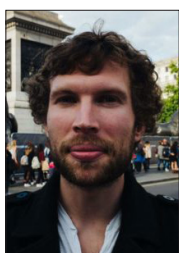


In this issue:

- The development doesn't stop
- Interest is going back into the major players
- In Q1 2019, major investment houses will finally launch their crypto services
- Areas I will be looking into in the coming months
- How to value crypto

# We are the middle children of crypto

Harry Hamburg, Editor



“We are the middle children of history. Born too late to explore the world and too early to explore the universe.”

This is a quote many people like to use on the internet. When I first heard it, I really liked it. But the more I thought about it, the more I began to dislike it.

It kind of sums up why I stopped going on most internet message boards, around five years ago.

I used to spend a fair amount of time browsing Reddit, which is basically like a massive internet forum. It is split up into different subreddits, each with its own rules and topics.

Posts and comments get upvoted and downvoted by readers and the most popular ones make it to the top and are most visible.

There are subreddits on just about every topic and activity under the sun. But a lot of them descend into people just posting about how depressing their lives are, in a sort of jokey way. Or how depressing the state of the world is.

A lot of people posting these things, particularly the tech subreddits, are very smart. And if you spend a lot of time reading them, you get sucked into their worldview.

When you see so many seemingly smart people all agreeing with each other and proving how the world is, and

always will be, a mess, it starts to taint your thinking.

I was torn reading these posts because a lot of what they said was very interesting and massively useful for someone interested in technology. But the more time I spent in these subreddits, the harder I would find it to get back to my usual way of thinking.

Eventually, I decided the payoff of reading these pages wasn't worth it and changed my homepages. I got on with my life and a few months later I took up running.

Don't worry, this is going to be crypto related. I'm going to bring it back. You haven't opened up the wrong email by mistake.

Anyway, when I took up running, I wanted to get more



knowledgeable about it and reluctantly opened up the main running subreddit.

I was taken aback.

The attitude was entirely different from all the other subreddits I'd previously browsed.

Instead of people proving how depressing the world is, and how their lives were devoid of meaning and basically pointless – people were actually happy.

The group discussions left you feeling the world was good, life was fun, and you could overcome most obstacles and enjoy yourself.

Don't get me wrong, it wasn't full of sickly self-motivational nonsense. It was just the people who posted had very different attitudes to the attitudes I'd seen in all the other subreddits.

Spending 20 minutes on a tech subreddit would leave you feeling fatalistic, slightly demotivated and just a little depressed about humanity in general.

Spending 20 minutes reading the running subreddit would leave you feeling the exact opposite.

I realised it was because most of the people on the tech subreddits spent most of their time on the internet, sat down, barely leaving the house, and then getting dismayed that their lives were boring and slightly depressing.

The people on the running subreddit spent a lot of their time out doing things.

That quote I mentioned at the start. That perfectly sums up how many people on internet forums see their place in the world.

There's no point doing anything. Whatever you try will either have been done better than you by someone in the past, or will be

done better than you by someone in the future. So why bother?

In truth, there are always things to explore. Just because someone else has already discovered America doesn't mean you shouldn't see it for yourself.

If you go trekking through the jungle, it's still going to be a unique and likely life-changing experience. It doesn't matter that you aren't documenting it to the world for the first time.

Most people inherently know this. But when you see a hundred well-written upvoted posts telling you the opposite, you start to doubt...

So, what does this long and arguably boring tale have to do with crypto?

Basically what I am writing about here is echo chambers. Crypto has its own echo chamber that is hard to escape.

When everything is going up, anyone who suggests the good times won't go on forever gets downvoted into oblivion.

When everything is going down, anyone who points out the good things going on behind the scenes gets downvoted into oblivion.

And given the nature of crypto, a massive amount of news and discussion about the state of play takes place on the internet. On Reddit, on message boards, on discord and on Telegram groups.

So after a year of decline, the stories about actual development going on become difficult to find.

Many crypto enthusiasts are of the same opinion as the quote. Just in a different way:

"We are the middle children of crypto. Too late for the last bull run and too early for the next one."

However, just because the news about real development is hard to find, that doesn't mean it's not happening.

## The development doesn't stop

Just like in 2017, the people out there doing the things are still out there doing the things. The people stuck in the echo chamber are still stuck in the echo chamber.

Right now, in 2019, the echo chamber is singing a different song. But the development has kept going on.

The main criticisms levelled at crypto's major players are crypto's lack of speed compared to Visa, and its massive energy usage.

Many altcoins have already solved these problems, but these coins don't move the market and most mainstream press doesn't care about them.

If bitcoin or Ethereum were to increase its transaction speed to that of Visa and solve its energy wastage, well, that would be a big deal.

And that's exactly what bitcoin and Ethereum developers spent 2018 working on.

Bitcoin is pinning its hopes on transaction speeds to its Lightning Network. This won't reduce its energy usage, but it will vastly increase its transaction speed.

Lightning Network is already operational, but it can currently only handle around 550 bitcoin transactions at maximum capacity. Like most tech developments, however, this is improving all the time.

Lightning Network does not really help with bitcoin's energy usage, however.



On the Ethereum side, a scaling solution has been coming soon for the better part of a year. But as with most software projects, the closer it gets to completion the longer it takes.

That last 5% of a project tends to take 95% of the time.

Ethereum has a number of scaling solutions in the works, most of which have been coming soon for so long that people tend to write it as soon(TM) as a joke.

Ethereum is also switching over to a Proof of Stake consensus. What that means in real terms is that it will no longer consume massive amounts of energy.

It will also mean that if you hold Ethereum you will be able to “stake” it and receive a reward for doing so. Current estimates are around 5%.

So to recap, Ethereum will soon™ solve the two biggest criticisms levelled at it. It will be able to process thousands of transactions per second, while using very little electricity. And it will return around 5% a year in Ethereum interest.

These developments are incredibly important for Ethereum because it is much more than just a currency. It calls itself a “world computer”.

What that means in reality is that people can develop decentralised apps to run on its network. When it can scale, these apps become infinitely far more useful.

## Interest is going back into the major players

A trend we’ve seen over the last few months that I think is set to continue is money flowing back into the major projects.

During the 2017 bull run, you

could throw money at ten random coins on the top 100 list and in a few weeks there’d be a good chance you’d have made 100%+ gains.

As the market has declined, interest in these random projects has waned, for two main reasons.

1. People are taking a long hard look at their holdings and re-assessing where they put their money. If crypto succeeds, the top coins will rise again. The same cannot be said of the random coins you’ll find two or three paces in on CoinMarketCap.

It feels a lot better holding on to big players as the market loses 90% in value than it does holding on to the “moonshots”.

2. The major players have now lost so much in value that if crypto takes off again they will offer moonshot gains. If Ethereum, for example, were to go back to its highs, you’d be looking at a 1,000%+ gain.

And as I said, there’s a much higher chance of that happening than a random ICO getting back to its all-time highs before it goes bankrupt.

After all, almost all of those blockbuster ICOs of 2017 were built on top of Ethereum in the first place. Isn’t it better to own the land than the corner shop built on top of it?

I guess you could see this renewed interest in the major players as a good or a bad situation.

You could see it as crypto losing its diversity. Of the barrier to entry getting higher for startups and the wealth pooling with the big names.

Or you could use the well-trodden forest fire analogy. This collapse has cleared away the dead

weight. Only projects with real merit will remain. And those that do will be much stronger for it.

What’s the phrase that well-known crypto lover Warren Buffett uses? “Only when the tide goes out do you discover who’s been swimming naked.”

Personally, I see it as a good thing.

## Stablecoins are proving their worth

I covered stablecoins in [issue 7](#).

The one that I have been paying most attention to is DAI because it is smart-contract based and autonomous. 2018 was a real test of this new concept, and it has held up perfectly.

Over the course of 2019, I expect stablecoins to take over most currency cryptos. These stablecoins solve one of the main hurdles of cryptocurrency, price volatility.

People don’t want to spend it in case it shoots up in value, and people don’t want to be paid in it in case it drops in value.

Now that there are decent, decentralised stablecoins in existence, I find it hard to see the argument for pure currency cryptos. Why would you not want your money pegged to something stable?

Stablecoins give you many of the promised advantages of cryptocurrency without many of the disadvantages.

They provide a truly global currency that’s free to send, free to receive, that you control, that is stable in price, etc.

I can certainly see the argument for stablecoin cryptocurrencies when the world is in chaos. For instance, if there was another



financial collapse, if money really started losing value, if the dollar went the way of the bolivar, etc.

And I can see the argument for bitcoin as a store of value. But you only really need one store of value. So long as it is secure.

I guess that's why many bitcoin enthusiasts are also "bitcoin maximalists". They only see space for one winning crypto, and they believe that should be bitcoin.

If you are thinking of crypto purely in terms of a currency, then I would probably agree with them.

And that is a shame, because currency cryptos like Nano are better in almost every way. They don't need miners, they don't waste energy, they can be more decentralised and they are already fast enough to take Visa's level of transactions.

However, they don't have that first-mover advantage. They don't have that brand recognition. So it's hard to see a case for them increasing in value.

And like I said, why would you want to buy and sell goods and services with floating cryptocurrency, when you could just as easily do it with a cryptocurrency stablecoin?

This is why, in terms of investment, I'm much more interested in platform cryptos. As I've said, I see platform cryptos as like owning land. As more things get built on top of them, they should increase in value.

## In Q1 2019, major investment houses will finally launch their crypto services

During the decline of 2018, there

was a lot of talk about major investment houses entering the crypto market and flooding it with money.

It's easy to see why people make this argument, as right now the entire crypto market is worth less than Adobe, which stands in 13th place on the Nasdaq.

If investment houses really took an interest in crypto, they could increase its market cap exponentially. But, is that really what they're planning to do?

I guess it depends on whether they want to stir up interest in a new investment area for their clients. It certainly wouldn't take a lot of capital to massively increase crypto prices.

Going off JP Morgan's research, we can see that in bitcoin the ratio of cash inflow to market cap is about 50:1.

So if crypto has a market cap of \$120 billion, there is likely only \$2.4 billion of actual money in the market.

Pump up prices and then ask if your clients want in on this new gold rush. Get a cut of everything they invest and make your investment house more money. It's a compelling argument. But things are rarely that straightforward in real life.

Because it takes so little money to manipulate crypto prices, and the payoffs can be so great, it's also easy to see why big investment houses would want to go this route instead.

Perhaps they will end up doing a combination of the two, perhaps they already are, as many people like to claim.

Pump up prices, get retail investors excited, short the market, make some well-timed sell-offs and profit on the way

down as well. Rinse and repeat.

In a normal market this would get you shut down for market manipulation. But crypto is far less regulated than traditional markets. Although, like most of the things I've talked about today, that too changed over the course of 2018.

See *Crypto Wire* [issue 4 – Tokenising the world](#) for more on that.

In Q1 2019 will see ICE launch Bakkt and Fidelity launch Fidelity Digital Assets.

I have written about Bakkt many times before, so I won't bore you with that one again. But Fidelity Digital Assets is not something I've covered much.

This is a big deal, as Fidelity is one of the biggest asset managers in the world. It had over \$2.5 trillion assets under management in March 2018. And believes that eventually all assets will be tokenised.

In Fidelity's own words:

*We envision a future where all types of assets are issued natively on blockchains or represented in tokenized format. It all begins with a full-service, enterprise-grade platform for securing, trading, and servicing investments in digital assets.*

If you want to know how this will happen, have a look [at issue 4 of Crypto Wire](#).

As these two major investment houses open up their crypto shops, it's hard to say what effect it will have on the price. But it will certainly bring a great deal of interest from investors and the media alike.



## Areas I will be looking into in the coming months

I covered a many key areas of crypto in 2018, but we still have a lot left to explore.

A few that I intend to cover early on are identity, gaming and social media platforms.

In terms of identity, crypto will be change the rules of the game. No longer will you need to trust company databases to keep your information secure. You will only grant them brief access to your data to verify your identity.

In terms of social media platforms, crypto will let you retain all you private data and all the content you've produced. The platforms won't own or have access to it. The power dynamic will shift in favour of users and content creators, and away from the platform that houses them.

In terms of games, well, the top dApps by transaction volume are games. And crypto- based games – surprise, surprise – create a very different business model to the ones most games follow today.

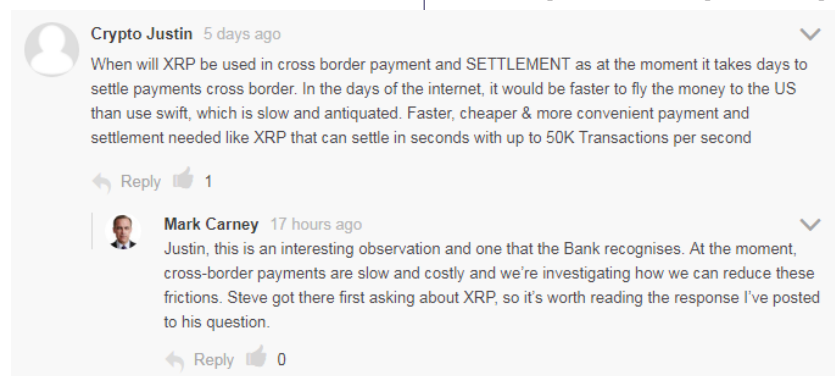
As Coinbase wrote in December 2018:

*Blockchain represents a fundamental business model shift: from value extraction in **closed ecosystems** to value capture in **open ecosystems**. The problem is that, while incumbents have figured out how to extract value in closed ecosystems (restrictive monetary policies, locks on transfers, fees, etc.), new entrants have yet to figure out how to capture value in open ecosystems.*

I'm also going to be taking a deeper look into what Ripple

is doing. Many in the world of crypto like to hate on Ripple. They say it isn't a true crypto, its founders have too much control and its applications don't even use XRP.

Over the course of 2018 a lot of that changed. And in an online interview I read with Mark Carney, even he says it's on his radar.



You can read all the questions and his replies [here](#).

I also thought this reply he gave to someone asking about using cryptocurrencies in the economy was very interesting:

*Money is defined by how well it serves as a store of value with which to transfer purchasing power from today to some future time; a medium of exchange with which to make payments for goods and services; and a unit of account with which to measure the value of a particular good, service, saving or loan.*

*The Bank of England's view is that cryptocurrencies do not meet these criteria, so cannot be considered as money.*

*Cryptocurrencies are proving poor short-term stores of value. For example, in November last year, Bitcoin lost over 40% of its value in less than 2 weeks.*

*Crypto is also an inefficient*

*media of exchange. No major high street or online retailer accepts Bitcoin as payment in the UK. For those who can find someone willing to accept payment for goods and services in cryptocurrencies, the speed and cost of the transaction is slower and more expensive than payments in sterling. For example, Visa can process up*

*to 65,000 transactions per second globally against just 7 per second for Bitcoin.*

*Given that they are poor stores of value and inefficient and unreliable media of exchange, it is not surprising that there is little evidence of cryptocurrencies being used as units of account. Retailers that quote in Bitcoin usually update at very high frequency to maintain stable prices in traditional currencies such as US dollars or sterling.*

His main argument against cryptocurrency is that it fluctuates in value, is too slow and is expensive to use in fees. Well, as I mentioned earlier, the stablecoin DAI has already solved two of his three objections. And when Ethereum scales (soonTM) it will solve all three.

I guess then he'll just have to do away with the logical arguments and go back to the moralistic ones. Money laundering, drugs and terrorism arguments will never let him down the way logical ones will.



## Your letters

Thanks to everyone who wrote in over Christmas. I always enjoy getting your take on what I'm writing about and the wider crypto market in general.

There was one email in particular I thought I should publish here and attempt to answer, from JD.

*Hi Harry,*

*I always enjoy your work and think it has a valuable place in the SBR constellation.*

*A few requests/observations.*

*IOTA is one of my largest positions, behind only BTC and ETH. But I think it would only be fair and objective to cover both the massive army of fanboys and shills - a vocal and aggressive group who shut down any attempts at critical debate and who seem to me to be far larger in size than those of VET - and the dysfunctional relationship behind the scenes between the founders, especially (but not limited to) the leaked transcript of Sonstebo, Ivancheglo and Schiener.*

*Secondly, a request.*

*Token economics. Personally, I struggle to understand the different models that underpin tokens. The furthest any analyst at SBR goes is to state the hard cap and then assert that if the product/service/token takes off then the nature of a finite supply means prices will rocket. Maybe so. But competition, price discovery and market efficiency will still apply. There is a point where the value/price of a token cannot exceed the value of the service/utility it provides.*

*It seems to me to be a crucial aspect of making informed decisions about whether to invest in a token or platform. And of recommending picks to subscribers.*

*An issue or two on this would, I'm sure, be of massive help to a lot of subscribers.*

*Finally, keep up the good work!*

*Best  
JD*

Firstly, yes I completely agree that IOTA has its own shill army. Although from what I see, they usually spend more time defending IOTA – and they can be aggressive in doing so – than actively promoting it.

If IOTA works in the way that it's supposed to, it will render most other cryptos obsolete. And because of this, it draws a lot of negative attention from other projects.

However, I have yet to see a criticism that hasn't been addressed and or fixed by the developers.

But that doesn't excuse the behaviour of some of its fans. Having a shill army is a double-edged sword. So I'll repeat what I said about VeChain's shill army. The sentiment is the same:

*There is also the problem of VeChain's army of online shills. This can be a good and a bad thing. As I said with the H&M video, they got the word out fast. But, as I said in the partnerships section, they are eager to hype up news which may not really deserve to be hyped up.*

*However, it could just be a few loud voiced just giving an otherwise great community a bad name.*

*From what I see online, many VeChain supporters are very knowledgeable and not in any way hostile.*

*They seem to want blockchain in general to succeed and not just VeChain. And what would a company like Apple be without its super fans? VeChain has these kind of followers in spades.*

JD's second question also needs addressing, that of token economics.

## How to value crypto

There are a few different ways to argue why a token should be worth something. But I would say they mainly boil down to:

**Scarcity**  
**Prestige**  
**Power**  
**Income**

Different cryptos favour some of these four characteristics more than others, but the thing they all have in common is scarcity.

If there is a finite supply of something, only certain people can possess it. The more finite it is, the more that thing tends to be worth.

When countries print more money the value of their currency drops. When companies make their products in limited editions, their products are worth more. If we started mining asteroids for gold, it would completely disrupt gold prices.

This is why most cryptos have their supply limited. To set a baseline.

Where this argument falls down is when you just create another crypto – for instance Bitcoin Cash as well as bitcoin. Or Litecoin as well as bitcoin. Or Vertcoin as well as bitcoin... you get the idea.



Some people argue this means that bitcoin is no longer scarce. You can just create another variant of it and dilute the supply.

But it's not really diluting the bitcoin supply at all. No matter how many copycats there are, there will still only ever be 21 million bitcoin.

Again, this is why I find it hard to see the argument for other currency cryptos.

Still, scarcity isn't a great reason for things being valuable. Major works of art aren't just valuable because they are scarce, their scarcity is tied up in their artistic merit.

This brings us on to prestige. When you combine scarcity with prestige, things can get very expensive very fast. Think antiques, art works, wines, historical documents, etc.

Arguably, owning bitcoin could be seen as a sign of prestige, especially if the price goes up.

In theory, only 21 million people will ever be able to own a full bitcoin. But the real number is far lower than that. Millions of bitcoin have been lost. Four million in fact, Fortune estimated in 2017.

That means only 17 million people will ever be able to own a whole bitcoin at the very, very most. But most people won't ever own a whole one. Bitcoin is divisible down to eight decimal places.

Most holders will only ever own a fraction of a bitcoin, and many more will own more than one. So there will actually be far fewer than 17 million people that ever own a full bitcoin.

There are currently 36 million millionaires in the world. Half of them would not be able to own even a single bitcoin at

any price. Suddenly that makes owning a bitcoin seem a lot more prestigious.

The next main reason tokens can be valuable is power.

Many tokens give voting rights to holders. The more tokens you have, the more weight your vote carries.

You can think of this as similar to how shares work in a traditional company. Only there is a lot more opportunity to vote in crypto, and votes can decide the entire direction of the project and its protocols.

It's fair to say, the want of power is deeply engrained in human nature. "The will to power" was the fundamental basis for Nietzsche's famous branch of philosophy.

But more tokens and you get more power over the thing you're investing in. But there is only a finite supply, so the more you buy, the more power you have and the less someone else can get.

Finally there is income.

Many tokens pay you for holding them or reward you for securing their system in some way – think Proof of Stake. Think Neo's Gas. Think bitcoin's rewards to miners. Think Ethereum's (eventual) reward for stakers.

This is part of my "owning the land" analogy.

The idea of getting an income in crypto simply for holding it, or for securing its network has a strong draw.

If you take all of the above reasons for a token's value, and add in the fact you can get more of it simply for holding it, that makes you want to hold more of it and reap the benefits of compound interest. At least, it does for me –

and for many others.

Those are some of the main reasons I believe crypto tokens have value. It is by no means an exhaustive list, but I think it covers the fundamentals.

Let me know if you agree or disagree: [harry@southbankresearch.com](mailto:harry@southbankresearch.com).

Thinking about it a bit deeper though, it's difficult to argue the value of, well, anything that's not necessary to survival.

After survival it just comes down to our desires to lead a better life – and that better life looks different for different people in different situations.

At the end of the day, many valuable things are valuable simply because people believe them to be valuable.

I've never seen an objective measure of value. I know some people who would argue that money itself is valueless, at least to them. And in certain situations it genuinely is. It is merely a record of what's owed.

For instance: there are two people trapped on a desert island, with no hope of rescue. One has a supply of food and water. The other has £1 million in cash. In that situation, which person's possessions are worth more?

I think you can prove that almost anything not essential to survival is actually valueless.

At the end of the day value just comes down to one thing.

Something is worth whatever someone is willing to pay for it.

Until next time,

Harry Hamburg  
Editor, *Crypto Wire*