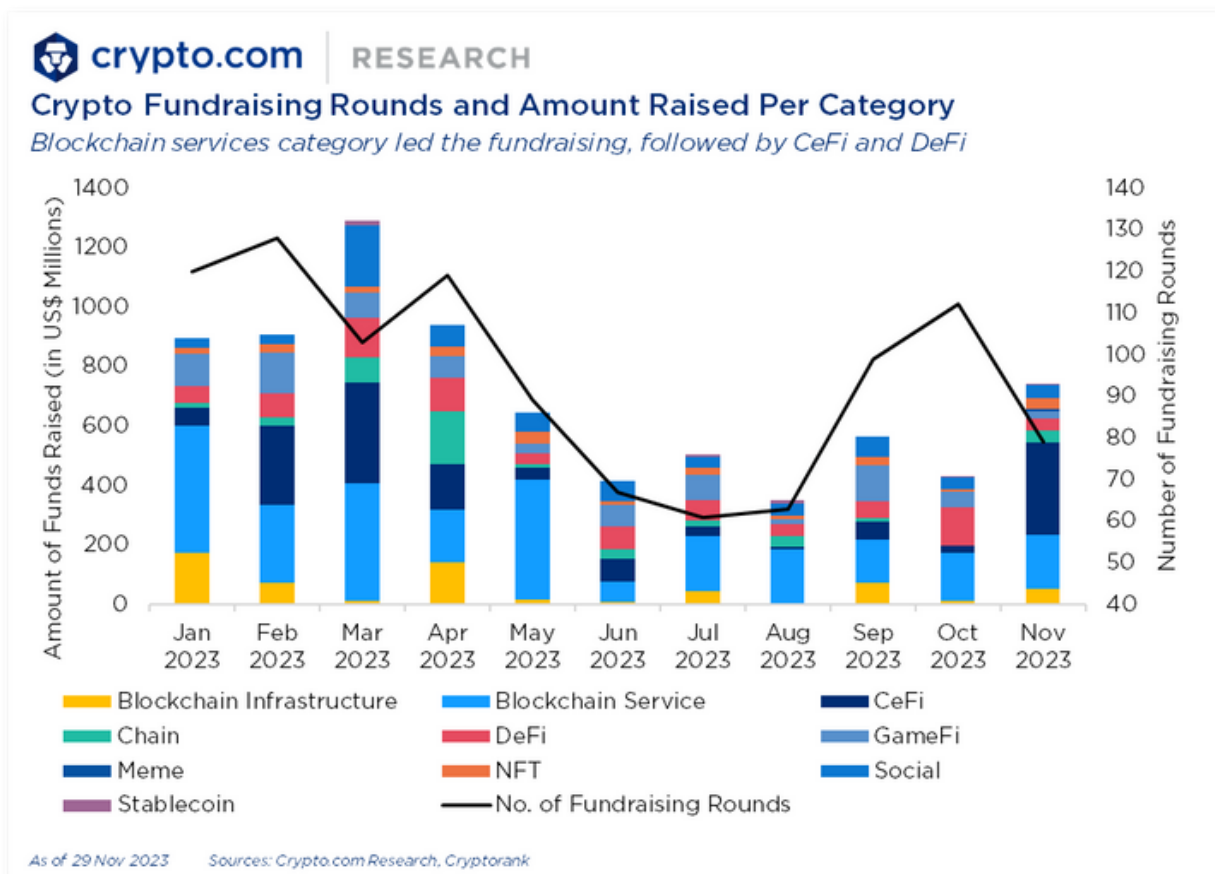
Network	Average Fee Per Transaction
 Ethereum	\$4.86
 Optimism	\$0.21
 Arbitrum	\$0.18
 Base	\$0.15
 Polygon	\$0.02

Source: Bitwise Asset Management with data from Token Terminal. Data from January 1, 2023 to November 30, 2023.

Crypto Fundraising Rounds and Categories

As we have seen in previous charts, March printed the peak in volume for the whole crypto space, and fundraising is no different. Something relevant to mention about the end-of-the-year increase is the **lack of diversification**.

While during March and April, we had projects from all the sectors popping up, it now seems to be **highly concentrated in Centralized Finance and Blockchain services**.

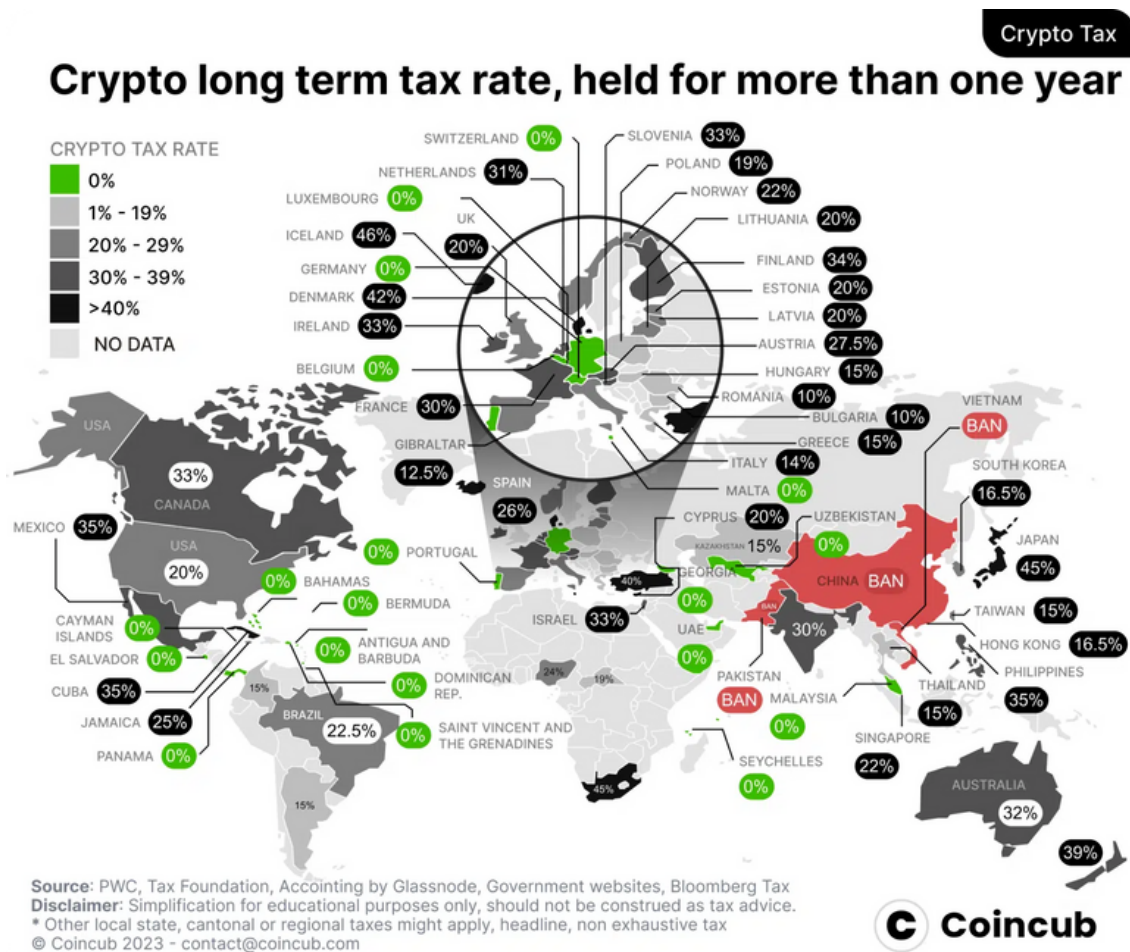


Crypto taxes for long term holders across the world

Really interesting comparison across the taxes you would have to pay if you hold your coins for more than one year. **Every year we have new countries with a more tax-friendly approach.**

The most interesting countries tax wise this year are:

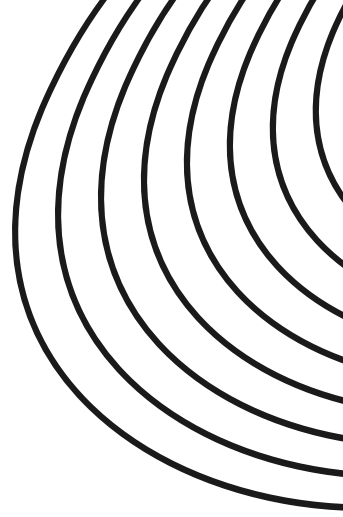
- United Arab Emirates
- El Salvador
- Malta
- Germany
- Singapore



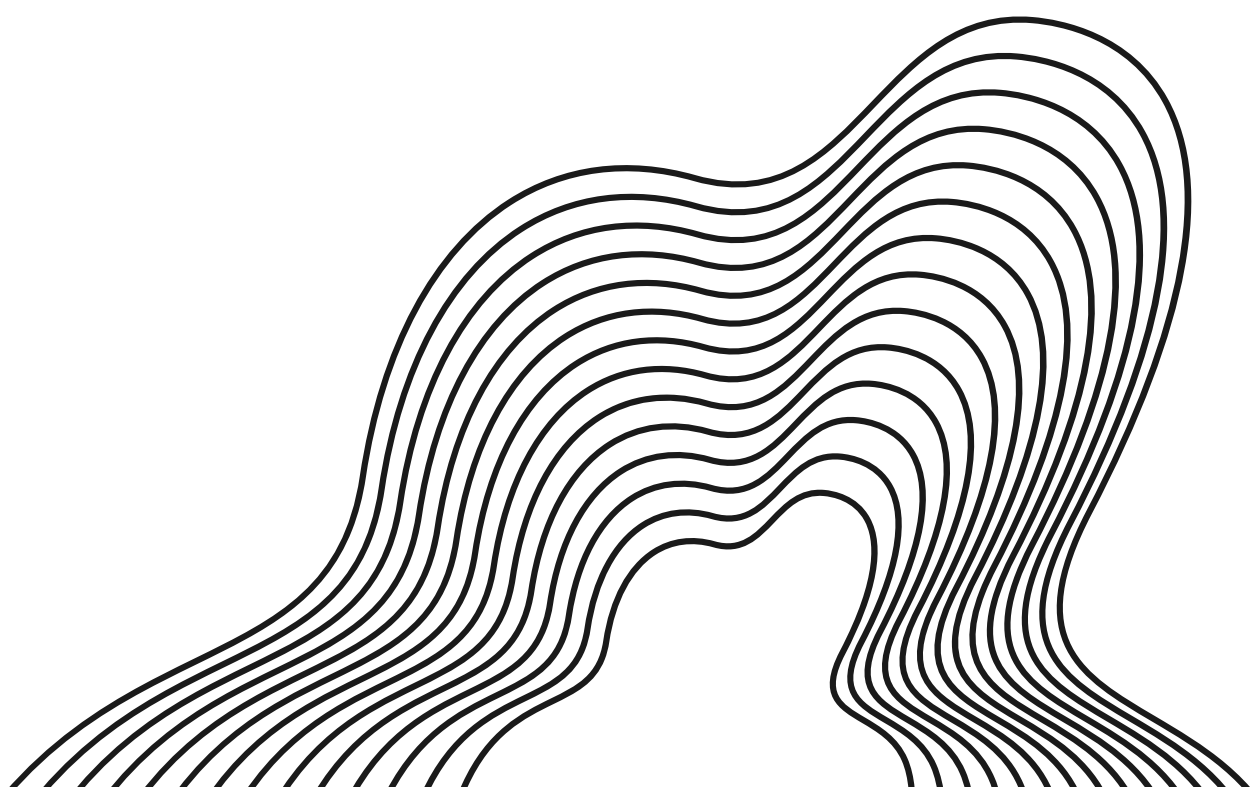
Notable Bitcoin price predictions for 2024

Let's go with a **bonus track** to end this section. Find here some of the Bitcoin price predictions from some of the **most notable personalities** and hedge funds. Seems like the future is bright!





The Artificial Intelligence Earthquake



As we reflect on the financial landscape of 2023, one undeniable force takes centre stage—**Artificial Intelligence (AI)**. It's not a buzzword anymore; it's a **transformative powerhouse** that has evolved from the shadows of data into the forefront of our daily lives.

This year's AI transformation goes beyond algorithms, diving into our **digital experience**. These applications leverage massive data sets to enhance their functionality, turning data processing into an art form. From conversational agents like ChatGPT to creative marvels like DALL-E or MidJourney, the aim is clear — bridging the gap between human and machine interaction.

An impressionist painting of a bustling café in Paris, with visible brushstrokes and a focus on the play of light and shadow.








Just like in the image above, with image generators society was really mindblown to see how a **machine** was able to come very close to what the mind was picturing if the description was accurate enough. Sometimes even making an insecure feeling grow brings questions of the magnitude of AI being conscious. Able to feel? Will it take over? Will I lose my job?

Debates and Regulations

With those thoughts and questions about machine “intelligence” we find ourselves in the current landscape of debates and discussions. **Ethical concerns** and potential issues such as biases in AI-generated content and the urgent need for transparency in AI development gained prominence.

This year marked significant progress in establishing **AI governance frameworks** while witnessing intense competition and strategic positioning between leading nations, particularly the US and China.

	 White Paper on AI – A European Approach to excellence and trust	 AI Act	 Intelligent security tools: Assessing intelligent tools for cyber security	 High-level Principles on Artificial Intelligence	 The National Artificial Intelligence Research and Development Strategic Plan
Identify and protect					
Risk analysis	✓	✓	✓	✓	✓
Model hardening		✓		✓	✓
Data protection	✓	✓	✓	✓	✓
Governance	✓	✓		✓	
Detect					
Traceability		✓		✓	✓
Monitoring	✓	✓		✓	
Respond					
Crisis management		✓	✓	✓	
Recover					
Backup plan		✓			

The EU took the lead in **AI regulation** through its deliberations on the “AI Act”, aiming to establish a global benchmark for ethical AI. Even international entities like the United Nations founded a new advisory body about AI's global ethical impact.

AI and Blockchain fusion

As we reflect on the transformative year of 2023 in AI, it becomes evident that the **opportunities** presented by this technology are as vast as they are complex.

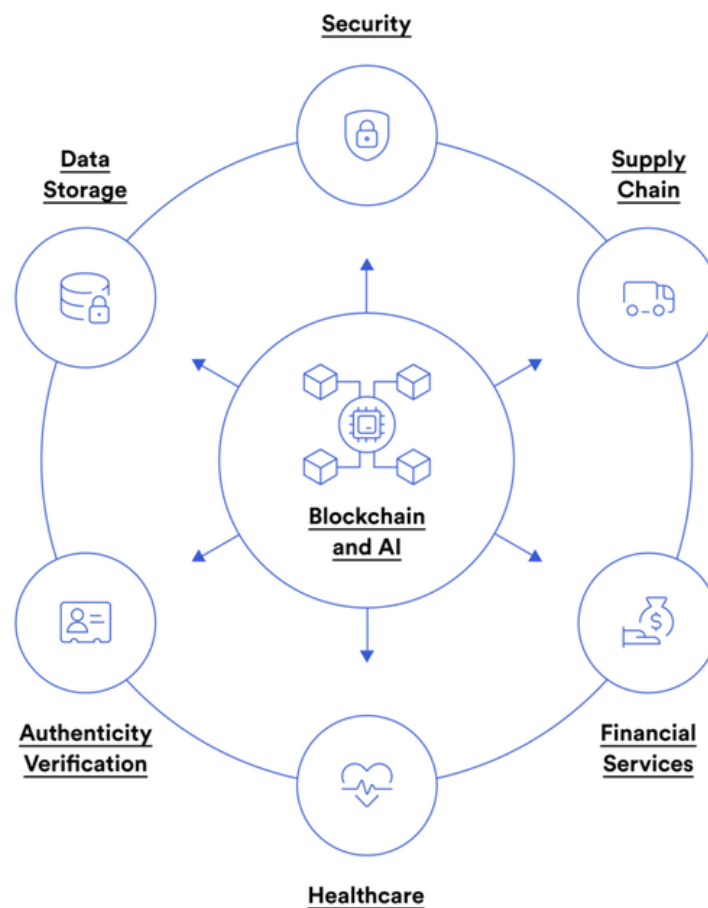
As we have seen, the rapid development of artificial intelligence has revolutionized not only our society but several industries, and **Web3** is no exception. With the rise of **blockchain** technology and **decentralized** platforms, AI has become an integral part of Web3.

The **fusion** of AI and blockchain is not just a meeting of technologies; it's a convergence of possibilities that can redefine industries paving the way for revolutionary advancements in various sectors.

- Supply Chain and Finance: Utilizing blockchain for transparent and secure supply chain tracking. Smart for automatic adjustments and fraud reduction. AI-driven analytics for real-time insights, inventory management, and demand prediction.
- Healthcare: Blockchain ensures secure and decentralized storage of medical records. AI contributes to disease diagnosis, treatment plans, and rapid image analysis. Collaborative efforts enhancing medical research through AI models.
- Data Analytics: Blockchain offering data provenance and long-term integrity for large-scale analytics. AI models optimizing calculations in blockchain consensus processes. Enhancing data security through AI algorithms for access limits and encryption.

- Data Storage: Blockchain-based storage solutions preserving training data integrity for AI models. Ensuring accurate provenance and safeguarding privacy in decentralized storage.
- Decentralized and Transparent AI: Blockchain facilitating decentralized marketplaces for tokenized AI services. Tokenization of AI services and intellectual property rights protection. Ensuring fair compensation for AI developers through smart contracts.
- Security Enhancement: Blockchain acting as an encryption-backed safety net for AI systems. AI protects blockchain and users from fraud, scams, and adversarial manipulation.
- Authenticity Verification: Blockchain validating the authenticity of images, videos, and other media. Cryptographic watermarking and NFTs ensure traceability and origin verification.
- Agriculture: Blockchain building trust through food traceability and transparent farmer payments. AI contributes to crop health and yield improvement through data analysis.
- Online Marketplaces: Blockchain ensures fair transactions and reviews in online marketplaces. AI provides personalized buying suggestions and fraud detection

Data Storage, Security, Supply Chain, Financial Services, Healthcare, Authenticity Verification... are some of the main industries which benefit directly from the synergies between the blockchain technology and the Artificial Intelligence.

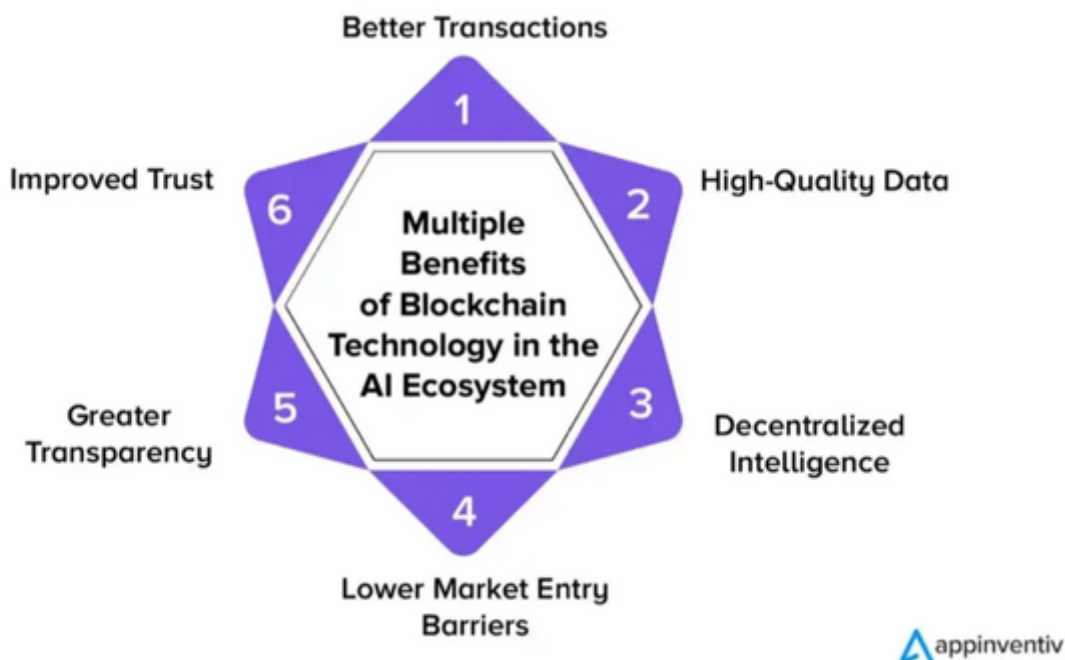


Blockchain limitations can be transcended through the integration of Artificial Intelligence (AI). AI's role extends to optimizing energy consumption in Blockchain operation bringing efficiency gains, reducing the time and effort expended, and contributing to a more eco-friendly Blockchain ecosystem.

The **scalability** challenge in Blockchain finds a good solution with the infusion of AI. Advanced decentralized learning systems and innovative data-sharing techniques give scalable solutions, opening the market for startups and enterprises.

AI is able to **augment security** measures, aligning with the adaptable nature of Machine Learning intelligence. So the convergence of AI and Blockchain facilitates streamlined flow of data under the watchful guidance of AI.

But the same way as AI would bring benefits towards Blockchain technology, the Blockchain is also poised to revolutionize the AI ecosystem. So this is a bidirectional synergy where **both technologies excel while being combined** paving the way for a future where transparency, trust, and efficiency converge in a dynamic partnership.



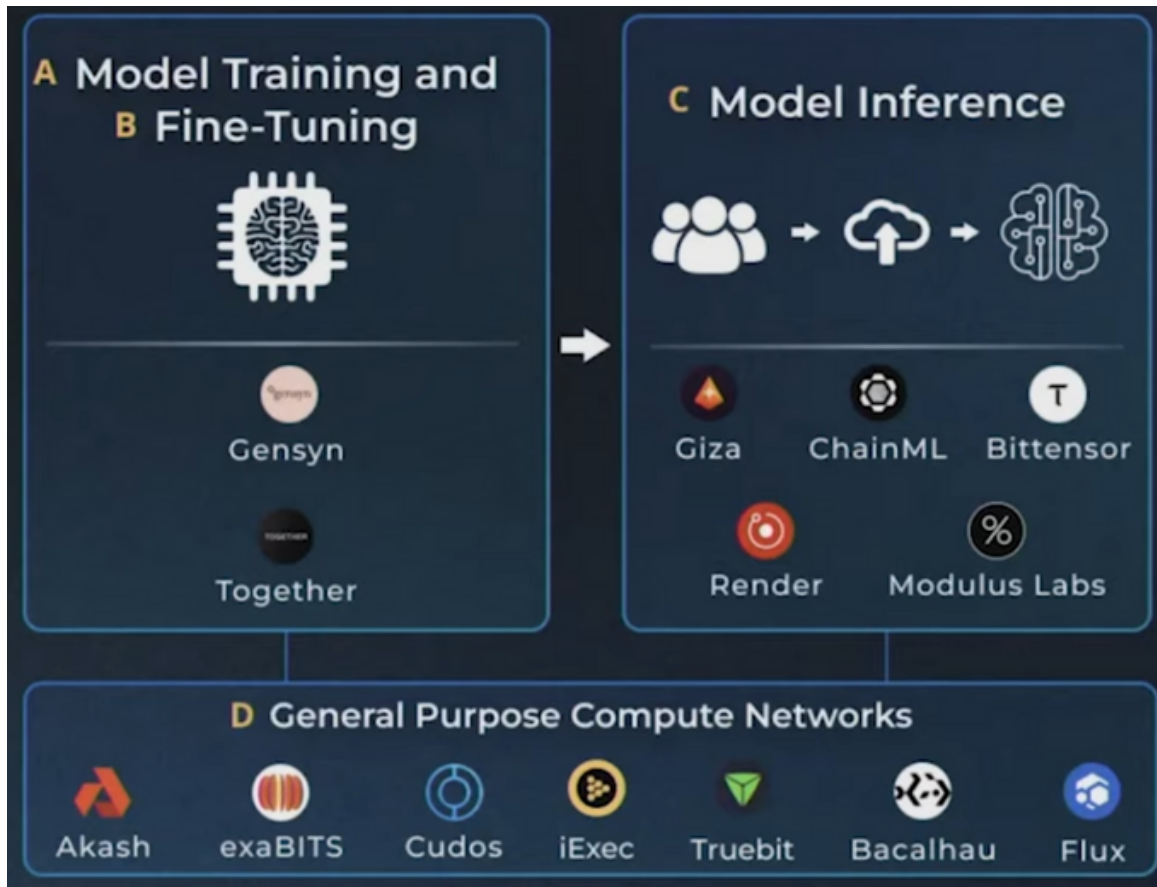
AI Crypto Narrative

Following through AI and blockchain convergence, the year 2023 has been fueled by a handful of **strong narratives**, AI being one of the most powerful ones, with rising in valuations of projects like Injective, Render, Bittensor, The Graph, Fetch.ai, SingularityNET, Ocean Protocol, Akash Network, inSure DeFi, are some of many others from a quite extensive list.

As we have seen there is reason to believe **further potential** lies ahead at least from the technological point of view. There is room for innovation and for new projects and trends around Artificial Intelligence and its interaction with Blockchain, NFT and cryptocurrency technologies.

From the infrastructure side, there are problems that currently are being solved in a non-incentised environment limiting the escalation of the solutions. With crypto and artificial intelligence combined those problems can be addressed in very different ways:

- Model Training: Hardware networks for verifiable training.
- Inference: Deploy models on-chain for native execution and ownership.
- Data Networks: Incentivize and distribute data sets.
- zkML: Trustlessly brings complex computations on-chain like LLM Interface.

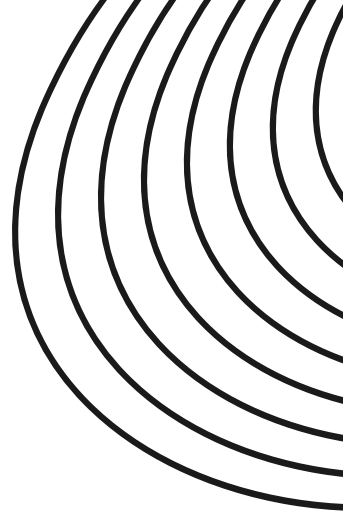


As we have seen, with nations getting in line to regulate both AI and crypto there are a lot of challenges to overcome but at the same time, the combination of Blockchain and AI fits so well that the landscape is also looking **promising for opportunities** to be seen in the coming year.

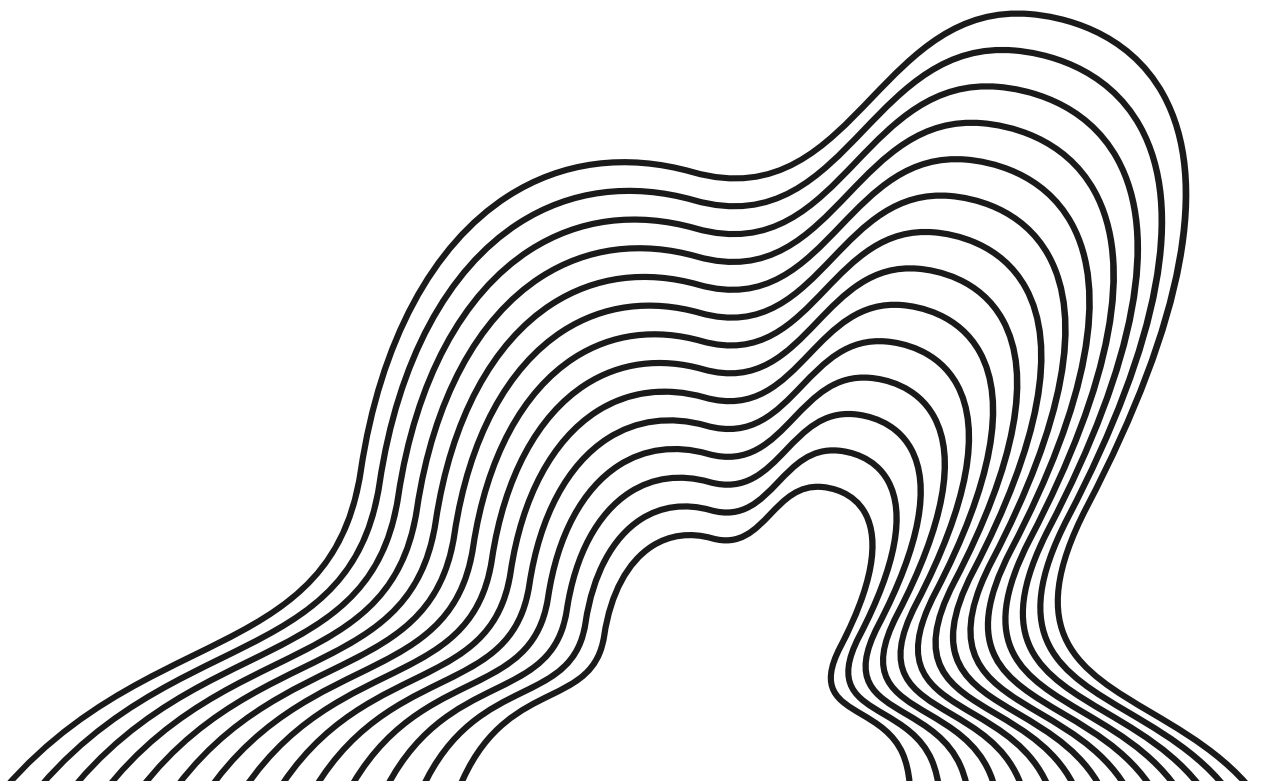
For 2024 we would keep an eye on the developments of Grok, the conversational AI developed by Elon Musk’s company xAI.



crypto rand. |



The Year of Regulations



Buckle up for a ride through the twists and turns of the crypto regulatory landscape. We've curated a recap of the regulatory events that unfolded in 2023, and trust us, it's been a rollercoaster of changes.

Regulatory events in the U.S.

This year the clash between decentralized ideals and regulatory realities has seen a lot of movement and developments.

The U.S. Securities and Exchange Commission (SEC) with Gary Gensler as chief and the Commodity Futures Trading Commission (CFTC) declared war on what they deemed a **crypto Wild West**—fraud, scams, and money laundering running rampant.

Over 200 enforcement actions were taken, ensnaring not only those who skirted the law but also those earnestly trying to comply. Animated cat JPEGs, DAOs, and even celebrity influencers found themselves in the regulatory crosshairs.

Binance, Coinbase and Kraken, three **major crypto exchanges**, faced their share of scrutiny, with the SEC launching investigations into their operations.

The regulatory landscape became more complex as these exchanges navigated legal challenges while attempting to address regulatory concerns and ended up with Binance CEO Changpeng “CZ” Zhao stepping down as part of a \$4 Billion settlement with the US.



This year also former **FTX CEO Sam Bankman-Fried** was found guilty of fraud, allegedly, adding a darker shade to the industry's narrative.

Terraform Labs founder **Do Kwon**'s legal saga took an unexpected turn with a four-month jail sentence in Montenegro for document forgery and in Nov. 2023 his extradition to the US was approved and will be facing charges for multibillion-dollar fraud.

In the SEC's quest for regulatory dominance, it faced setbacks in court battles against **Ripple and Grayscale**. The courts deemed some regulatory actions "arbitrary and capricious," signalling a potential shift in the tides. Grayscale's legal challenge resulted in a unanimous court decision, forcing the SEC to rethink its rejection of a spot bitcoin ETF.

The regulatory storm wasn't limited to crypto. The Fifth Circuit Court ruled against the SEC in a lawsuit brought by the Chamber of Commerce, highlighting concerns about **arbitrary decision-making**. The Commodity Futures Trading Commission (CFTC) faced its share of challenges, including accusations of abusing discretion and arbitrary rejection of contract listings.

Regulations in other territories

In 2023 **more than 40 countries** have been actively working on advancing regulations and legislation related to cryptocurrencies.

The **main focus areas** for these regulatory efforts across the globe converge mainly in four main topics, defining very well where nations seem to be in need to act:

1. Travel rule compliance.
2. Licensing and listing guidance.
3. Overall crypto framework development.
4. Stablecoin regulation.

Some countries, such as Japan, the Bahamas, and several EU states, engaged in initiatives across all these areas, while others like Uganda, India, and Brazil focused on just one or two, indicating **varying attitudes** toward the crypto industry.

Taking **the EU** as an example, it made a regulatory push with the finalization of The Markets in Crypto-Assets Regulation (**MiCAR**) fortifying Europe's position as the global vanguard in comprehensive crypto regulation.



Aiming to create a **uniform crypto-assets framework** throughout the whole European Union offering legal clarity for issuers, service providers, and users, enhancing consumer protection and market integrity.

As we stand on the precipice of a new year, the dust from the regulatory battlefield is settling. **What can we expect in 2024?**

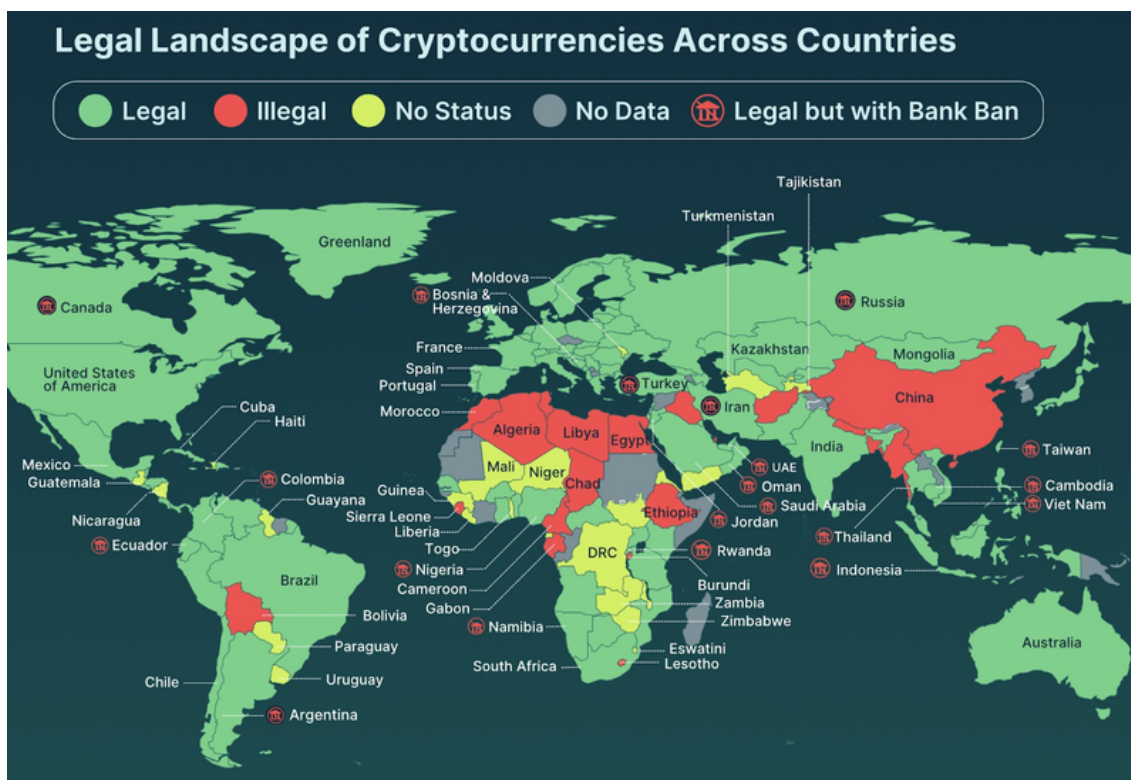
Challenges ahead

As we have seen, governments around the world are dealing with the complexities of regulating crypto. As digital assets gain mainstream acceptance, the need for comprehensive regulatory **frameworks** becomes more pressing.

One of the biggest challenges governments face is the lack of a unified, global regulatory approach. Cryptocurrencies operate on a decentralized and borderless premise, but each country has its own perspective, resulting in a **fragmented regulatory landscape** that poses compliance challenges for businesses operating across borders.

The adoption of cryptocurrencies varies widely from one jurisdiction to another, leading to **divergent priorities** in regulatory efforts. Striking a balance that fosters innovation without compromising security and consumer protection is a delicate line governments must walk.

Most of the territories around the globe already have some say about cryptocurrencies and the majority of the world sees them as legal assets, but in many cases with reservations from the respective Central Banks.



The exponential growth of the crypto market has sparked concerns among governments regarding **financial stability**. With a market capitalisation exceeding \$1 trillion, policymakers are also trying to mitigate risks associated with crypto while harnessing its potential for economic growth.

The rapid pace of technological advancements with new and innovative blockchain-based applications emerging constantly forces governments to **adapt swiftly** to stay ahead of the curve, as regulations have to be relevant and effective in a dynamic digital landscape.

Fostering innovation within the crypto industry and **safeguarding investors** is a formidable challenge governments must address.

Ensuring compliance with cryptocurrency regulations presents an enforcement challenge for governments. The decentralized nature of blockchain technology and the pseudonymous nature of crypto transactions make tracking and regulating activities challenging.

Given the global nature of cryptocurrencies, **international collaboration** seems to be the only way. Governments would have to actively engage in dialogue and coordination to develop cohesive strategies for tackling cross-border challenges.

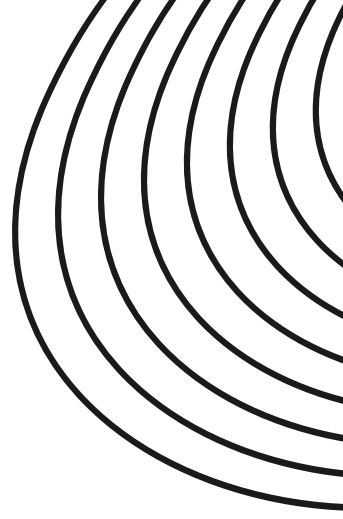
Initiatives like the **Financial Action Task Force (FATF)** play a crucial role in fostering collaboration and setting international standards.

In conclusion, as governments try to keep up with the advancement of technology, they face a lot of challenges that require careful consideration and adaptive strategies.

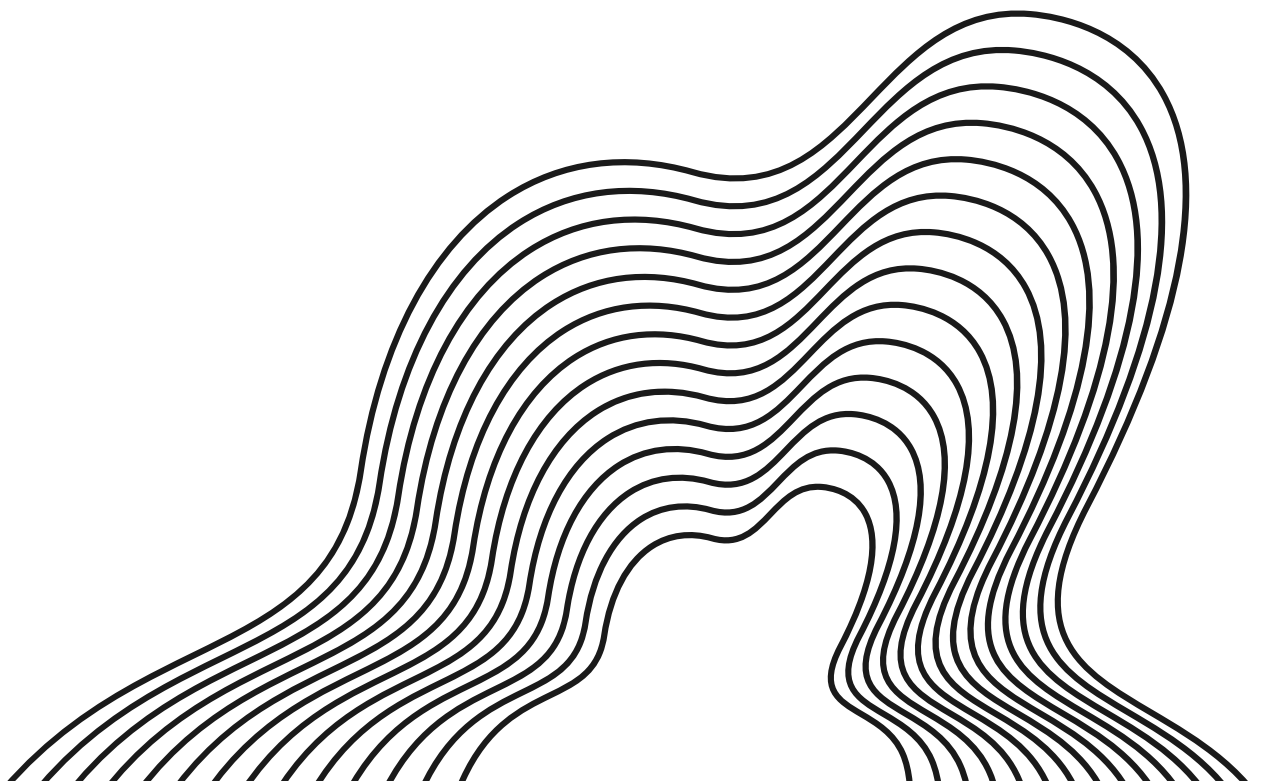
Striking a balance between embracing innovation, ensuring financial stability, and protecting consumers seems to be the goal to achieve. The coming years will undoubtedly shape the regulatory landscape, and how governments respond to these challenges will play a **pivotal role** in defining the future of the crypto industry.



crypto rand. |



Top Narratives Of the Year

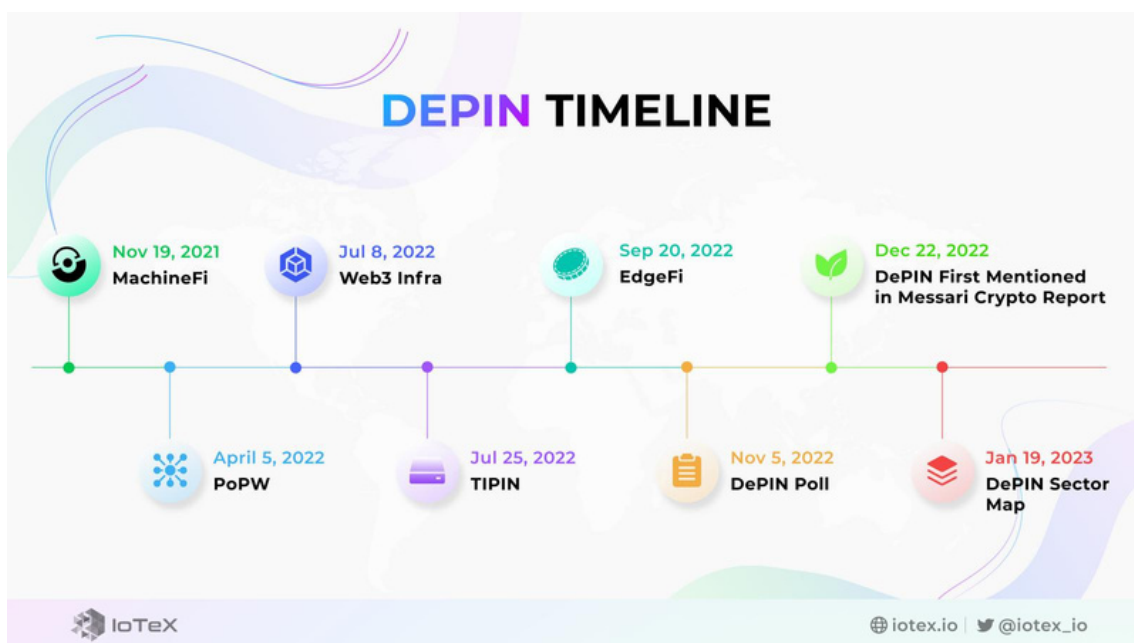


This year has been intense, and many narratives that were merely insinuations in the past gained the necessary strength to shake the board and establish their ideas and projects in a crypto market that's evolving at an increasingly rapid pace. Here, we have a selection of three interesting narratives that took off in 2023.

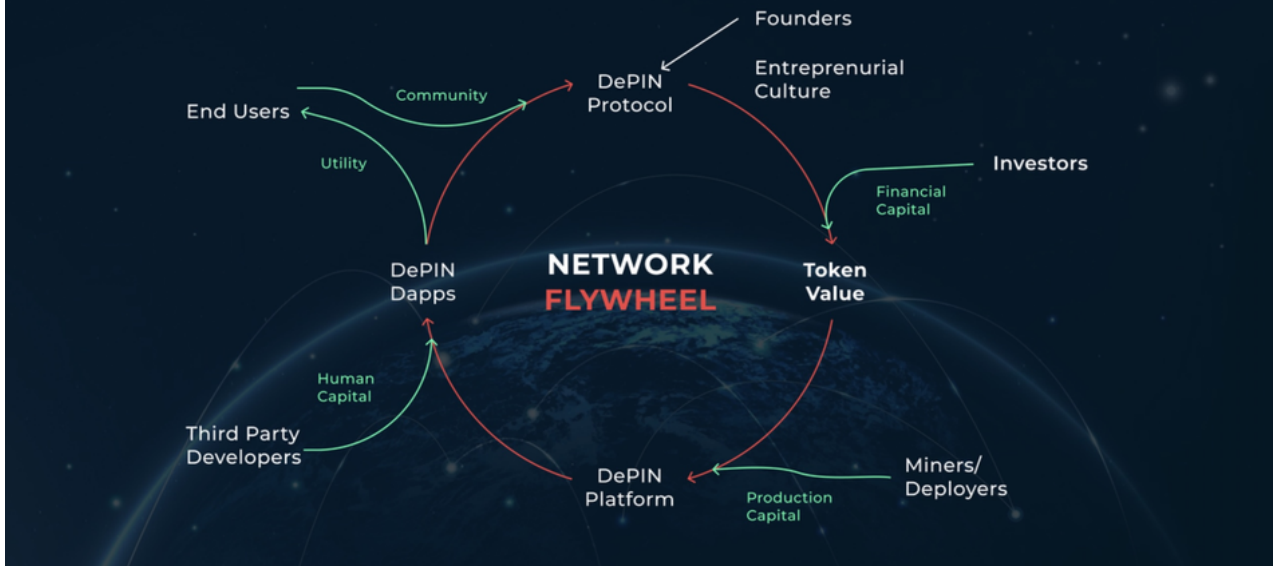
DePIN (Decentralized Physical Infrastructure Networks)

It's well-known that blockchain as a technology is revolutionizing much of digital life, but it's also making an **impact in the physical realm**, within material infrastructure. This is where DePIN comes into play by **decentralizing physical infrastructure** and triggering a paradigm shift in the sector.

DePIN is an emerging sector in crypto that essentially proposes the **decentralization of ownership and control of physical infrastructure**, in contrast to the historical concentration in one or few hands (a clear example being Amazon's AWS). This is achieved through tokens that incentivize communities to build it.

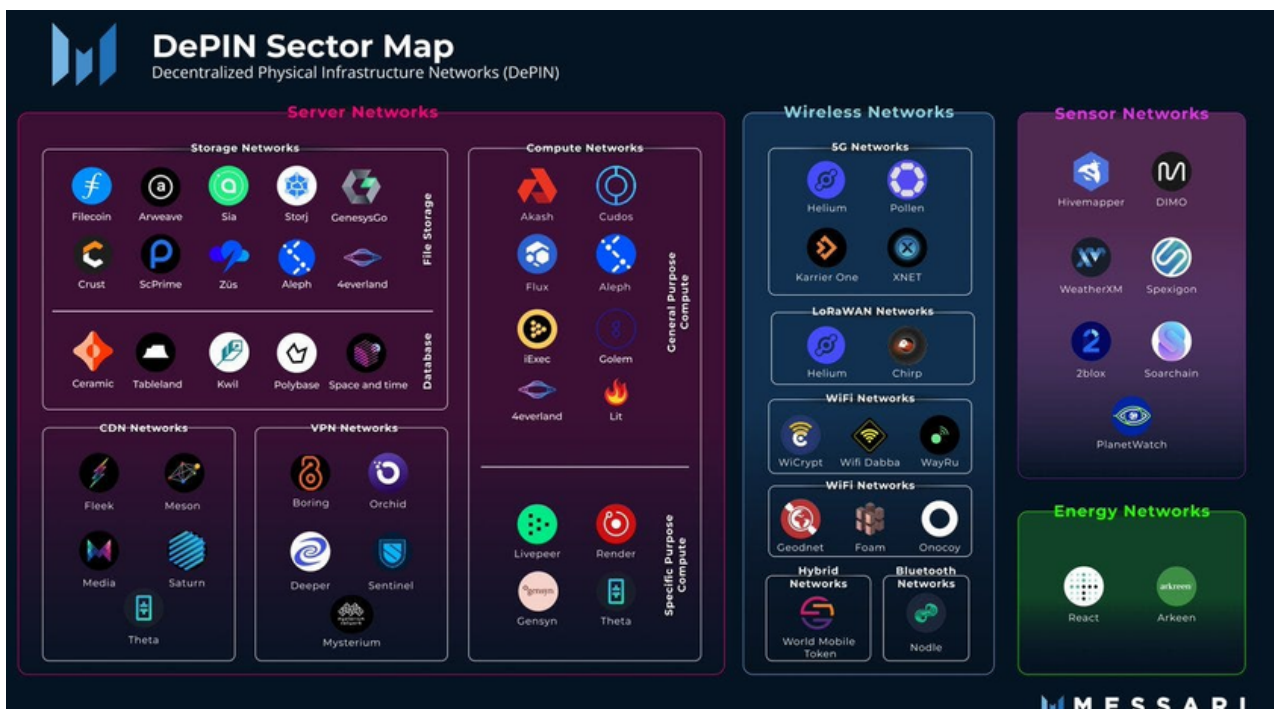


DePIN Network Flywheel



The keys to its rise are:

- Increased physical infrastructure, from roads to communication networks
- The continuing adoption of blockchain in decentralizing the world
- New projects that catch the attention of investors
- Implies more accessibility for small investors
- Efficiency in the process of construction
- Environmental care and a more green approach



The **main projects** based on current market capitalization are:

- Internet Computer - \$ICP
- Filecoin - \$FIL
- Render - \$RNDR
- Helium - \$HNT
- IoTeX - \$IOTX
- Arweave - \$AR

Currently, it's a \$3 million market, but projections indicate it could reach **\$3.5 billion by 2028**, which means an astonishing growth potential and signifies that it's still in its early stages.

With DePIN, it no longer depends on a single company or government; instead, **anyone can participate.**

GambleFI (Gamble Finance)

We all hear phrases like “Crypto is a casino”, so **gambling and blockchain** should be the perfect match then!

Gambling has always been one of the **largest entertainment and revenue industries** in the world (\$77 billion just on mobile casinos in 2022).

With the advent of the internet, there was no longer a need to go to a casino to place bets, leading to a revolution in the betting business. This is where the paths of betting and crypto naturally converge.



(Online gambling market size - Source: Polaris)

GambleFI can be seen as the **bridge connecting gamblers with crypto**, built upon the pillars of blockchain's power, smart contracts and game theory seeking to provide **crypto-based betting games**.

Its aim is to enhance participant experiences and create a far more robust market than the traditional one (both the physical and digital -web2-). We are talking about an **industry disruption**.

The main sectors are casinos, sports bets and lottery.

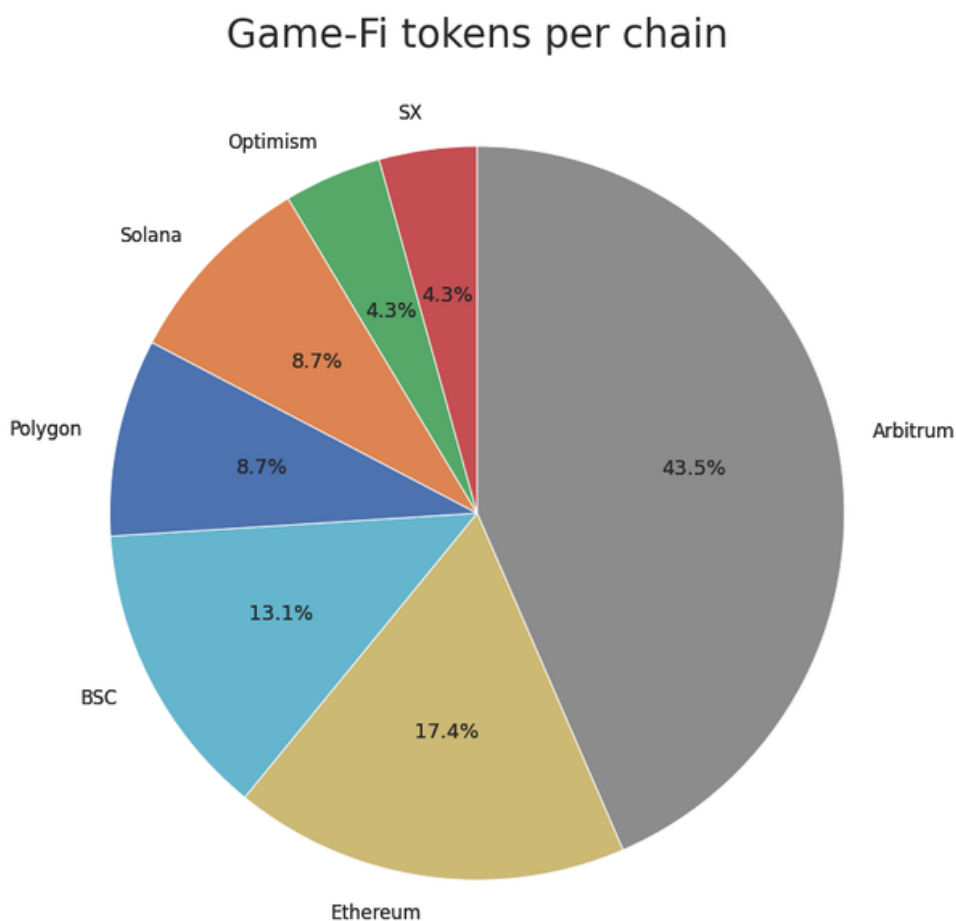
Some of the **advantages** of GambleFI over the web2 alternatives (online casinos):

- No need to trust in the site, trust rely on in the smart contracts
- Transparency on prices and data provided by oracles
- Web3 allows fast on/off ramp from the betting sites to users
- No necessity of KYC
- Pay and get paid with Crypto

The **challenges** that GambleFI will face:

- Sustaining 100% security and transparency standards
- Offering a wide range of gaming options, a feature lacking in traditional casinos
- Avoiding suspensions for frequent winners, a common practice (blacklists)

Most of the projects are built in the existing chains but SX has **launched their own blockchain** as it's shown in the chart below.



(GambleFI tokens per chain - Source: CryptoKoryo)

Some of them are: \$LOTTO, \$WINR, \$BCB, \$FUN, \$RLB, \$DC.

The future of this narrative will greatly depend on the industry's efforts to improve upon what centralized platforms are doing. In an ecosystem increasingly demanding decentralization, **GambleFI holds promise**, but its success will rely on projects being as, if not more, serious than their centralized counterparts.

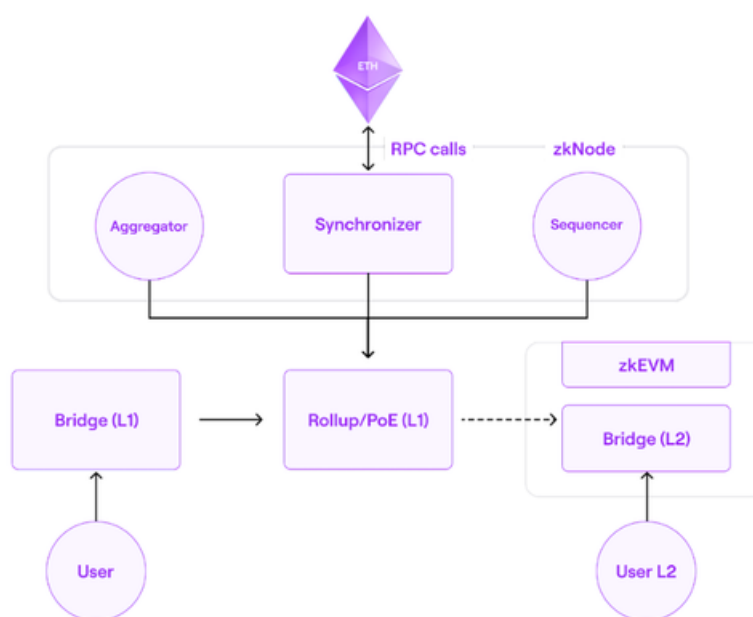
In conclusion, the house always wins but now you also could be the house by investing in their tokens and sharing the revenue. So, **be(at) the house!**

Polygon zkEVM

Everyone agrees that **Ethereum is amazing** and has revolutionized the crypto world, but we also all agree that **scalability issues** are a problem. Delays in processing transactions or the high costs involved were not making the best experience.

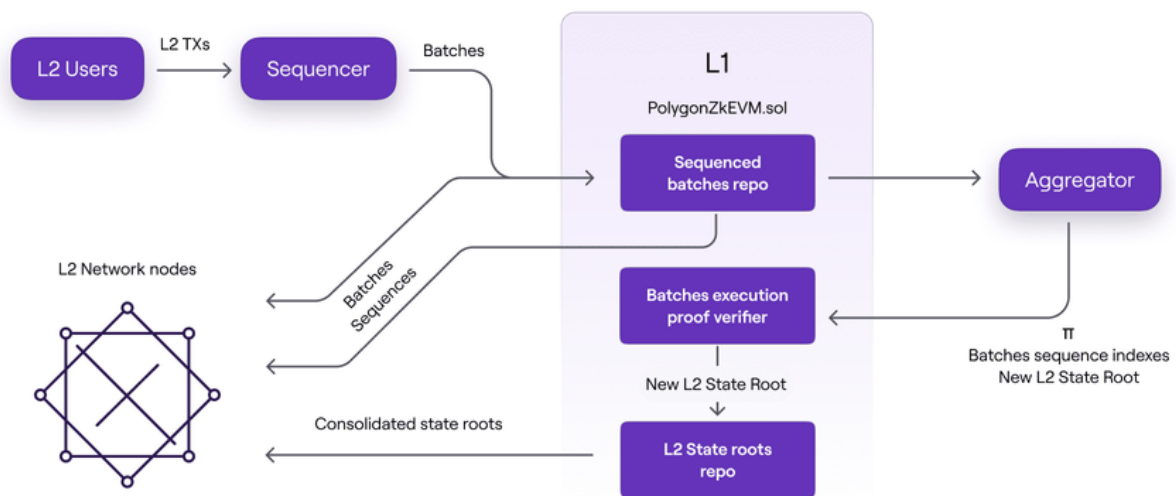
That's why an alternative presented by **Polygon**, the zkEVM, emerges. This is the combination of two **powerful technologies**: Zero Knowledge (zk) and the Ethereum Virtual Machine (EVM):

- **Zk** is a method consisting of two parts: the prover and the verifier. Zk proofs are a way of demonstrating that something is true without revealing anything else. It is used in blockchains to enhance transaction privacy and protect identities. Furthermore, allows faster and more secure transactions compared to other layer 2 solutions.
- The **EVM** is a software that enables developers to write much more complex smart contracts than initially possible.

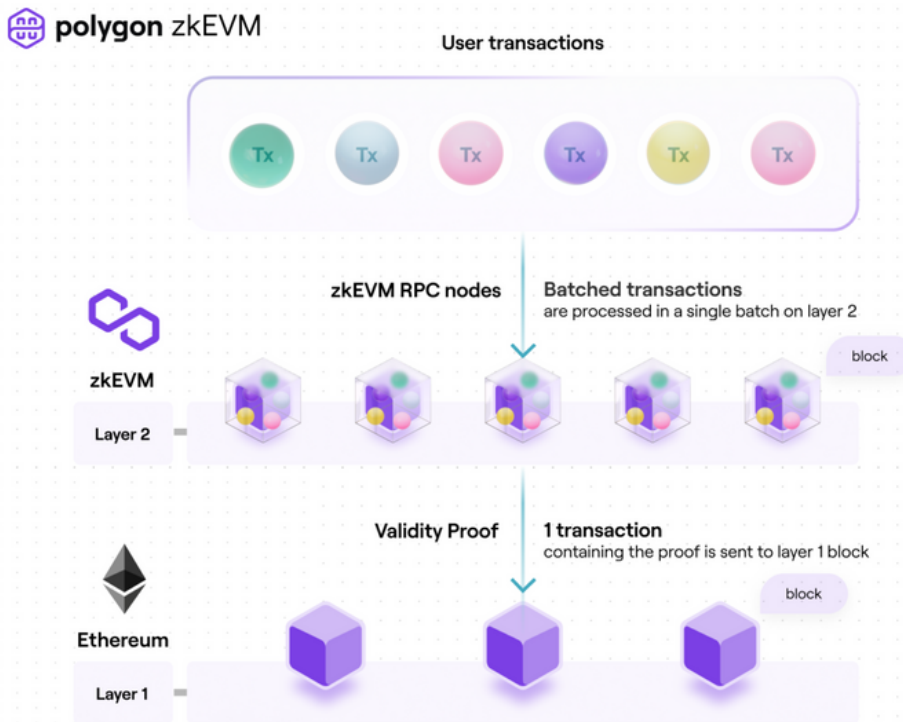


The concept of zkEVM **merges** zero-knowledge cryptography with the security and speed of the Ethereum Virtual Machine.

It represents an **L2 solution** using zero-knowledge proofs to execute smart contracts securely and efficiently.



With this technology, it's possible to bundle thousands of off-chain transactions and record a summary of them on the Ethereum mainnet. Being **compatible with EVM**, developers can use the same code, tools, and applications already in use on Ethereum but with **much more accessible costs**.



Some of its **key benefits** are:

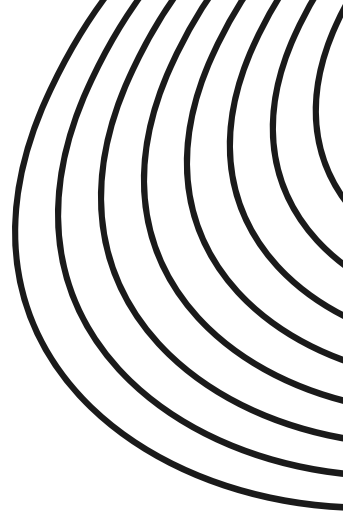
- Low fees
- High performance
- EVM compatibility
- Enhanced security
- Privacy

The significant number of developers using zkEVM is remarkable, and the various advantages of using zero-knowledge proofs are proving to be increasingly effective.

To sum up, Polygon zkEVM is an **innovative solution** that combines the best of sidechains and L2 solutions to provide an optimal experience for Ethereum users and developers. It promises to **scale** Ethereum without losing compatibility or security, allowing you to execute your smart contracts quickly, affordably, and privately.

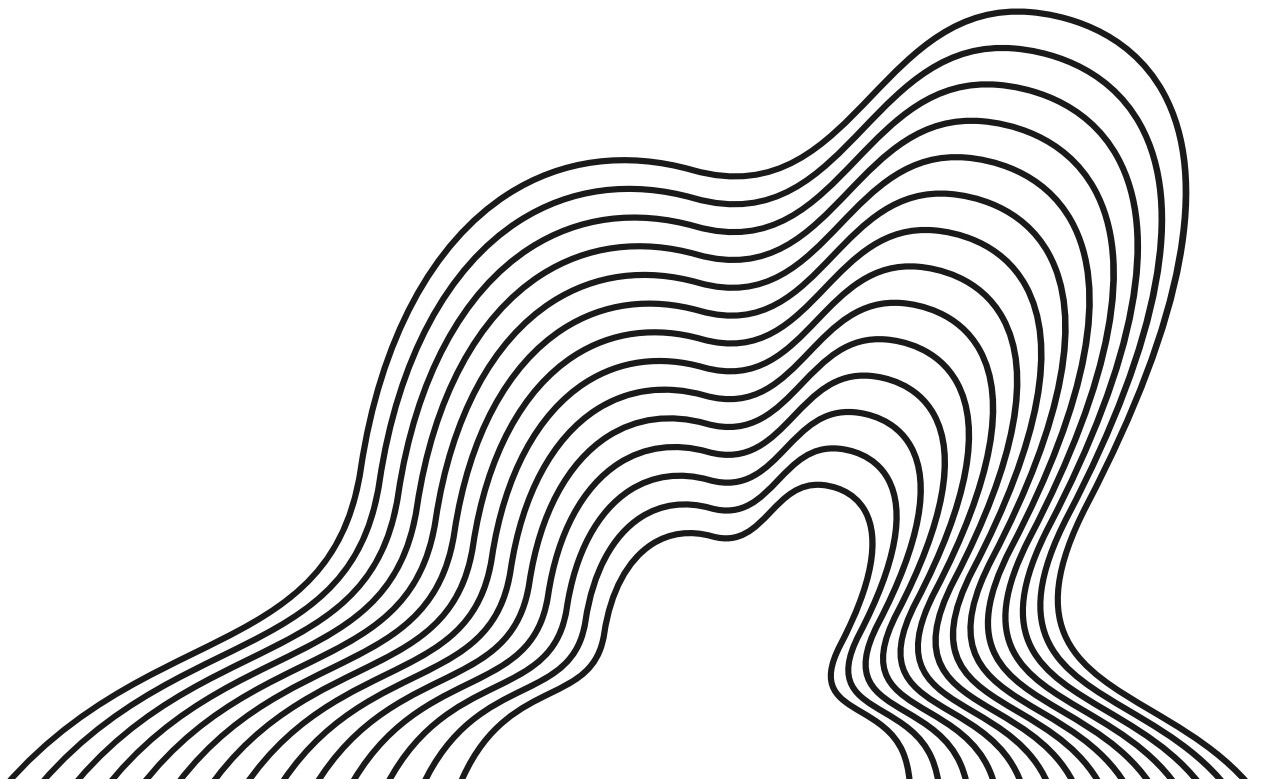


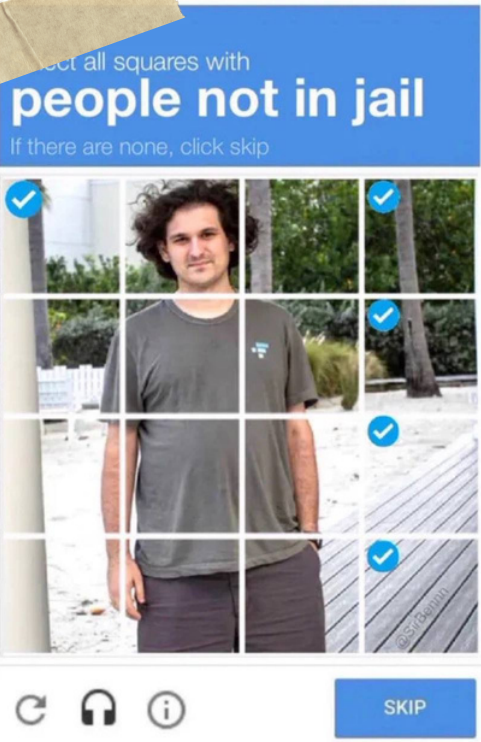
crypto rand. |



Best Memes Of the Year

Unexpected Gems

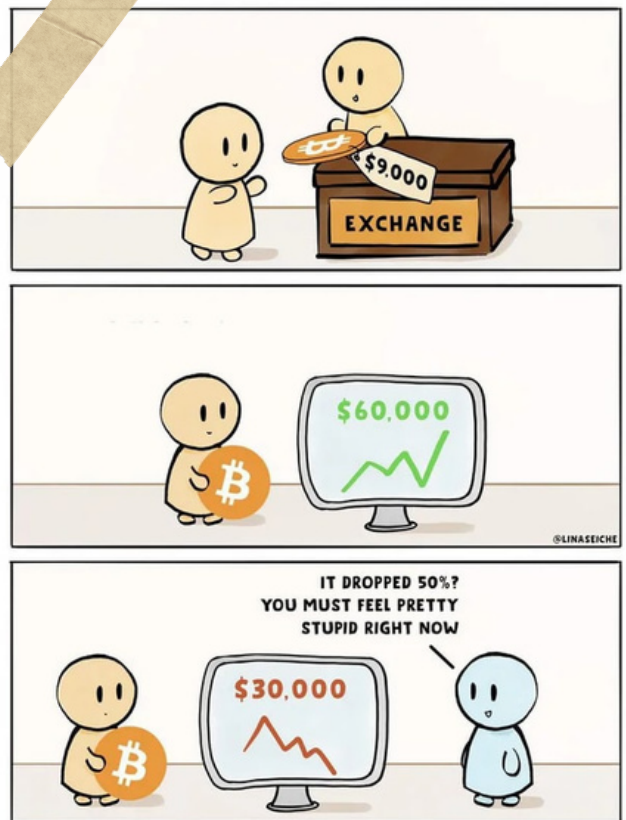
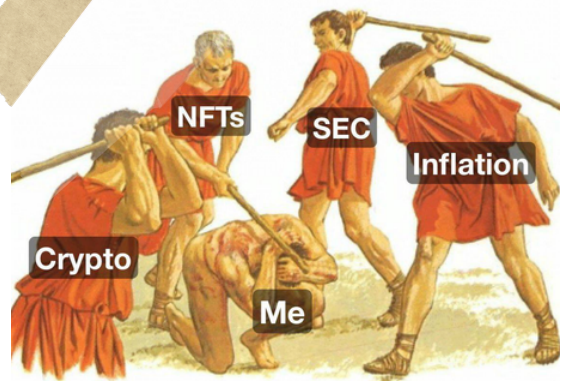




When your boss thanks you for staying late to work but you were just watching the price of Bitcoin and lost track of time



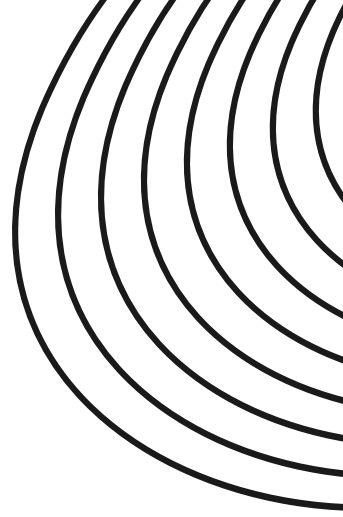
When your friend starts driving at 150 mph and says "I should have sold bro.."





Bitcoin up 10% in a week
My boss: why were you late?
Me: Watch your mouth.

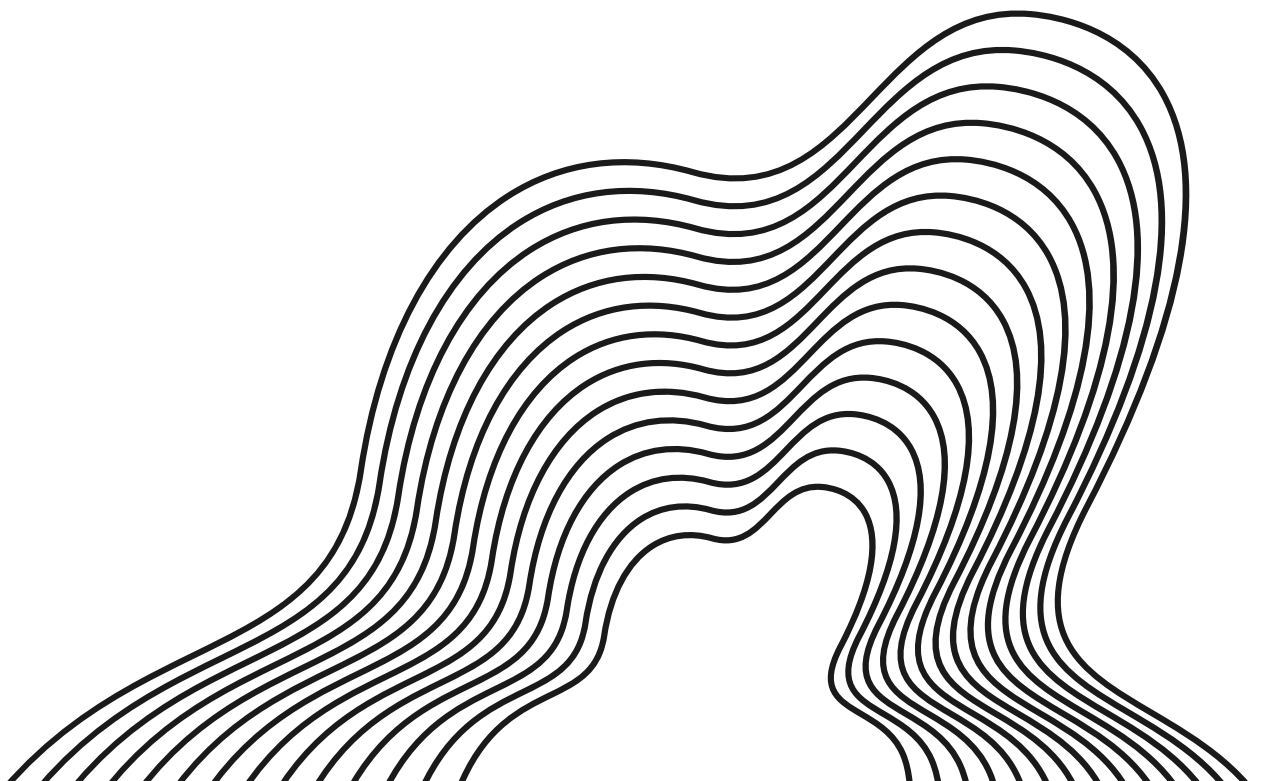




What's Next?

A Prediction

Or a Bet?



As we approach the end of the year, our focus naturally shifts to the upcoming one, looking for strategies to beat the market. However, to anticipate what lies ahead, **understanding the present** is critical in projecting an **uncertain future**.

Real World Assets (RWA)

This year, the narrative surrounding RWAs has created significant waves in the crypto market. Nevertheless, it's important to note that **tokenization isn't a new concept**.

Tokenization was **introduced in 2017** with the goal of integrating illiquid assets like real estate, commodities, art, stocks and bonds onto the blockchain. This move aimed to enable fractional ownership, enhance security, and prevent fraud. However, initial attempts were **unsuccessful**, likely due to the **early stage of blockchain technology** at that time.

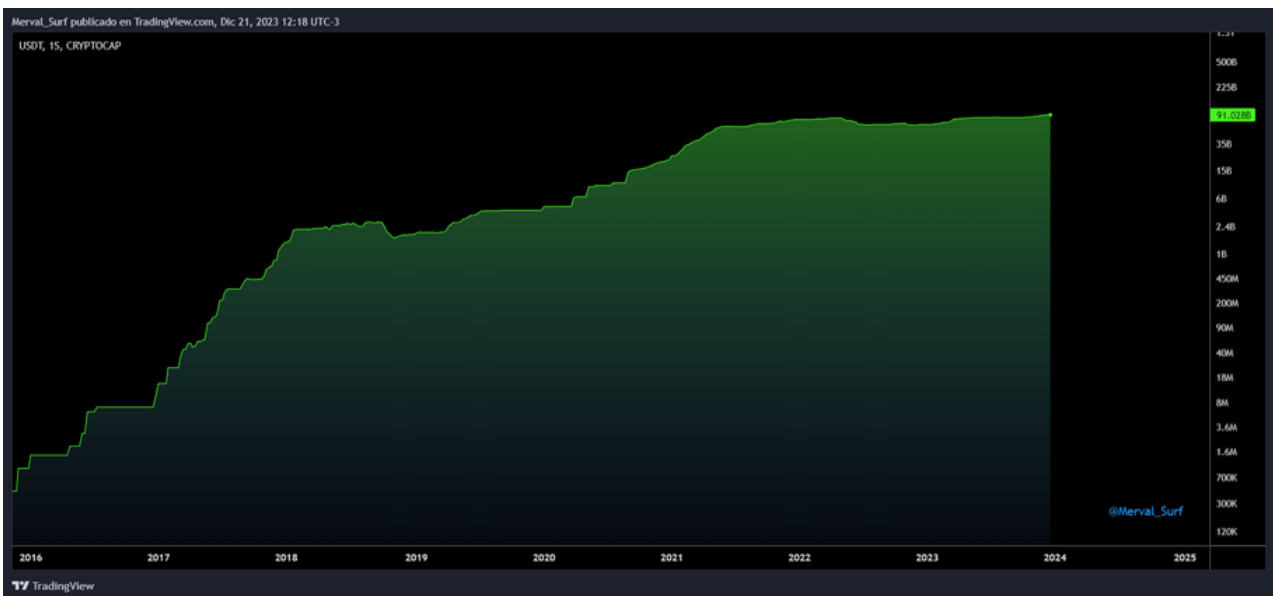
Total Value Locked in Tokenized Real-World Assets (RWAs)



(TVL in RWAs - Source: Bitwise)

Among all asset classes, real estate, the largest globally, has been profoundly influenced by tokenization and stands as one of the most promising applications of this technology today. However, the **majority of tokenized assets currently consist of stablecoins** (growing from 0 to 137 billion market in four years).

Stablecoins, particularly **Tether (USDT) with a 70% market share**, have gained prominence. Their popularity is largely attributed to **emerging markets**, where individuals seek access to USD owing to the weakness of their local currencies.



(USDT Market Cap 90B - Source: CryptoRand Group)

Countries like Argentina, Turkey and Lebanon, coping with high inflation rates, view **stablecoins as a means to bypass restrictions** within their **banking systems and governments**.

Responding to **genuine needs**, stablecoins are witnessing **significant demand** in these regions and are anticipated to continue growing. **Payments and remittances** will play a significant role in this development area. To set an example, in Argentina there are more people with crypto wallets (mostly just for stablecoins use case) than stocks & bond accounts in a broker.

Similar to stablecoins, gold and other commodities are now easily accessible in tokenized forms (e.g., XAUT for gold), providing users a convenient **alternative to traditional markets**. Additionally, Agrotoken, for example, facilitates commercial and financial transactions backed by tokenized grains.

Even the giant **JP Morgan** will launch a tokenized fund in 2024 using this technology to automate a significant amount of the steps involved in the portfolio management process, including subscriptions, redemptions and rebalancing.

In conclusion, the **future for RWAs appears promising** with the increasing adoption of blockchain technology in traditional financial markets. This includes further tokenization and diversification, regulatory clarity, and global accessibility.

Spot Bitcoin ETF

We are on the verge of a **Spot Bitcoin ETF approval in the United States** (some analysts expect authorization from the SEC to the 1st quarter of 2024), a game changer for the industry.

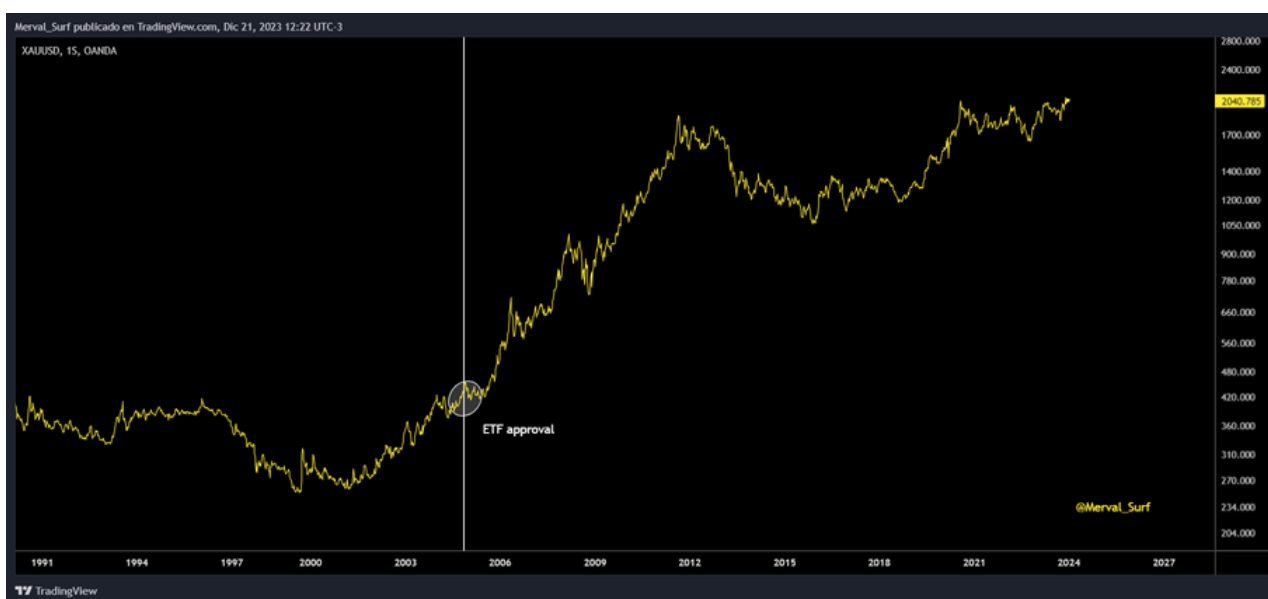
An ETF is an Exchange-Traded Fund that tracks the price of an index, commodity or Bitcoin in this case. Since 2021 we have a Bitcoin Futures ETF in the United States but now we are approaching a Spot ETF which would be different because these **funds will be directly backed by the cryptocurrency**. In other words, the issuing companies must hold bitcoin to give value to the funds, so more **buy pressure** for BTC.

Currently, a **small percentage of financial advisors allocate crypto products in client accounts**.

This limitation stems from their inability to include them, as cryptocurrencies aren't recognized as an asset class within the regulations of their funds.

This is precisely why **the introduction of a Bitcoin ETF is expected to bring substantial inflows of new money into the market** and to enable individuals who don't feel comfortable in the crypto environment to participate through a traditional Wall Street broker (even though futures contracts exist on CME today, it's challenging for retail investors to access them) and Institutional money who prefer to invest in instruments under regulations instead of the crypto directly.

The ETF will have a **great impact** in the industry considering that the **commissions** to trade an ETF are way lower than those charged by Centralized Exchanges. However, the main impact should be in the BTC price, considering that these funds will need to **buy the coins** to have their operations backed. We could find an example of this in the Gold ETF approval in 2004.



(GOLD Spot price - Source: CryptoRand Group)

In conclusion, we could expect a **positive effect** of the Spot Bitcoin ETF both in the crypto world and in the price, beyond that the market has moved in anticipation taking the Bitcoin price from 16K to 44K in 2023. **Having a spot ETF on Wall Street will place Bitcoin at the same table as the other major indexes.**

Market Cycles

Understanding and **identifying** market cycles holds paramount significance in investments: aligning with the right market cycle can significantly increase gains, while being on the wrong side can lead to substantial losses, pushing many investors to abandon the market.



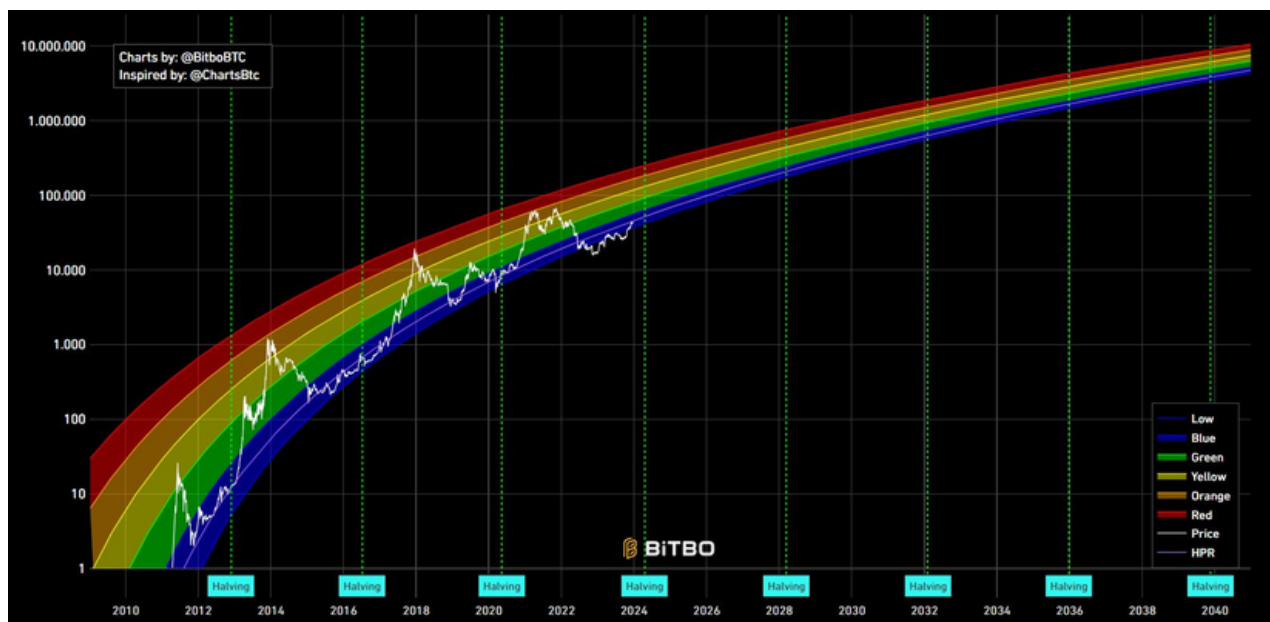
(Bitcoin chart, weekly time frame - Source: CryptoRand Group)

Bull cycles can be divided into two phases: the recovery from lows to all-time-highs (ATH), and the period of soaring at ATH levels without preexisting resistances. Choosing between these phases depends on our **risk aversion** and **trading style**.

Cycles are an **inherent part of nature**, and financial markets are no exception. Embracing these cycles rather than resisting them is essential.

As 2023 draws to a close, Bitcoin shows **signs of recovery** from its lows but remains below its ATH. This sets the stage for an **interesting 2024**, potentially marked by surpassing the previous high of 69K and navigating unknown waters.

Moreover, the scheduled **Bitcoin halving** in April 2024 (when the miner reward will decrease from the current 6.25 BTC to approximately 3 BTC) adds to this anticipation, as we can see in the rainbow chart below, after each halving the price gets momentum to new all time highs.



(Bitcoin rainbow chart - Source: BITBO)

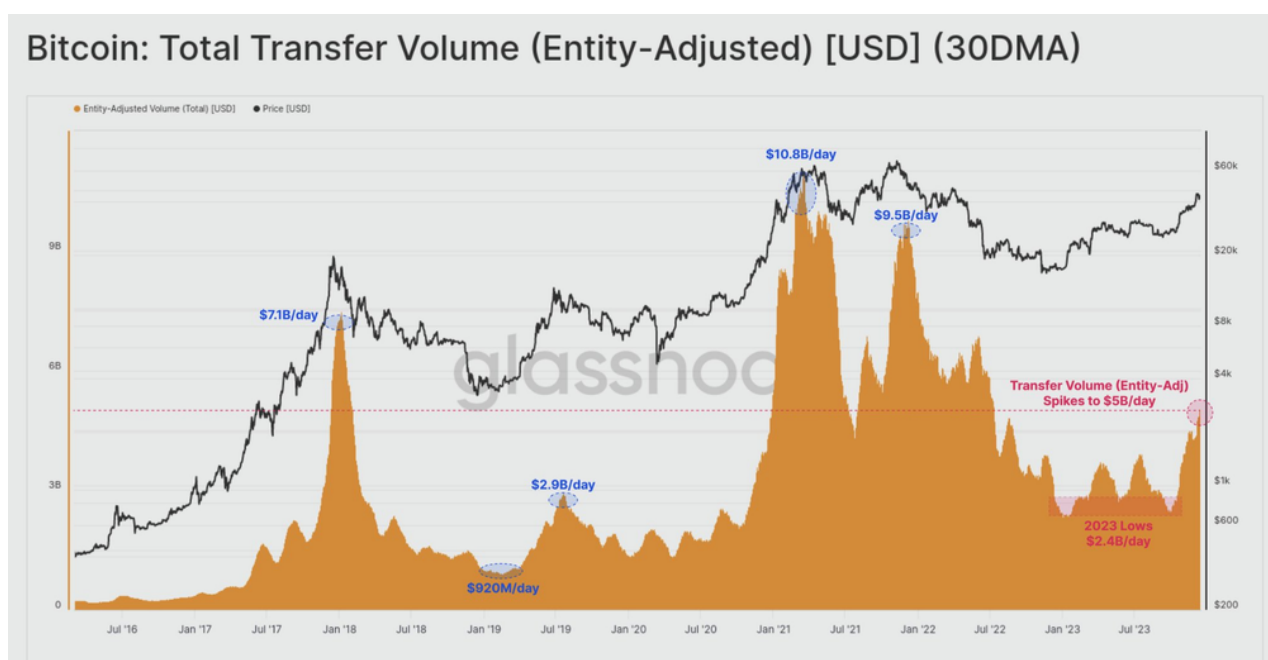
The following **stock to flow** chart shows that as we are approaching the next **halving** the price starts to move towards ATH, knocking on heavens door.

Moreover, if we consider the average S2F 463 days (orange line), price has room to converge to it.

Following the chart above, you can see how it creates a line that shows an estimated price level based on the number of bitcoins available in the market relative to the amount being produced (mined) each year.



An interesting point is the **transaction volume** (tx) compared to the Bitcoin price. In the chart below we can see that in the 2023 bull run, the **tx volume is 40% lower** than its previous peaks. This shows a **bullish scenario** for the market with plenty of room for money to re-enter in the game.



(TX volume vs BTC price - Source: glassnode)

Adoption is still **growing non stop** as this chart shows the total number of addresses vs the BTC price.

Bitcoin: Number of Addresses



(Adoption vs BTC price - Source: glassnode)

Wall Street & the FED

Here, our big brothers, Wall Street and the FED, step into the game.

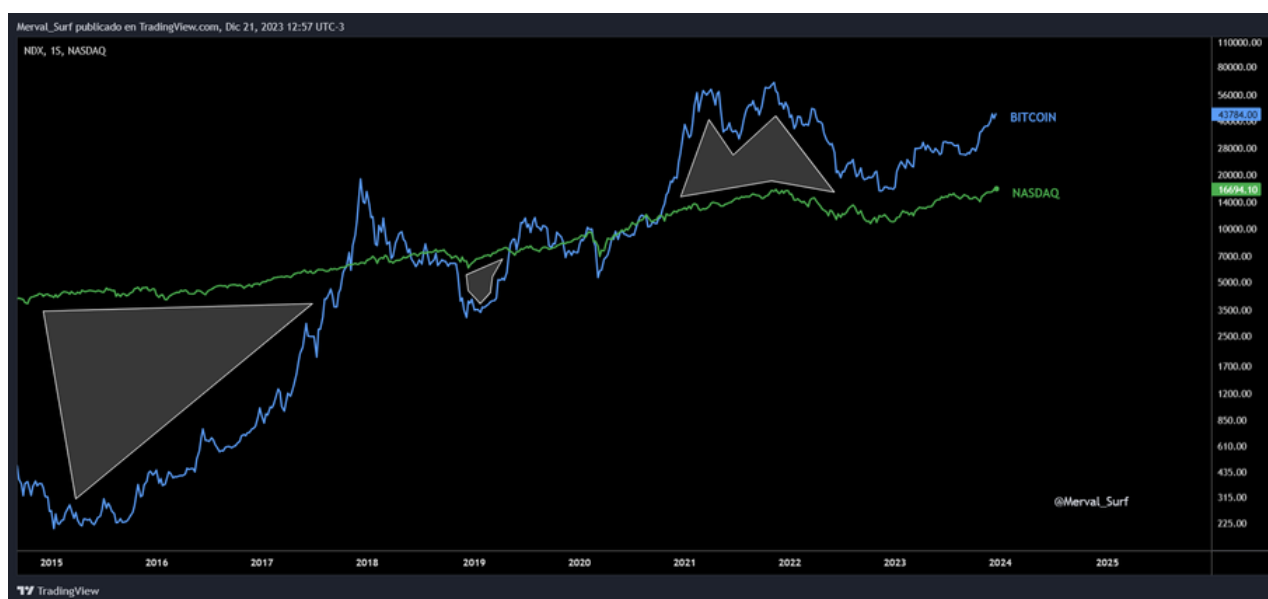
Years ago, particularly during the 2017 bull run, the Crypto world paid little attention to Wall Street and the FED. Nobody cares about the NASDAQ and even less the 10y rate. It's essential to recall that this period coincided with a cycle of **low interest rates** and hyper liquidity stemming from the **2008/09 Sub-Prime crisis**, the time when **Bitcoin's whitepaper** was released (coincidence? I don't think so.)

With Bitcoin taking over the market, it evolved into an **investment instrument** like those available in Wall Street. Was this positive or negative? That's subjective.

For those viewing the Crypto realm as an adversary to Traditional Finance (TradFi), this integration might not be favorable. Yet, for those who perceive that Crypto was born to enhance and resolve many of the TradFi challenges, this conversion into an attractive asset class alongside the traditional ones (stocks, bonds, ETF, etc.) is undeniably positive.

So, Crypto stands as the **cool brother of TradFi**, and it's becoming increasingly difficult to consider them separately.

This chart shows how Bitcoin didn't care what's going on on Wall Street, especially in 2017, 2019 and 2020/21. However, starting from the lows of 2022, Bitcoin has shown a **correlation** with NASDAQ unlike any seen before. This trend is likely to persist into 2024, with **NASDAQ surging towards ATH** and Bitcoin poised to exhibit a similar pattern, especially considering the potential **approval of the ETF** by then, resulting in a wave of fresh capital both retail and institutional.



Now let's consider the role of the **FED**. Similar to our discussion about Wall Street, when interest rates were low, the FED didn't command much attention. However, as they began to **increase rates** due to inflation, this started impacting both Wall Street, especially the NASDAQ, and the Crypto market. Consequently, many projects became economically unviable. However, as we conclude 2023, there's positive news regarding this situation. The FED has reached the **Terminal rate** and **forecast cuts in 2024**. (75bp to 4.6%)

So, anticipating an eventful 2024 with the Bitcoin halving, FED rate cuts, Wall Street at ATH, we can conclude that a **promising year is ahead** and perhaps we are at the doors of **massive adoption** for crypto like any seen before.

Artificial Intelligence (AI)

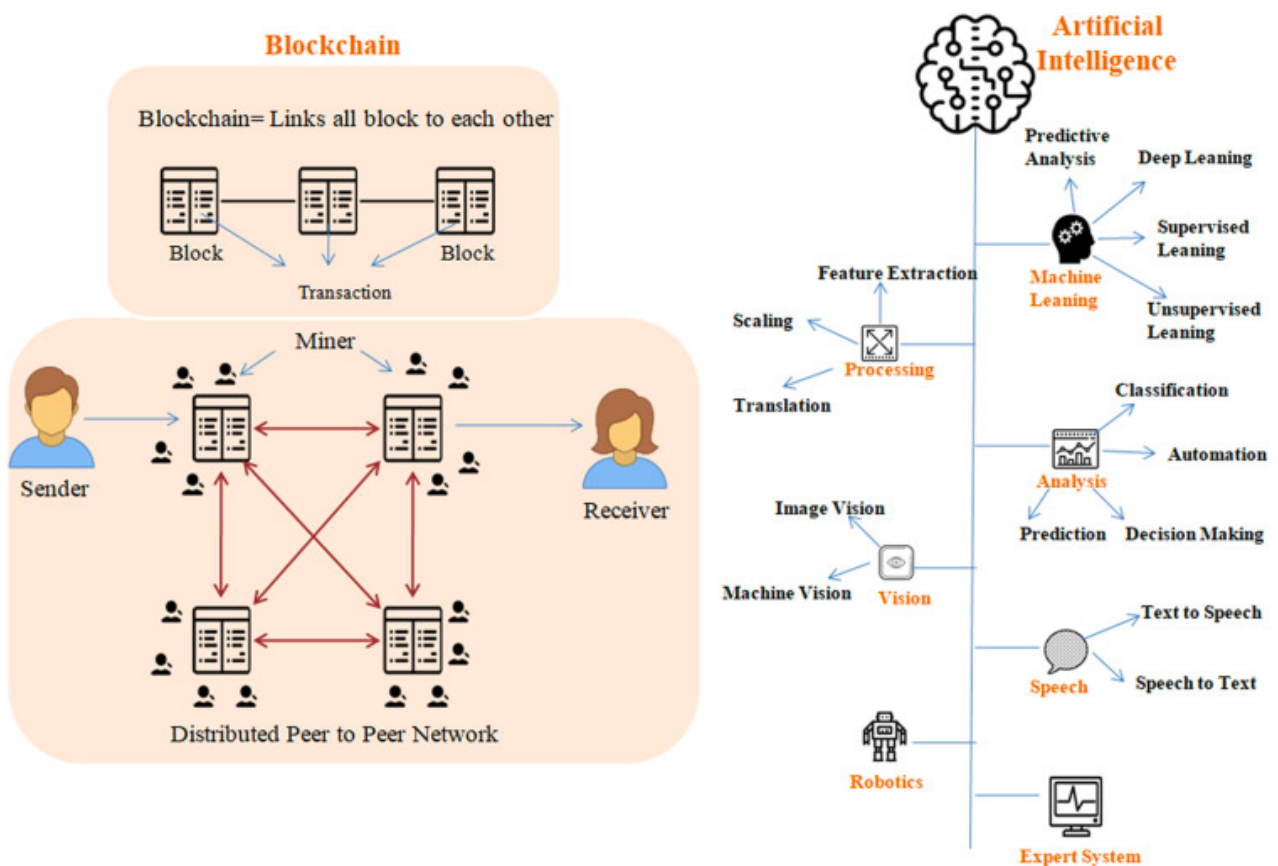
Artificial Intelligence has been the hottest topic of the year, featured in almost every Wall Street earnings report (sometimes even within companies unrelated to AI) and the Crypto market is not the exception.

Both AI and Crypto represent development areas that rapidly advance in technology, making predictions challenging. However, several trends may potentially define the role of AI in the upcoming crypto future:

- **Advanced Trading Algorithms:** more powerful, sophisticated and leveraging machine learning techniques to analyze the market data. Also enhance trading strategies and risk management for crypto traders.
- **AI-Powered security solutions:** the rise of cyber threats implies that AI could be driven security solutions in detecting and preventing frauds, hacks and vulnerabilities in blockchain networks and crypto exchanges.
- **Enhance market analysis:** AI tools will continue to refine market analysis by processing and interpreting real-time data from various sources. Sentiment analysis, natural language processing, and predictive analytics could provide deeper insights into market trends.
- **DeFi and AI integration:** DeFi platforms may integrate AI technologies to optimize lending protocols, automate risk assessment, and create more efficient decentralized financial products.

- Regulatory compliance: automating KYC (Know Your Customer) processes, AML (Anti-Money Laundering) monitoring, and ensuring adherence to evolving regulatory frameworks.
- Payments: Crypto is the native money of the internet and could be the ideal tool for online payments facilitated by the AI agents.

Without a doubt, **AI has arrived to stay**, and in crypto, it can find the ideal playing field to thrive, considering that both are advancing at a speed that other areas can only imagine. The **future is uncertain but promising** for these technologies, and the success of both will depend on how well they can complement and enhance each other.



Regulations

The regulation of the crypto market is an **inevitable future**, as adoption grows, the interest of tax authorities increases proportionately, and we must be aware that this is the direction we are heading towards.

We are still in a very **early stage** because taxing crypto transactions by a government is very challenging. However, it's something that will happen **sooner rather than later**, and we need to be prepared. Today, we can discuss two topics that draw attention regarding government intervention in the crypto world: **CBDCs and taxes**.

Central Bank Digital Currencies (CBDCs): The development and potential widespread adoption of Central Bank Digital Currencies might **influence** regulatory approaches towards other cryptocurrencies. Governments might consider how CBDCs interact with existing cryptocurrencies and blockchain-based assets.

Taxation Frameworks: Governments are likely to refine **taxation frameworks** for cryptocurrencies. This could include clearer guidelines on **how to report and pay taxes** on crypto assets, potentially leading to more widespread adoption and acceptance of cryptocurrencies within regulated financial systems.

Regarding this, we can add that the **rapid emergence and application of AI** has led to considering **halting its evolution**, as there is no regulation in place for this new phenomenon that will impact the entire knowledge industry and the way we work. So we can expect that **some regulations will begin** in this matter, especially in the way it applies to established jobs that require university validation or truth auditing.

Gaming

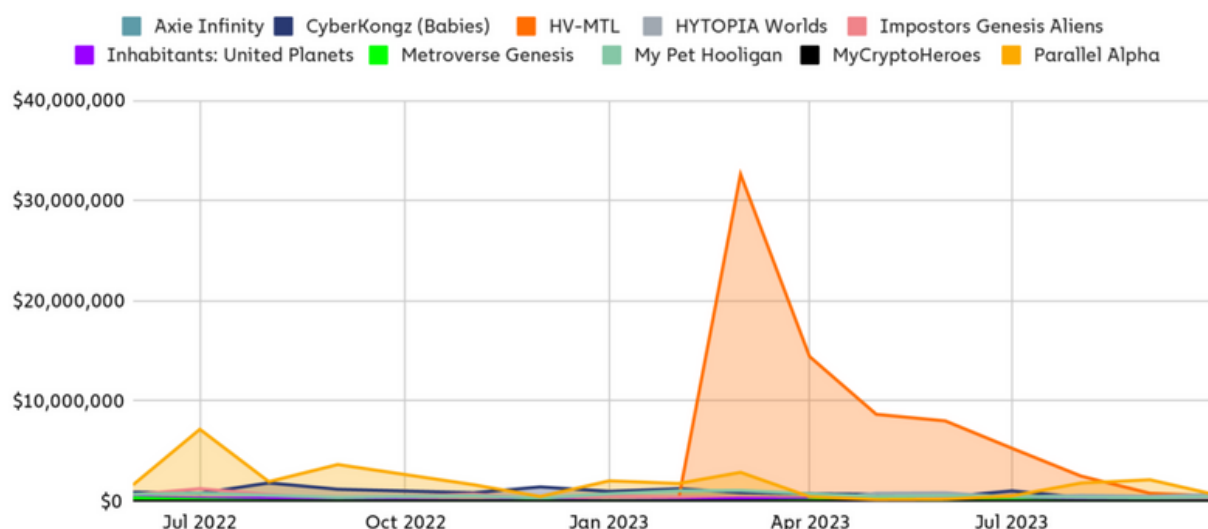
Back in 2019 it was a matter of time for **gaming and blockchain** to cross his roads. This became a reality in 2020 with the bursting into the scene of AXIE Infinity to take over the crypto gaming market. But things got cold in 2022 following the bear market.

However many remain excited about how blockchain and video games can join forces to create a **new paradigm** in the biggest entertainment industry of the world.

Besides that in 2022 the industry experienced a big decline in usage, the **interest** in blockchain gaming shows **no signs of stopping** (some analysts see a potential growth path of 68% of market value by 2030, this is a 8 billion market).

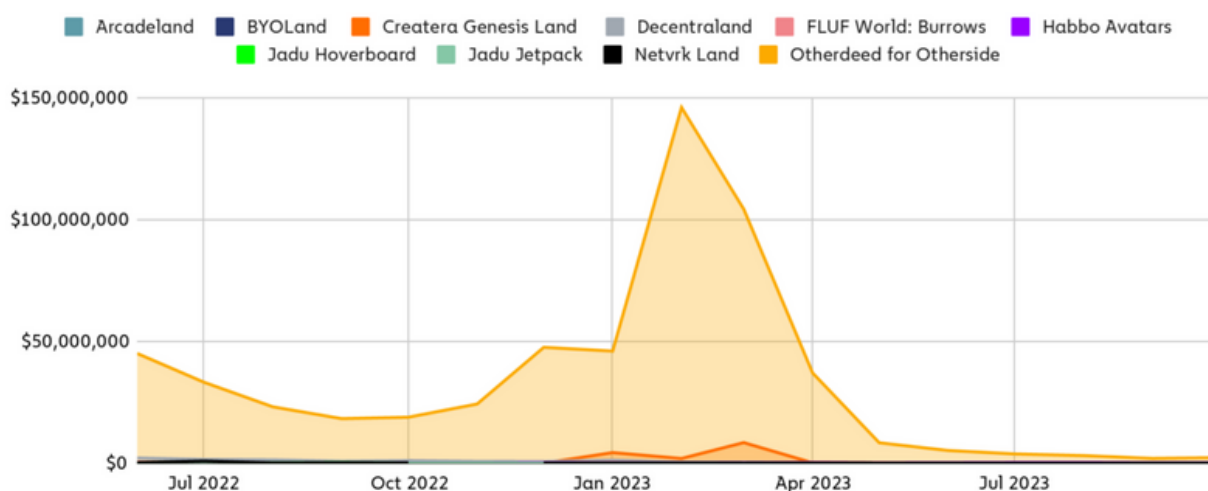
NFT (non-fungible tokens) have the **potential to grow** the crypto gaming industry to unimaginable levels. Their technology is perfect for this and likely one of the best uses for it. It remains to be seen in which direction the **synergy** is generated, whether from the traditional gaming industry towards crypto or if crypto incorporates the traditional in an attempt to create a new gaming experience.

Top ten blockchain game NFT collections by transaction volume, Jun 2022 - Oct 2023



With the **metaverse**, we're not just facing a new branch of the gaming industry but a **new plane of reality**, where it will become increasingly common for people to 'go there' to have fun, attend concerts, meet people, and more. It's not insignificant that Mark Zuckerberg has changed the name of his holding company to META, investing heavily in this forthcoming era that we're still not entirely sure how to handle, but it's definitely just around the corner.

Top ten metaverse NFT collections by transaction volume, Jun 2022 - Oct 2023



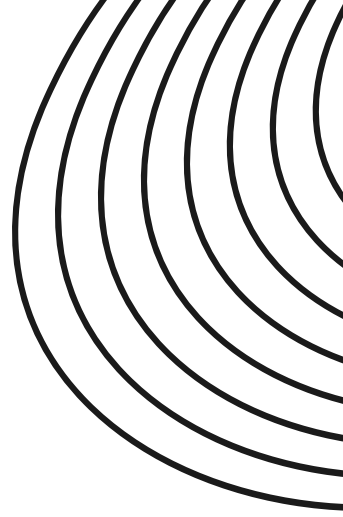
Play-to-earn (P2E) games will **align with the prices** in the crypto market, meaning that their interest will reignite as Bitcoin and other altcoins approach historical highs, making it profitable to play these games if the goal is just the money.

Some **challenges** for the future are:

- Breaking down the entry barrier for gaming users who aren't familiar with crypto and how to use it
- Improving network scalability, especially on Ethereum where most games are based
- Transaction fees that make games very costly
- Enhancing graphics compared to those of the traditional industry, which are excellent

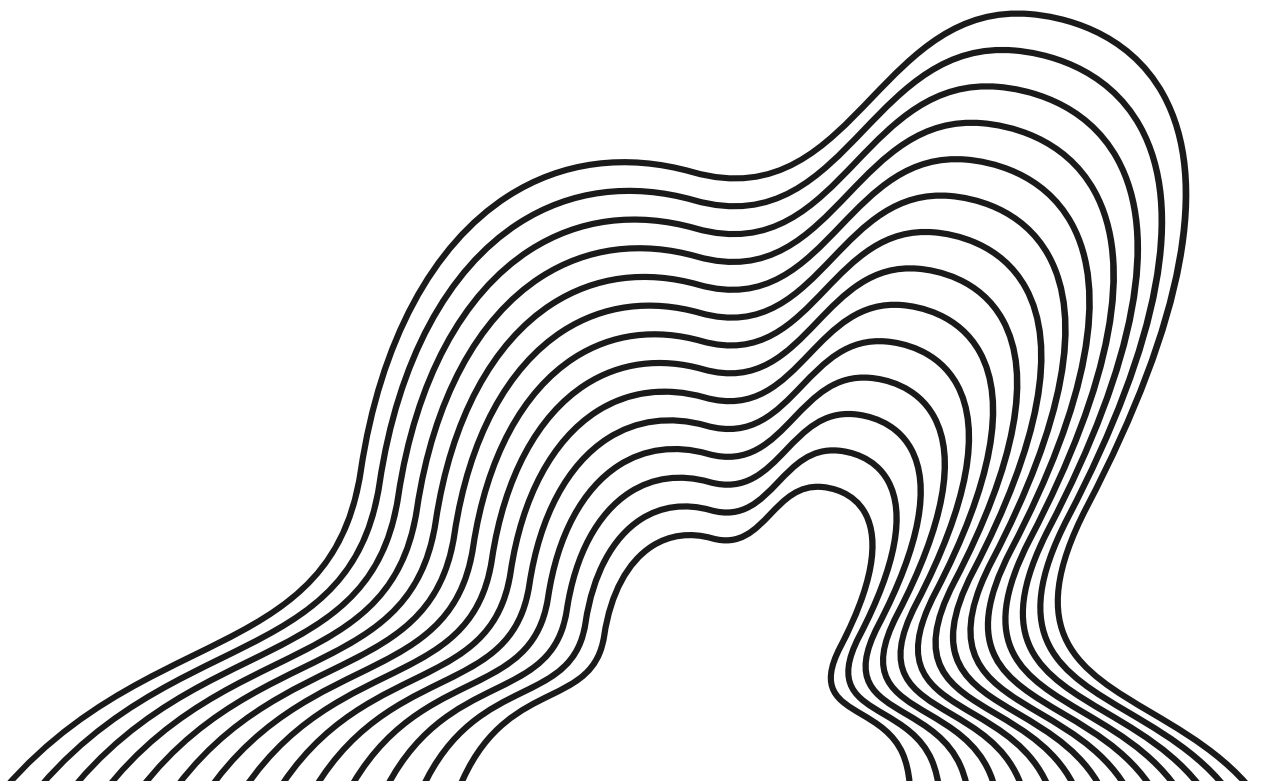
We also need to consider the **impact that people's interaction** in the gaming realm can have, where there is still **no legislation** regulating actions such as crimes committed by avatars in the metaverse or sexual harassment.

Education will be one of the **keys to the future** for the gaming industry, as it's necessary to attract traditional gamer users to move towards crypto, not just to make money but because their involvement implies greater ecosystem development and more employment, advancements, and investment opportunities.



A Word From The Team

New Ways, New Potential





Crypto Rand
CEO



2023 has been a transitional year, but no less important. The market and the industry in general have matured enormously.

The foundations have been laid for what will be a historic year for Bitcoin & Crypto. Halving, ETF's, AI, RWA, Gaming, L2's...

I couldn't be more excited about 2024.



Kuro
General Administrator



This year has been simply a roller coaster! More awesome projects have faced new regulations, and some older ones have collapsed to the power of the SEC.

The FTX drama is finally over, but the show must go on for CZ, who's now the one in trouble!

With the end of the year being this jumpy, no doubt 2024 will be a blast to follow!



Agroman Crypto Teacher

“

“Good morning champs! How are you doing today?”

Yeah, those are my first words of the day after I grab my coffee, it's not mechanical posting I actually care!

I want to use this opportunity to thank you for sticking around all this time and congratulate you on your progress. Motivates me incredibly to see you guys pushing through every day, keep it up!

Be ready for a year full of surprises. Until then, I wish you a Merry Christmas and a Happy New Year!



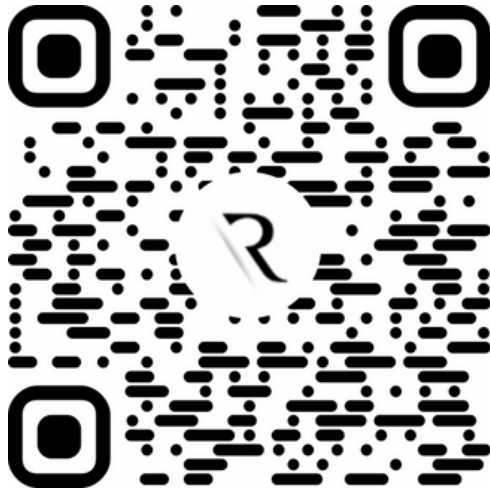
Merval_Surf Technical Analyst

“

I'm the new guy on the team, I joined at the end of November but it feels like I've been working with them for years.

I'd like to thank Rand, Agro, and Kuro for welcoming me, and every community member for trusting my analyses and market insights, as well as for contributing their ideas.

Wishing you all a great year-end and 2024 full of good vibes and TARGET ACQUIRED 🎯



 @crypto_rand

 cryptorandgroup.com