

CRYPTO A.M.

PARTNER CONTENT

CITY A.M.'S CRYPTO INSIDER

JAMES BOWATER

So I brought the spring sunshine back from Spain, where I have been for the past two weeks, to glorious London Town – you're very welcome!



Yoni Assia, founder and CEO of eToro, announced yesterday on Twitter that eToro has agreed to acquire Danish blockchain firm Firmo to accelerate eToro's growth in tokenised financial assets. In a phone interview with Bloomberg he said 'this acquisition is a game-changer for eToro as it will help boost our growth in the future tokenised economy, we aim to be active players in blockchain consolidation'.

Also of note this week is that since adding Cardano to my watchlist it has been growing in value with the launch of Cardano 1.5, and has just entered the 'top ten crypto firm by market capitalisation' list, displacing Tron (TRX).

Bitcoin (BTC) finally settled at just over the \$4,000 mark for most of last week and has been pretty stable. However, at time of writing, it is trading at US\$3,975.55. Ethereum (ETH) is at US\$134.41; Ripple (XRP) at US\$0.3036; Binance (BNB) at US\$16.45 and Cardano (ADA) at US\$0.05830. Overall market cap has risen just over four per cent since the last *Crypto AM* at US\$139.13bn (data source: www.CryptoCompare.com).

This week I reconnected with a long-standing friend Arthur Davis, chief executive of RACE-CAP. Having been involved with nChain Holdings, which he sold in June 2017, he has come out of stealth mode to launch RACE-CAP. It promises to be an exciting add-on to the industry. Together with industry pioneers and heavyweights Jon Matonis and Roger Ver, he is building an integrated frictionless platform to manage the transition from traditional money into the emerging digital asset world.

For the average person, crypto is complex and requires multiple counter-parties to operate with blockchain assets seamlessly. Davis and co's soon-to-launch RACE-PAY app promises to offer consumers a serious banking competitor with state-of-the-art blockchain tech in a practical, simple-to-use hybrid banking and digital app.

London's blockchain community has become close-knit and last week I had the pleasure of meeting up with Natalie Furness and Susan Maddison. They co-founded Women in Tech Revolution in 2018, leading the way in celebrating the technologists, creative and business leaders in blockchain and industry 4.0. Together they have built a community on a mission to achieve gender parity in technology by 2030.

The committee has been working hard to disrupt London's emerging tech scene with events and initiatives for techies and non-techies to share skills and knowledge. Their next event is this Wednesday (27 March) evening in the City, with tickets available on Eventbrite and www.witechrev.com.

Our series on AI, Blockchain, Cryptoassets and Tokenisation

A long time has passed since blockchain technology was created in 2008 with Satoshi Nakamoto's bitcoin white paper.

This was the period of the global financial crisis. Some banks went to the wall, and others that were deemed too important or 'too big to fail' were bailed out. This bailout happened through the process of quantitative easing (QE) and central banks literally printing money out of thin air. Satoshi referenced this happening with the line 'Chancellor on the brink of second bailout' worded into the very first block on the bitcoin blockchain.

BLOCKCHAIN'S NEW DAWN

Blockchain being born at a time of little trust in the banking system was not a coincidence. Many people before Satoshi had seen this abuse by those with power but were unable to see a way to change it.

Having a system with no centralised control, complete transparency for all, a clear audit trail for anyone that wishes to look into it, on an immutable, append-only ledger is an anathema to the way that things had been previously.

It's so easy to see no other way of doing things, if that's the way it's always been done. We have had to trust government. We have had to trust the central banks. We have had to trust our news sources. We have had to trust our pension providers – the list just goes on.

We are now ten years on from bitcoin's inception.

Trust and transparency are now an opportunity for businesses – if you step back from it all, the fact this has not been the norm seems crazy. According to a recent survey by Deloitte, more than 40 per cent of businesses are calling blockchain one of their top five strategic priorities.

Enterprise is now seriously looking at the possibilities of business and industry transformation through blockchain, and the wider distributed ledger technology (DLT) world.

It is really important to note that blockchain itself is simply a fancy ledger, distinct through its distributed, decentralised and immutable nature. It is a



CAN BLOCKCHAIN RESTORE LOST TRUST?

Designed by
Phill Snelling,
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part of digital transformation, rather than being digital transformation.

FROM SHIPS TO WHISKIES

Where blockchain truly comes to life is through using additional technology to record multiple moments, immutably.

An example could be a logistical supply-chain that is using blockchain and Internet of Things (IoT) devices to measure and record chilled cargo temperatures on shipping containers, writing the information into dedicated blockchains every ten minutes along

side GPS tracking. Potentially, if there was failing refrigeration, you could re-route ships to closer ports based on AI understanding of the collected data.

'Crypto-anchors', which are like ink dots or tiny computers (smaller than a grain of sand), can be built into multiple physical goods and even everyday devices and objects. As an inert molecule, a crypto-anchor can be blended into high-value alcohol (think expensive whiskies) where counterfeiters have been known to use the empty bottles of these high-priced items and fill it with

their cheaply made knock-off booze, or olive oil.

Everywhere we look in our lives, it is easy to see how we trust so much, and maybe that trust hasn't been deserved.

Just last month, the Canadian Food Inspection Agency (CFIA) warned that poor olive harvests are likely to lead to a big increase in adulterated olive oil this year. Olives to olive oil has a long journey: from the tree to the mill, then on to the bottling plant before distribution over land and sea to reach the store.

There are multiple places for shadi-

ness to occur within this journey. Through the use of blockchain, crypto-anchors, IoT and real-world oracles, it starts to become a much fairer, cleaner and more transparent supply-chain, which, in turn, can boost consumer trust.

IDENTITY CAPABILITIES

A significant element of blockchain's adoption and overall success will be the ability to provide a completely new series of concepts and capabilities around identity.

Beyond identity for individuals, blockchain will allow companies to have their own identity. It can even allow for the millions of IoT devices to each have their own identity and thus to interact with other devices in the wider world.

Blockchain can even allow for situations or events to have an identity. Think about a car crash having a unique identity: the cars involved, location, time of day, weather and all the other characteristics that make up the identity of that event, and how those things impact insurance and insurance claims.

With secure and trusted blockchain-based identities we will be able to have frictionless movement for highly specialised and qualified doctors or surgeons who have studied and practised



'Crypto-anchors' can be built into physical goods and everyday objects

for years in emerging countries, but when leaving those places are unable to have their work or qualifications validated. Healthcare records will be transportable and digital, enabling people to have access to the right drugs should the worst happen when travelling, expediting any care that might be needed.

In the not-too-distant future, blockchain will simply become invisible – and trust will be the standard.

Jon Walsh, associate partner at Blockchain Rookies, in conversation with James Bowater

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WHEN DO YOU PUT DATA IN A BLOCKCHAIN?

Troy Norcross, Co-Founder, Blockchain Rookies

There are 67 episodes of the American fantasy drama TV series *Game of Thrones*. The entire series in a single video file would be 26.8GB. What would you think if I asked you to insert this 26.8GB file into an Excel sheet and then give a copy of that file to 10,000 people? Crazy, right?

A website serves more than 450 million banner ads a day. What if I told you that you needed to pump a live feed of information on every ad into an Excel sheet. And then, keep 100s of copies of the Excel sheet constantly in sync. Again, crazy?

In both cases, it is a little like putting roller skates on a blender. You could

do it, but you wouldn't. You could put 26.8GB video file into Excel sheet and you could put 450 million rows of data live-streamed into an Excel sheet, but you wouldn't.

The key is to put only the most relevant data into the Excel sheet and at a rate that makes sense. For *Game of Thrones*, you put a location of where to find the video file and a licence key for every user in an Excel sheet. For the ad impressions, you make an entry for daily or hourly summaries.

The same is true for blockchain. For each use-case, you decide the most relevant parts of data and the frequency of when to write onto

the blockchain. The rest of the data can be stored in either a distributed file system such as IPFS (InterPlanetary File System) or off-chain entirely.

Good blockchain design requires an understanding of the data available and what subset of that data needs to be stored in a distributed immutable ledger such as a blockchain.

And we haven't even started to talk about data considerations such as the General Data Protection Regulation (GDPR)...

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WIREX MARKET VIEW

Ethereum's competitive challenge

Ethereum has been in the spotlight after a candid comment from founder Vitalik Buterin. In an interview with journalist Laura Shin, he said that Ethereum may be losing some of its hold on the smart contract blockchain ecosystem. He attributed this to competition and the fact that new players are able to iterate and improve on existing protocols.

The price of Ethereum, however, is holding steady, maintaining its position of second place. Last week ETH traded around \$142.7, with lows of \$135.86.

XRP was stable, trading between \$0.320777 and \$0.309338 and Bitcoin traded around \$4,000 with a high of \$4,097.36 and a low of \$4,005.15. Fundamentally, there have been no major developments or events that have influenced the markets.

Underscoring the increasing adoption of blockchain in business, IBM's blockchain payments and settlement network, World Wire, announced that six additional international banks have shown interest and intent to use its Stellar-based protocol. World Wire facilitates cross-border transactions for regulated financial institutions and enables banks to issue their own stablecoin or fiat-backed tokens.

Leading anti-money-laundering (AML) compliance software solutions company Elliptic says regulators will soon be levying

significant penalties for AML/CTF compliance violations in the crypto space. In a recent article, they said regulators will be paying particular attention to privacy coins as they are becoming increasingly popular with criminals. Some regulators are already acting against these coins, preventing exchanges from listing them.

The BlockFi Interest Account (BIA), which gives investors a return despite the direction of the markets, is gaining traction with investors. They have attracted \$35m in investments since their launch and grown by more than 400%. In a recent move, BlockFi adjusted its interest rates to favour retail investors, allowing them to benefit from their 6.2% annual percentage yield (APY). BlockFi says that despite demand from crypto hedge funds and VC firms, 75% of BIA customers have an account balance of \$7,000 and they intend to grow this consumer-focused market. BlockFi developed a dollar-based cryptocurrency lending fund that allows holders of Ethereum and bitcoin to borrow money, while using their crypto as collateral.

A weekly update would not be complete without a scam story. Indian officials have taken four suspects into custody after discovering a scam involving a fake cryptocurrency (Cash Coin) that took \$14.5m from several local investors.



TOKEN INTELLIGENCE
TokenIntelligence.io

Crypto 'fog of war' is clearing

It's been incredibly difficult to really get a handle on the development of blockchain technology over the past few years.

This is partly because of the rapid pace of recent developments. Also, research and development is decentralised. There are many thousands of start-ups, plus many more projects located inside existing organisations, with no central point of reference.

This is new. It was never so with the internet. This time, like blockchain technology itself, it is decentralised and permissionless. Paradoxically, distributed ledger technology (DLT) projects beloved of banks and incumbents require no permission to reinstate a central authority into their 'solutions'.

So where do you go to get authoritative information?

It's actually worse than all this – or has been. Three more layers have served to obscure what I now think of as the 'Blockchain Iceberg'.

The first is bitcoin, or rather all the chaff and propaganda put up by incumbents to blacken the name of bitcoin itself and cryptocurrencies more generally – some of this (at least part of the time) rubbing off onto blockchain projects and ventures. It's hard to get a meaningful conversation started in many boardrooms because of the miasma of fear and trepidation deliberately created around the area. Some will soon find themselves under threat from competitors that have embraced the technology.

The second layer that has been obscuring the iceberg, and what's really going on, are (paradoxically) cryptocurrencies themselves. Or, rather, the attraction they have for those seeking to 'get rich quick'. As a result, speculators have dominated the conversation pretty much across the board.

On a recent *Forbes* blog, Gloria Zhao, head of student-run organisation Blockchain at Berkeley, says that it is only recently, as a result of the 'Crypto Winter', extreme bear market, and those interested only in speculation falling away, that 'we could finally get

down to meaningful discussion'. 'Now,' Gloria is quoted as saying on the blog, 'we are seeing the real builders. These are people who believe in the technology and what it can do instead of focusing just on how much money they can make'.

The third layer is related but not the same: tokens. In particular the massive upsurge in Initial Coin Offerings (ICOs) during 2017 and 2018, which has now slowed (except, perhaps, in Asia) from a torrent to a trickle of projects covering every subject under the sun.

Together they have served to obscure what, after the fog of war clears on a crisp day in the Crypto Winter, now becomes apparent. That much of the real work, the laying of the rails upon which the next economy, after the Fourth Industrial Revolution, will run is being done by a combination of a few handfuls of inspirational ventures plus a raft of more established companies, whose activities are mostly below the waterline.

What is being revealed is, as *'Unblocked'* author Alison McCauley has put it, is that we are at 'a moment in time where foundational systems are being laid, and these rails for a new world are being put into place'.

She warns, too, that the let's-see-what-happens strategy is a highly risky one this time around. While you and your boardroom contemplate ('confused minds say no,' she says), there's every possibility that, as it was with the internet, competitors get there first – with consequences that are only too predictable. Only this time it's happening much faster and the disruption is likely to be deeper (by far).

So, it's time to understand what's already going on around us.

An extended version of this piece is available online at bbfta.org.

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

Crypto A.M. shines its Spotlight on DustAid

Think back and remember the last time you donated to a charitable cause: can you remember what they promised to do with your donation? Did you ever receive any evidence of what they did with the money or the actual impact it made?

Lack of transparency is an ongoing problem in the charitable sector. According to a survey by Fidelity Charitable, 41% of donors say they have changed their giving due to increased knowledge about non-profit effectiveness.

Charities, in the main, have been set up as worthy causes but like every organisation they must deal with issues related to efficiency and prioritisation. It has been estimated that as much as 50p in every £1 of donations in some large charities goes to admin and other expenses.

This brings us nicely to Distributed Ledger Technology (DLT). By placing donations onto a chain, benefactors can immediately see where their donations have gone and even how they have been spent. In turn, the speed and legitimacy of these transactions greatly lowers costs

for the charities themselves and also governments – every party in the chain benefits.

DustAid – a UK-based not-for-profit start-up – is building a fully transparent platform that will demonstrate proof of donation, need and impact.

It will not only allow charities to demonstrate how a donation was made but where and how it is to be used. Projects must set specific milestones for success and donors will receive updates as and when these milestones are achieved.

Using the DustAid banking partner



DustAid is building a fully transparent platform that will demonstrate impact



network, flat transaction fees will also be kept to a minimum. This platform will be seamless for both donor and beneficiary, and DustAid will not take a fee for this

service. To further improve efficiency DustAid has partnered with Helpfor.org to build the largest actionable charity database in the world

DustAid, whose managing director is Duncan Murray (pictured), is working with exchanges to collect all unused cryptocurrency 'dust', as well as partnering other platforms to allow users to voluntarily donate to worthwhile global projects.

The organisation has established a network of donor partners and is in the process of building the largest 'tech for good' ecosystem in the world. This will use technology to help with education, banking, aid, shared internet, healthcare and digital identity.

Billions of previously underprivileged, unconnected and unbanked globally could potentially gain, finding themselves with the help that they urgently require.

The first beneficiaries of all donations received by DustAid will be The Little Edi Foundation, a UK charity that works in Romania and Moldova; Space For Giants, an international organisation to conserve African elephants and the landscapes they depend on; and Ormiston Families, a charity for children and families in the east of England.

DustAid has a launch event planned for early April and expect to begin delivering donations shortly afterwards.

The future of charitable giving is on the blockchain.

For more information see www.dustaid.org