

CRYPTO A.M.

Our series on AI, Blockchain, Cryptocurrency and Tokenisation

PARTNER CONTENT

CITY A.M.'S CRYPTO INSIDER

JAMES BOWATER

I'd like to thank all of the City A.M. readers who were able to attend last Thursday's inaugural Crypto A.M. Keynote and Panel Event at the Forge in the City's Cornhill. A huge thank you, too, to Thomas Power (co-author of Tokenomics - published last week) for delivering a fascinating keynote address and to Charles Kerrigan, Dr Maxine Room CBE, Andrew Rabbitt, JC Oliver, Joe Crawley and Robert Pyke for being such a great and engaging panel. The evening was made to sparkle by the City A.M. events team led by Victoria Salem and of course last but not least the wonderful Rebecca Ferguson, who sang beautifully. We will be reviewing the event in next week's edition.

There has been a significant shift this past week in the Blockchain and Cryptocurrency world with the focus squarely on the custody market for digital assets. This is an extremely important move towards institutional adoption.

At the epicentre of this activity has been Mike Novogratz, the billionaire investor and ex partner of Goldman Sachs. His TSX-V quoted merchant bank Galaxy Digital has become the first custodial client of Fidelity Digital Asset Services LLC, which was launched in October by the behemoth Fidelity which is the world's fourth largest asset manager - counting circa \$7 trillion under management. Headed by Tom Jessop, the Boston-based firm will commence operations in early 2019 with three main services: custodial, execution and client on-boarding. Jessop has reportedly said that this move is a result of sufficient demand from institutions to enter the Crypto space.

Novogratz also hit the headlines by joining forces with Goldman Sachs to invest \$59 million into the Series B funding round of BitGo, the only regulated custodian created exclusively for cryptocurrencies. BitGo was founded in 2013 and, as I have previously reported, received regulatory approval from the South Dakota Division of Banking in September. It has circa \$2 billion of client assets made up of more than 90 cryptocurrencies. Goldman Sachs has previously announced the creation of a crypto specific division but walked from that to focus on custodial services. Whilst this investment is a part of that ambition it will almost certainly now follow Fidelity's lead and create its own stand alone digital asset management company.

Also in the news, the U.S. Securities and Exchange Commission (SEC) is launching a new division with the goal of making it simpler for fintech startups - including those launching initial coin offerings (ICOs) - to navigate the legal implications of their products.



The Bitcoin Blockchain was developed to provide a platform for value exchange between two or more parties who did not know one another and had no basis for trust without a trusted intermediary to facilitate the transfer, i.e., without a bank in the middle. Blockchain technology was developed so that no one individual or group of individuals became a centralised control or access point.

When an enterprise decides to develop their own Blockchain or Distributed Ledger Technology (DLT) project it often fails at the first hurdle because if the company controls the protocol, the computers in the network, access to the network and the methods by which the data is kept in sync they are, by default, centralised.

On the other hand, if an enterprise decides to work with a number of other companies via an established industry



Companies don't need Blockchains. Industries need Blockchains

body or by forming consortia to solve a common problem then there is a solid basis for implementing a Blockchain solution.

There are a number of wide-ranging challenges in these situations, including alignment of objectives, agreeing as to what data will be stored, in what format and according to which standard. There are cultural changes required within the strategy of the enterprise and potentially up to board level to allow for cooperation with other enterprise customers who are often considered archrivals and competitors. In speaking with IBM HyperLedger team they say that the reason there aren't

WHAT IS YOUR ENTERPRISE BLOCKCHAIN STRATEGY?

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more projects underway is, "No one wants to go first."

But here's the thing. If an enterprise decides to wait they will eventually be forced to connect their business to a Blockchain that they had no input in developing or designing.

What I say is this, "No one wants to go first - but the leaders."

Walmart is such a leader. In 2009 Walmart developed a database for tracking food through their supply chain as part of a food safety initiative. Last year they migrated the program to Blockchain and working with IBM created the IBM

Food Trust. Last week it was announced that Walmart was mandating the use of their supply chain Blockchain for all leafy green vegetables. But here is the really interesting bit. Also using the same Blockchain are Nestle, Tyson, Carrefour - and Walmart's biggest US competitor, Kroger. Walmart was a leader in developing the system, but they had a much larger vision of building a food safety platform for the entire industry.

PERMISSIONED AND PRIVATE BLOCKCHAINS HAVE A PLACE. The Bitcoin and Ethereum Blockchains

are the most mature and widely used of public Blockchains in the market today. A significant aspect of their design is that anyone can join the network to either hold a copy of the Blockchain or to take on the role of verifying and validating transactions and then adding them to the Blockchain (this is also called mining). Permissioned Blockchains mean that only approved computers are involved in reaching consensus and updating the ledger - but that a wider range of computers can access the Blockchain to read and inspect the contents. Private Blockchains restrict not

just the computers who do the work of updating the ledger, but also the computers allowed to access and inspect the ledger.

The majority of the Blockchain community opposes private and permissioned Blockchains as they violate the spirit of openness and transparency behind the original Blockchain for Bitcoin.

Enterprise customers are rightfully cautious about building critical business infrastructure on a platform where anyone can join the network and have the same rights and access as

anyone else. This is why many enterprise Blockchains are developed as either private or permissioned Blockchains.

TRANSPARENCY ISN'T ALWAYS APPROPRIATE - OR PROFITABLE.

On a public Blockchain like the Bitcoin Blockchain, all transactions are visible to all parties. It's this transparency of transactions that ensures that someone can't send the same Bitcoin to two different people - also known as the double spend problem. However, enterprise customers are not so crazy about this idea of transparency. They don't necessarily want everyone to know about every deal they have done. They don't want to reveal their trading and pricing policies. They don't want to make the details of their contracts visible to their customers, suppliers - or their competitors. Transparency isn't always appropriate - and it isn't always profitable.

The good thing about enterprise Blockchains is that they can be designed with these considerations in mind. Sensitive data can be stored outside the Blockchain (off-chain) and only a signature of the data stored on the Blockchain (on-chain). Equally, data can be encrypted and stored on the Blockchain so that only those people involved in a transaction can view the data in a readable fashion. Designing an enterprise Blockchain requires not just a decision on who are going to be the members of the Blockchain - but also a detailed data strategy.

There are numerous Blockchain protocols and DLT platforms. The best enterprise strategies involve multiple distrusting parties working together to solve a common problem. This is a fundamental shift in the way enterprises need to look at Blockchain.

It's not a platform for competitive advantage. It's a platform for cooperating with your competition. It's a platform for "coopetition".

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CRYPTO CHALLENGE FORUM 2018

Blockchain and the Future of Humanity: Economy. Environment. Ethics

Crypto Challenge Forum is the crypto world's major industry event. It will take place on 28-30 October 2018 at the iconic Central Hall Westminster, London, connecting global thought leaders, policy makers, investors and startups from across the world for a three-day top content event. It will be attended by industry leaders, think tanks, institutional and private investors, family offices and VC firms.

The forum is privileged to have some of the world's most authoritative speakers, some of whom are global transformers.

Split across three tracks, the Forum's agenda will address a range of global issues including the Future of Digital Investment and Regulatory Framework of the Crypto.

The Forum will see an unprecedented agenda «The World's Ecosystems and Crypto Investment» where a whole track will be given to crypto friendly governments who will be showcasing their ecosystems and highlighting their Blockchain initiatives. Global announcements are expected to be made.

A distinctive feature of Crypto Challenge Forum is the Investors' Hub - an exclusive networking area where the brightest startups will have access to decision makers representing participating investment funds, VC firms and family offices, with a total of \$70bn under management.

An ICO contest with 100k prize pool to be distributed in three prizes will be held alongside the two day exhibition in the Hall's lobby.

Last, but not least, the Forum abounds in a rich networking programme ranging from post-conference receptions to private VIP retreats. It will culminate in the black tie Halloween Gala & Awards Giving Ceremony at the renowned 8 Northumberland Avenue.

The Gala will feature award-giving in a variety of nominations including, inter alia Crypto Challenge Forum 2018 Most Innovative Regulator of the Year, 2018 Blockchain / Crypto Investor of the Year and ICO Advisor of the Year.

www.cc-forum.com



TOKEN INTELLIGENCE

Dr Doom & The 'Big Blockchain Lie'

It has been a week of controversy. One in which it was revealed that without visible support from the government - quite the reverse - or its "Cryptoassets Taskforce" of which they are a part and who have yet to report, the FCA has been responsible for acting to drive out ventures funded by ICOs or token offerings as well as those dealing in any substantial way with crypto by denying or freezing and closing their bank accounts. A story that has yet to resolve.

A week also in which Dr Doom, US economist Nouriel Roubini, attacked not just Bitcoin or cryptocurrencies but Blockchain technology itself, calling it "the most overhyped and least useful technology in human history". Which flies in the face of a very broad consensus which includes those outside the crypto world as well as those within, including banks, governments and universities.

Even those who seek to emasculate the perceived threat to central and other banks and incumbents by renaming it DLT (Distributed Ledger Technology) - and ignoring the fact that Bitcoin's Satoshi Nakamoto manifestly did indeed solve the previously intractable 'double spending problem' - even they admit this is a major innovation with huge potential.

Overhyped? Perhaps, time will tell. Least useful technology in human history? Hardly. Let's look, with sober eyes, at what Roubini derides as a "glorified spreadsheet".

Can a spreadsheet (glorified or otherwise) solve the crucial double spending problem? No - or it would have been solved long ago.

Can it survive naked and unprotected in public, without a protective cyber-perimeter - yet allow access to transactions governed by pre-set and transparent rules? No.

Can it provide public infrastructure spanning the world and across ecosystems allowing people and organisations to transact together without each having a perimeter-based cybersecurity? No.

Can it support smart contracts able to provide automated transactions with real money? Thought not.

Or can it enable the fractionalisation of static assets, creating a vast new lake of liquidity? If so why has this not been done? By a spreadsheet, glorified or otherwise, or by the other paradigm-shift denier's favourite, the humble database?

Neither have either of them, spreadsheet or database, scared and puzzled the living daylight out of just about every regulator on the planet.

Someone said that Roubini's performance was being quoted as wisdom in the mainstream financial press. This, strangely, is not really that surprising. It's amazing what will pass for wisdom by people desperate not to be disrupted.

Email Barry.James@TokenIntelligence.io for a C-Strategy session or listen in at ICORadio

Crypto A.M. shines its spotlight on Tokenomics

Explore the differences between ICOs, cryptocurrencies, and tokens (offerings), enabling the reader to understand the ICO landscape, how millions were raised in minutes, and where the future of the tokenized economy is heading. Take a real-time journey, cutting through the myths, understanding token choices available to everyone.

Tokenomics is the economy of this new world. This is a no-holds-barred, in-depth exploration of the way in which we can participate in the blockchain economy. The reader will learn the basics of bitcoin, blockchains, and tokenomics; what the very first ICO was; and how over a period of 5 years, various projects managed to raise the enormous sums of money they did. The book then provides insights from ICO experts and looks at what the future holds. By comparing the past, current, and future of this technology, the book will inform anyone, whatever motivates their interest.

The crypto shift of blockchains, ICOs, and tokens is much more than just buying bitcoins, creating tokens, or raising millions in a minute in an ICO. It is a new paradigm shift from centralized to decentralized, from closed to open, and from

opaqueness to transparency. ICOs and the creation of tokens during the craze of 2017 needed a lot of preparation, an understanding of cryptocurrencies and of emerging legal frameworks, but this has spurred a new movement to tokenize the world.

The author gives an unbiased, authoritative picture of the current playing field, exploring the token opportunities and provides a unique insight into the developing world of this tokenized economy. This book will nourish hungry minds wanting to grow their knowledge in this fascinating area.



a unique insight into the developing world of this tokenized economy



Co-Author of Tokenomics, Thomas Power, presents a copy to James Bowater

THOMAS POWER

Thomas Power is an author of 7 books since 1998 and has made over 1,000 speeches in 56 countries covering all aspects of technology, social media, community building, cloud, and SaaS Apps. Now the world has shifted its attention to Blockchain, Bitcoin, Ethereum, ICOs, Tokenomics, Cryptonomics, Internet of Things, and Artificial Intelligence, and Thomas has shifted with the times, making presentations on these subjects to conferences and board members around the globe. Thomas is ranked No 11 in the Crypto 100 most Influential People.

WHO SHOULD BUY THIS BOOK?

With the media hype about bitcoin, this book appeals to anyone, from those with a general interest in anything crypto, or those with some knowledge of the nuances between cryptocurrency, ICOs, IPOs and the Token economy.

City AM readers will receive a 20% discount on Amazon using the voucher code 20THOMAS

Authors: Sean Au and Thomas Power. Produced by: Andrew Waldron, Packt Publishing. Edited by Jo Lovell and Dominic Shakeshaft

SEAN AU
Sean Au is a blockchain researcher and trainer with a B.E. (Hons) in Electrical Engineering and a Masters in Engineering Management from the Canterbury

University in NZ. His masters' thesis 19 years ago was titled "Information Intermediaries," but with the rise of decentralization, that old model has surely crumbled.



WHAT IF WE COULD FUSE BLOCKCHAIN TECHNOLOGY AND GOLD TOGETHER?

Jai Bifulco, Chief Marketing Officer of Kinesis, blockchain and cryptocurrency specialist

The current inflationary monetary policy constantly devalues our money by lending more than exists in holdings, it's called fractional margin lending.

For people who don't trade stocks or have enough money to buy real estate, there's no other way to counter inflation than to hold money in banks and savings accounts.

However, most countries currently offer interest rates below the inflation rate, this keeps the economy spending more and more to keep up with the rising cost of living.

THE CURRENT MONETARY SYSTEM IS A NEW INVENTION. For centuries, every currency issued by governments was backed by gold or silver, known as the gold standard. Countries had

as much money in circulation as they had precious metals in reserve funds.

Since then, monetary policy has taken the form we're most accustomed to: the issuance of currencies controlled by central banks, resulting in control over supply, giving them power to manage economic variables such as credit supply, liquidity, interest rates, and money velocity by injecting or removing money from the system.

SO HOW IS MONEY ON THE BLOCKCHAIN DIFFERENT FROM FIAT MONEY?

It's possible to use cryptocurrency to hedge savings, like people in Iran and other regions currently do, due to a distrust in the actions of their governments. Here we see

an obvious example of how cryptocurrencies are used by the people instead of official paper money, and it works better in a self-regulated environment. But what if we go further and modify the idea for the modern world without being too futuristic?

Gold and silver always were the stable commodities backing national currencies for centuries, by bringing precious metal on to the blockchain we can create a new gold standard, one that is decentralised.

In 2018-2019, people are now given a choice to move towards a future where instead of using paper based currency whose value is determined by governments, we have an option of real money whose value is universally accepted by all.

