

CRYPTO A.M.

Our series on AI, Blockchain, Cryptoassets and Tokenisation

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PARTNER CONTENT

CITY A.M.'S CRYPTO INSIDER

JAMES BOWATER



The clocks have gone forward over the weekend, and time never stands still in the Crypto market.

Bitcoin (BTC) has had a bullish past month, settling at above the \$4,100 level. Interestingly the altcoins have had a good past month eroding BTC's market dominance (percentage value of overall Crypto market) to 50.13% and, at time of writing, are trading at US\$4.130.20; Ethereum (ETH) at US\$142.31; Ripple (XRP) at US\$0.3123; Binance (BNB) at US\$18.20; and Cardano (ADA) at US\$0.07. Overall market cap has risen nearly nine per cent since the last Crypto A.M. at US\$145.29bn (data source: www.CryptoCompare.com)

Last Friday (29 March) the US Securities & Exchange Commission (SEC) announced a further delay on the two Exchange-Traded Fund (ETF) applications it is considering from Bitwise Asset Management/NYSE Arca, which was put back to 16 May, and VanEck/Solid X, which was put back to 21 May. Commentators still firmly believe that eventually an ETF proposal will satisfy the standards required by the SEC. The Crypto community will collectively no doubt hope that 2019 will see an approval.

There have been a few several bullish pieces of news from Japan, however. E-commerce giant Rakuten has announced that, having received regulatory approval from Japan's Financial Services Agency, it is to launch its own cryptocurrency exchange. The 'Rakuten Wallet' is set to go live in June.

Cointelegraph Japan reported yesterday that the Coincheck cryptocurrency exchange will launch a BTC over-the-counter trading desk for large-scale institutional investors. They have indicated that, in the future, they will consider adding support for other crypto currencies.

Japan Railways Group is reportedly looking to add cryptocurrency payment options for travellers. According to mainstream commercial news network ANN, the JR Group could establish cryptocurrency payment options through a partnership with a major bank, which could also see it launch a cryptocurrency company, believed to be an exchange.

Separately, one business sector that I believe could benefit from the application of blockchain technology is the auditing industry. How will the 'Big Four' respond?

I met AuditChain founder Jason Meyers last week to learn how they are transforming the audit and reporting profession. AuditChain proposes big changes to how enterprises plan and operate in the digital age. "We're entering the age of the programmatic enterprise, which requires continuous 'Bitcoin-style' external validation with real-time financial disclosure," he told me. If the proliferation of utility and security tokens hasn't moved regulators to modernise, could AuditChain's disclosure framework for digital asset issuers cause regulatory disruption? Watch this space.

In an incredible behind-the-scenes 227-page presentation given to the US Securities & Exchange Commission (SEC) by Bitwise Asset Management et alia last month, a damning indictment of the Crypto-space was made with substantial analysis and evidence of spoofed volume, 'wash trading' and irregular activity.

In an effort to improve the reputation of Bitcoin and future Cryptoassets, Bitwise's report outlines several examples of fraudulent and 'suspect behaviour' on the majority of crypto exchanges, including naming large exchanges such as Coinbase, Lbank, BitForex and OkEx. In a conclusion made by Bitwise 'just ten of the 81 top exchanges are revealed to have actual volume': cited to be Coinbase, Kraken, Bitrex and others.

The list of abusive practices is numerous, from trade printing, wash trading, monotonic trading volume, irregular spreads and spoofing adjusted daily volumes. These all point towards a rotten core within the industry of misleading investors and companies into a false sense of security around the exchanges they interact with.

In the race to appear as the most active and liquid exchanges around, wash trading is rampant. Coinbase, one of the 'suspect exchanges' of the report, fails three vectors of analysis - trade size histograms, volume spike alignment and spread pattern analysis - in comparison to patterns of 10 'real exchanges' that seem to have similar trends.

WASH TRADING EXPLAINED

Wash trading, typically deployed by exchanges, market makers or companies, is the use of liquidity in forms such as: native tokens, Ethereum and Bitcoin. Programmes are then used to recycle buy and sell orders on exchange, creating a higher reported daily volume and used by many traders and investors.

Wash trading helps give the appearance of an activity traded Cryptoasset, and implies liquidity within that asset. Very difficult to spot, wash trading is the buying and selling of tokens with orders seconds apart and within very small variations. Worst of all, it's free to recycle these tokens, as markets both internal and external to exchanges often have



WASH TRADING AND FAKE VOLUME EXPOSED

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zero per cent trading fees.

With malpractices currently deployed, many will be looking at their favourite tools such as CoinMarketCap (CMC) to gauge how their investments are doing, unknown to many that much of the volume is fake and there may not lie any real liquidity behind some tokens.

Polarising rapidly, it is estimated that the real market volume, when adjusting for fake reported volume and wash trading, is an astonishing 95% smaller than reported. Reported volume in March in a four-day period was \$6bn - which was estimated to have an actual volume of \$273m.

It's a widespread practice in the industry and currently the main mechanism

against fighting a market correction. Another side of wash trading is the flourishing avenue of exchange tokens - giving investors reduced fees or access to exclusive investments. Asset management of exchange tokens is often, in the real world, this is market abuse and illegal, so why not in Crypto?

Recent conclusions have also been published by other bodies. A Blockchain Transparency Institute report found that two of the top five reported liquidity pairs have less than one per cent of their reported volume.

LET'S TALK ABOUT SEC

The push to approve a Bitcoin exchange-traded fund (ETF) is underway with

more resources and efforts being drafted to satisfy SEC requirements. There is clear polarisation occurring in the industry between 'Crypto' and 'Blockchain'. Institutions are looking for all angles to distinguish away from the reputation of the 'Cryptos'.

The presentation to the SEC suggests that Bitcoin is uniquely resistant to market manipulation and fraud, a long-held concern of the SEC. Previously, the SEC has outlined two possible approaches to satisfy their requirements: showing unique resistance to market manipulation and fraudulent activity, or surveillance sharing (private agreements to share market surveillance with regulated exchanges), in

order for the SEC to approve a Bitcoin ETF. This, the crux of the situation on the Bitcoin ETF, giving rise to never-ending delays and rejections. Three arguments put forward around fungibility, transportability and exchange tradability form the basis of the Bitwise argument.

BITCOIN FUTURES: A REAL CONTENDER

Institutionalisation of the market is happening through the back door. Here's why - actual volume of Bitcoin Futures on regulated exchanges is growing to be a significant contender, with an actual spot volume and futures volume of the market between 4-

8 March of \$273m and \$91m respectively, according to the Chicago Board Options Exchange (CBOE).

Futures volume is growing rapidly. In fact, in February Futures volume represented 35% of global BTC spot volume. For those not familiar with futures, the CME futures market is nearly as big as Binance for Bitcoin with Spot Volume, at \$84m and \$110m respectively.

The institutional face of Crypto and Blockchain is gaining traction and starting to form a shadow over the classic characters, which are struggling to maintain a foothold.

In order for Cryptoasset markets to mature, regulation typical of the traditional markets is needed that protects



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investors and traders.

As Cryptoassets grow, more institutions step into the ring, hostile players in the space will be relegated to operating in offshore havens with shrinking user-bases, vulnerable to the oscillations of manipulated markets.

The reports by Bitwise, venture companies and concerned communities are a welcome spotlight in 2019.

Arnie Hill aka Crypto Arnie (Twitter: @The_CryptoArnie) in conversation with James Bowater

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Crypto A.M. shines its Spotlight on Crowd for Angels

Andrew Adcock is CEO of Crowd for Angels, a leading player in the UK crowdfunding market, having helped to raise several million pounds of growth capital for dozens of companies. *Crypto A.M.* asked him whether tokenised securities are the future of fundraising.

or a company looking to digitise its cap table (shareholder register). This gives me an honest insight into the pulse of how the security token industry is developing.

IS THERE A MARKET FOR STOs?

While STOs might not yet be seeing the boom times that initial coin offerings (ICOs) did in late 2017, recent trends suggest that security tokens might become more popular than their

WHAT IS A TOKENISED SECURITY?

A tokenised security is type of Cryptoasset that exists on a blockchain but with the key characteristic that it meets the FCA's regulatory definition of being a 'Specified Investment', like shares or a bond. Tokenised securities are classed as securities because they grant certain rights to holders associated with traditional securities, like ownership, voting rights or rights to a share of the profits.

HOW TOPICAL IS THIS?

Barely a day passes without an email sliding into my inbox promoting an upcoming STO (Security Token Offering)



Andrew Adcock, CEO, Crowd for Angels

unregulated cousins in the not too distant future. According to figures from the March 2019 ICO/STO report from Strategy&, in 2018 there were 28 STOs which raised a total of \$442m. This was up markedly from just two STOs in 2017 that raised a combined \$22m. In contrast, the report noted a marked slowdown in ICOs in the second half of the year.

WHAT ARE THE BENEFITS FOR COMPANIES?

Our vision is that STOs will continue to see growth this year and next as companies see the benefits of having digitised securities. To give one example, if a company's cap table is digitised it tracks a blockchain token representing the company's equity, showing a fluid number of token holders. The removes the

administration burden from the company and gives it the underlying assurance that those holders are known. Supporting my view, cap table digitisation is already being implemented by companies and is supported by the UK government.

WHAT IS CROWD FOR ANGELS DOING?

To date, the financial instruments issued by our clients to investors have been traditional shares and bonds. However, in 2017 we began to take advantage of opportunities in the blockchain field by offering investors access to Cryptoassets and the ability to invest with Bitcoin. As an FCA-authorized company itself, Crowd For Angels believes it looks well placed to take advantage of the growth opportunities in the STO arena. One example of a company looking to raise funds on Crowd For Angels via a tokenised security is whisky investor Oak Group. Headed by a team with backgrounds in the asset and fund management industries, Oak is an investment vehicle focusing exclusively on investing in bottles and barrels of rare whiskies. Oak Group will issue the Oak Token, with the aim being to provide investors with transparency. Every transaction, purchase or sale will be documented on their blockchain ledger, allowing for a portfolio to be examined on an ever granular view.

For more information see www.crowdforangels.com



CRYPTOCURRENCY - BEFORE YOU INVEST...

Troy Norcross, Co-Founder, Blockchain Rookies

Bitcoin was the original cryptocurrency and it was designed to provide two primary functions.

First, it was designed to reward those people who chose to invest time, energy and resources into running the bitcoin network. Second, to act as a peer-to-peer currency free from the influence of banks and governments.

Bitcoin is a digital currency and, by itself, they have no value. The coins are not backed by any asset or by any government. The only reason they have value is that there is demand for the coins to serve the purposes of either store of value, a medium of exchange or both. Coins can act like digital bars of gold or they can act as currency for

everyday transactions. Supply and demand drive the price of these currencies.

Some companies create coins to represent equity or other value in their underlying business as a means of raising capital. The scope, purpose and definition of these tokens vary depending on the offering and must be fully disclosed as part of new regulatory frameworks and guidelines.

Other tokens are not connected to the operation of a public blockchain but are required to operate a service built on top of a blockchain. The value of these tokens is connected to the demand for the underlying service. The more likely the service is to grow and thus creates demand for the tokens, the more likely

the value of the token will increase.

What links all of these cryptocurrencies is their underlying technology - blockchain. All cryptocurrencies have an underlying blockchain providing services for recording each and every transfer of value in a public, transparent, and immutable ledger.

Before you invest in cryptocurrency ensure that you understand if you are investing in store of value, a medium of exchange, an equity related to a company, or only the right to use a service built on a blockchain.

Get in touch with us: info@blockchainrookies.com / [Twitter @getblockchain](https://twitter.com/getblockchain)

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WIREX MARKET VIEW

Android malware targets Crypto

In what was a generally-positive week for Crypto, discovery of a new generation of Trojan malware that targets Crypto assets has caused concern.

The 'Gustuff' malware targets Android devices and aims to disrupt applications of major exchanges and banks, according to Moscow-based cybersecurity firm Group-IB. Dubbed the 'Weapon of Mass Infection', Gustuff is fully automated. Hackers use text messages containing malicious links and fakes websites that mirror legitimate apps in order to obtain data from users. Group-IB reported that the malware has targeted more than 30 Crypto exchanges so far, including Coinbase, BitPay and Bitcoin Wallet.

The start of last week saw a drop in crypto market cap to \$137bn but the markets had rebounded to the \$143bn mark by the weekend.

Bitcoin's daily trading volume stood at around \$6.7bn early last week before reaching \$9.25bn at the weekend. BTC is trading at \$4,177 and retains a market cap of \$73.6bn. Ethereum started off last week toggling between \$133 and \$137. Midweek saw the price climb to \$139 and it moved within a \$1 range until Friday, when the price increased by 5% to \$146 on Saturday. By midweek Ethereum's daily trading volume was at \$4.3bn and Saturday saw a repeat of this figure.

As Crypto gains popularity and more use-cases for blockchain come online, it is unsurprising to see big retail brands jump into the fray.

Luxury-goods group LVMH is launching a blockchain-based system to help prevent the proliferation of counterfeit goods by authenticating luxury products. LVMH has been collaborating with Ethereum development studio Consensys and Microsoft Azure, and the new system will initially be used to track the supply-chain of the Louis Vuitton and Christian Dior perfume brands.

Coinbase has added Stellar Lumens (XLM, 0.47%) to its Earn programme, which is aimed at rewarding users who complete educational courses on various coins. Users may earn up to \$10-worth of XLM for successfully completing lessons, and a further \$10 XLM for each user they refer.

Exchange tokens are grabbing the headlines this year - their popularity has been driven by the initial exchange offering model (IEO). There has been significant interest in cryptocurrency exchanges that already host IEOs or intend to list soon. The popularity of these tokens was likely encouraged by Binance's BNB, resulting in other exchange tokens moving in tandem. It will be an interesting space to watch.



From three months to a week

What if "the slowest database ever invented" could speed up the real world by a factor of 10, when other

process of a property from up to 90 days to just over a week? This would be pretty impressive. Especially since we've had database technology for decades and been unable to achieve anything of the sort - for good reasons we know and understand, to do with the necessarily independent governance of all of the parties involved: buyers, seller, surveyors, lenders, insurers, etc, and not least, in addition to this, their legal representatives. Not forgetting HM Land Registry of course.

Let's put them all together on one database, I hear you say. But here's the rub: who will own it? Who will run it? How can it be policed? How will the independent governance of all these different parties be maintained? That in a nutshell, is why HM Land Registry has been unable to do this in the past 30 years.

In Estonia, as in the UK, this process can take 90 days - or it used to. In Estonia it now averages eight days - with commensurate cost savings, no doubt, since the many human steps necessary for realignment and cross-checks, most of the friction, is no longer necessary and so has been removed.

Which is why HM Land Registry, together with Blockchain Digital and 39 other global partners, have this month begun a trial using 'the world's slowest database' to speed things up.

The point being that this technology is no mere database and is more than a 'distributed ledger' - evident in that fact that blockchain can do a number of things that ordinary database technology could not and still cannot. Mostly deriving from its ability to connect together or communicate between any miscellany of data sources or databases. While they each keep their 'sovereignty' (governance) intact. They do not need to be in the same database, or

indeed insider the same perimeter. The implications of this are enormous in enabling us to do many things that were inconceivable before.

Shared workspaces to progress transactions, such as the 'instant property network' that HM Land Registry is testing, are extraordinarily powerful - with many, many applications.

Add to this to the many new ways of doing things that are enabled by the ability to fractionalise assets and make micropayments, including micro-insurance, rewards and incentives, fluid ownership, and the picture explodes. All things that are impractical with ordinary databases, no matter how fast.

Plus, of course, real-time audit and fine-grain traceability - also in real-time - and what else might you need to complete the picture of a revolution? Self-sovereign digital credentials perhaps - throw that in, too.

To compare this technology to a database is to compare a racehorse with a work-horse, or a F1 car with a combine harvester. Fine if all you need is to 'go fast' in a closed environment. But if you need to get out there in the real world and get real work done, neither are going to last very long under real-world working conditions 'in the field'.

So as we consign this 'database' canard to history - it always was a case of painful shoe-horning - it's great to see the Blockchain APPG providing some great grist to the mill in the form of a set of 10 video case-studies or real, existing and built, blockchain, real-world, applications. They're summarised in 'Frontier Insights' live at bbfta.org/insights.

After 40 successive weeks this will be my last column for a little while - see you here in a month or so. Meanwhile, do join us at bbfta.org.

By Barry E James, chair of bbfta.org and founder, Token Intelligence.