PANTERA

EXCERPTS FROM OUR BLOCKCHAIN LETTERS

NFTs

September 8, 2021

NFTs - By Franklin Bi, Director of Portfolio Development

"The medium is the message... the framework which changes with each new technology and not just the picture within the frame."

- Marshall McLuhan

A Thousand Words vs. \$69 Million

You can buy a van Gogh painting for a couple of thousand dollars. Well, not a *real* van Gogh, but at least 99% of one – enough to fool private collectors and institutions like Christie's or the Tate Modern. Just place your order with a former middle-school art teacher named John Myatt, also known by Scotland Yard as the talent behind "the biggest art fraud of the 20th century."

What separates a John Myatt's Starry Night from the one hanging pricelessly in the MoMA?

To the naked eye, nothing. Their consumptive value is perfectly equal – whether viewed digitally or physically, whether appreciated by one or many.

The difference between the real thing and the copycat boils down to one simple answer: Provenance. The ledger tracing the work's chain of custody back to its creator. Or, in the words of our youth: "Let's see the receipts."

Art experts estimate that roughly 10% of all van Gogh's in existence are fakes. The van Gogh painting itself holds no value. Together with the museum plaque beside it, it's priceless.



LOT 1
Beeple (b. 1981)
EVERYDAYS: THE FIRST 5000 DAYS
non-fungible token (jpg)
21,069 x 21,069 pixels (319,168,313 bytes)

Beeple (b. 1981)
EVERYDAYS: THE FIRST 5000 DAYS
token ID: 40913
wallet address:
0xc6b0562605D35eE710138402B878ffe6F2E23807
smart contract address:
0x2a46f2ffd99e19a89476e2f62270e0a35bbf0756
non-fungible token (jpg)
21,069 x 21,069 pixels (319,168,313 bytes)
Minted on 16 February 2021. This work is unique.

The "museum plaque"

Earlier this year, the digital artist Beeple and MakersPlace, a leading NFT marketplace, combined forces to list the first purely digital artwork and NFT ever offered at Christie's.

Beeple's magnum opus, *EVERYDAYS: THE FIRST 5000 DAYS*, sold for over 39k ETH or \$69 million at the time of sale – the third-highest auction price for a living artist.

At today's ETH price of ~\$3k, that's \$150 million - placing it comfortably in a price range reserved for Picasso, Rothko, and Basquiat.

The Beeple sale set off a wave of NFT market activity, but also a ton of skepticism. As NFT critics point out, a digital image is infinitely easier to replicate than a physical painting. Yet, Christie's clearly thought it might be worth something and the market confirmed it resoundingly. Why?

What separates a digital image sold at Christie's for millions from one that I right-clicked and saved to my computer?

Again, the answer is: Provenance.

Blockchains bestow provenance on digital assets in a way that previously wasn't possible for digitized media. It's easy to copy and paste a digital picture, but it's impossible to fake the NFT that carries its provenance.

Is a digital picture worth \$69 million? Depends who you ask.

33 bidders placed over 350 bids for Beeple's THE FIRST 5000 DAYS.

Their breakdown by age:

Under 25 years old: 2 Between 25 and 40: 19 Between 41 and 55: 11

Over 55: 1

30 out of the 33 were first-time bidders at Christie's.

I suspect they'll be sticking around.

A CryptoPunk Renaissance

The driving force behind the Renaissance wasn't Michaelangelo or Donatello. It was the Medici family, 15th-century pioneers of our modern financial system and the largest bank of their time. Their patronage of the arts turned Florence, Italy into the center of a creativity explosion.

Today, we're witnessing the emergence of a new financial system – one without middlemen or Medici's. The market cap of crypto has grown to over \$2 trillion in the past decade. Yet people are puzzled about why NFT markets are doing billions in volume and why NFT-related tokens currently make up over \$20 billion in market cap.

New financial system, new Renaissance. It's unsurprising that a Medici-style patronage system is emerging out of crypto to establish its own culture – one born in the image of its tastemakers: a mash-up of 8-bit aesthetics and cyberpunk *je ne sais quoi*.

Since 2017, there have been 115 million primary sales of NFT's. CryptoPunks sit atop the list with over \$1 billion of volume since their release in 2017 as one of the earliest NFT projects on Ethereum. Visa has purchased a CryptoPunk. So has Jay-Z. One particularly unique CryptoPunk sold at Sotheby's for \$11.7 million.



Cosimo I de Medici in Armour, 1545 Sold to The Met, price undisclosed



CryptoPunk #7523, 2017 Sold to SillyTuna, \$11.7 million, Sotheby's

CryptoPunks are both art and artifact.

What matters for CryptoPunks is not their provenance. Most Punk buyers have no particular affinity for their original creators.

What matters is their timestamp - the specific block mined on Ethereum that immortalizes their historical significance; and their scarcity - only 10,000 unique Punks exist.

Uniqueness is an unfamiliar concept in the digital world. It's just not worth the effort or cost to track individual instances of a music file or PDF as they travel across the Internet.

NFT's lower the cost of digital uniqueness to near-zero.

This unlocks a new world of collectible assets that extends beyond fine art. Today, a Kanye West album playing on my phone is indistinguishable from the final version delivered at his recording studio. How much would an "original mint" of *The College Dropout*, one of the most influential hiphop albums in history, be worth?

What we're seeing now is a future where content and context travel together through the digital universe. The data and the metadata, distilling the previously intangible into legible, transferable value.

Who Cares About NFTs

NFT's are a disruptive force in the same way that cryptocurrencies are disrupting the global financial system - through disintermediation and censorship resistance.

Musicians take home only 12 percent of their revenues. Artists pay 50% commissions to art galleries. Google and Apple take a 30% slice of all apps and in-app purchases.

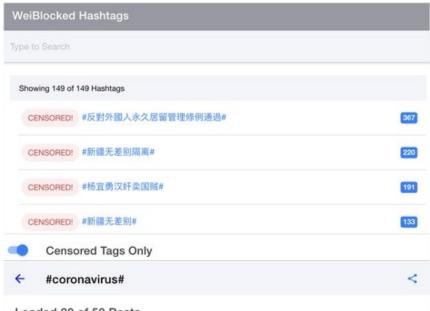
The connection between creators and consumers is broken. In a world where data is king, it's Ticketmaster, auction houses, and streaming apps that interact directly with fans, gathering their information behind walled gardens and maintaining their grip on commercial distribution.

Every time an artist sells an NFT, they take back ownership of their economics. A direct distribution channel where they can earn the full worth of their creations.

Censorship is alive and well. As content and communication keep moving further into the digital world, so are various forms of censorship. We see it happening through state-controlled Internet access, algorithmic news feeds, and Terms of Service policies.

The most consistent outcome of all censorship is its circumvention. Much of NFT content is hosted on a decentralized storage network, Arweave, where JPEG's and GIF's sit alongside an app called WeiBlocked.

WeiBlocked monitors Weibo, the top messaging app in China, for phrases and hashtagged posts that are likely to be censored and copies them to Arweave, where they become virtually indestructible. Earlier this summer, Hong Kong's largest pro-democracy newspaper, Apple Daily, was forced to close following government raids and the shut down of its website - but not before 4,000 articles were posted on Arweave.



Loaded 20 of 50 Posts

Every NFT purchase increases the capacity of decentralized infrastructure like Arweave and Filecoin to support and preserve critical applications.

Still Early

The market cap of NFT's is estimated at around \$28 billion - only 1.4% of the crypto market's \$2 trillion total.

Platforms like MakersPlace are the first step - a gateway for creators and fans to create and access their first NFT's. That's why we're thrilled to lead their latest funding round.

In the same way that a fintech apps that can't see your bank balances is dead on arrival, the next big social network will need to recognize users' NFT inventories.

New product strategies will be built around the objects held in your wallet - a unique fingerprint of likes, preferences, fandoms, and willingness to spend that marketing executives can only dream of.

In a future world of practically infinite data, Al-generated "deepfakes," and virtual anonymity, the role of NFT's will become even clearer: as the building blocks of authenticity, curation, and true signal from the noise.

"Art at its most significant is a distant early warning system that can always be relied on to tell the old culture what is beginning to happen."

- Marshall McLuhan

Dan Morehead

CEO & Co-Chief Investment Officer

NFT

NFTs are exploding into mainstream consciousness. There was even a skit on SNL recently explaining the concept to a parody of Eminem's *Without Me*. Kate McKinnon plays Treasury Secretary Janet Yellen. You can watch here.

Non-Fungible Tokens are a type of cryptographic tool that can be used to create unique digital items. The non-fungible part means that they cannot be replaced with an identical item and are provably scarce. This is a huge change from other digital media which can be copied infinitely at little to no cost.

The flagship use case for NFTs is digital art and collectibles. Creators can tokenize and sign digital art, and then sell them as NFTs on various digital marketplaces. Digital art collectors can purchase and exchange these works on marketplaces like MakersPlace, OpenSea, SuperRare, Rarible, and more, cultivating an active digital art community within crypto.

2021 will see continued growth in the NFT space, thanks to ever-growing mainstream interest in crypto, better developer platforms and NFT tooling, and thriving digital creator communities. Already in February 2021 alone, NFT transactions reached \$340 million, more than the entirety of transaction volume in 2020. With the growing importance of our digital identity (and consequently, digital ownership), NFTs will change the way that we conceive and exchange value on the Internet.

March 16, 2021

WHY ETHEREUM IS UNDERVALUED WITH JOE LUBIN

Last month's thematic call was a very special one, *Why Ethereum Is Undervalued*, with Ethereum co-founder Joe Lubin. Joe and I went to Princeton together – the ecosystems have evolved a great deal since then.

Despite Ethereum being close to its all-time high, we believe both it and DeFi assets built on top are undervalued relative to their long-term potential.

Below are some highlights from the conversation. You can watch the full episode at https://www.panteracapital.com/why-ethereum-is-undervalued.

Q. Of the consumer-use cases being built on Ethereum right now, what ones are you most excited about?

Joe Lubin: "I'm really excited about DeFi. DeFi is just an astonishing innovation. The web and internet protocols represent the democratization of access to information globally, the ability to publish information, the ability to engage in e-commerce, the ability to engage in social networks. That sort of power of democratization is being brought to the financial infrastructure. The financial infrastructure hasn't really been changed that much by the internet until recently.

"Real deep infrastructure changes are now possible because we're creating money on decentralized protocols – whether it's stablecoins, bitcoin, central bank digital currencies. We're creating these financial protocols that act together like Legos for lending, borrowing, insurance, equity issuance, bond issuance, automated portfolio management and so many

more use cases. This financial infrastructure is being built by innovators, it's being built by technologists and entrepreneurs and it's enabling use cases like flash loans that are astonishing, use cases that were never really thought possible before.

"I'm confident that discussions with regulators in different countries is going to bring in tremendous value creation. We're moving from an analog and friction-filled society to a natively digital society, and that's going to enable us to squeeze all the frictions and delays out of our economies, and drive tremendous value. DeFi is going to enable the world to rearchitect its systems again because it needs that financial encryption structure to sit on.

"Another incredibly exciting use case, that is possibly going to be bigger than DeFi commercially, is NFTs (non-fungible tokens). NFT's are basically creating digital representations or just gain some ownership for lots of different things in the world, whether they're natively digital, like digital art or music, or whether they represent physical objects.

"NFT's are a part of DeFi. They will implicate DeFi in some use cases, but are also just going to be relevant to so many more people. There are going to be so many use cases in art and music - people like collecting things and organizing things as a species."



PORTFOLIO COMPANY UPDATES

Origin Powers Record-Breaking \$11.6 Million NFT Auction

Origin Protocol is a decentralized peer-to-peer commerce protocol for businesses to build and participate in marketplaces without paying intermediaries. The team recently partnered with musician 3LAU to auction the artist's first tokenized music album. Participates placed bids on 33 non-fungible tokens (NFTs), a type of digital asset with unique rights to limited-edition vinyls, unreleased music, and VIP experiences. The NFT collection sold for a total of \$ 11.6 million, the highest music-related NFT sale to date. An NFT of digital artist Beeple's work recently sold for \$69 million at Christie's, one of the world's leading auction houses.