



# CoinGecko Yearly Report



for 2019

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Daryl Lau



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Shu Min

# Founders' Notes

What a year 2019 was for the cryptocurrency industry! The year saw Bitcoin reaching its 10-year milestone and starting to gain attention from politicians. Blockchain was front and center during a U.S. Senate hearing in July and was also endorsed by Chinese President Xi Jinping in October.

BigTech companies, led by Facebook, are getting more involved with blockchain technology. Facebook announced that it was launching a cryptocurrency called Libra. Central banks worldwide are also actively thinking about how blockchain technology can improve the current monetary system. China's Central Bank has the most advanced plans, in the form of its Central Bank Digital Currency. The 2020s certainly promise to provide a lot of excitement as we redefine the concept of money in our economy.

The year 2019 was a great one for Bitcoin, which saw a 95% gain in value, from \$3,693 to \$7,195. Bitcoin's gains far outpace those of the other top 5 cryptocurrencies. There was a flight towards Bitcoin, solidifying its position as the reserve currency for the cryptocurrency market. Bitcoin saw its market dominance increase from 56.3% to 71.5% amongst the top 30 cryptocurrencies.

Additionally, in 2019, crypto derivatives went mainstream. Many new and existing exchanges launched derivative products - a trend that we expect will continue in 2020. In 2019, we at CoinGecko started tracking [crypto derivatives products](#) such as perpetual swaps and futures. By the end of the year, we had tracked 25 crypto derivatives exchanges. The year 2019 also saw us launching [Trust Score](#), a better method of sorting exchanges on CoinGecko, developed in response to the fact that many exchanges report fake volumes.

The Decentralized Finance (DeFi) space also saw many developments and we are very excited to see all the new DeFi apps that are launching. We expect DeFi to continue growing in 2020 but believe that caution should be exercised regarding smart contract risks.

We are very excited about what the 2020s will bring. We believe that this decade will see the blockchain industry mature and that more blockchain products will gain mainstream adoption. We at CoinGecko will continue to BUIDL and improve our offerings to better serve all of you. Have a happy decade ahead and we wish you success in all your endeavors!



**Bobby Ong**  
COO

**TM Lee**  
CEO

# Macro Outlook of Crypto Industry

# Market Dynamics

# +44.1%

Total Mkt Cap increase in 2019

**Market Cap & Trading Volume were both on an upward trend throughout 2019.**

Market capitalization peaked at \$350 billion in late June when Bitcoin rallied to \$13,000+, and closed the year at \$180 billion. It gained ~\$60 billion compared to the start of the year.

Trading volume far outpaced market capitalization, **gaining nearly 600%** throughout 2019.

### Cryptocurrency Market Capitalization & Trading Volume through 2019



\* Data taken from top-30 cryptocurrencies by Market Capitalization

# 2019 Top 5 Coins Returns

**+20.6%**

Avg. Top-5 coins returns in 2019

Among top 5 coins\*, Bitcoin had the best performance in 2019 with **95% gains** at the end of the year.


XRP (XRP) is the biggest loser for 2019 with a hefty **45% loss**.

Bitcoin Cash (BCH) and Litecoin (LTC) both fared well, **gaining ~40%**. Ethereum (ETH) however underperformed as it ended the year with a small **2% loss**.

Top-5 Coins 2019 Price Change (%)



 **+95%**

 **-2%**

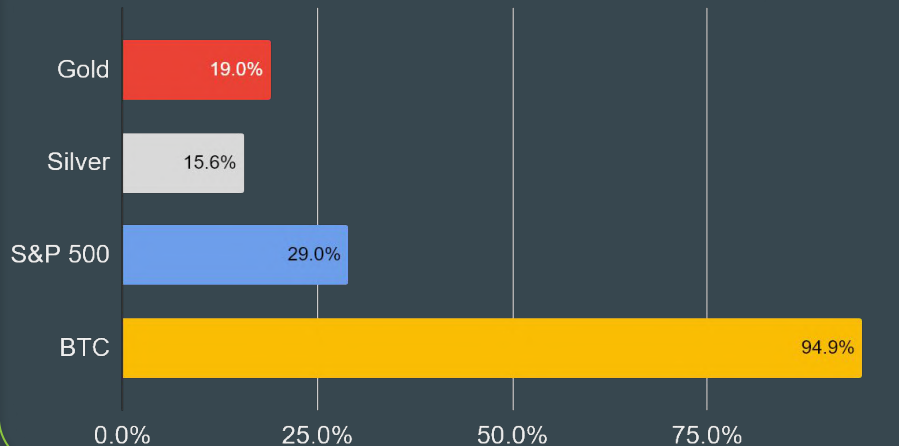
 **-45%**

 **+38%**

 **+37%**

\* Price of top-5 coins by market capitalization, excludes stablecoins such as Tether (USDT)

## Major Assets % Gains in 2019



2019 was a great year for investors with gains across various asset classes.

**While Bitcoin was highly volatile (2019 trading range between ~\$3,500 to ~\$13,000), it was one of 2019's best performing asset class.**

Year-on-year, Bitcoin saw a **95%** appreciation, far outpacing S&P 500 (**+29%**), Gold (**+19%**), and Silver (**+16%**).

## What About 2010 - 2019? (the decade!)

*Also, we couldn't plot this on a graph*

Silver 

~0.0%

Turning \$1 to \$1

Gold 

+32.2%

Turning \$1 to \$1.32

S&P 500 

+202.9%

Turning \$1 to \$2.03

Bitcoin 

+9,000,000%

Turning \$1 to >\$90,000

In addition to being 2019's top investment choice, Bitcoin was also the **best investment of the 2010s**. \$1 invested in Bitcoin at the start of the decade would be worth over \$90,000 by the end of the decade.

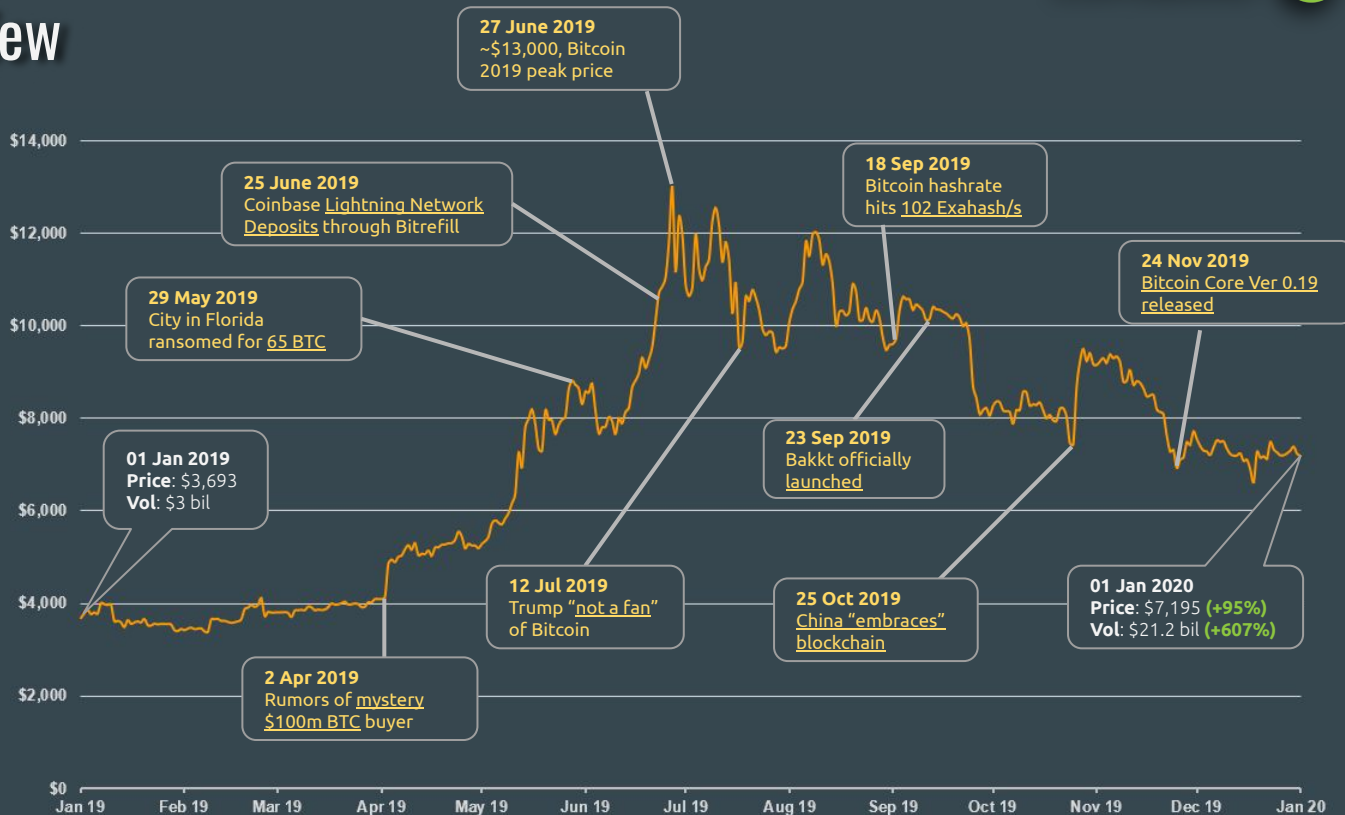
# 2019 Bitcoin Overview

**+94.9%**  
BTC price increase in 2019

Throughout 2019, Bitcoin rallied to \$13,000, then gradually corrected to around \$7,000 by year-end.

Looking through 2019, Bitcoin's price movement was largely news driven. It reacted violently when China's President, Xi Jinping made an announcement that China will be embracing blockchain even though Bitcoin or cryptocurrencies were never mentioned.

All in all, 2019 was a good year for Bitcoin, gaining nearly 100% after a bearish 2018 where Bitcoin saw a 73% drop in value.



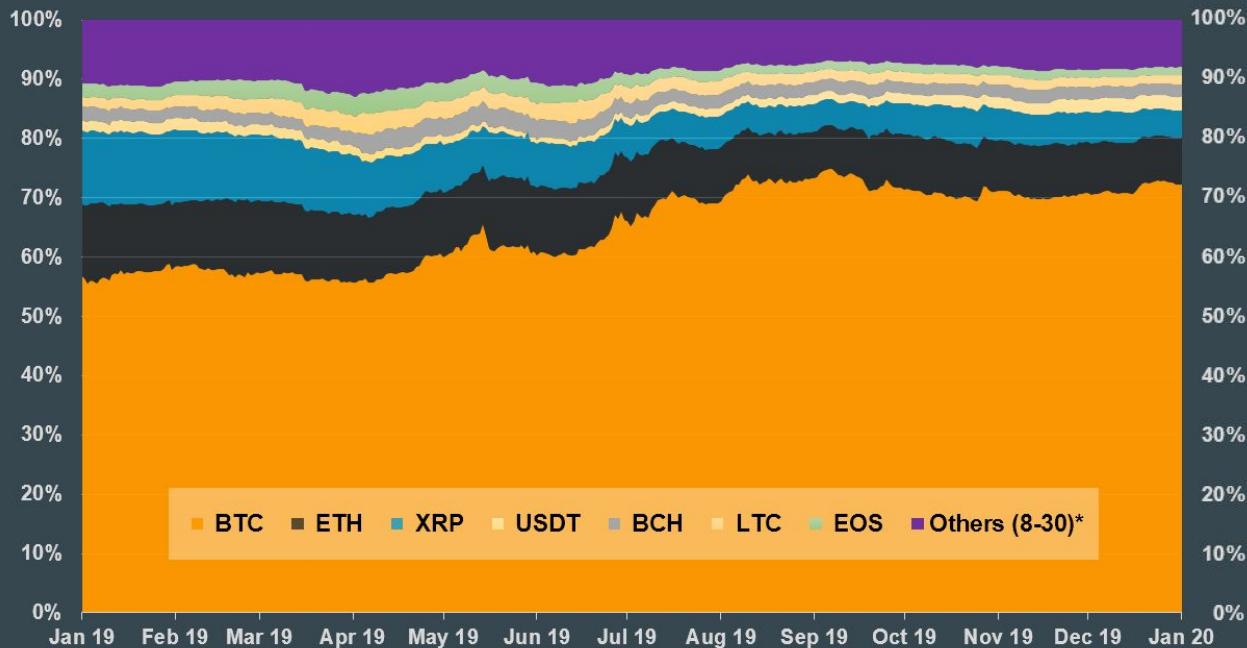


# 2019 Market Dominance Overview

2019 was without a doubt Bitcoin's year as its market dominance increased from 56.3% to 71.5% (+15.2%) amongst the top-30 cryptocurrencies.

Among top-30 coins, XRP was squeezed the most from 12.5% to 4.6% (-7.9%), followed by ETH which decreased from 12.0% to 7.7% (-4.3%). Third in place would be Others (top 8 - 30) which decreased 10.6% to 7.9% (-2.7%).


USDT started 2019 ranked #6 and closed the year ranked #4, largely due to increase in supply coupled with the reduction in value of other cryptoassets.





2020 vs 2019  **71.5%** (+15.2%)


 **7.73%** (-4.3%)


 **4.58%** (-7.9%)

 **2.35%** (+0.5%)

 **2.04%** (-0.2%)

 **1.44%** (-0.1%)

 **1.36%** (-0.9%)

 **7.89%\*** (-2.7%)

\* Others (8 - 30) refers to top 8 - 30 coins by Market Capitalization on CoinGecko as of 1 Jan 2020

## 2019 Top-30 New Entrants

#	Asset	Ticker	#	Asset	Ticker
1	 <b>Bitcoin</b>	BTC	16	 <b>Monero</b>	XMR
2	 <b>Ethereum</b>	ETH	17	 <b>OKB</b>	OKB
3	 <b>XRP</b>	XRP	18	 <b>Huobi Token</b>	HT
4	 <b>Tether</b>	USDT	19	 <b>Chainlink</b>	LINK
5	 <b>Bitcoin Cash</b>	BCH	20	 <b>NEO</b>	NEO
6	 <b>Litecoin</b>	LTC	21	 <b>USD Coin</b>	USDC
7	 <b>EOS</b>	EOS	22	 <b>Ethereum Classic</b>	ETC
8	 <b>Binance Coin</b>	BNB	23	 <b>IOTA</b>	MIOTA
9	 <b>Bitcoin SV</b>	BSV	24	 <b>Crypto.Com Coin</b>	CRO
10	 <b>Cardano</b>	ADA	25	 <b>Dash</b>	DASH
11	 <b>Tezos</b>	XTZ	26	 <b>Vechain</b>	VET
12	 <b>Stellar</b>	XLM	27	 <b>Ontology</b>	ONT
13	 <b>TRON</b>	TRX	28	 <b>Maker</b>	MKR
14	 <b>Cosmos</b>	ATOM	29	 <b>NEM</b>	XEM
15	 <b>LEO Token</b>	LEO	30	 <b>Basic Attention Token</b>	BAT



### Binance Coin (BNB)

Price: \$13.70 **(+125%)**  
Mkt. cap: \$2.1B **(+125%)**

- Strong exchange performance with increasing token burns in 2019
- Launch of new features with BNB utility - IEO, Binance Chain, DEX etc.



### ChainLink (LINK)

Price: \$1.76 **(+487%)**  
Mkt. cap: \$643M **(+490%)**

- Launch & adoption of crypto oracles with strong network growth



### LEO Token (LEO)

Price: \$0.82 **(-23%)<sup>1</sup>**  
Mkt. cap: \$809M **(-28%)**

- Huge IEO in 2019, raising \$1 billion
- Token buybacks



### Crypto.com Chain (CRO)

Price: \$0.0034 **(+62%)**  
Mkt. cap: \$427M **(+47%)**

- Strong, consistent marketing
- Good product offering



### Basic Attention Token (BAT)

Price: \$0.18 **(+38%)**  
Mkt. cap: \$256M **(+65%)**

- Improvements in Brave browser and growth in user base
- Maker's Multi Collateral Dai now allows for BAT staking in the creation of DAI



### Huobi Token (HT)

Price: \$2.75 **(+159%)**  
Mkt. cap: \$662M **(+1476%)<sup>2</sup>**

- Strong OTC markets in China
- Opening of multiple local fiat-crypto exchanges worldwide

Price refers to closing price of 31 Dec 2019 (23:59 UTC) for top 30 by market capitalization.

[1] LEO price starts around May 2019.

[2] Huobi released a large amount of HT as circulating supply around June 2019

## Macro Outlook of Crypto Industry

# Exchanges & Stablecoins

## Exchanges - Spot & Derivatives

### Spots vs. Derivatives on CoinGecko

In 2019, we saw crypto derivatives booming. The number of derivatives exchanges have increased over 12x. It was interesting to see many of the new players are existing large players in the crypto space (eg. Binance, Kraken, Bitflyer etc.). It'll be interesting to see their effects on BitMEX, the existing leader.

That said, spot exchanges have grown significantly as well - over 130 exchanges were added on CoinGecko in 2019. While greater in number, the dynamics have not shifted much with existing players remaining on top such as Binance, Coinbase, Bitfinex, Kraken to name a few.

#### # of Derivatives exchanges tracked



#### # of Spot exchanges tracked



### Exchange Stats Comparison (Average Dec '19 vs Jan '19)

	Trading Volume	Product Overview	Leading Exchanges' Performance in 2019
 <b>Spot</b>	<ul style="list-style-type: none"> <li>• \$65B avg. 24h volume <b>(+364%)</b> (~\$14B Jan '19)</li> <li>• 400 exchanges <b>(+150%)</b> (vs 270 tracked Jan '19)</li> </ul>	<ul style="list-style-type: none"> <li>• 6,500+ <b>cryptocurrencies</b> (3,000+ added in 2019)</li> <li>• 63,732+ trading pairs</li> </ul>	<ul style="list-style-type: none"> <li>• 181 cryptocurrencies, 594 trading pairs</li> <li>• Dec '19 average 24h volume \$1B <b>(+100%)</b> (vs ~\$500B Jan '19)</li> <li>• Average Normalized volume \$1B <sup>[1]</sup></li> </ul>
 <b>Derivatives</b>	<ul style="list-style-type: none"> <li>• \$26B avg. 24h volume <b>(+840%)</b> <sup>[2]</sup> (~\$2.5B Jan '19)</li> <li>• 25 exchanges (vs 0 tracked Jan '19)</li> </ul>	<ul style="list-style-type: none"> <li>• 373+ <b>products</b> (all added in 2019)</li> <li>• 204+ different indexes</li> </ul>	<ul style="list-style-type: none"> <li>• 8 cryptocurrencies, 21 Perp/Futures products</li> <li>• Dec '19 average 24h volume \$2B <b>(-25%)</b> (vs ~\$2.5B Jan '19)</li> <li>• Open Interest \$1B <b>(+233%)</b> (vs ~\$0.3B Jan '19) <sup>[3]</sup></li> </ul>

[1] Refers to [CoinGecko Trust Score](#)

[2] [CoinGecko Derivatives](#) was launched in 2019

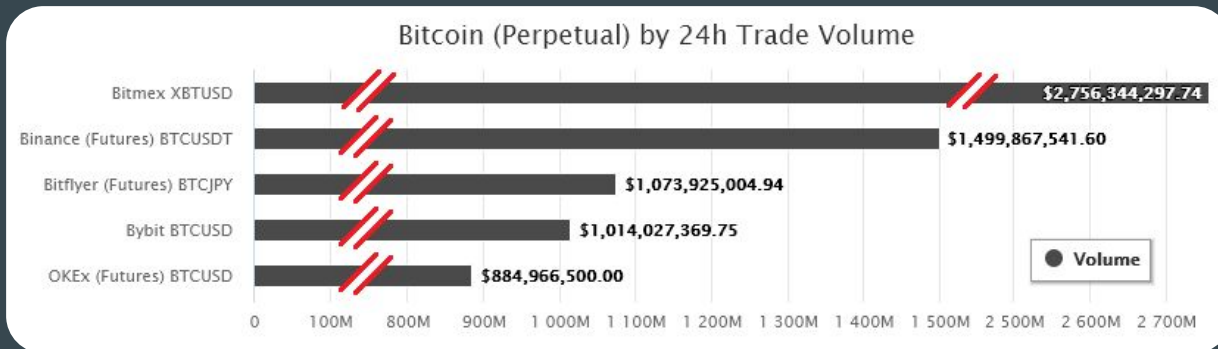
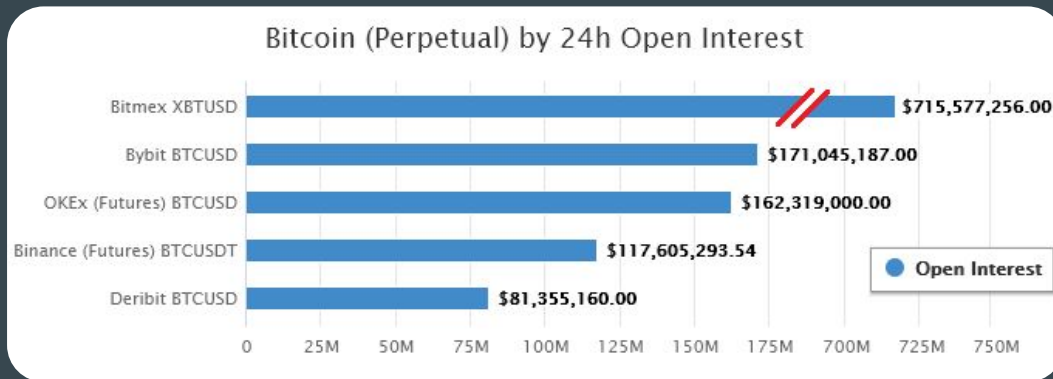
[3] Refers to BitMEX's Perpetuals Swaps and Futures products

## BTC Perpetual Swaps - Star of the show

Derivatives in the crypto space arguably started with BitMEX's Bitcoin (BTC) perpetual swaps trading pairs.

Averaging around \$1.3B daily Open Interest (OI)<sup>[1]</sup> and \$10B volume throughout Dec 2019, BTC perpetual swaps remain as the most popular product for derivative traders.

In terms of Open Interest, BitMEX remains as the leader (52%) while the nearest contender, Bybit still has a lot of catching up to do with only 12% dominance.



BitMEX also takes the lead when it comes to trading volume, with over 30% dominance followed by Binance with 17% dominance.

As other platforms (Binance, OKEx, Deribit, Bybit etc.) continue to innovate in this space, it would be interesting to monitor if BitMEX's share of trading volume in Bitcoin's perpetual swap will decrease over time.

\*Snapshot data taken on 31st December 2019

[1] Open Interest refers to the total number of derivative contracts held by market participants.

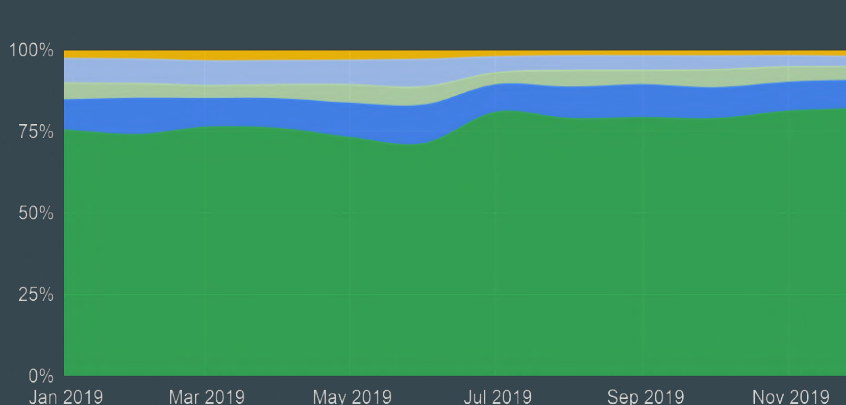
## Top 5 Supply Dominance & Peg Status

### Stablecoins Supply Dominance

Tether (USDT) continues to dominate the stablecoin market in 2019 despite arguments in the media of it not being backed 1:1 with the USD. It is the only stablecoin to have increased its dominance (measured in terms of supply / issuance) in 2019.

True USD (TUSD) suffered the greatest loss in supply dominance, and was overtaken by Paxos Standard (PAX) in August 2019. Gemini USD has declined tremendously and is no longer a Top 5 stablecoin.

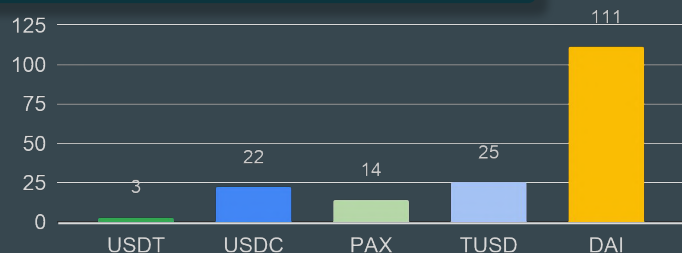
Similar trend is observed for trading volume. In 2019, Tether saw strong growth in its Ethereum ERC-20 and Tron TRC-20 token usage.



2020 (vs 2019)

	USDT	82.0%	(+6.5%)
	USDC	8.7%	(-0.5%)
	PAX	4.2%	(-1.0%)
	TUSD	3.1%	(-4.4%)
	DAI	2.0%	(-0.6%)

### # of Times Stablecoins Lost \$1 Peg



Losing stablecoin peg is defined as a deviation of more than  $\pm 1\%$  over \$1.00 (measured on daily closing price).

Among all stablecoins, DAI is the most volatile with 111 daily counts, while USDT was the most stable with only 3 daily counts.

There is a strong correlation between the stablecoins' ability to maintain their \$1.00 peg with overall liquidity. DAI had the least markets available and has the lowest trading volume (~100x lesser vs. PAX, ~12,000x lesser vs. USDT)

## Crypto Acquisitions & Investments

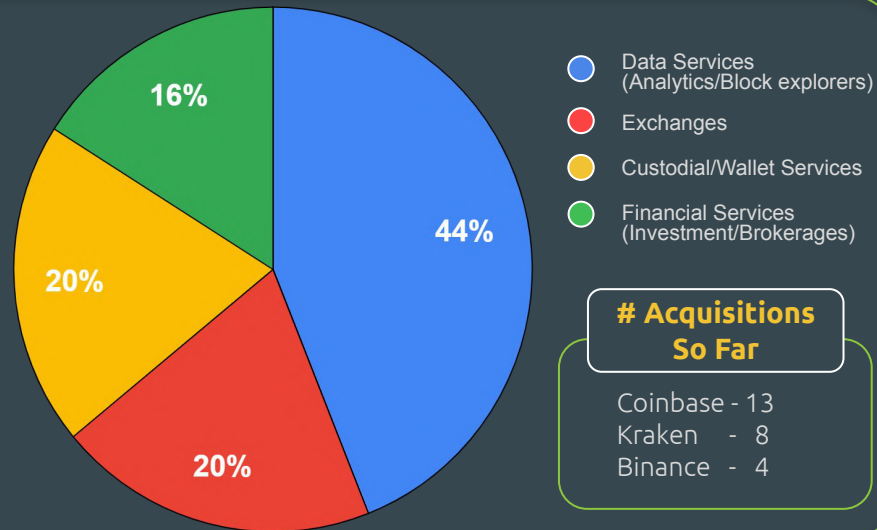
### Acquisitions

The crypto industry has made over \$4 billion<sup>1</sup> worth of acquisitions across 350 deals since 2013.

We took a deep dive into 3 of the largest acquirers in the crypto space - **Coinbase**, **Kraken** & **Binance** and mapped out the sectors where they made acquisitions.

The hottest sector for acquisition was crypto data services (44%), followed by crypto exchanges & custodial/wallet services (20%), and lastly financial services (16%).

An interesting trend we noted lately was also the acquisitions of derivatives exchanges, notably JEX by Binance and Crypto Facilities by Kraken.





### Investments

Aside from acquisitions, Coinbase & Binance also made strategic investments into many sectors in crypto. Coinbase has investments in over 40 different blockchain companies, covering almost all aspects of the blockchain economy. Binance has a hand in almost all aspects as well, ranging from projects supported by Binance Labs, investments into FTX (derivatives), Mars Finance & Zhi Dian (social media) and more.

[1] Tokendata

# Top 8 Largest Crypto Acquisitions

Rank	Date	Acquirer	Target	Target Sector	Amount (\$m)	Target Country
1	Feb 2018	Circle	Poloniex	Exchange	400	United States 
2	Oct 2018	Bk Global Consortium	Bithumb	Exchange	350	South Korea 
3	Jul 2018	Tron	BitTorrent	P2P File Sharing	126	United States 
4	Apr 2018	Coinbase	Earn.com	Blockchain Service	120	United States 
5	Feb 2019	Kraken	Cryptofacilities	Exchange	100	United Kingdom 
6	Jan 2019	Go-Jek	Coins.ph	Custodians and wallets	72	Philippines 
7	Aug 2019	Coinbase Custody	Xapo	Custodians and wallets	55	United States 
8	Apr 2018	Money Group	Coincheck	Exchange	33	Japan 



## First they doubt it. Then they join in.



### Ernst & Young (EY)

EY launched its [blockchain-enabled finance tracker tool](#) to help governments with transparency.

EY also published their blockchain related analysis on a [dedicated page](#).



### JPMorgan Chase (JPM)

In 2017, JPM's CEO, Jamie Dimon says [Bitcoin = bad](#). Then in [May 2019](#) they rebooted their blockchain, and began trials of JPMCoin around [June](#).

JPM also published their analysis on their [Blockchain and Distributed Ledger page](#).



### Bakkt

Bakkt, first announced by ICE in 2017 now offers Bitcoin futures to traditional markets.

Bakkt plans on expanding its current physically-settled offerings to [cash-settled BTC Futures in SG](#) and launching a [crypto consumer facing app](#) to help retail customers transact digital assets.



### Nike

Nike now has patents for blockchain -based sneakers called "[CryptoKicks](#)".

The patent describes shoes that have their unique ID tied to a digital asset. There are also Crypto Kitties elements where you can "breed" them to make new pairs of sneakers.



### Square

Square has launched an [initiative to spark mass adoption](#) by focusing on making open source contributions to the Bitcoin and crypto ecosystem.

They [hired developers](#) from Google, Libra and Lightning Labs, and also donated \$100,000 to the BTCPay foundation.



### Rakuten

Japan's e-commerce giant, Rakuten has [launched its new cryptocurrency exchange](#), in its Rakuten Wallet.

Rakuten first [acquired](#) crypto exchange Everybody's Bitcoin, received [license](#) in Japan, then [partnered](#) with CypherTrace to ensure regulatory compliance.

**2020 and Onwards**

**What's Next for Crypto?**

We think that DeFi is already reDeFining the finance sector and in 2020, it will continue to push through with over \$1b locked in the entire ecosystem. Here is what we expect to happen in 2020!

## More Offerings

With a majority of the DeFi ecosystem related lending and trading, we expect products like SmartBonds (Maple Finance), Interest Rate Swaps and a decentralized options market to launch.

## The rise of DAOs

Decentralized Autonomous Organization (DAOs) would help the DeFi ecosystem achieve true decentralization. We expect several projects to implement this moving forward like Synthetix and Kyber.

## Benchmark Interest Rate



DeFi markets are still lacking reference rates to be used similarly to how the London Inter-Bank Offered Rate is used in traditional markets. We expect the DAI Savings Rate to be a contender for adoption as the benchmark.

## Regulations



While some may argue that regulations are not necessary for DeFi as it can operate without regulatory approval, crypto-friendly regulations would help the DeFi markets greatly especially in major crypto locations.

## What can we expect?



**Matthew Tan**  
Founder & CEO, Etherscan

2020 will be like all previous crypto years, filled with unexpected surprises, challenges, ups, and downs. On the product end, the crypto scene is cyclical and I expect the current themes surrounding DeFi to continue well into the year. I also expect to see more solidification and activity surrounding multi-chain platforms like ETH2.0, Polkadot, and Cosmos.

Issues such as scalability and UX will continue to be pain points in onboarding new users while more stringent regulations will make it more difficult for crypto related projects to operate under the previous context.



**Taylor Monahan**  
CEO, MyCrypto

2020 will be a divergent year for crypto where a significant path is initiated - one where we keep our philosophies and ideals that we had at the beginning of this journey or one where governments and corporations co-opt and corrupt things.



**Jeffrey Zirlin**  
Co-founder, Axie Infinity

1. 2020 will be a breakout year for blockchain games that focus on mobile-friendly applications.
2. Dapps will begin to experiment with revenue sharing models that reward their users for "proof of engagement".
3. Consumer facing Dapps will strengthen their value propositions through novel integrations with DeFi protocols.



**Tim Ogilvie**  
Co-founder & CEO, Staked

Ethereum will successfully launch phase 0 of their transition to ETH2.0 and make significant progress towards phase 1.



**Mark Lamb**  
CEO, CoinFLEX

In 2020 the surface area of trading and investment opportunities will balloon as derivatives volumes increase by an order of magnitude. Basis will remain extremely volatile and this year we will experience 2 periods of extremely widening, bringing in fresh capital into the derivatives markets.



**Gauthier Zuppinger**  
Co-founder, NonFungible.com

1. NFT infrastructures, tools and platform will be the focus of major investments.
2. Underdogs with strong values and products will continue to take more market share from well-funded projects who only focus on "blockchain-hype".
3. More Non-NFT stakeholders will enter the field. We believe that other players such as Coinbase will launch more "test & learn" products & events.



**Sandeep Nailwal**  
Co-founder & COO, Matic Network

Layer 2 is going to be a reality in 2020 which will enable Ethereum to scale massively and may leave many "new age" blockchains redundant. This scalability will also allow Dapps to realistically compete with centralized apps of today and we may finally see the first killer Dapp.



**Dr. Long Vuong**  
Founder & CEO, TomoChain

Bitcoin and DeFi will continue to grow, and traditional finance players will start to collaborate with crypto companies. Overall, 2020 will be a relatively stable year. There will be a breakthrough in blockchain gaming such as CryptoKitties by the end of the year that will make people excited about the space.

## What can we expect?



**TM Lee**  
Co-founder, CoinGecko

In 2020, DeFi will continue to see further growth with more DeFi dapps flowing into the market on Ethereum as well as other platforms. With so many DeFi dapps in the market, I expect to see an influx of DeFi aggregator services that allow these different DeFi services (exchange, lending, swap, derivatives, insurance) to interoperate with friendly UI/UX; leading towards higher adoption and new possibilities for end users to utilize their crypto finances.



**Justin Sun**  
CEO, Tron & BitTorrent

1. There is going to be a revolution in the content economy with more creators like PewDiePie switching to decentralized platforms like DLive. We are likely to see the rise of democratic content platforms where content creators and users are rewarded for their creativity and engagement
2. Blockchain is also going to make a big impact on reducing our carbon footprint, by eliminating the need for ledger documentation and management records kept on paper and therefore reduce our energy consumption.



**Ben He Bin**  
CEO, imToken

In time, the concept of blockchain will become more user-friendly, along with capital markets which will have improved and more advanced concepts from the traditional finance world.

A scattered open-source blockchain landscape, scalability issues & uncertainties surrounding regulations remain as obstacles for the industry in East Asia.

Regardless, I believe that DeFi will continue its rapid developments especially for DEXes and the lending sector as more professionals continue to experiment. Expect more users (even early adopters) to be attracted as more robust/solid financial products are continuously introduced.



**Bobby Ong**  
Co-founder, CoinGecko

We should expect to see strong DeFi growth continuing. Total Value Locked in DeFi apps on the Ethereum blockchain will exceed over \$1 billion. We will see over 100 DeFi apps by the end of the year and DeFi apps will also appear on other smart contract platforms. However, we will be reminded of the risks of DeFi apps and it would not surprise me if at least 1 DeFi app will get hacked. DeFi insurance / derivative markets will grow as a result to better handle these risks.



**George Cao**  
CEO, BitMax.io

In 2019, we saw many of the large “exchanges” expand coverage beyond trade facilitation in spot markets to encompass a more holistic suite of service and product offerings including derivatives, custody solutions, lending & staking. I think we’ll see this trend continue in 2020, & even intensify as retail and institutional clients consolidate their businesses to a handful of top-tier platforms.

I don’t necessarily think we’ll see many of the key industry players stray from the status quo too much with high-risk innovations. Instead, we’ll see top-tier platforms pursue various strategies to differentiate within their existing business models and invest significant resources in keeping up the pace with the rapidly evolving regulatory landscape.



**Guy Corem**  
Board of Director, Beam Foundation

2020 will be the year in which privacy and DeFi will meet. We will see permission-less privacy preserving stable coins, synthetics and other instruments. We will also see bridges and interoperability between privacy preserving chains and non-privacy preserving “old” incumbent chains. 2020 will also be the year in which sidechains will finally take off as a way to extend base-layer functionality while keeping it simple and safe.

## What can we expect?



**Viktor Radchenko**  
Founder, Trust Wallet

Time has shown that it usually just takes this one Killer App to open the floodgates for more adoption. I personally think DeFi (Decentralized Finance) has great potential in becoming this next Killer App, we just need to get the user design correct. With its incentivized and direct network participation, it will help build communities and secure the whole network in a decentralized way.

We will see a lot more experiments within the DeFi space, some will work, and some may not, but overall, the effect on crypto adoption will be tremendously positive.



**Samson Mow**  
Chief Strategy Officer, Blockstream

The number of assets and L-BTC in the Liquid Network will continue to grow. Some of those assets will be security tokens, which will also start to gain more popularity overall. We will also see more adoption of the Lightning Network, but metrics like the number channels and Bitcoin capacity will drop as more users take advantage of improved privacy features.



**Benedict Chan**  
CTO, BitGo

Consolidation across the industry will become more apparent as the bear market continues in the first 2 quarters of 2020. Larger players will likely spend the year getting into position for the next bull run, making strategic talent/tech acquisitions. With the travel rule deadline looming in June 2020 and stablecoin regulation on the horizon, a bifurcation of tokens, companies and even ecosystems between the US and rest-of-world could occur.

I'm hoping to see if the halvening could be a catalyst for the Bitcoin store-of-value asset narrative. This, combined with the potential for growth around financial derivatives, prime brokerage, and DeFi could bring us a very exciting year!"



**Alexandre Dreyfus**  
CEO, Chiliz

2020 will be the year of many M&A in the space and hopefully including protocol/layers. I hope to see some creative M&A that will be token based. I do believe a lot of exchanges will dry out and die, like any industry consolidation. Same for some 'projects'.

Regulation will kill innovation, in an industry that is not yet settled and proven. Most of innovation and growth will come from Asia and emerging countries. US & Europe will be about politics, instead of delivering an experience for users & companies.



**Joon Ian Wong**  
Managing Director, CoinDesk

1. New DAO structures will redefine how public goods - such as journalism and other commons - are funded, built atop the great work of Moloch and MetaCartel DAOs and OpenLaw.
2. A central bank or megacorporation-backed digital currency will launch. The going will be slow at first, but it's just the starting gun in the race to redefine the world's monetary regime.



**Hiroyuki Mihara**  
COO, BitBank

Crypto exchanges will face a large hurdle in Japan. Due to the increase of compliance cost and the decrease of the revenue, small and mid sized exchanges may have no choice but to consolidate or exit. After the planned CFD regulation, even though leverage ratio might be limited to 2x, more and more big securities companies will rush into crypto. It would flourish the industry.



**Asher Tan**  
CEO, CoinJar

Critics will heap more scrutiny around DeFi lending projects even as they grow in popularity. While I don't see an explosion in user growth, users who have had a positive experience with crypto credit are highly likely to become repeat users.

# Some Did-You-Knows

# More on Bitcoin

## 10 years of Magic Internet Money!



The numbers defining the **first 10 years of Bitcoin**

34,100

Mentions of "Bitcoin" in Google Scholar by 2019. In 2009, there were only 309. What a ride!

\$90,000

How much your \$1 will be worth if you invested since 2010.

6,500+

# of different cryptocurrencies that currently exists. There's likely more that CoinGecko isn't tracking!

18,155,975

bitcoins circulating as of Jan 2020. There will only ever be 21m Bitcoin.

3,241

Cryptocurrency related companies. The industry has grown a lot since Bitcoin's inception. Thanks, Satoshi!

~19,000

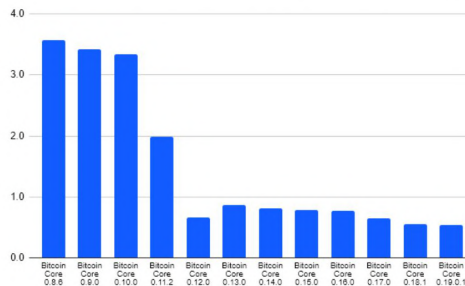
Bitcoin Trading Pairs that's tracked on CoinGecko

1,457%

blockchain jobs growth since 2015. Bitcoin created a whole new industry that's flourishing.

### To the Bitcoin developers

Figure 1 - Bitcoin Initial Block Download Time (Days) - Average Of 3 Attempts



6x Faster

That's how much faster it is to sync a full Bitcoin node now.

BitMEX team found that it would be nearly impossible to sync a Bitcoin node if not for the various improvements made. Thanks, Bitcoin devs!

### A summary of events



11+ Years

And still going strong! Even for those who have been in the space for a while, this is a good summary for BTC over the past decade. Credit goes to the creator!

\*Wizard image taken from r/bitcoin, Bitcoin circulating as of 12th Jan 2020



# Stacking Satoshi (Sats) Some Food Sats for Thought



Did you know?

With  
**\$5/day**  
since 2014

**15.55**  
is how many **Bitcoin (BTC)** you'd have

**\$10,795**  
is how much **you've invested** so far

**\$124,375**  
is how much **you'd have now**

**11x**  
is the approximate **returns of investment**, with Bitcoin priced at \$8k today

### Stack Sats

Build your Bitcoin Stack!

With \$ <input type="text" value="10"/> today	You'll be stacking <b>120,180</b> sats / day	Stack for <input type="text" value="5"/> years	You'll have <b>\$2.1933</b> \$18,250	Assuming Bitcoin is \$ <input type="text" value="8000"/> in the future
---	--	--	--	--

With \$17546, You can buy a car!





Made with ❤️ from 

[Share it with a friend!](#)

**2017**  
was the **best year** to stack with ~638% returns

**Today**  
is the **next best time** to start stacking.



 Stack sats refers to the act of accumulating Bitcoin (BTC) over a period of time. We created a handy tool to help you calculate how much you can stack. [Check it out!](#)

2020 and Onwards

Key Events 

# 2020 and onwards

## Key Events



### Bitcoin Halving

est. 24 May 2020 (Block #630,000)

Bitcoin's block reward halves from 12.5 to 6.25 BTC per block.

With each halving, Bitcoin becomes more scarce. Regardless of whether it has been "priced in" or not, BTC halving has historically been an important event.



### Calibra Launch

est. sometime in 2020

Facebook's Libra is expected to launch it's wallet, Calibra sometime in 2020.

Libra aims to bank the 1.7 billion of unbanked users, but push backs from regulator worldwide have hindered it's progress. How will this fare?



### Ethereum 2.0

est. sometime in 2020

Series of updates to Ethereum in several phases, including Proof-of-Stake (PoS).

Eth 2.0 promises to make Ethereum faster and more scalable, bringing in much needed improvements for mass adoption and better dApps.



### Consensus: 2020

New York, May 11-13, 2020

The annual blockchain summit where the entire industry converges.

Started in 2015, Consensus by Coindesk is the event for an unbiased introspective look at the previous year while paving the way for the next 12 months.



### Devcon 6

Buenos Aires, 2020

Annual gathering held by the Ethereum Foundation since 2015.

Devcon is the Ethereum conference where developers, researchers, thinkers, and makers alike sync up. Expect major announcements and progress updates.



### China's DCEP

est. sometime in 2020

China's Digital Currency Electronic Payment launch.

While not directly related to Bitcoin or cryptocurrencies, would this push help bring publicity, validation & legitimacy to cryptocurrencies the way Libra did?

Ethereum

Onwards to ETH 2.0

# Why is it needed? What is this all about?

## Problems with Ethereum

**Overcapacity** > 95%



Ethereum network is operating at over 95% capacity on average

**15 transactions per sec**

For Ethereum to become the world's computer, it needs to be able to process thousands of transactions per second

**Slow**



**Vitalik Buterin**  
Founder, Ethereum

*Ethereum 1.0 is a couple of people's scrappy attempt to build the world computer; Ethereum 2.0 will actually be the world computer.*

## Ethereum 1.0 (Currently)



All nodes in the Ethereum network processes every transaction and stores the entire state of the blockchain.

While effective and proven, the need for all nodes to always sync the entire blockchain has effectively placed a cap on the throughput of the blockchain based on current infrastructure and technology.



## "Sharding" in Ethereum 2.0



Sharding refers to the separation of computational resources into different groups. Each of them doing specific tasks and together bringing higher computational throughput as a whole.

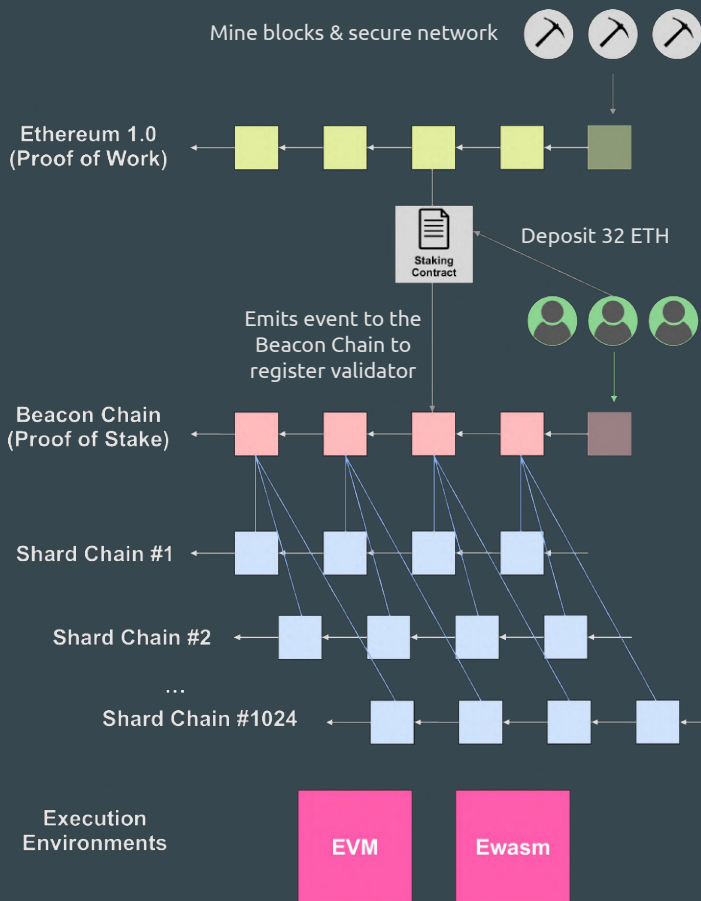
In Ethereum 2.0, transaction processing and data storage/state will be delegated into separate independent shards.

Each node only needs to handle a fraction of the total system load, thereby increasing overall throughput and scalability.



# Ethereum 2.0 Explained

## TLDR



**Phase 0**  
(Q1 2020)

**Phase 1**  
(2021)

**Phase 2**  
(2022)

### Eth 1.0 & Eth 2.0

- Eth 2.0 will be a separate blockchain, developed in phases.
- Eth 1.0 blockchain will continue to operate in parallel, as existing smart contracts may not be compatible with Eth 2.0

### Phase 0 (Q1 2020) Beacon & Staking

- Eth 1.0 holders can deposit 32 ETH into a staking contract as a commitment to Eth 2.0 ([Here's how much you can make.](#))
- Stakers validate blocks on Beacon Chain via [Casper Proof-of-Stake](#).
- The Beacon Chain does not do much by itself, it cannot validate or execute transactions yet.

### Phase 1 (Q1 2021) Sharding

- Multiple chains (shards) will be deployed to facilitate scaling.
- Computational loads spread out across multiple chains rather than being dependent on a single chain as is on Eth 1.0
- Beacon Chain is the Beacon that "points the way" for all shards to maintain sync and data integrity within shards.

### Phase 2 (2022) Execution Env.













- Allows processing of transactions, tokens & smart contracts
- Ethereum 2.0 finally ready to launch!

# Proof of Stake (PoS)

No, not steak 

# Proof of Stake (PoS)

## What is it all about?

Proof of Work (PoW)		Proof of Stake (PoS)	
 Miner solves repetitive computational problems to secure the network.	What is it?	Staking freezes your crypto assets in order to get interest for securing the network.	
 Proof of Work requires purchase of hardware needed to mine.	What's needed to start?	Proof of Stake requires buying the amount of crypto needed to stake.	
 Proof of Work rewards goes to the miner that solves a complex mathematical equation in the fastest manner.	How are validators incentivized?	Proof of Stake chooses who validates the next block based on how much coins are staked by the validator.	
 BTC's network is secured using as much electricity as <a href="#">Switzerland</a> does.	Electricity consumption	Proof of Stake uses less electricity since it does not involve repetitive computations.	
 ETH currently handles approximately 15 transactions per second (vs 7/sec of Bitcoin)	Scalability (In ETH's case)	Proof of Stake is likely capable of <a href="#">increasing the scalability</a> of the Ethereum network.	
 Risking their own specialized equipment (eg. ASICs) useless if network forks away.	Security (In terms of attacker's liable assets)	Risks their own stake (51% or more of total supply) discarded if found to be bad actor.	



# Decentralized Finance (DeFi)

## Bank the Unbanked

# Decentralized Finance (DeFi)

## Why does it matter?

### Current financial system (*centralized*)



Nearly **¼ of the world (1.7b\*)** remains **unbanked**, and have limited access to wealth management tools.



On average it takes 3 working days and **~6.8%\* fee** for a cross-border remittance.



Centralization risks where rogue actors can bring entire systems down - **2008 financial crisis & Venezuela hyperinflation.**



**Censorship/Discrimination** from banks freezing accounts, denying access to funds, bank runs.

### Decentralized Finance



Wider access to global financial services - **Anyone with mobile phones/internet** access can be part of it.



**Affordable & swift** cross-border payments - on average ETH takes less than \$0.018\* and 20 seconds, regardless of location.



Low barrier & friction for **exposure to different asset classes** for all users - better liquidity, options and positions.



Censorship resistance - Every entity is treated equally by the code **regardless of social standing, credit history or political beliefs.**



The **DeFi** movement is all about creating a money market that is more **efficient.**

\* <https://remittanceprices.worldbank.org/en>

\* <https://globalindex.worldbank.org/>

\* <https://ethgasstation.info/>

# Decentralized Finance (DeFi) Growth



## Current popular DeFi use cases

### Lending (2.81m ETH)

Borrowing/Lending on a public blockchain with much less friction vs. traditional platforms.

### Derivatives/Assets (\$170m USD)<sup>1</sup>

Synthetic assets which are derivatives of other assets allows exposure without having the actual asset.

### Decentralized Exchanges (126.702k ETH)

Traders can trade on platforms that do not hold their funds custody.

### Payment solutions (863.01 BTC)<sup>2</sup>

Traditionally centralized payment solutions can be decentralized to be as effective while staying censorship-free.



## DeFi's Growth

Locked (ETH)

**3.1M**  
(\$701.1M)<sup>3</sup>

Maker Dominance

**55.58%**

### ETH Locked in DeFi

TVL (USD) | [ETH](#) | [BTC](#) | [DAI](#)

All | [1 Year](#) | [90 Day](#) | [30 Day](#) | [7 Day](#)



ALL

LENDING

DEXES

DERIVATIVES

PAYMENTS

ASSETS

DEFI PULSE	Name	Chain	Category	ETH ▼	1 Day %
	1. Maker	Ethereum	Lending	2.4M	1.1%
	2. Compound	Ethereum	Lending	374.7K	1.3%
	3. InstaDApp	Ethereum	Lending	323.5K	4.0%

Growth in DeFi sector can be measured by the amount of ETH locked into the ecosystem. The dominant sector for DeFi apps are Lending and Derivatives.



## Did you know?

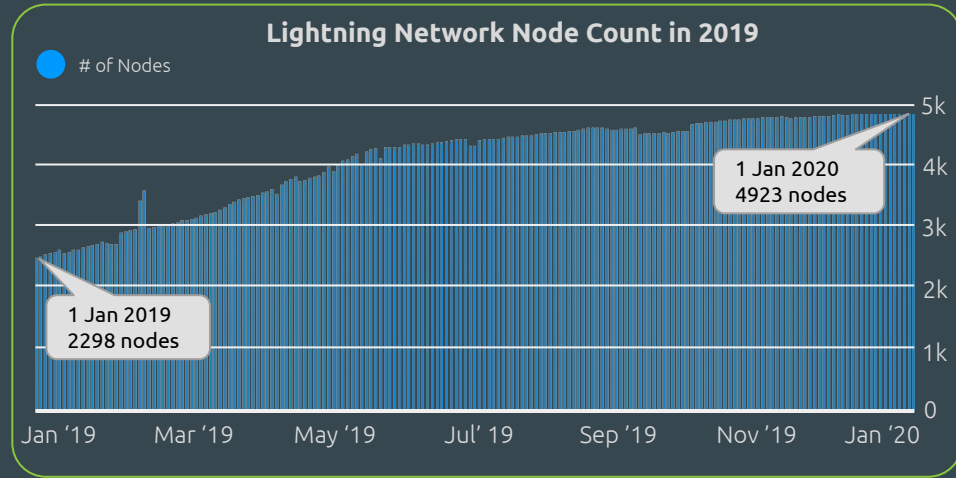
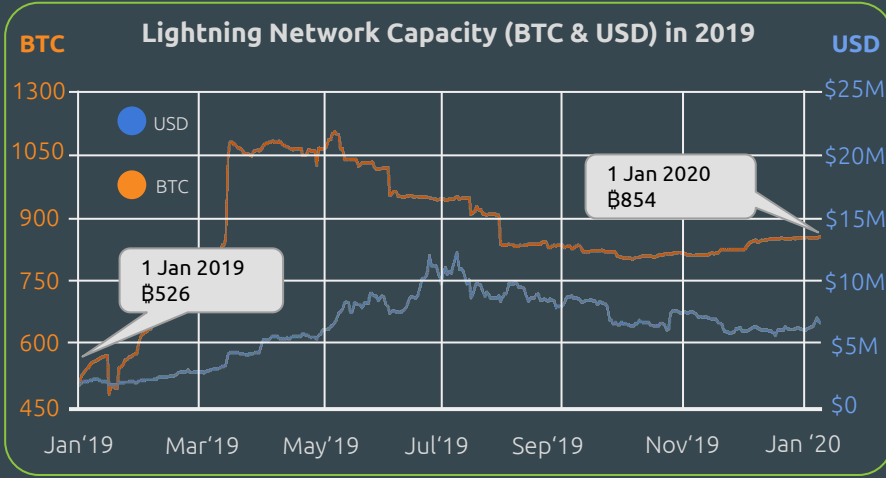
The amount of ETH locked into the ecosystem has grown from ~2m ETH to ~3.1m ETH (**=>\$160M!**) in the span of one year.

[1] ~130m USD worth of Assets are locked in SNX

[2] BTC is used for Lightning Network

[3] \$USD value includes BTC, DAI

## 2019 Lightning Network Statistics ⚡



**⚡ +62% ⚡**  
LN BTC Capacity Increase in 2019

BTC locked into LN peaked around ₿1100 during May '19, but gradually decreased through 2019 and eventually closed the year around ₿850.

Interestingly, BTC locked into LN seemed to be decoupling from BTC's prices towards the end of year.

**⚡ +114% ⚡**  
LN Node Count Increase in 2019

2019 has seen the # of nodes for LN more than double, but most of the gains were made early during the year. Past mid-year, growth slows down considerably but remains on an uptrend.

\*Data from [Bitcoinvisuals.com](https://bitcoinvisuals.com)



# Decentralized Apps (Dapps) Market Overview

in collaboration with



# Decentralized Apps (Dapps) 2019 Summary - Overall



Category	⌘ All	⬠ ETH	🔥 EOS	⚡ Steem	🦋 TRON	⚙️ IOST	📦 Neo
<b>Total Number of Dapps</b>	2,989	1,822	493	92	520	38	24
<b>Active Dapps</b>	2,217	1,129	479	80	482	32	15
<b>New Dapps</b>	1,445	690	260	34	411	38	12
<b>Active Users</b>	3,117,086	1,427,093	518,884	120,560	967,185	27,871	55,493
<b>New Users</b>	2,769,070	1,289,831	399,416	60,123	947,775	27,871	44,054
<b>Transactions</b>	3.26B	24.52M	2.81B	85.72M	290.28M	47.10M	2.27M
<b>Volume (in Native Token)</b>	—	12.64M ETH	1.40B EOS	84.83M STEEM	142.44B TRX	12.53B IOST	410.33K GAS
<b>Volume (in USD)</b>	\$10.90B	\$2.37B	\$4.98B	\$29.02M	\$3.41B	\$114.34M	\$1.01M

## 2019 Dapp Stats by Quarter

**2,217** Active Dapps, **3.12M** Active Users, **3.26B** Transactions, **\$10.96B** Volume.

### Q1

Active Dapps: **1,536**  
Active Users: **1,073,579**  
Transaction: **355,611,233**  
Volume: **\$3,637,022,637.86**

### Q2

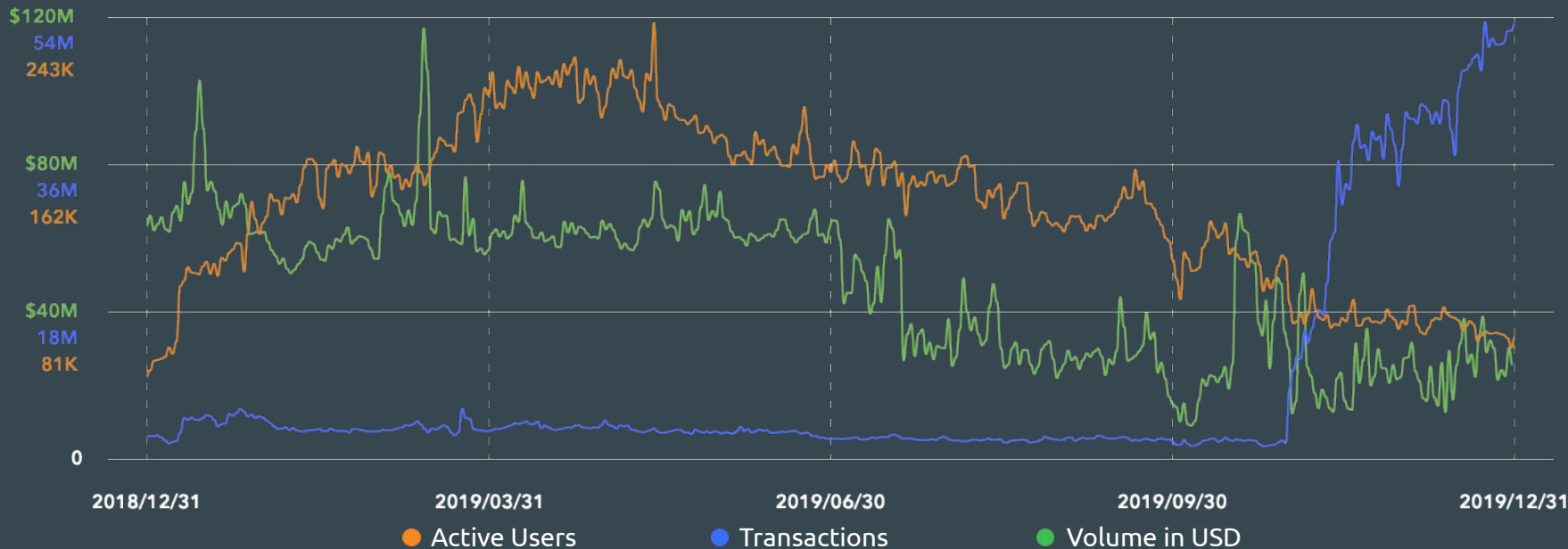
Active Dapps: **1,532**  
Active Users: **1,267,312**  
Transaction: **327,794,618**  
Volume: **\$3,341,202,153.51**

### Q3

Active Dapps: **1,406**  
Active Users: **1,092,604**  
Transaction: **225,070,642**  
Volume: **\$2,185,833,531.01**

### Q4

Active Dapps: **1,400**  
Active Users: **878,590**  
Transaction: **2,350,898,041**  
Volume: **\$1,733,991,458.76**



# Decentralized Apps (Dapps)

## 2019 Dapp User Analysis



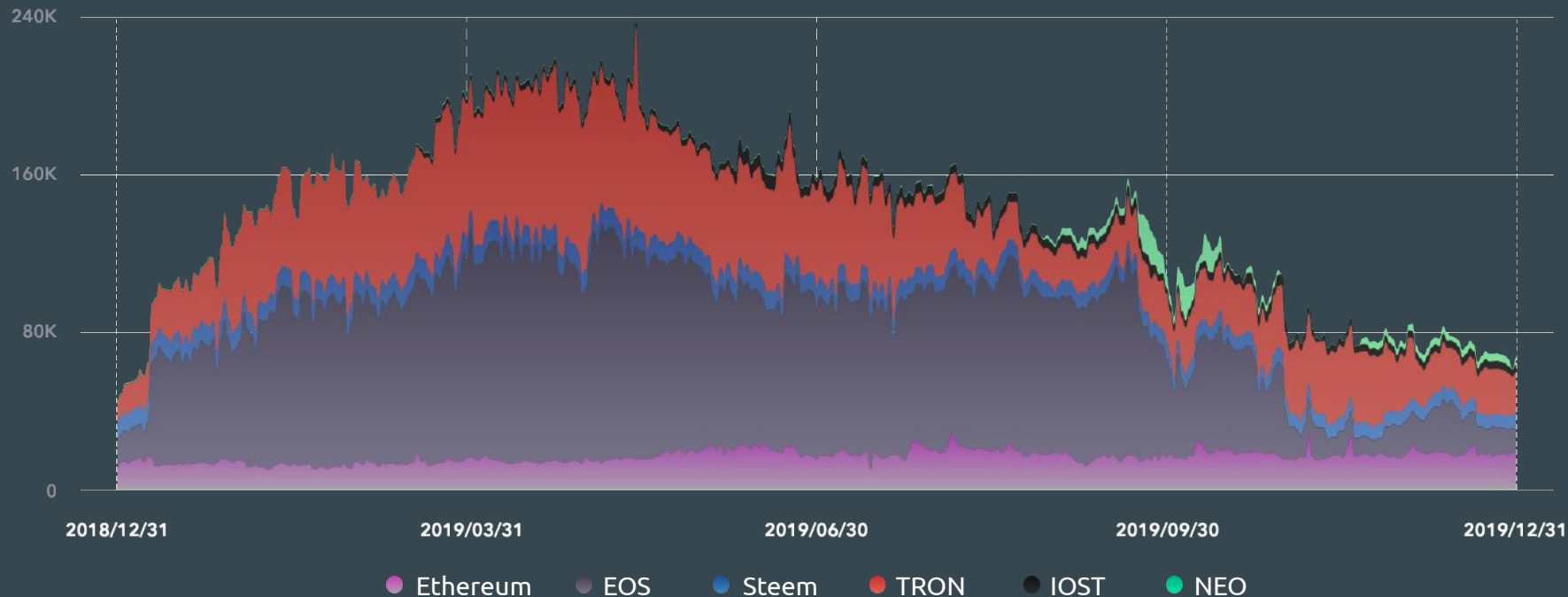
Category	⌘ All	⬠ ETH	⬠ EOS	⌘ Steem	⬠ TRON	⬠ IOST	⬠ Neo
<b>Number of Active Dapp Users</b>	3,117,086	1,427,093	518,884	120,560	967,185	27,871	55,493
<b>Number of Unique Dapp Users</b> 2019 New	4,630,105 + 2,769,070	2,330,260 + 1,289,831	572,441 + 399,416	579,418 + 60,123	1,019,993 + 947,775	27,871 + 27,871	100,122 + 44,054
<b>User Activeness</b> Compared to 2018 Data	67.32% 109.36%↑	61.24% 78.24%↑	90.64% 199.89%↑	20.81% 68.84%↓	94.82% 1239.26%↑	100.00% —	55.43% 1.03%↓
<b>Number of Mainnet Address</b> 2019 New	93,885,304 +34,849,866	83,932,227 +29,701,733	1,693,608 +1,061,608	1,350,000 +170,000	4,394,515 +3,261,492	344,183 +344,183	2,170,771 +310,850
<b>Number of Active Mainnet Address</b>	n/a	n/a	1,060,976	n/a	2,684,018	97,663	603,048
<b>Dapp Users %</b>	n/a	n/a	48.91%	n/a	36.03%	28.54%	9.20%



# 2019 Daily Active Users by Blockchain

Total of **3,117,086** Daily Users:

Ethereum **1,427,093**; EOS **518,884**; Steem **120,560**; TRON **967,185**; IOST **27,871**; Neo **55,493**.



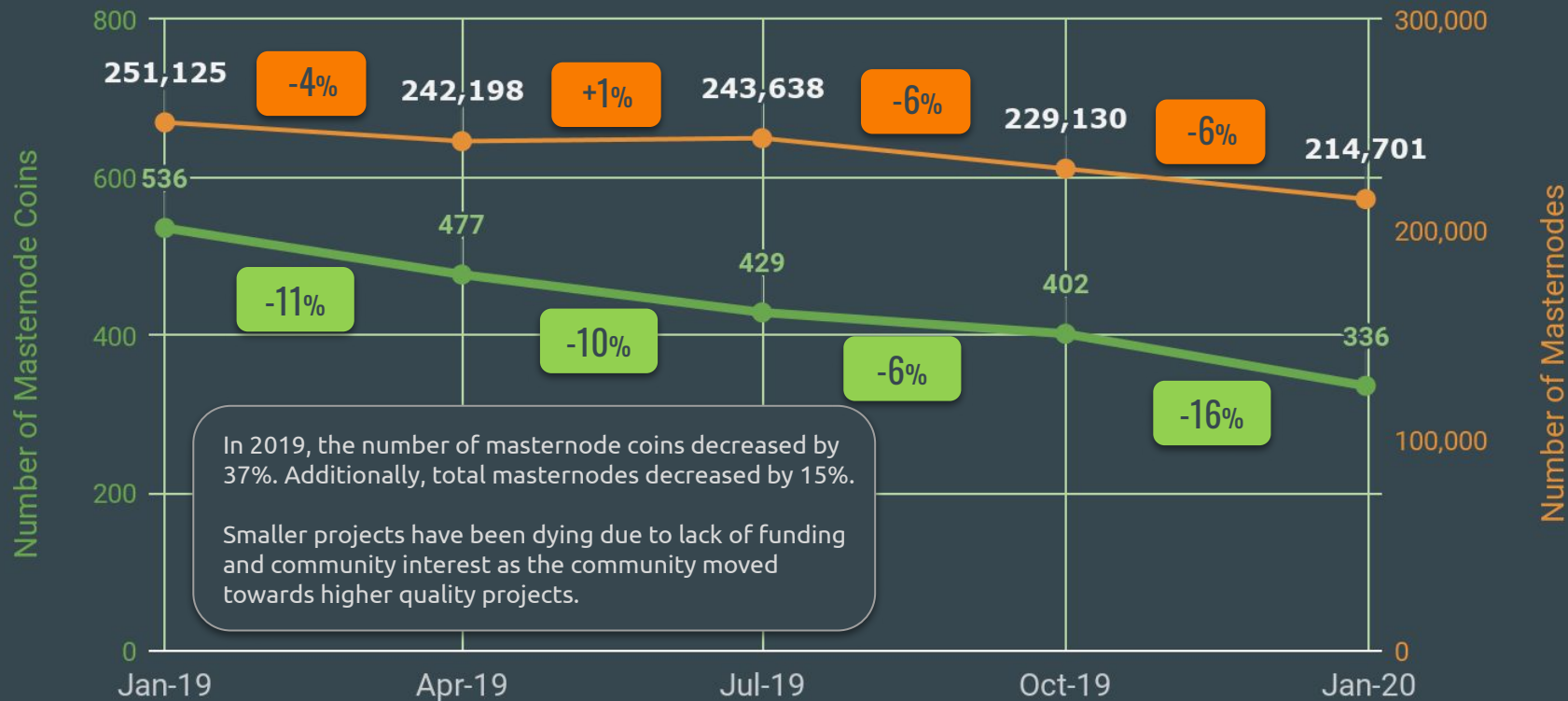
# Masternodes Market Overview

in collaboration with



Masternodes.Online

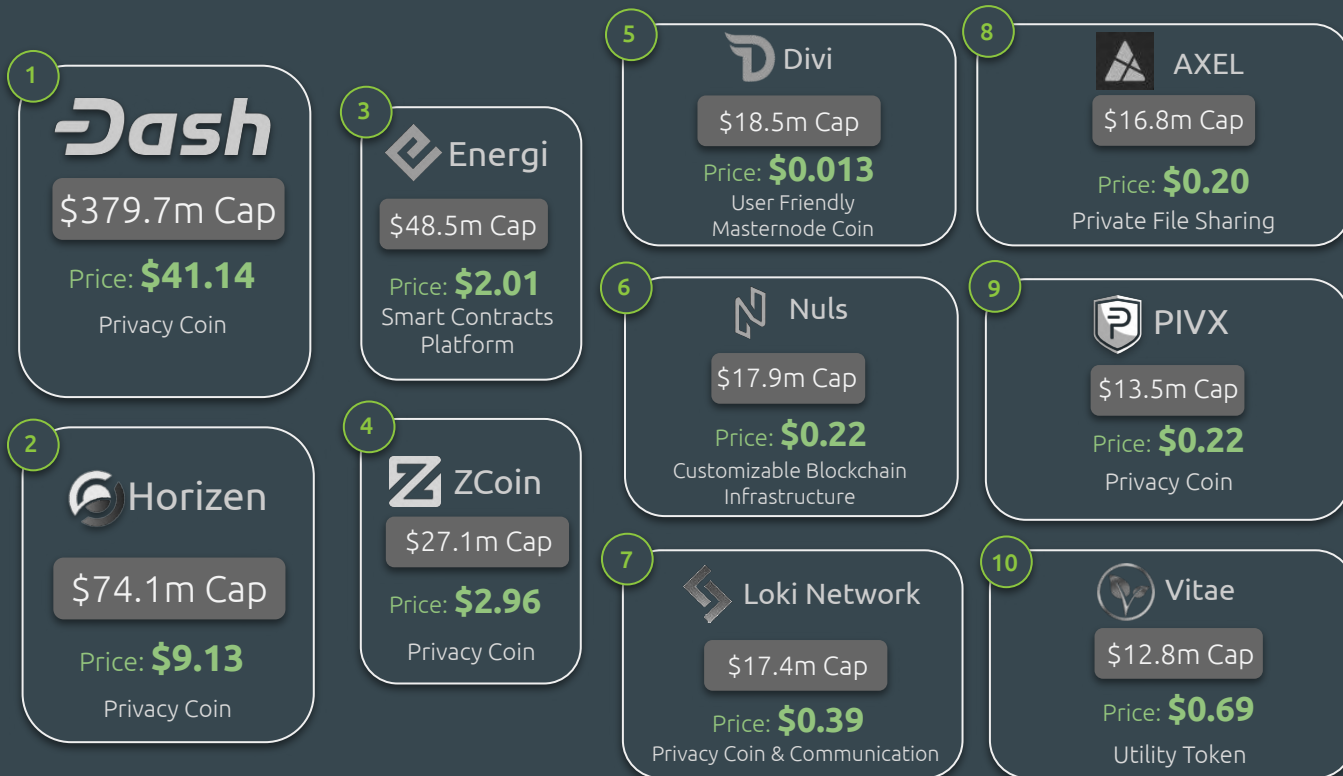
## Number of Masternodes & Masternode Coins



## Top 10 Masternodes by Market Capitalization

6 out of the top 10 masternodes have an **emphasis on privacy**.

Year-on-year, Dash maintained its position as the top masternode. Horizen and Energi made strong gains to be the second and third largest masternode coin by end-2019.



\* Price and market capitalization refers to closing price of 31 Dec 2019 (23:59 UTC).



NonFungible.com



CoinGecko



# Non Fungible Tokens (NFT) Market Overview

in collaboration with



NonFungible.com

# 2019 Unique Active Addresses

## Total Unique Active Addresses

105,000

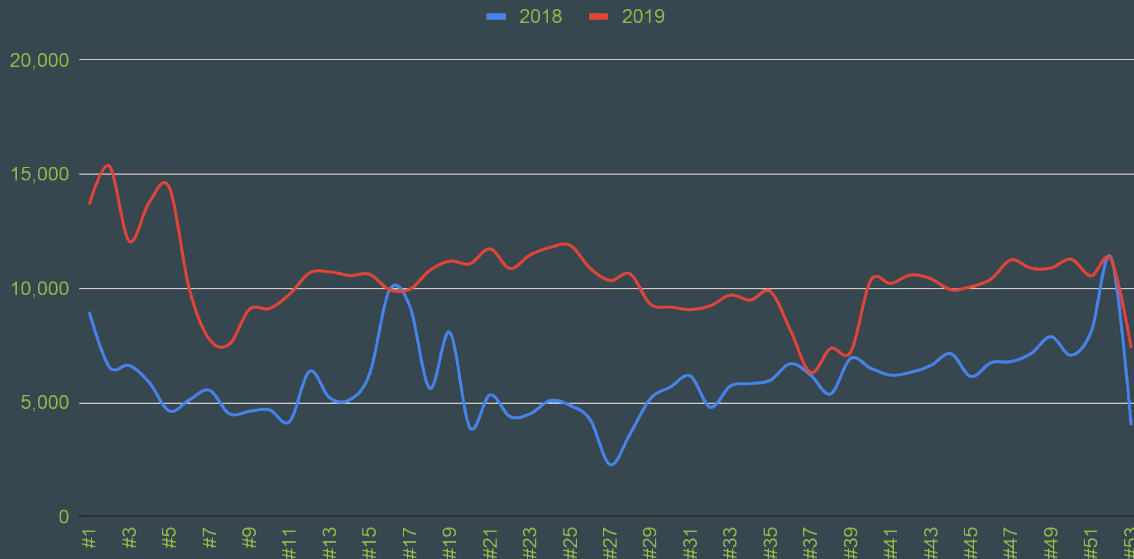
107,000

2018

2019

NFT user-base was mostly stable in 2019 and grew 1.58% year-on-year. 2019 was a year of densification of uses around NFT assets and did not see major growth in on-chain activity. The community was observed to be much more active than in 2018.

## Weekly Active Addresses on Ethereum Blockchain 2018 vs 2019



# Non-Fungible Tokens 2019 Transaction Volume



NonFungible.com



CoinGecko



## Total NFT Transactions

8,096,615

In 2018

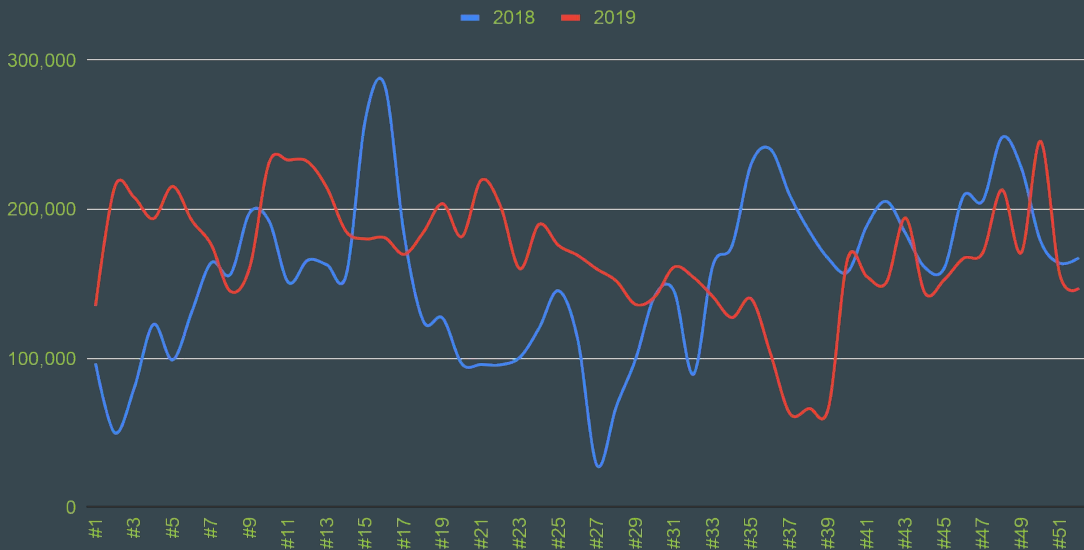
8,842,776

In 2019

NFT transaction volumes in 2019 grew close to 10% year-on-year. This relatively modest growth was part of 2019's overall trend of stabilization without any specific NFT hype.

From a market's point of view, there was a slight drop in the liquidity of NFT assets which reflected a slow down in NFT assets speculation.

## Weekly NFT Transactions on Ethereum Blockchain 2018 vs 2019



## 2019 Ethereum NFT Communities Distribution

### 2019 Largest Community



My Crypto Heroes

>50%

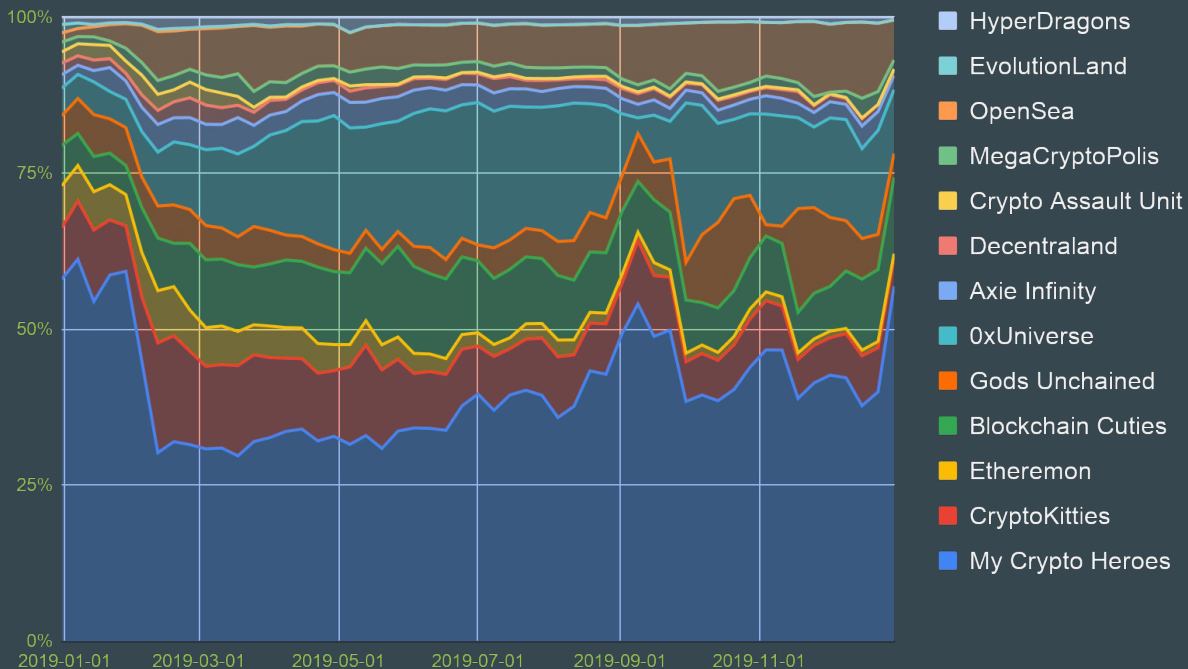
In 2019

Crypto Kitties, which was largely dominant in 2018, gave way to My Crypto Heroes in 2019. My Crypto Heroes is a Japanese multiplayer RPG which managed to bring together nearly 10,000 weekly active players.

As a whole, two projects, Crypto Kitties and My Crypto Heroes together comprised about half of the NFT community.

OxUniverse was also one of the winners of 2019 - it gained a significant amount of followers from Q2 2019 onwards.

### NFT Community Distribution (Top 13 NFTs)



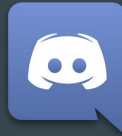


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** how we did! **