Founders’ Note

After a relatively hard-hitting Q2, the total crypto market capitalization has slowly clawed its way back to $1.7 trillion from May’s correction. In Q3, traders and investors remained cautious lest a massive liquidation event would happen again in such a short time.

Crypto continues to draw the scrutiny of regulators globally, with the Chinese government cracking down the hardest, banning crypto mining and transactions in Q3. This Chinese crackdown seems like the harshest to date and has practically forced all miners and exchanges to move out of China.

Decentralized Finance (DeFi) rose from the ashes of Q2 and into a new multichain reality as Avalanche, Harmony, and Celo announced large incentive programs. As we enter a multichain world, cross-chain bridges such as Solana’s Wormhole and Celer Network’s cBridge are becoming fundamental pieces of DeFi infrastructure in helping liquidity migrate between blockchains.

Non-Fungible Tokens (NFTs) blasted into the stratosphere as VCs endorsed digital collectibles as investable asset classes. Three Arrows Capital led the pack, sweeping prized digital artworks from CryptoPunks and Art Blocks. Even VISA was not immune from the CryptoPunk train and purchased one.

NFT hype peaked in August when OpenSea achieved $3.4 billion in monthly trading volume. A new wave of NFT collectibles entered the scene as virtual avatars repeatedly grabbed news headlines. Many people started to change their profile pictures to NFT-based JPEGs, forming new communities and ushering in a new era of crypto culture.

Even text-based NFTs were popularized, forcing us to reconsider the notions of what constitutes value in this new digital age. We have already seen the impact of the Play-to-Earn movement, but NFTs continue to surprise us in new ways with far-reaching implications.

NFTs are here to stay and have proven themselves to be the gateway drug for mainstream adoption. We have been big fans of NFTs since learning about them in 2016. To celebrate the coming of age for NFTs, we are happy to announce GeckoCon, our first NFT conference, on 17-19 November 2021. Join us as we explore the NFT narrative deeper with NFT celebrities, thought leaders, and side events!
Q3 2021 Spot Market Overview

Crypto market cap has recovered since infamous May crash, reaching $1.7 trillion

Top-30 Market Cap & Spot Trading Volume (Apr – Sep 2021)

Market Cap

$2.5T

$2.0T

$1.5T

$1.0T

$0.5T

$0.1T

$-

Total Market Cap

Total Volume Traded

Q2 2021 Market Cap

-20%

Q2 2021 Vol.

-33%

Q3 2021 Market Cap

+31%

Q3 2021 Vol.

-47%

$1.7T

$1.3T

$0.17T

$0.15T

$0.17T

$0.5T

$1.0T

$1.3T

$2.0T

$2.5T

Apr-21

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

Data source: CoinGecko

Alternate chains to Ethereum continue to exert dominance as their ecosystems flourish.

Compared to Q2 2021, the crypto market experienced a 31% increase in market cap but experienced a 47% drop in trading volume.

The huge discrepancy between the higher market cap and lower trading volume suggests that the market entered an accumulation stage where HODLers stepped in.

Trading volumes have remained relatively stagnant, likely because many market entrants were either liquidated or remain apprehensive since the May 2021 crash.
Cardano led the pack as it started implementing smart contracts and NFTs.
Altcoins continued to show signs of decoupling, especially from alternative chains.

Altcoins’ dominance continue to outperform Bitcoin’s which declined by as much as 4.5%, signifying the growing sentiment that altcoins are decoupling from Bitcoin. The exceptions, however, are Cardano and Tether. Tether marked the biggest decline with a 15.7% drop.

Solana entered the top-8 for the first time and dethroned Doge with a remarkable 226.9% increase in market share. Binance Coin (BNB) has also performed relatively well with a 16.3% increase.

Coupled with Ethereum’s stagnating dominance (1.6%), it is clear that alternative chains are growing strong.

Data source: CoinGecko
* Others (8 - 30) refers to top 8 - 30 coins by market capitalization on CoinGecko as of 1 October 2021
Q3 2021 Top-5 Stablecoins

Tether has continued to lose market share as the preferred stablecoin

Stablecoins have grown at a modest rate of 17% and reached a market cap of $123B by the end of Q3 2021. Trading volume followed suit, with a 14% increase.

Other than USDT, all other top-5 stablecoins have grown by more than 20%, suggesting that more users are opting for other alternatives as Tether continues to face increased regulatory scrutiny.

Data source: CoinGecko
Top-5 stablecoins by market capitalization taken as of 1st October 2021. See https://www.coingecko.com/en/stablecoins
BITCOIN ANALYSIS
Bitcoin Price vs. Trading Volume

Bitcoin gaining its lost ground?

BTC was trending downwards throughout Q2 and the start of Q3. This trend was reversed in August, and BTC has since breached the $50,000 mark. The price increase in Q3 came on the back of rather muted trading volume.

BTC ended Q3 2021 at $43,859, a 25% increase quarter-on-quarter and had consolidated since its retracement from Q3’s peak.

There were a few noteworthy events in Q3:

- **El Salvador** BTC payments going live
- **Institutional interest** in BTC is increasing, with many seeing it as a hedge against inflation
- China outlawed cryptocurrency mining and transactions

Data source: CoinGecko
Bitcoin total hash rate crashed after the Chinese authorities announced a mining ban on 21 May 2021, dropping to a low of 85M TH/s. However, total hash rate has since recovered to 145M TH/s by the end of Q3 2021, marking a gain of 54% as compared to a 45% loss in the previous quarter.

The strong hash rate recovery may be linked to the great miner migration from China to the rest of the world. Chinese miners are migrating to other countries like the US for more favorable electricity prices and to avoid the regulatory crackdown.
Bitcoin vs. Major Asset Classes (Jul – Sep 2021)

Price Returns: Bitcoin vs. Major Asset Classes

Bitcoin has climbed 25% and outperformed all other major asset classes

Prices of Major Asset Classes were sourced from: https://finance.yahoo.com/

Revisiting Q3 2020, Bitcoin was seeing a wave of interest, which saw the price climb throughout the quarter. We see this price climb being mirrored in Q3 2021.
### Bitcoin Treasuries in Publicly Traded Companies

Public companies now control 1.11% of the total Bitcoin supply

<table>
<thead>
<tr>
<th>Company</th>
<th>Total Bitcoin</th>
<th>Rank</th>
<th>% of Total BTC Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>MicroStrategy Inc.</td>
<td>114,042 BTC</td>
<td>#1</td>
<td>0.543%</td>
</tr>
<tr>
<td>Tesla</td>
<td>48,000 BTC*</td>
<td>#2</td>
<td>0.229%</td>
</tr>
<tr>
<td>Galaxy Digital Holdings</td>
<td>16,402 BTC</td>
<td>#3</td>
<td>0.078%</td>
</tr>
<tr>
<td>Square Inc.</td>
<td>8,027 BTC</td>
<td>#4</td>
<td>0.038%</td>
</tr>
<tr>
<td>Marathon Patent Group</td>
<td>4,813 BTC</td>
<td>#5</td>
<td>0.023%</td>
</tr>
<tr>
<td>Coinbase</td>
<td>4,483 BTC</td>
<td>#6</td>
<td>0.021%</td>
</tr>
<tr>
<td>Hut 8 Mining Group</td>
<td>2,851 BTC</td>
<td>#7</td>
<td>0.014%</td>
</tr>
<tr>
<td>NEXON Co Ltd.</td>
<td>1,717 BTC</td>
<td>#8</td>
<td>0.008%</td>
</tr>
<tr>
<td>Voyager Digital Ltd.</td>
<td>1,239 BTC</td>
<td>#9</td>
<td>0.006%</td>
</tr>
<tr>
<td>Riot Blockchain, Inc.</td>
<td>1,175 BTC</td>
<td>#10</td>
<td>0.006%</td>
</tr>
</tbody>
</table>

*New HODLer*

This list includes only public companies. Bitcoin held by private companies are not accounted for.

Market Capitalization: Bitcoin vs. Gold vs. Top-5 S&P 500 Stocks

Bitcoin's market capitalization is now 13.5X away from flipping Gold

<table>
<thead>
<tr>
<th>Assets (Market Cap)</th>
<th>Bitcoin’s ratio to respective assets</th>
<th>Q3 2021 growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitcoin</td>
<td>7.4%</td>
<td>(-1.6%)</td>
</tr>
<tr>
<td>Gold</td>
<td>35.8%</td>
<td>(-1.15%)</td>
</tr>
<tr>
<td>Apple (AAPL)</td>
<td>38.1%</td>
<td>(+3.7%)</td>
</tr>
<tr>
<td>Microsoft Corp. (MSFT)</td>
<td>45.4%</td>
<td>(+7.11%)</td>
</tr>
<tr>
<td>Alphabet A (GOOGL)</td>
<td>49.8%</td>
<td>(-6.27%)</td>
</tr>
<tr>
<td>Amazon (AMZN)</td>
<td>85.5%</td>
<td>(-3.87%)</td>
</tr>
</tbody>
</table>

Data snapshot taken on 1 October 2021
Price of Assets (other than Bitcoin) were sourced from:
https://finance.yahoo.com/
DEFI ANALYSIS
Q3 2021 DeFi Overview

DeFi is on the path to recovery

DeFi market cap rebounded by 91% from $67B to $128B. Quarter-on-quarter, DeFi has increased its dominance from 4.7% and settled at 5.8%.

The increasing demand for DeFi is likely driven by the rise of native DeFi products on other alternative chains like Avalanche, Solana, and Terra.

It is also worth mentioning that the SEC has been heavily scrutinizing CeFi products. Notably, Coinbase was forced to cancel its crypto lending product (Lend) after a lawsuit threat from the SEC.

Nonetheless, DeFi has not reclaimed its all-time high dominance since May 2021.

Data source: https://www.coingecko.com/en/defi
Q3 2021 DeFi Multichain Dominance

A new wave of alternate chains step up to the plate

Data Source: DefiLlama. Monthly TVL is calculated by taking the average TVL on a daily basis for each month

Solana and Avalanche are the new stars. Both managed to attract high liquidity, ending the quarter with a 6% and 2% TVL dominance, respectively.

Binance Smart Chain maintained its TVL dominance of 11% by end-Q3, but has not recovered since its 20% peak in May 2021.

Attention seems to be shifting to other chains, with notable projects launching on them.

Terra saw its dominance increase to 5% even though it only has a few major protocols like Mirror and Anchor.

This is likely in anticipation of the Colombus-5 upgrade which will amongst other things, facilitate the launch of new protocols.

Ethereum, meanwhile, is maintaining its TVL dominance, even as TVL across all platforms have grown significantly.
The DeFi sector regains some of its strength as the overall market capitalization of the industry increased by 37%. The main contributors include DEXs, oracles and lending platforms, with each segment recording a 28%-40% increase. The market cap of DEXs itself increased by nearly $10 billion.

Both lending platforms and oracles are still going neck-and-neck in terms of DeFi market share. Although oracles experienced 7% lower growth compared to lending, the total market cap of each sector saw a similar increase of approximately $3 billion.

Although fixed interest and insurance projects had the weakest growth compared to other DeFi sectors, the asset management sector had an overwhelming increase in market capitalization by 91%.
Gaming tokens dominated Q3 2021, with AXS coming out on top.

In Q3 2021, gaming tokens dominated the charts. AXS outperformed other cryptocurrencies in terms of returns, by posting a 3-month return of 965% and having YTD gains of 13,783%.

This is followed by GALA and ILV with a 3-month return of 1,051% and 599% respectively.

In terms of CEX tokens, FTT token led Q3 with an 87% return. Most of the top CEXs tokens suffered losses in Q2. All top 5 CEXs tokens had positive returns in Q3.

Similarly, the top 5 DEX tokens had positive returns in Q3 as well, gaining 2% to 36% across the board. RUNE only recovered 2% after suffering multiple exploits in Q2. However, CAKE was still up 2,954% YTD.

LUNA posted the best 3-month return in Q3 (+486%), while other DeFi tokens had positive returns between 10% - 36%.
Solana saw a jump in its TVL in Q3 2021, accumulating $10.37B.

On 14 September 2021, the Solana blockchain hit a peak of 400k transactions. This exceeded the processing capacity and resulted in a memory drain on the validating machines.

In order to fix this critical bug, the developers from Solana were forced to restart the chain. After a vote among validators, Solana's reset was performed on 15 September 2021.

There are several demand drivers for Solana:

- High Yields Aggregators like Saber and Sunny
- Solana was included in the Grayscale investment vehicle
- NFTs craze due to the low gas fees, started with Degen Ape Academy
Solana ecosystem soars in growth, with more protocols hopping onboard

The Solana ecosystem experienced a massive growth in Q3 2021, flirting close to $10.37 billion TVL by the end of the quarter, making it the 3rd largest ecosystem, behind Ethereum and Binance Smart Chain.

The introduction of a native ETH-SOL bridge also helped facilitate cross-chain asset transfers.

Users can now use Wormhole Network to bridge their assets from Ethereum to the Solana ecosystem.

Saber, the DEX has brought in a TVL of $3.01B on Solana, followed by Sunny with $2.38B TVL.

Data source: DefiLlama
Seasons align as summer also kicked off on the Avalanche chain

Avalanche Ecosystem

Avalanche Foundation announces $180m DeFi incentive program to lure more applications and assets to build on the Avalanche protocol. Notable projects involved include DeFi pioneers like Aave and Curve, as well as native Avalanche protocols such as Trader Joe and BENQi.

In Q3 2021, Avalanche's native token, AVAX, experienced multiple all-time-highs, catapulting the price to $66.47 from just $11.98 in the beginning of the quarter, a whopping +455% increase.

The high-speed, cost-effective nature of the ecosystem appealed to many as an alternative to Ethereum, which is notorious for its high gas fees and congestion issues.

Total Value Locked in Avalanche as of 1 October 2021

$3.9B

Avalanche bankrolled a massive $180m incentive program to lure more applications and assets to build on the Avalanche protocol. Notable projects involved include DeFi pioneers like Aave and Curve, as well as native Avalanche protocols such as Trader Joe and BENQi.
Avalanche Ecosystem

Like Solana, more and more protocols are sprouting up on Avalanche

- **Lending & Borrowing**
  - *Aave (Q4)
  - BENQi

- **Bridge**
  - Avax Bridge
  - Anyswap

- **Decentralized Exchange**
  - Trader Joe
  - Pangolin
  - *Curve (Q4)
  - Synapse

- **Yield Aggregator**
  - Yield Yak
  - Snowball
  - Penguin Finance
  - Beefy Finance

- **Collateralized Stablecoin**
  - Abracadabra Money

- **Asset-backed Token**
  - Wonderland

The Avalanche ecosystem experienced a massive growth in Q3 2021, flirting close to $4 billion TVL by the end - making it the 6th largest ecosystem, right behind Polygon.

Native protocols like Trader Joe and BENQi also partnered with The Avalanche Foundation in running liquidity mining incentives, co-leading the charge in Avalanche’s growth.

The introduction of a native ETH-AVAX bridge also helped facilitate cross-chain asset transfers.

Users who bridged >$75 worth of assets will be airdropped up to 0.1 AVAX (enough for ~15 swaps), which helped entice newcomers to enter the ecosystem.

*Launching in Q4 2021*  
Data Source: [DefiLlama](https://defillama.com)
Non-Fungible Tokens (NFTs)
General Overview

Art marketplaces appear to be recovering momentum but ...

The start of Q3 2021 was slow for art marketplaces. However, volumes in August 2021 quickly picked up, growing by 325% and peaking for the quarter in just over a month. Nonetheless, the exponential growth cannot compare to the month of April 2021 which surpassed $100M.

When looking at Q3 in its entirety, the quarterly growth rates are nominal with only a 1.06% increase. Although this might indicate demand stabilizing, there is another point to consider – Art NFT Marketplaces are niches which cater to different consumers.

Indeed, we are already starting to see Tezos native, Hic et nunc climb the charts – they already have 20% of the total market share by the end Q3 2021. Nifty Gateway, on the other hand, experienced the sharpest decline in market share; they went from 43% in June 2021, to 21% by the end of September 2021.
General Overview

... the reality is that OpenSea is monopolizing the entire NFT market in NFT Summer

We are clearly in NFT Summer as NFT trading volumes reached all time highs, shattering previous records. Both OpenSea and Rarible hit a combined trading volume of $6.8B in Q3 2021.

OpenSea continues to exert its monopoly status, contributing more than 99% of the total trading volume by the end of September 2021. Rarible only contributed $21M in the month of September 2021 which is less than 1%.

A big reason why OpenSea has been so successful is also because it is the home ground for Art Blocks which captures a large market share of generative art enthusiasts. The reality is that all NFT Marketplaces (including Art Marketplaces) are losing ground to the behemoth that is OpenSea.

Many attribute the summer to a variety of factors such as the growing maturity of the market. However, the big catalyst came about when institutions legitimized NFTs as an investable asset through their own investments.
Top 5 Collectibles by Aggregate Sales Volume

Art and avatars saw the highest returns while non-JPEGs plateaued

**Top 5 Collectibles Average Sales Price Monthly Growth Rate (Apr - Sep 2021)**

<table>
<thead>
<tr>
<th>Collectible</th>
<th>Apr-21</th>
<th>May-21</th>
<th>Jun-21</th>
<th>Jul-21</th>
<th>Aug-21</th>
<th>Sep-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axie Infinity</td>
<td>0%</td>
<td>-18%</td>
<td>15%</td>
<td>76%</td>
<td>-7%</td>
<td>-38%</td>
</tr>
<tr>
<td>CryptoPunks</td>
<td>4%</td>
<td>29%</td>
<td>-47%</td>
<td>99%</td>
<td>176%</td>
<td>56%</td>
</tr>
<tr>
<td>Art Blocks</td>
<td>-4%</td>
<td>-21%</td>
<td>14%</td>
<td>95%</td>
<td>246%</td>
<td>32%</td>
</tr>
<tr>
<td>NBA Top Shot</td>
<td>-58%</td>
<td>-52%</td>
<td>-12%</td>
<td>-20%</td>
<td>107%</td>
<td>-32%</td>
</tr>
<tr>
<td>Bored Ape Yacht Club</td>
<td>565%</td>
<td>259%</td>
<td>84%</td>
<td>551%</td>
<td>86%</td>
<td></td>
</tr>
</tbody>
</table>

At the start of the quarter, the top-5 collectibles (except NBA Top Shot which had a 20% drawdown), saw positive price returns of more than 70%.

Three Arrows Capital, one of the most successful crypto hedge funds, galvanized the market after announcing their CryptoPunk purchases (amongst other NFTs) in late July 2021.

The NFT mania hit its peak in August 2021. Bored Ape Yacht Club stands out with its impressive 551% return in anticipation of its auction sale at Sotheby's in early September. Notably, the auction would later go on to sell a bundle of 107 Apes for $24.4M.

**Top 5 Collectibles Aggregate Sales Volume Since Inception (As of 1 October 2021)**

<table>
<thead>
<tr>
<th>Collectible</th>
<th>Aggregate Sales Volume</th>
<th>Unique Buyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axie Infinity</td>
<td>$2.2B</td>
<td>963,119</td>
</tr>
<tr>
<td>CryptoPunks</td>
<td>$1.4B</td>
<td>6,869</td>
</tr>
<tr>
<td>Art Blocks</td>
<td>$925.0M</td>
<td>25,881</td>
</tr>
<tr>
<td>NBA Top Shot</td>
<td>$723.9M</td>
<td>779,635</td>
</tr>
<tr>
<td>Bored Ape Yacht Club</td>
<td>$527.9M</td>
<td>9,706</td>
</tr>
</tbody>
</table>

Data source: CryptoSlam
## Top 5 New NFTs in Q3 2021

JPEGs and texts blew up the market

Q3 2021 saw the birth of new NFT projects that drew global attention. No one could have predicted what a bunch of NFTs would have done. From cutesy creatures to just plain old words, many projects took their cue from them Bored Ape Yacht Club (BAYC) and showed how a picture or even texts can be so much more. Out of the five projects listed below, four currently have the top-10 highest trading volumes ever for NFTs, with Pudgy Penguins following closely behind in 11th place. This is an impressive feat, considering that all of them are less than 3-months old.

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>July 2021</th>
<th>Total Sales Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cool Cats</td>
<td>Cool Cats are a collection 10,000 randomly assembled cats that have a variety of outfits, faces and colors. Each cat has a pre-determined score from 3-10, based on their traits. The score is important because they affect community events such as contests and Gen 2 breeding mechanics. Notably, famous celebrities like Mike Tyson have acquired one, and the project even appeared on Times Magazine.</td>
<td>4,706</td>
<td>$126.0M</td>
</tr>
<tr>
<td>Pudgy Penguins</td>
<td>Pudgy Penguins consists of 8,888 penguins that are designed to be pudgy, cute, fun, and a little goofy. After receiving widespread attention on Crypto Twitter through a deluge of memes, the community crystallized and started developing a proper roadmap. Since then, the project has donated over $100,000 to a penguin charity and made headlines for newspapers like the New York Times.</td>
<td>4,714</td>
<td>$122.9M</td>
</tr>
<tr>
<td>0N1 Force</td>
<td>0N1 Force is a set of 7,777 generative side-profile lo-fi avatars that drew heavy inspiration from Japanese anime. The collection is divided into three clans: 0K-A1, B4K3M0-N0, and 0N1. Many buyers were drawn in by the detailed and intricate art styles of each avatar, including Logan Paul, who set the record for the highest purchased NFT for 188 ETH.</td>
<td>4,237</td>
<td>$138.8M</td>
</tr>
<tr>
<td>Loot</td>
<td>Loot is a series of 8,000 NFTs that was created by Dom Hoffman, co-founder of Vine. Unlike any other project before, the collection was designed to be a social experiment. Rather than any image or plan, the entire project was meant to be community-driven and centered on fantasy-themed words on top of a black background. As the project exploded, even VCs like Multicoin entered the foray.</td>
<td>2,373</td>
<td>$250.0M</td>
</tr>
<tr>
<td>Mutant Ape Yacht Club</td>
<td>Mutant Ape Yacht Club (MAYC) is a collection of 20,000 mutant apes that were created by the founders of BAYC. Every BAYC Ape (total of 10,000) received a random serum based on three tiers (M1-M3) that could be used to mint a new Mutant Ape NFT. Each serum used creates an MAYC modelled after the original Ape while another 10,000 randomized MAYCs went up for sale in a Dutch Auction.</td>
<td>8,951</td>
<td>$276.7M</td>
</tr>
</tbody>
</table>

Data source: CryptoSlam and Nansen as of 30 September 2021
NFTs can be extremely profitable if you have luck, instinct, and diamond hands.

**Mint Price**

- Cool Cats: 0.02
- Pudgy Penguins: 0.03
- ON1 Force: 0.07777
- Loot: Free
- Mutant Ape Yacht Club: Dutch Auction starting at 3

**End of Q3 2021**

**Average Sale Price**

- Cool Cats: 7.41 (+36,950%)
- Pudgy Penguins: 2.82 (+9,300%)
- ON1 Force: 2.59 (+3,230%)
- Loot: 12.56 (N/A)
- Mutant Ape Yacht Club: 5.77 (+92%**)

**Highest Ever Sale**

- Cool Cats: #3330 (110, +549,900%)
- Pudgy Penguins: #6873 (225, +749,900%)
- ON1 Force: #717 (188, +241,638%)
- Loot: #748 (250, N/A)
- Mutant Ape Yacht Club: #4849 (350, +11,567%**)

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*Mint Price excludes gas fees

**The Auction concluded within an hour. Assumption is therefore calculated based on the initial mint price of 3 ETH
Profile Pictures (PFPs) are leading the JPEG trend

PFPs are a tool to express oneself in the Metaverse

Aside from Loot, all the top-5 new NFT projects are focused on virtual-avatars. Each project has its own distinct art style and distribution. Nonetheless, they all have recurring themes such as different rarities and traits. The most important feature, however, is their intended use; each NFT is designed for online profiles. This follows in the footsteps of CryptoPunks and Bored Ape Yacht Club who, arguably, pioneered the profile picture trend.

People are spending more and more time online; a digital identity is (if not) more relevant than our physical counterpart. For many, a PFP confers greater status than a Rolex. On the Internet, our digital identities are on display to the world 24/7. In contrast, in the material world, our diamond-laden watches can only be seen by a small fraction of society at any one time.

Basing a PFP after your NFT signifies that you have decided to identify as a member of an exclusive NFT tribe, like how some people identify themselves based on their preferred religious or political beliefs.

Exclusivity and like-mindedness are what follow. Social signaling manifests in the form of community approval, where other community members will start socializing with you and publicize their support (e.g. follow on Twitter). And since humans are highly social creatures, eventually, non-holders get induced with FOMO.

So why are people willing to throw millions of dollars into PFPs?

We bought punks and other NFTs bc they’re undeniably part of the broader story of digital scarcity, meme economy, collective capitalism, metaverse, and mind-body dissociation.
The role-playing NFT game that could be anything you want it to be

As part of social experiment, Loot was meant to let the crypto community’s imagination run wild. Each Loot bag is an NFT that contains words that depict armors and weapons. Artists, designers, writers, and programmers were encouraged to contribute and expand the Loot universe, essentially building a role-playing game from the ground up. The Loot DAO formed a few weeks later.

Imagine NFTs as LEGO pieces that one could use to build on top of. The result is an amalgamation that is greater than the sum of its parts – that is essentially what Loot is.

Traditionally, NFT creators generate value to attract users. The advent of Loot flipped the script where value is instead crowdsourced from the collectors.

Key Stats*

- >85 Number of Loot derivative projects
- 16 On-chain government proposals

*As of 1 October 2021.

Notable Loot-based projects

Adventure gold (AGLD) is an ERC-20 token for the Loot project. Each Loot bag was entitled to a free 10,000 SAGLD airdrop.

LootMart is a project that unbundles a Loot bag into individual components. Adventurers are then able to assemble their own unique character using items that they acquire.

Different item compositions unlock different abilities and powers for the adventurer.

Inspired by Loot, Rarity is a bottom-up role-playing game where players select characters from various classes to go on adventures and complete quests in return for experience points, gold and crafting items.

Characters can upgrade their skills as they progress, and forge new equipment along the way.

"Grim Shout" Grave Wand of Skill +1
Hard Leather Armor
Divine Hood
Hard Leather Belt
"Death Root" Ornate Greaves of Skill
Studded Leather Gloves
Necklace of Enlightenment
Gold Ring

*Omin Shout* Grave Wand of Skill +1
Hard Leather Armor
Divine Hood
Hard Leather Belt
"Death Root" Ornate Greaves of Skill
Studded Leather Gloves
Necklace of Enlightenment
Gold Ring
EXCHANGES
Overall, Q3 spot trading volume across the top-10 centralized and decentralized exchanges decreased from $6.74 trillion to $3.90 trillion (-42.17%).

Q3 2021 initially trended downwards but rebounded strongly in August 2021 to reach $1.3 trillion. September’s trading volume for both CEXs and DEXs increased by 214.96% and 171.94% respectively as compared to July. However, both exchanges struggled to reclaim May’s all-time-high.

The DEX-CEX ratio has decreased from 10.44% in Q2 2021 to 8.74% in Q3 2021.
Binance’s dominance shrinks as CEXs recorded a 41% drop in trading volume

Top-10 centralized exchanges recorded a total of $3.58 trillion spot trading volume in Q3 2021. The quarter started with $0.74 trillion in July (-35% as compared to June), but recovered in August and September.

As China continued its crypto crackdown, Huobi’s dominance scaled back from 19% in Q2 to 13% in Q3, while its Q3 trading volume decreased by nearly 60% as compared to Q2.

Data source: CoinGecko
Top-10 CEX as of 1 October 2021 – Binance, Huobi, Coinbase, Crypto.com, FTX, KuCoin, Gate.io, Kraken, Bitfinex, Gemini

CoinGecko Q3 2021 Cryptocurrency Report
Q3 2021 Top-10 Centralized Exchanges (CEX)

CEX trading volumes suffer amidst heightened regulatory scrutiny

Most CEXs’ trading volume have decreased drastically, with Binance accounting for 60.13% (-$1.5 trillion) of this quarter’s drop.

Huobi trading volume dropped by 59% (-$677 billion) drop while Coinbase’s trading volume by 30% (-$138 billion).

The other CEXs have decreased by at least 26% in Q3 as compared to Q2.

FTX and Crypto.com are the only two growing CEXs, surging by 14% (+23.4 billion) and 316% ($105.8 billion) respectively.
## Q3 2021 Top-10 Decentralized Exchanges (DEX)

### Non-Ethereum-based DEXs carve their way to the top

<table>
<thead>
<tr>
<th>Rank</th>
<th>July</th>
<th>August</th>
<th>September</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Uniswap (v3)</td>
<td>Uniswap (v3)</td>
<td>Uniswap (v3)</td>
</tr>
<tr>
<td>2</td>
<td>Uniswap (v2)</td>
<td>PancakeSwap (v2)</td>
<td>PancakeSwap (v2)</td>
</tr>
<tr>
<td>3</td>
<td>PancakeSwap (v2)</td>
<td>Uniswap (v2)</td>
<td>Uniswap (v2)</td>
</tr>
<tr>
<td>4</td>
<td>1inch</td>
<td>1inch</td>
<td>SushiSwap</td>
</tr>
<tr>
<td>5</td>
<td>SushiSwap</td>
<td>SushiSwap</td>
<td>Raydium</td>
</tr>
<tr>
<td>6</td>
<td>Curve</td>
<td>QuickSwap</td>
<td>1inch</td>
</tr>
<tr>
<td>7</td>
<td>QuickSwap</td>
<td>Curve</td>
<td>Trader Joe</td>
</tr>
<tr>
<td>8</td>
<td>DODO</td>
<td>Raydium</td>
<td>Curve</td>
</tr>
<tr>
<td>9</td>
<td>WaultSwap</td>
<td>Pangolin</td>
<td>WaultSwap</td>
</tr>
<tr>
<td>10</td>
<td>Bancor</td>
<td>DODO</td>
<td>QuickSwap</td>
</tr>
</tbody>
</table>

The ranking of the Top-10 decentralized exchanges is rebalanced in August and September to show the **entry of Solana-based and Avalanche-based exchanges** into the Top-10 ranking.

The entrance of Raydium, Trader Joe, and Pangolin into the top-10 DEXs list in Q2 2021 may **signal that traders favor DEXs with low latency and costs** over the other DEXs that reside on chains with **higher transaction fees**.

In August, **Bancor and WaultSwap were replaced by Avalanche-based Pangolin and Solana-based Raydium**, with both of the latter overtaking the trading volume of DODO.

However, Pangolin fell out of the top-10 in September 2021 as traders began flocking to Trader Joe as an alternative.
Q3 2021 Top-10 Decentralized Exchanges (DEX)

DEXs spot trading volume were far worse than CEXs, dropping by 51% for the quarter.

Top-10 DEX Trading Volume Dominance (Apr – Sep 2021)

Total Trading Volume ($ Billion)

<table>
<thead>
<tr>
<th>Month</th>
<th>Trading Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr-21</td>
<td>$166.7</td>
</tr>
<tr>
<td>May-21</td>
<td>$308.8</td>
</tr>
<tr>
<td>Jun-21</td>
<td>$161.4</td>
</tr>
<tr>
<td>Jul-21</td>
<td>$71.6</td>
</tr>
<tr>
<td>Aug-21</td>
<td>$118.5</td>
</tr>
<tr>
<td>Sep-21</td>
<td>$123.2</td>
</tr>
</tbody>
</table>

Top-10 DEXs Total Trading Volume Growth in Q3 2021 vs. Q2 2021

-51%

Top-10 DEXs spot trading volume recorded a total of $313.3 billion in Q3 2021. DEXs started the quarter with a 55.62% reduction in trading volume ($71.6 billion) compared to June but ended the quarter with $123.2 billion.

Uniswap maintained its position as the top DEX (V2 and V3 protocol), with a combined dominance of 46% throughout Q3 2021.

Notably, the trading volume of Solana-based DEX Raydium has grown steadily from 4% ($4.6 billion) in August to 8% ($10.2 billion) in September.

Data source: CoinGecko

Top-10 DEXs as of 1 August 2021: Uniswap (v3), Uniswap (v2), PancakeSwap (v2), SushiSwap, 1Inch, Curve, QuickSwap, DODO, WaultSwap, Bancor

Top-10 DEXs as of 1 September 2021: Uniswap (v3), Uniswap (v2), PancakeSwap (v2), SushiSwap, 1Inch, Curve, QuickSwap, DODO, Raydium, Pangolin

Top-10 DEXs as of 1 October 2021: Uniswap (v3), Uniswap (v2), PancakeSwap (v2), SushiSwap, Raydium, 1Inch, Trader Joe, Curve, WaultSwap, QuickSwap

CoinGecko Q3 2021 Cryptocurrency Report
### Q3 2021 Derivatives Exchanges – Bitcoin Perpetual Swaps Volume

BTC perpetual swaps trading volume reduced to just over $4 trillion

#### Aggregate Monthly Bitcoin Perpetual Trading Volume Dominance (Apr - Sep 2021)

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Trading Volume ($ Trillion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr-21</td>
<td>$1.47</td>
</tr>
<tr>
<td>May-21</td>
<td>$1.96</td>
</tr>
<tr>
<td>Jun-21</td>
<td>$1.83</td>
</tr>
<tr>
<td>Jul-21</td>
<td>$1.27</td>
</tr>
<tr>
<td>Aug-21</td>
<td>$1.45</td>
</tr>
<tr>
<td>Sep-21</td>
<td>$1.37</td>
</tr>
</tbody>
</table>

#### Total Trading Volume ($ Trillion)

<table>
<thead>
<tr>
<th>Exchange</th>
<th>Apr-21</th>
<th>May-21</th>
<th>Jun-21</th>
<th>Jul-21</th>
<th>Aug-21</th>
<th>Sep-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitfinex</td>
<td>44%</td>
<td>50%</td>
<td>58%</td>
<td>59%</td>
<td>57%</td>
<td>54%</td>
</tr>
<tr>
<td>Kucoin</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
<td>6%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Deribit</td>
<td>18%</td>
<td>16%</td>
<td>11%</td>
<td>15%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>OKEx</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>7%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Bitmex</td>
<td>14%</td>
<td>14%</td>
<td>13%</td>
<td>15%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>FTX</td>
<td>17%</td>
<td>14%</td>
<td>13%</td>
<td>15%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Huobi</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>6%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Binance</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Bybit</td>
<td>6%</td>
<td>6%</td>
<td>5%</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

#### Data source: CoinGecko

### Top-9 Bitcoin Perpetual Swap Trading Volume Growth in Q3 2021

- **$1.83 trillion**
- **$1.47 trillion**
- **$1.27 trillion**
- **$1.45 trillion**
- **$1.37 trillion**

#### Bitcoin perpetual swaps trading volume across the top-9 derivative exchanges saw a net decrease of approximately 25% to $1.37 trillion.

In terms of dominance, **Binance continues to lead the pack**, although it is starting to lose some ground. FTX, Bitmex and OKEX continue to increase their dominance ever so slightly.

Although the **top 3 dominant exchanges saw little change** in volume throughout Q3, **trading volume on other exchanges surged**. Kucoin and Bitmex recorded a 59% and 47% increase respectively.
FTX gains significant ground in the Open Interest (OI) battle

Bitcoin perpetual swaps open interest (OI) across top-9 derivative exchanges recorded a total of $867 billion ending September 2021.

Open Interest saw a net decrease by 50% to $313 billion in Q3 2021.

FTX (32%), Binance (21%), and Bybit (19%) accounted for 72% ($74 billion) of the net growth in Q3.

In a similar trend to trading volume, Binance’s open interest dominance decreased from 35% to 31%, while FTX increased its dominance by 5%.

Open interest on FTX has increased by a whopping 133% since Q2 2021.
**Q3 2021 Derivatives Exchanges – Bitcoin Perpetual Swaps Funding Rate**

Drastic changes in funding rates is usually a precursor of what’s to come

8-Hour USD-Margined Bitcoin Perpetual Funding Rates (Jul – Sep 2021)

-0.004% (-1.2 b.p.)

Weighted-Average Bitcoin Funding Rates as of 1st October 2021

It appears that massive changes to funding rates on Bitcoin perpetuals tend to happen before drastic price movements.

During Bitcoin’s run-up from $30k to $40k at July’s end, funding rates became increasingly negative, reaching as low as -0.1%.

However, funding rates remained relatively stable throughout August, spiking as high as 0.08% towards the end of the month.

Before the price of Bitcoin fell by 10% on 7 September, negatives funding rates on Bybit were exceedingly high compared to other exchanges.

Data source: bybt.com. Consists of 8-hour funding rates from Binance, Huobi, OKEx, and Bybit from 1 July to 1 October 2021
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To top it off, GeckoCon will bring you Otherworldly activities showcasing DJs from around the world in our Afterparties, and powwows in the Metaverse.

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