

BIMONTHLY REPORT
APRIL EDITION
2023



MOONROCK CAPITAL

The TLDR

What Happened, Where Are We Now?

Various sectors and ecosystems such as Bitcoin, NFTs, Arbitrum and Optimism, received a boost in funding support.

However, things took a turn for the worse, when an unexpected rise in inflation, coupled with the Federal Reserve's quantitative tightening approach, led the market into a vicious cycle. The situation was further exacerbated by the collapse of three major US banks, namely Silvergate, SVB, and Signature Bank, triggering a liquidity panic and regulatory concern in early March. New opportunities and categories have emerged as a result of the overall recovery, but it is still too early to predict whether this momentum will continue. To achieve full recovery, the crypto space needs to foster more innovation and overcome the challenges ahead. The road towards success is long and arduous, but we must remain vigilant and seize every opportunity that presents itself.

In This Report

- **Infrastructure:** A modular future for Bitcoin is on the horizon. Rollkit is a flexible framework that creates a sovereign rollup on Bitcoin with custom DA and execution layers. The decentralization and security properties of Bitcoin are the only ones, which can compete with Ethereum and therefore make it a viable competitor of its rollup-centric roadmap.
- **Social:** The adoption of crypto is steadily increasing, and Lens, along with Web3 Social, has shown a strong product-market fit, resulting in a significant surge in user activity and a 100x increase in handle prices since October.
- **GameFi:** A partnership between two powerhouses, aiming to scale the adoption of Web3 gaming, has adopted Polygon's zkEVM technology to reduce transaction fees and make the process smoother and more efficient, shaking up the Web3 gaming space.
- **What else:** Gambling, NFT marketplaces and Ordinals....

Overview

Exciting stuff, that we cover in this report:

Bitcoin

Do we really have to explain what this is?

Arweave

Permanent information storage.

Lens Protocol

A composable and decentralized social graph.

Immutable

Layer-two scaling solution for NFTs on Ethereum.

WINR Protocol

Decentralized on-chain e-gaming infrastructure.

Niftables

Creating white label NFT platforms for creators & brands.

Sentiment

How We Approach The Cycles

At Moonrock Capital, we don't subscribe to the traditional market approach of risk-on and risk-off for short-term timeframes. Instead, we observe the larger global liquidity cycle, as we believe that crypto is the fastest horse in monetary debasement, as Paul Tudor Jones said in 2020. That's why we have become more aggressive in picking up liquid assets and primary deals since the uptick in liquidity at the end of last year and the beginning of this year.



Regarding Bitcoin halvings, we are firmly in the camp that they are fundamentally bearish events. Every four years, the security budget of the network is halved, which makes us nervous about Bitcoin's ability to deliver a secure transaction layer. Although halvings can be an accelerator for bull markets, it won't happen without an upswing in fees or at least a tail emission to delay the problem. Our mental model for cycles involves keeping an eye on changes in global liquidity and network effects on both the asset and transaction layers. For instance, a new upswing in global liquidity could be led by China, as indicated by the credit impulse data. But liquidity alone won't be enough for the industry to thrive. Further innovation that reinforces new network adoption by providing user value is essential for success, such as scaling without sacrificing decentralization or security.

Censorship money remains the most significant use case since the beginning of blockchain. Still, if we throw decentralization out the window, we can scale, but we won't be able to deliver on the product. Ethereum's years of hard work have led us to the beginning of the roll-up centric roadmap and scaling ETH as money without sacrificing decentralization or security.

In each liquidity cycle, crypto transforms from visionaries rethinking social organization to degenerate gambling on future use cases. The fundamental value we add in each run is the number of people who stay as real on-chain users. The beauty of network effects is that the inherent value of the network grows exponentially rather than linearly with new users. While we are now at the "fight you" stage, we are far from collapsing risk due to the limited use cases resulting from few users.

Infrastructure



A Modular Future For Bitcoin Is On The Horizon

The most exhilarating development we've come across in years is Rollkit, as it addresses our worries about Bitcoin network security. Rollkit is a flexible framework that enables custom DA and execution layers to be plugged in, allowing for the creation of a sovereign rollup (SR) on Bitcoin. This means that Bitcoin would be used for its DA and consensus, while settlement and execution would be handled independently by the SR using the Rollkit client software.

In the blockchain trilemma mental model, rollups have always been a viable solution to solve the trilemma by outsourcing security and decentralization to the baselayer in exchange for scalability. However, a less decentralized baselayer has never made sense for us as a competitor to Ethereum, as it can offer better options to rollups. If the use case requires more cost-effective transactions, there is still the possibility of a validium that uses, for example, Celestia for DA. Even if we simplify the topic, we only see potential competitors to Ethereum in baselayers that provide similar or better decentralization and security.

Bitcoin is the only baselayer that falls under this category, and it directly addresses our security budget concerns. We can imagine an idealistic debate, similar to the PoW and PoS debate, on the tradeoff space between sovereignty in Bitcoin's case and automatic composability for Ethereum in the future.



Social

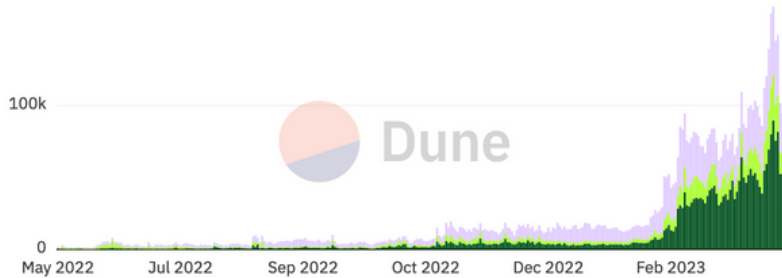
Lens



In our previous discussions, we've shared our belief in the potential of Web3 Social and in particular Lens. The adoption of crypto by native users is increasing steadily, and the recent onboarding of phone apps has seen a significant surge in Lens user activity. While the number of potential user handles is yet limited, the MAUs for existing users have shown a clear uptick. In fact, 57% of all Lens handles are monthly active, and the total daily actions of Lens owners have also increased substantially since February. The strong product-market fit and demand for Lens have caused the price of handles to increase by 100x since October. Even though some participants might farm for a potential airdrop, new users and degens are willing to pay around \$240 for a floor price handle.

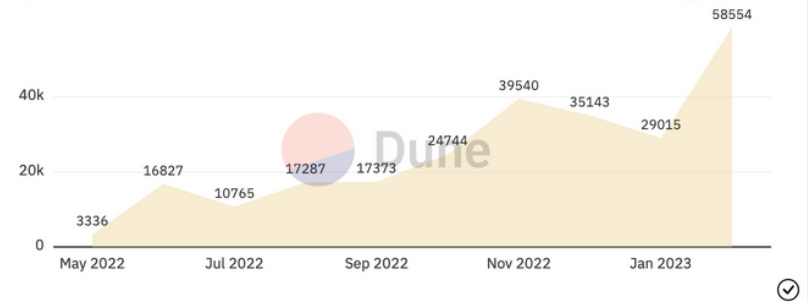
Daily Lens Owners Actions

@rustamov



Monthly Active Profiles

@rustamov



The Web3 social tech stack has several components, including access controls, dApps, indexers, data models, relayers, state machines, and storage layers. However, state machines and storage layers are located at the bottom of the stack and provide the most straightforward value accrual trickle-down effect for any innovation that occurs on the upper layers. Following this thesis we positioned ourselves in leading storage networks, which will allow us to capture the growth of new users and their output effectively.



Strategic Alliance

We wrote about these two leading web3 gaming companies in our last report where we wrote about their differences and advantages. Recently they announced their partnership.

Let's talk about a partnership that has the potential to shake up the Web3 gaming space as we know it. Together, these powerhouses have set their sights on scaling the adoption of Web3 gaming. They want to use their multi-billion-dollar gaming experiences to help developers bring their vision to the Web3 space more accessible than ever. And they're off to a fantastic start. Immutable has already adopted Polygon's new zkEVM technology to reduce transaction fees, making the process smoother and more efficient than ever.

Now, you might be wondering, why did Immutable and Polygon Labs decide to partner up?

Well, it's simple. Through the combination of their innovative products and services, the two companies are aiming to simplify the Web3 development process for game developers. And in the long run, this move will encourage 3 billion active gamers and creators to join the blockchain sector.

Here's how it works.

Polygon simplifies the technological aspect of Web3 gaming, such as transactions. Meanwhile, Immutable holds some of the most user-friendly platform products for gamers. And it all starts with Immutable adopting Polygon's zkEVM technology.

So, what exactly is Immutable zkEVM, and how will the new tech accelerate Web3 gaming adoption?

To put it simply, Immutable zkEVM is a zk-rollup designed using Polygon's structure and Immutable's platform support. And it's a game-changer. Gaming developers using the Immutable zkEVM and their platform to build Web3 games can create games faster, cheaper, and cleaner than before.

Strategic Alliance



Polygon's zkEVM technology is already renowned for offering low transaction fees and faster processing.

And the best part?

These features are fully compatible with the Ethereum blockchain. According to Immutable Co-Founder Robbie Ferguson, *"By combining the #1 web3 gaming platform – currently serving hundreds of game studios and millions of players – with Polygon's best-in-class zkEVM technology, we are building an Ethereum-centric gaming ecosystem that is poised to take web3 mainstream and bring digital ownership to millions of people around the world."*



We think it's safe to say that this partnership has the potential to change Web3 gaming as we know it. After all, Polygon Labs and Immutable have plenty of experience in the blockchain gaming niche. Immutable Games launched the first NFT trading card game, Gods Unchained, which skyrocketed to success shortly after its release. And the team is currently developing a highly-promising multiplayer RPG – Guild of Guardians.

Meanwhile, Polygon Labs boasts over 1.18 million smart contracts created to date. The platform gained popularity globally due to its clever Ethereum scaling solutions for the Polygon protocols.

In conclusion, we believe that the partnership between Polygon Labs and Immutable is a significant step forward for the Web3 gaming space. By bringing their expertise together, they can create a gaming ecosystem that is accessible, affordable, and user-friendly for both developers and gamers alike. And we can't wait to see what they'll achieve together.



WO2023039557 - The NFT Patent

Sony Interactive Entertainment, the gaming console behemoth, has just dropped a patent filing for NFTs that would allow for the transfer of assets between different games and consoles. This power play is aimed at making assets more interoperable, not just within different games, but across hardware such as VR headsets, computers, and different consoles.

The patent, which was filed just two weeks ago, would allow users of Sony products, such as the flagship PlayStation, to enjoy an interoperable Web3 gaming experience. Gamers could swap in-game assets between devices like VR headsets, tablets, computers, and smartphones. And let us tell you, this patent is no joke - it even goes so far as to say that "the NFT can be used cross-generationally (e.g. from PS4 to PS5)."

But that's not all, the application also dives deep into the mechanics of how NFTs would work for achievements and tournaments, stating that "the digital asset may be usable via the NFT by the first end-user entity across plural different computer simulations." And, as if that wasn't enough, Sony specified that this framework aims to be interoperable between products outside the Sony ecosystem, such as Xbox or a "cloud-based video game." This means that assets would be fully transferable and usable between different gaming ecosystems.

Here's where it gets even more interesting: The patent outlines a function that would prevent gamers from repeating tasks to earn the same NFTs with different products or games. This function would be able to prevent "performance of the task again in other instances of the computer simulation that are executed, and/or declining to provide additional NFTs for subsequent additional performances of the task."

Sony has been making bold moves to expand its presence in the Web3 space, testing early blockchain-based products and forming strategic partnerships. Last November, the company released motion-tracking wearables, giving gamers the ability to control their avatars with their bodies in real-time. And just last February, its internet provider division, Sony Network Communications, teamed up with blockchain network Astar to create an incubation program for companies focused on building NFTs and decentralized autonomous organizations (DAO) with real-world utility. This is a big one, folks. Keep your eyes peeled for more news from Sony as they continue to push the boundaries of gaming innovation.

GambleFi

Degens Like Gambling

Listen up, degens! When it comes to gambling, crypto casinos have taken the game to the next level. With decentralized platforms that run on a blockchain network, players can enjoy a fair and secure gaming environment. No need to worry about personal information being compromised because anonymity is the name of the game. Transactions are lightning-fast and transaction fees are significantly lower compared to traditional online casinos.

Decentralization is the key differentiator that sets crypto casinos apart from the rest. Instead of being run by a single entity, the platform's transactions and activities are processed and recorded on a decentralized ledger. This means that there is no room for manipulation, ensuring a fair and unbiased gaming experience. Plus, the lack of a centralized authority keeps player funds safe in a decentralized wallet.

Anonymity is also a big factor in the popularity of crypto casinos. Players don't need to provide personal information during registration, which means that they can enjoy more privacy and security. And with accountant transactions enabled by blockchains, players can deposit and withdraw funds almost instantly without revealing any personal information.

Instant deposits and withdrawals are a game-changer in the online gambling world. With no need for intermediaries such as banks or payment processors, players can transfer funds from their crypto wallet to the casino's wallet and vice versa with ease. Say goodbye to waiting days or weeks to access your winnings! The recent FUD about the industry leader Rollbit has shown how important real decentralization and transparency is. So which casino should you choose when it comes to playing and investing? Well why not choose a decentralized protocol, on which gambling products are built?

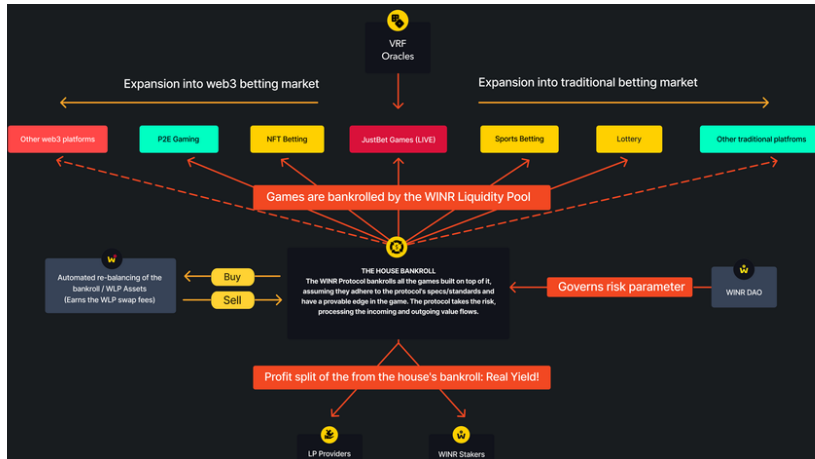


GambleFi



The WINR?

Our portfolio company WINR Protocol is a fully autonomous liquidity and incentive infrastructure explicitly built for on-chain games requiring a counterparty asset vault. It offers several advantages for gamers. One of the primary benefits is that games are settled immediately on the blockchain through smart contracts. This ensures that all transactions are secure, transparent, and reliable. Players playing on platforms using the WINR Protocol also receive incentives in the form of vWINR tokens, which are paid out immediately after each transaction. This system provides players with rewards in real-time and encourages them to engage with the platform. All promotions and rewards are recorded on the blockchain. This means that the system is entirely transparent and fair, with no hidden leaderboards or undistributed jackpots. WINR also uses decentralized oracles to generate random numbers for games, ensuring that all games are played fairly and preventing tampering.



One of the key advantages for LPs is that it provides a mathematically protected edge for your liquidity. This means that your funds are secure, and you can trust that the system is designed to prevent any losses.

Another benefit are the on-chain incentives. These incentives reward players with a portion of your revenues, which encourages them to play and drive the volume. It also features autonomous and decentralized reserves with no ownership. This system ensures that the house cannot use your funds for malicious activities, which provides you with peace of mind and security.

As a developer you can achieve a finality of one second, using the smart contract game engine and ensure your users have a truly seamless experience. By submitting your game to the WINR DAO and getting accepted your game will be integrated into the deep WINR Liquidity Pool, granting direct payouts to your players. And if you incentivize to your users via vWINR emissions you can earn a commission from the vWINR minted through your smart contracts, thereby increasing your revenue stream.

NFTs

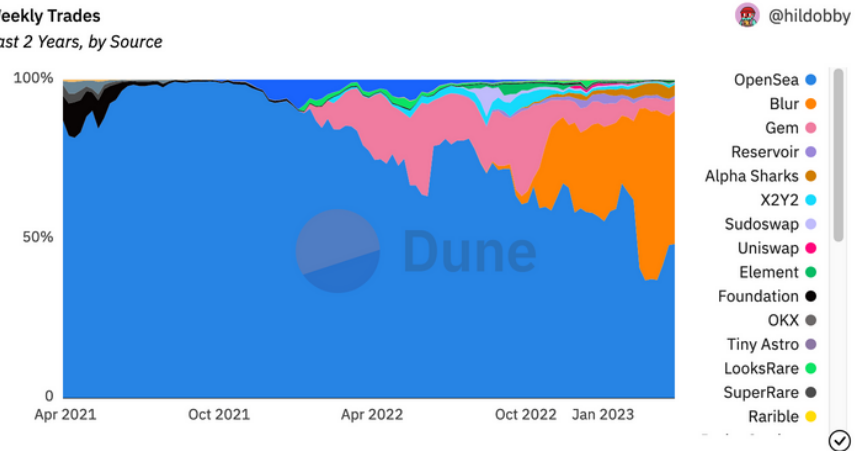
The Unbundling Of The NFT Marketplaces

In the world of e-commerce, marketplaces for physical goods have become the dominant business model, winning out over wholesale due to lower costs and network effects. In an increasingly digital world, a more or less general purpose marketplace for any digital goods acts in our view as one of the biggest TAMs the space can offer.

OpenSea was the market leader in this space until Blur emerged, securing a significant share of trade volume, particularly among the more "degen" traders.

While there will be a battle for the top dominant marketplaces, we see an ongoing development of niche usecase marketplaces with appealing user interface.s

Weekly Trades
Past 2 Years, by Source



Therefore there is an opportunity for an unbundling to create better-suited marketplaces such as science research IPs. We also anticipate a future where social and commerce will merge even more and therefore see value in serving the longtail with tools to sell their digital goods. That's why we invested in our portfolio company Niftables, which is building whitelabel NFT platforms for creators and brands.

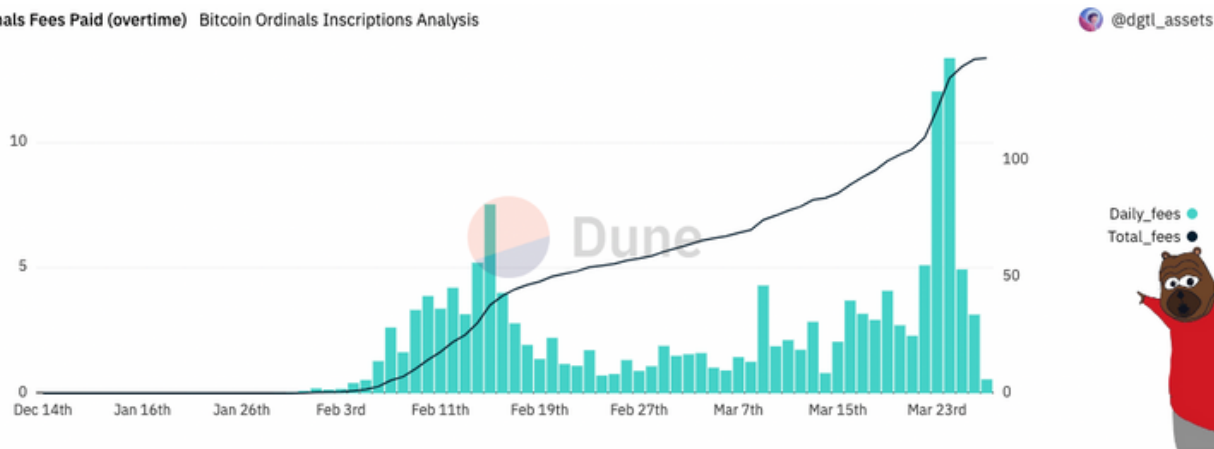
NFTs

Ordinals



The recent surge in ordinal NFTs has sparked some lively debates within the Bitcoin community. Some argue that Bitcoin should solely be used for secure financial transactions, and that ordinal inscriptions are needlessly filling up the blockchain's blockspace, which in turn drives up transaction fees. On the other hand, many are excited about the memetic and cultural value that ordinal NFTs can bring to Bitcoin, and love the idea of expanding this blockchain's immutable, decentralized database past financial transactions. The latest news is that Bitcoin Ordinal NFTs just produced its highest daily fee yet - a whopping \$352K! But what does this mean for the granddaddy of DeFi?

Ordinals Fees Paid (overtime) Bitcoin Ordinals Inscriptions Analysis



For those of you who are new to the game, ordinal NFTs use a unique ordering concept to provide value to each asset. Each ordinal NFT is numbered in a specific sequence, creating a unique identity and value for each one. The key concept here is "Ordinal Theory" - a math concept that deals with the ranking and ordering of items. It assigns numbers to satoshis based on their position in a sequence, and a satoshi is the smallest unit of measurement in Bitcoin. For example, in a block with 10 transactions, transaction 1/10 has a value of 50 satoshis, and potentially 50 ordinals can be inscribed or "minted". If all 50 satoshis in transaction 1 were inscribed, then the first ordinal minted in transaction 2 would be numbered 51 and so on...

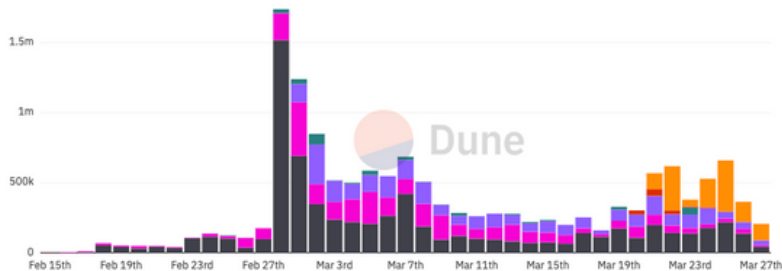
NFTs

Ordinals



So, how do you buy an ordinal? Ordinal trading is largely peer-to-peer/OTC, with deals taking place across Discord communities and marketplaces like Ordinals Market or ordsawp. Recently, MagicEden has also started supporting Bitcoin NFTs, which has boosted transaction volume and attracted more users.

Volume by Marketplace \$ marketplace2



@domo

ordinals market
ordsawp
ordinals wallet
open ordex
gamma
magic eden

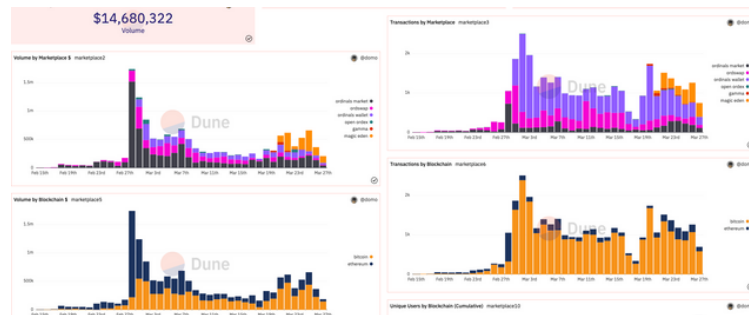
Current stats show that ordinal inscriptions are soaring, hitting new highs as clones of popular ETH NFT projects like CryptoPunks and BAYCs are being inscribed as ordinals.

Total Inscriptions To Date Bitcoin Ordinals Inscriptions Analysis

607,149
Total Inscriptions To Date

Source: https://dune.com/dgtl_assets/bitcoin-ordinals-analysis

Source: <https://dune.com/domo/ordinals-marketplaces>



Ordinals have done over \$14M in volume over a very short duration, mostly through a few key markets. Interestingly, you might notice that transaction volumes are dominated in ETH. That's because Ordinals Market allows trading of Bitcoin inscriptions on the ETH blockchain. However, it seems that whale NFT traders are essentially all on ETH, while lots of smaller traders are testing the waters with ordinals on BTC.

NFTs

Ordinals



Now, let's talk about the effects of ordinal NFTs on the BTC network.

First, we're seeing skyrocketing block sizes, with larger block sizes enabling more transactions to be processed - if those transactions are monetary.

But now, ordinals are gradually occupying more space. Roughly 150 blocks are created a day with average block sizes now at 2.5MB, adding about 375MB to the blockchain size daily, with roughly 50% of that currently being used up by ordinals. This could cause problems for nodes with insufficient bandwidth and potentially slow down Bitcoin TPS. Additionally, the number of transactions in mempools has also been hitting highs lately, and as ordinals flood the mempool, miners are including fewer total transactions per byte of block size. This indirectly puts pressure on transaction fees as users have to pay more to have their transactions prioritized. On the bright side, ordinal inscriptions are netting miners more fees than usual, which is heavily welcomed by miners. This drives demand for block space and creates pressure on the floor for average transaction fees.



It seems that NFTs are still largely an ETH-based phenomenon, with the average value per Ordinal transaction being over 2 times higher when using ETH instead of BTC. If we want Ordinals to truly flourish, we may want to consider leveraging marketplaces such as Ordinals Market. This platform allows BTC inscriptions to be traded using ETH, utilizing some sweet cross-chain action. And let us tell you, the ETH vaults that hold the keys to these inscriptions are ERC-721 tokens themselves, making them quite the NFT in their own right.

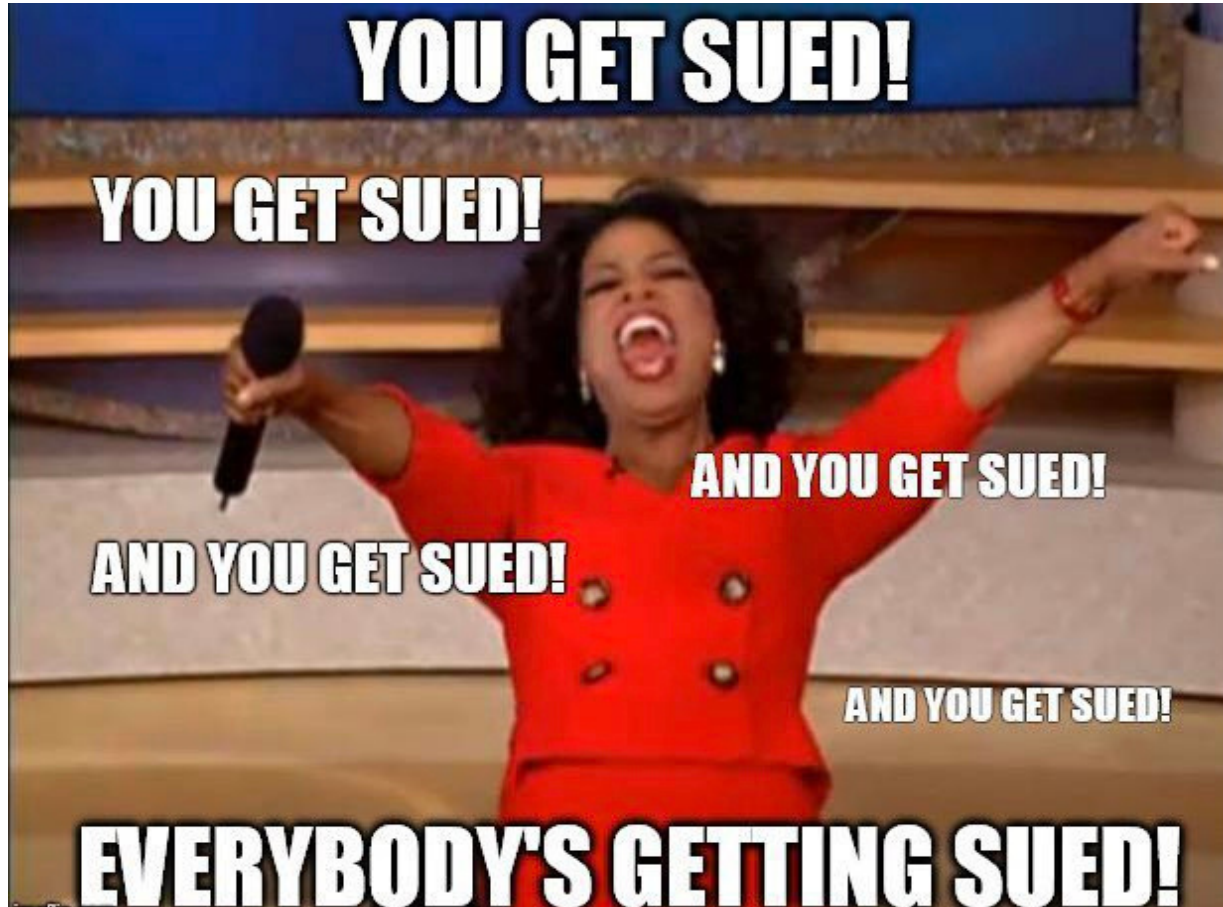
Now here's where things get really interesting. We're starting to see NFTs being used for all sorts of utility purposes, like being used as collateral for borrowing or creating NFT AMMs for better liquidity. And with the advent of smart contract-enabled chains, the possibilities for NFT utility are truly boundless. So why not explore ways to add even more utility to Ordinals? With a little creativity, we could take these bad boys to the next level.

Good Reads

Moonrock Library

- We asked the SEC for reasonable crypto rules for Americans. We got legal threats instead.
- Exploring the scalability needs for blockchain apps
- Defining real and fake DAOs
- Applications of Eigenlayer for MEV management
- A technical overview of the Uniswap mobile wallet
- Bank regulators and banking explained
- Arthur Hayes - Kaiseki
- MEVconomics
- Eigenlayer to change the game in terms of how staked Eth can be used through the innovation of "restaking"

Murica



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