CRYPTOA.M. Our series on AI, Blockchain, Cryptoassets, DLT and Tokenisation

CITY A.M.'S CRYPTO INSIDER

ince last week's Crypto AM, the markets have been extremely volatile with Bitcoin (BTC) testing and breaching the \$13,000 resistance mark. However, at the time of writing, it has lost all gains and more trading at US\$10.085.10. ETH is at US\$281.12; Ripple (XRP) is at US\$0.3883; Binance (BNB) is at US\$31.54 and

Cardano (ADA) is at US\$0.07972. Overall Market Cap is down circa 9% 298.02 US\$325.52bn (data source: www.CryptoCompare.com) Interesting news from Finboot today. The Barcelona / London based blockchain start-up, whose co-founder and Chairman Nish Kotecha I met recently, has received a double endorsement from Repsol. The energy giant has bought a stake in the company and agreed a commercial contract for its blockchain technology solution. Finboot's proprietary software MARCO facilitates the adoption of blockchain technologies into daily business operations, focusing on industrial supply chains, and making them more efficient. Repsol reckons it will save about €400,000 per annum, even with a limited rollout. Kotecha is confident in Finboot's future growth ambitions. highlighting the fact that Finboot's software is blockchain agnostic

and capable of verifying products' sustainability credentials - an area of growing concern for executives. This week I moderated a fireside chat at Tokenize It! with Brady Luo, the Co-Founder & CEO of everiToken (EVT), and Soups Ranian, the Head of Fincrime Risks for Revolut. everiToken technology was used

to tokenize the service data of over 71 million users and to provide the technical infrastructure for a \$500MM stablecoin in Malavsia. Revolut. which is currently valued at about \$2.7 billion, is the first European digital bank unicorn

everiToken CEO Brady Luo gave a keynote presentation during the event, in which he mentioned that 20 new asset-backed stablecoins are set to be issued on everiToken's public chain.

KuCoin ambassador Mik Mironov, who is also a partner at SMC Capital, gave a keynote presentation at the event in which he announced that KuCoin is expanding very rapidly in Europe. KuCoin boasts a global network of over 5 million registered users and 320 million dollars peak 24-hour trading volume. Top blockchain analytical companies have consistently awarded KuCoin with A-level trust ratings. KuCoin has established itself as a market leader in altcoin liquidity. Also, I was surprised to learn that a significant part of KuCoin's audience is located in the US and UK.

Yesterday Crypto A.M. contributor Arnie Hill (aka 'Crypto Arnie' launched the CryptoArnie Platform which is a newly developed solution for ICO participants, enabling individuals from all backgrounds and experiences to participate in high-demand allocations for the latest projects in Blockchain and Crypto. Unlike almost every other platform, his business model is not aligned to the projects, but to the investor.

If you'd like beta testing access simply fill in the typeform here https://cryptoarnie.typeform.com/to/BHpFVt

its Spotlight on

Rlockchain for good: Using Blockchain has the ability to tackle **J**inequality

Recently, I was in Westminster at the All-Party-Parliamentary-Group for Blockchain on education, research, sport, charities and NGOs. It reminded me of a working trip to India in 2000 as I was able to connect a lot of blockchain dots.

In India I was 'selling' British qualifications for a further education college and doing research on the transferability of qualifications. The relative poverty I observed was overwhelming visited a school, a charity, who provided hot meals everyday for 100 pri-mary-aged children for a total cost £5 per-day. Returning home, I fundraised £150 to pay for 1 month's meals. The money was sent however, never received or cashed as far as I know.

Listening to the panel I reflected on this and my interest in 'Blockchain-for good', Had I known about blockchain. how could it have been applied, to education, my research and this charity? The panel covered these various uses and challenges of blockchain concluding "It's not a magic pill, but certainly can go a long-way to making current business and process more efficient and transparent."

Everyday a media reference is made to equality, diversity and inclusion but progress is slow.. I'm keen to see how blockchain solutions for good can be integrated, influence and drive change for these areas particularly in these turbulent political and economic times.

However, someone whispered in my ear at a recent blockchain event 'they are all only interested in making money.'

Making buisnesses capitalise on the use of blockchain more successfully and profitably by embracing an equality diversity and inclusion strategy is an attractive proposition whether linked to blockchain, crypto or not. It's economic good sense! Doing good through the use of blockchain can give you a feel-good factor, a #metoo advantage in addition to making money! Equality, diversity and inclusion can

Phill Snelling, Bowater Media

Designed by

be seen as a minefield to be navigated innovation carefully. However, consider who is making these kinds of judgements in of DiversiTech asked. Is there anyone organisations, who are the decision makers? Of the top 350 companies in the UK only 24 have female Chairs. Although 700 women have been appointed to Boards since the Davies Report, and some Boards have over 50% representation, some have none and teristics. A recent One Loud Voice event

the overall statistics hide the reality. Many businesses still don't understand people from networks you know. Diverse teams are challenging but bring do the maths! One figure is glaring, VC

A FinTech article by Gemma Young, out there who doesn't think that work place diversity is a good thing? It referred to blockchain having inbuilt democratisation transcending race, colour, religion, creed, age, gender, sexual orientation and protected characfocused on the need for male advocacy. Diversity data linked to gender profiles or recognise the value diverse teams of blockchain companies and events bring. It's easier to recruit and manage isn't easy to access. However, observe any blockchain event or company and

> projects on the Catalyst Network in the fields of supply chain, utilities, food provenance, energy, and plastics recycling. One example is in a plastics recycling deposit return program – being developed with partners, ACG's Catalyst Network will track the life-cycle of plastic drinks bottles from production to return to NFC IoTenabled low-cost recycling bins and then return the deposit value into consumers

digital wallet app. Catalyst was chosen for this because of its ability to scale and track millions of plastic bottles and provide the consumer facing application to produce a full circular-economy benefit by encouraging consumer behaviour and reducing plastic waste and the environmental impact of plastic.

Darren says, "In the future I can see Catalyst scaling alongside the applications and businesses that run on it. From startups leveraging Catalyst's infrastructure and using the resources available on the network, to established organisations that want to protect and manage their data and even easily distribute their cloud-based applications across multiple cloud providers. Catalyst will enable a host of new web services and enable the next eration of developers to build software that has privacy, security and performance built-in, in ways that haven't been achieved before'

For further information visit https://atlascity.io

0.5% in the UK! sive to gender.



I hether we are using cryptocurrency as an V application built on top of blockchain technology or using blockchain as an industry application supporting supply chain transparency we always need to have a wallet. But exactly what is a blockchain wallet? And what do you keep in it? A blockchain wallet is a collection of the keys necessary to access information on a blockchain. Keys are always in matched pairs - a public key and its matching private key. This is like your account number (public key) and pin code (private

Considering that a wallet is a place to safely store the information necessary to



Atlas City lockchain has been one of the most talked about technologies of the last

year and it's been said to be the solution to a wide range of problems. While the enthusiasm is impressive, the technology has struggled with real-world problems. Issues of cost, speed and level

of difficulty to build practical applications have stalled adoption by global business, commerce and governments. Atlas City Global (ACG), a London-based

startup is aiming to meet customers' needs by taking practical, innovative approaches o provide more than just a ledger. The Catalyst Network is a new distributed computing protocol, a full suite of integrated technologies, not forked, but written from scratch.

Designed as an open source, fast, light, secure and scalable network, that is accessible to .Net developers, Catalyst is launching in the second half of 2019, having received \$4M in seed investment from Robert A Hefner III, among other HNW

individuals. This funding will support the final stage of development of its Catalyst Vetwork.

Darren Oliveiro-Priestnall, ACG, CEO, said, "Catalyst, which is for global public use, is designed to support any programming language or framework, to integrate with today's current systems, to work in the same way as businesses already work. When we started, we talked with many companies across industries like utilities, energy, logistics and financial services. We wanted to build applications



deploy private networks to fit the exact needs of the customer



to solve their business problems using the efficiencies, traceability, data security and savings that working with single, trusted records of transactions can provide, but we found that we couldn't meet our customers expectations building on the platforms in the market at the time

"Fundamentally, we don't set out to make businesses or people change how

they work, we need to make the technology work in the same way they do. Many businesses have specific ways of working which even the most flexible of public ledgers can't fit perfectly. So we've built Catalyst to be modular: we can modify and deploy private networks to fit the exact needs of the customer

ACG is running proof-of-concept and pilot



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We can modify and

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(M)CryptoCompare

funding for women-led business sits at

Over the past few months I've been privileged to have conversations and discussions about the links between blockchain and equality that have the power to disrupt through a call to action, or two or three! Reducing social and gender gaps benefits are recognised but structural barriers still exist that mean women and girls cannot reach their full potential. Equally this can be applied to other marginalised groups across the globe. It's not exclu-

What does the UN say? The global

500 CEO's are women; 65% of women have experienced sexual harassment today? in the UK and 96% of global homicides are by men.

IMF research shows that tackling conversation with James Bowater workplace sexism could boost economic productivity by 35% says IMF cbe-074b6744 chief Christine Lagarde.

Almost half of all female managers IMPORTANT INFORMATION: THE VIEWS workplace altogether, says Young SECTION SHOULD NOT BE TAKEN AS Women's Trust.

without legacies of demarcation of FINANCIAL ADVISOR

labour, roles and responsibilities could be a driving-force for change. Something as simple as identity could bring financial inclusion to hiring and pay ment for skills and contribute to reduc ing gender poverty associated with women globally

The blockchain world is a continuum dominated by men because it is 'technology'. The ability to make it genderneutral lies with a complete overhaul of "the mobilisation of knowledge skills attitudes and values through a process of reflection, anticipation and action, in order to develop the inter related competencies needed to engage



Of the top 350 companies in the UK only 24 have female chairs

with the world' says the OECD Learning Framework. Blockchain is seen as possibly the

most disruptive force of modern times. It can be the force of change to disrupt one of the greatest challenges of our time, inclusion and diversity

The words of Amir Dossal, Executive Chair of the Blockchain Commission for Sustainable Development are poignant and a call to action "It is not women who need to change, it is our gender pay gap is 23%; 5% of Fortune species and lip service is unacceptable" What lip-service will you change

> Dr Maxine Room CBF. CFO of All of Us in http://linkedin.com/in/maxine-room-

say their workplace is sexist and in AND OPINIONS PROVIDED BY CITY A.M.'S some cases shut women out of the CRYPTO INSIDER AND IN THE CRYPTO A.M. INVESTMENT OR FINANCIAL ADVICE. The relative 'newness' of blockchain ALWAYS CONSULT WITH YOUR

WHAT ARE BLOCKCHAIN WALLETS?

Troy Norcross, Co-Founder Blockchain Rookies

authorise all your transactions, it is important to keep your wallet safe. Blockchain wallets can take different formats from paper wallets, cold storage hardware wallets, mobile wallets, noncustodial and custodial wallets, web wallets and more. Each of these have pros and cons and varying degrees of security. Unlike with your regular wallet, if you

lose your private keys or they are stolen, there is no one to call to get new private keys. Any transactions made with your stolen keys are not reversible. A common misunderstanding is that a

wallet holds the cryptocurrency you own A blockchain wallet is comparable to your traditional wallet which holds debit and credit cards. The cards are

representations of your cash or credit, but the value resides in a database at the bank. In a similar fashion, your blockchain wallet holds your public and private keys but does not actually hold any cryptocurrency. For supply chair blockchains, the wallets hold the keys giving you authority to sign transactions for the transfer or transformation of

Blockchain wallets are a critical part of any blockchain deployment and are an especially critical part of owning cryptocurrency.

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Come enjoy the first ever tokenised Craft Beer. Scan, get app, collect free pint at the brewery! @ German Kraft SE1 6DR - bit.ly/craftcoin



CRYPTOCOMPARE MARKET VIEW

Bitcoin Soars to Test \$14k Before Retrace

ast week saw bitcoin surge to fresh

yearly highs - cruising all the way up to \$13,813 on Wednesday evening (Jun 26) before a substantial drop back down below the \$11,000 level on Thursday. The last time the leading cryptoasset hit these levels was in January 2018, during the peak of the last bull run. These new highs mean that many who bought bitcoin in late 2017 and early 2018 are now back in profitable territory.

In contrast to the last bull run, where altcoin gains often far outrsripped that of bitcoin, other cryptocurrencies did not see the enormous gains they experienced in late 2017. While ethereum (ETH) hit new yearly highs around the \$350 mark last week, many altcoins saw less dramatic gains. Litecoin - the fourth largest cryptoasset by market cap, saw very little upward movement as bitcoin was soaring, remaining around the \$135 mark before dropping following bitcoin's retrace, while Ripple's XRP posted only very modest

In other positive news for Bitcoin markets last week saw TD Ameritrade, one of the largest brokerage firms in the US, open margin trading on Bitcoin. Seen as one of the 'Big Four' brokers, the digital trading platform manages around \$1.3 trillion of client funds. To trade Bitcoin on the platform, users must have a minimum account balance of \$25,000.

Last week also saw another development in the drama surrounding controversial self proclaimed Bitcoin creator, Craig Wright, In the ongoing lawsuit, where he denies allegations that he stole bitcoin and intellectual property from his ex-business partner, Wright told a Florida judge that he is unable to produce addresses for the \$10 billion he supposedly mined during Bitcoin's infancy, Wright also claimed that he stopped working on Bitcoin in 2010 afte feeling regret that the asset was being used for nefarious purposes such as the nowdefunct Silk Road

CRYPTO A.M. INDUSTRY VOICES Security Standards, Regulation, and Best Practices

part of the decentralised financial ecosystem, functioning as marketplaces in which owners of cryptocurrency can trade digital assets and trade cryp tocurrency for fiat. It is one of the fastest growing sub sectors of the crypto industry this exponential growth means that

exchanges face increased attacks and must constantly improve their security measures. Without adequate security systems, cryptocurrency exchanges can encounter painful hacks, affecting their business and wider faith in the cryptos

when investors choose to store value in the close to 2,000 digital currencies available today in a crypto exchange, they should ask; where does this exchange store assets? Who can access and control my assets? What happens to my assets in the event of a hack? If the exchange in question is secure, these questions will lead to clear answers.

O WHERE? — Any assets stored online are vulnerable to security breaches. In a recent example of a major hack of one of the world's largest cryptocurrency ex-changes, hackers stole 7,000 bitcoins. Attacks such as these can be prevented by using cold storage, where investors' assets are stored offline. This makes assets immune to unauthorized attacks or theft.

• WHO? - Exchanges should use 'multisignature wallets', ensuring that there are multiple authorised access points to assets and that investors have control. Assets kept in cold storage are incredibly secure, so investors must be given control of an access key. In another recent case, a Canadian cryptocurrency exchange lost access to its cold storage wallets when its CEO, the only one with access to the cold storage wallets of thousands of users, died suddenly. The exchange lost \$190 million of investor funds, which could have been prevented by multi-signature wallets, in combination with cold storage. **O WHAT?** – Cryptocurrency exchanges

must provide insurance for assets, ensur ing that investors are protected and will not lose funds permanently; trust be tween investors and cryptofinance insti-tutions is crucial. This is the final step in

rypto exchanges are a fundamental the promise that exchanges will protect investors' interests, and in the cryptofinance space's aim to build a legitimate ecosystem

These necessary security measures must be continuously assessed for effectiveness and updated in light of new potential vulnerabilities. Post-security breach action is not enough — a systematic procedure must be in place from the establishment of an exchange.

Financial regulation can prevent financial crime and mismanagement, but it has evolved slowly across the cryptofinance space. A recent report by regtech company Coinfirm found that only 14% of 216 global cryptocurrency exchanges were confirmed as being licensed by regulators As such, the majority of the world's cryp tocurrency exchanges are not being held to any particular standards and may operate without security practices. Certain jurisdictions, such as Switzer

land, Liechtenstein, and Gibraltar, are leading the way in providing comprehen sive regulation to cryptofinance institu tions; investors should look to exchange in these jurisdictions as examples of best practice. The Gibraltar Financial Services Commission's DLT License Framework passed in January 2018, providing nine principles to follow for regulated firms, centred around investor protection. Liecht enstein recently passed blockchain regulation to improve investor protection.

For the cryptocurrency industry to progress, it must adopt the same standards of regulation, security, and protection as traditional financial services Procedures from the traditional financial sector cannot be ignored as we recreate this industry with emerging technology. This should be a basic principle for cryp tocurrency exchanges, as we develop as an established division of the wider financial space. Combining traditional and digital spaces can result in vast benefits, and we must commit to establishing trusted crvptocurrency exchanges that protect in vestors assets, whilst doing justice to the thriving, global cryptocurrency ecosystem.

Nick Cowan, CEO of the Gibraltar Stock Exchana