CRYPTO A.M.
Our series on AI, Blockchain, Cryptocurrency and Tokenisation

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CITY A.M.'S CRYPTO INSIDER

JAMES BOWATER

Having already attended Dr Abdalla Kablan's impressive Delta Summit, I was keen to see how the Malta Blockchain Summit would compare and live up to the hype. Staged by Eman Pulis of SIGMA fame, it did and I saw most of the UK's Blockchain and Crypto companies being represented either as visitors or exhibitors. The 8,500 confirmed attendees, the equivalent of circa 2% of the island nation population, made it a phenomenal endorsement of Prime Minister Joseph Muscat's vision of Malta becoming the Blockchain Island. In fact discussing the event with Wesley Ellul aka Mister Malta we agreed that Blockchain has found its home in Malta.

Notable attendees were Charles Hoskinson of Cardano and IOHK, John McAfee, the Winklevoss Twins of Gemini and Scott Stornetta who along with Stuart Haber co-invented Blockchain, which Satoshi Nakamoto then used as the basis for technology unpinning Bitcoin. The presence of Dr Ben Goertzel, CEO at SingularityNET who brought with him Sophia, the AI robot, coincided with Parliamentary Secretary Silvio Schembri launching Malta.ai, the Maltese Government's vision on Artificial Intelligence. "After successfully positioning Malta as The Blockchain Island by being the first in the world to regulate DLT products and services, we now would like to position Malta amongst the top 10 countries in the world with an Artificial Intelligence Policy", said Schembri. I have invited Dr Goertzel to write a thought leader piece and hope to share that in the coming weeks.

Edan Yago, founder of CementDAO -a clearing house and rating agency for fiat-pegged cryptocurrencies through a system of decentralized governance - has been tracking the explosion of the [stablecoion] ecosystem, identifying over 120 projects to date. Tether, the stablecoin behemoth with a market cap of 1.8B, has been losing market share to new competitors due to rumors about their lack of collateral.

Competition between stablecoins will be healthy for the cryptocurrency market if standards for customer protection are established. In that spirit, CementDAO sponsored an event this past October 25th at The Reform Club, gathering 25 stablecoin organizations from 16 countries to form a collective network of issuers, investors, exchanges, service providers and legal experts to work together and accelerate their mainstream adoption going forward.

With the number of asset backed stablecoins and DLT solutions being examined, it is worth mentioning that Team Blockchain are hosting their November Meetup at Grant Thornton's Finsbury Square offices on the 14th November. Peter Walker, an Asset Manager from Link Asset Services will be speaking about bonds and equity linked notes issued using the Nivaura platform.

Monday 29th October marked the 49-year anniversary of the first ever internet transmission. As we head into the Internet's 50th year, the problem of authentication has risen to the forefront of discussions about the state of the internet. With ubiquitous internet-based services like social media, mobile commerce, and increasingly, smart homes and connected cars, many are realising the current methods available for protecting the world's data and the online infrastructure powering our daily lives are long past being adequate to defend against today's sophisticated adversaries. Breaches can often be traced back to a single compromised credential; most commonly, a password.
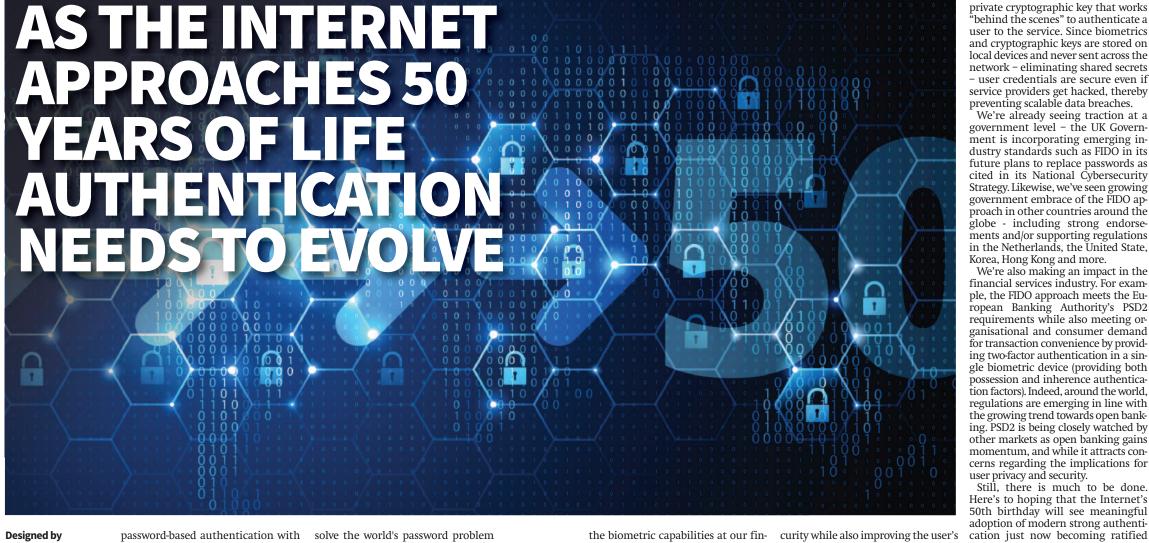
Passwords have become synonymous with "login." Each day, humans spend 1,300 years collectively entering passwords. Yet they have also become

> ## The problem of authentication has risen to the forefront of discussions about the state of the internet

a key weakness of the connected world, with over 2.3 billion passwords stolen this past year. The expansion of internet-enabled services has arguably run ahead of our ability to adequately secure them, and recent security incidents prove that our infrastructure for is lagging behind.

There is good news, however - we are currently seeing major organisations across the globe coming together in the FIDO Alliance to drive standards that enable the replacement of weak

AS THE INTERNET APPROACHES 50 YEARS OF LIFE AUTHENTICATION NEEDS TO EVOLVE

Designed by Phill Snelling, Bowater Media

password-based authentication with stronger approaches that leverage on-device biometrics and/or external security keys where authentication credentials are stored securely and that have added measures to prevent phishing and account takeovers. The FIDO Alliance is a global public-private consortium of leading technology, payments and consumer service providers that are collaborating to solve the world's password problem through open technical standards for interoperable cryptographic authentication; these standards are being rapidly adopted across internet-connected devices, websites and applications.

New and improved methods of authentication based on FIDO Alliance standards are coming to market every day. FIDO authentication can leverage the biometric capabilities at our fingertips via mobile devices, or can be built into simple-to-use security keys that prevent phishing and account takeover. We're even seeing support for FIDO in wearables, such as the recently updated Motiv ring. All of these approaches provide a compelling proposition for banks and other financial services firms, due to their potential to greatly enhance security while also improving the user's authentication experience - which in sum will only boost brand affinity.

When using a FIDO-enabled device, in practice, a user swipes a finger, speaks a phrase, looks at a camera on a device, or touches the button on a hardware authenticator to login, pay for an item, or use another online service. The device-based verification is used as an initial factor to then unlock a second, more secure factor: a private cryptographic key that works "behind the scenes" to authenticate a user to the service. Since biometrics and cryptographic keys are stored on local devices and never sent across the network – eliminating shared secrets – user credentials are secure even if service providers get hacked, thereby preventing scalable data breaches.

We're already seeing traction at a government level – the UK Government is incorporating emerging industry standards such as FIDO in its future plans to replace passwords as cited in its National Cybersecurity Strategy. Likewise, we've seen growing government embrace of the FIDO approach in other countries around the globe - including strong endorsements and/or supporting regulations in the Netherlands, the United State, Korea, Hong Kong and more.

We're also making an impact in the financial services industry. For example, the FIDO approach meets the European Banking Authority's PSD2 requirements while also meeting organisational and consumer demand for transaction convenience by providing two-factor authentication in a single biometric device (providing both possession and inherence authentication factors). Indeed, around the world, regulations are emerging in line with the growing trend towards open banking. PSD2 is being closely watched by other markets as open banking gains momentum, and while it attracts concerns regarding the implications for user privacy and security.

Still, there is much to be done. Here's to hoping that the Internet's 50th birthday will see meaningful adoption of modern strong authentication just now becoming ratified web standards, leading to stronger methods of protection in today's connected world.

By Andrew Shikiar, Chief Marketing Officer of the FIDO Alliance, a not-for-profit industry consortium driving open specifications and an interoperable ecosystem for simpler, stronger authentication

COINGEEK.COM LONDON 2018

CoinGeek brings the world of crypto together in London

While outsiders' interest in cryptocurrencies is often limited to their volatile prices, industry leaders will be debating a much wider agenda, including everyday uses of crypto, at a three-day conference in London at the end of November. Tickets can be bought with discount code "cityam20" on Eventbrite

The CoinGeek Week Conference will feature entrepreneurs who already accept Bitcoin Cash (BCH) in retailing. Among the speakers is Elizabeth White, whose New York business sells everything from art and jewellery to Lamborghinis - legendary symbols of success in the crypto world – all for crypto, including Bitcoin Cash.

If you can't afford the luxuries offered by The White Company, you can try crypto at a more modest level by buying a bëër. Martin Dempster of Brewdog will be explaining why the brewery and pub chain business now accepts Bitcoin Cash at its new Canary Wharf bar.

Alongside retailers, the conference day devoted to developers looks set to prove that there's an idealistic side to the crypto vision. Michael Hudson of Bitstocks describes his London business as an "ethical investment brand", which "seeks to give disadvantaged people and small enterprises better access to the financial system" - whilst also making money for its clients.

Leading speakers from the world of crypto will include Dr Craig Wright, chief scientist of the London-based blockchain research business, nChain, Roger Ver, CEO of Bitcoin.com and Ryan X. Charles, co-founder of Yours.org, a social network that pays Bitcoin Cash to the creators of popular content.

The final day of the conference looks to the future, and to the formation of the new bComm (for 'Bitcoin commerce') Association, which will allow the conversation to continue between merchants, developers, crypto miners and crypto exchanges.

TOKEN INTELLIGENCE

The Cryptoassets Taskforce Reports - Missing the Point

Let me take you back 20 years to 1998 and the days when modems sang to us. In most of the boardrooms around the land those even considering the matter where trying to figure out what use this web thing might be to them, as another smart tech salesperson packed away their gear hopeful of a deal. Others were looking for the 'killer app'. Understandable back then.

We know better now - and that all this missed the point. Which is why most of those firms no longer exist. We know that the business environment was about to change radically and the choice was not, in fact, to buy-in or not, but to adapt and survive, or not.

The UK Cryptoassets Taskforce Report just published says "Government has set out an ambition for the UK to be the world's most innovative economy, and to maintain its position as one of the leading financial centres globally.

Great - but pretty much downhill from there. With the feeling that we're back in one of those late 90's boardrooms with the coming tidal wave just visible in the distance through the panoramic windows.

Back then few could see how completely our environment would change. Fewer still how fast and how completely it would happen.

Now we know how that goes – or at least we should. That what is changing is not incremental but revolutionary. Not tools or toys, but our entire environment. This time it's faster. Much much faster.

Which is why it matters so much that the UK's flagship report which, as one commentator says has "the hallmarks of an early stage analysis" strikes such a defensive tone.

This "relies on, the UK maintaining its international reputation as a safe and transparent place to do business in financial services; ensuring high regulatory standards" (and 'allowing' selected innovations).

Of course it does but is this a vision for a nation set to lead the world? No – it's 'business as usual'. Led by regulation not innovation.

Worse still with the FCA closing in on innovators and their ventures, pre-emptively freezing and closing their bank accounts the earlier revolution in innovation – of which the government are rightly proud, saying: "the Innovation Hub and Regulatory Sandbox ...both of which are held up as global examples of best practice" is in danger.

It seems if we are to survive, let alone thrive, we may need to lead another kind of taskforce. Perhaps more like this one: www.World1stTaskforce.org?

Email Barry.James@TokenIntelligence.io questions or listen to the latest at ICOrad.io

Crypto A.M. shines its spotlight on Coinweb

2018, an evolutionary year for blockchain technology, has seen the growth of next generation blockchain projects all trying to solve issues of mass adoption surrounding usability, scalability and security. Projects focussed on mass adoption and ease of use are high on the agenda of developers and investors alike.

Coinweb founded in 2017 is building for blockchain's mass adoption. Their Layer 2 interoperability project boasts a Hyperlayer that sits above route chains (blockchains), seamlessly connecting them. The Coinweb platform supports decentralised apps (DApps) and allows developers the opportunity to build solutions that pick and choose the functionality of the underlying blockchains. Developers can now build across chains in a horizontal capacity, allowing them to select desired functionalities of underlying networks, thereby mitigating the risk of being confined to one chain network that may have scaling or capacity issues, as well as running the more risk of becoming neglected.

The team are committed to making the blockchain more personal by building the namespace for the blockchains to do what the DNS did for the internet. This project is spearheading the invention of the Domain Name System (DNS), Paul Mockapetris.

In parallel, they will be releasing a multi-currency wallet and DEX, as well as enabling users to issue their own branded tokens and smart contracts. The ecosystem makes use of their native token, the XCO.

Coinweb goes a long way to future-proofing solutions built on their platform, Toby Gilbert CEO commented,

Other projects in this space are theoretically strong and have experienced developers but not everyone has experience in shipping product to mass market. Our team is a blend of blockchain developers

Toby Gilbert, CEO Coinweb

> ## We're committed to making blockchain more personal and connected

and experienced consumer technologists. Our CTO, Mike Conte was responsible for Excel, Shopping, Windows and Entertainment at Microsoft, our Chief Tech Architect, Alexander Kjeldaas led Google+ and Google Hangout dev teams and contributed to patching the Bitcoin core, whilst Strategy Director Paul Davis wrote Word for Mac and was Microsoft's first Windows evangelist. Our team has built products used by hundreds of millions of people everyday.

Our distribution strategy is a deliberate mix of strategic partnerships, community and industry support, layered with an in-house 360Accelerator overseen by Tom Yoritake, founder and MD of Cisco Systems Incubator. The 360Accelerator focuses on helping established businesses and projects with an existing user-base that are looking to integrate blockchain technology. By helping 360Accelerator participants to build on our platform, in turn their users will make use of our technology. We've already signed up six projects with combined balance sheets of over $1B and tens of millions of existing users that will make use of blockchain and our products.

The Coinweb private presale has recently opened and more info on Coinweb can be found at coinweb.io

CURRENCY VS MONEY - THE CHOICE YOU DIDN'T KNOW YOU HAD

Jai Bifulco, CMO of Kinesis, blockchain and cryptocurrency expert

Modern crypto projects face a series of obstacles ranging from plain operational issues to core conceptual principles by which the currency should be made. The most obvious and practical way of creating a digital currency is by getting to the root of the conventional currencies and connecting this virtual entity to real and valuable goods, like precious metal.

One option is to adopt a commodity-based currency whereby the currency in circulation is the commodity itself, take gold for example. The key benefit being the credibility of the currency backed by the intrinsic value of the commodity, there is no need to trust the governing body that gold or silver will hold their value.

The recent example of the Turkish lira highlights just this. After a quarrel over tariffs with the US, the lira plunged more than 25%, entering a downward spiral when individuals possessing the currency began getting rid of their holdings.

The main message to take away from this: governments can't stop printing money, because they spend more than they earn by collecting taxes. To raise money, they issue government bonds, and pay a fixed interest to all debt holders. To pay off the interest, they print more money, thereby increasing inflation. Ultimately what this means is the monetary system of today is entirely debt-based.

The question then arises of how can we create a healthy economy that pays a healthy interest back to its holders based on the velocity of money rather than the performance of debt. When a system shares its wealth in a fair and honest way, we can now start to drive positive growth and evolve beyond a central control.

This is the potential for cryptocurrency. Everyone who wants to secure themselves against the debt bubble seeks assets that are backed by something real, or at least not dependent on someone else's debt. It's very unpleasant for anyone to lose 25% of his/her savings over 10 years, even with a small 2% yearly inflation rate.

So, the real question becomes: how do we break free of this vicious cycle?

Perhaps the solutions are already here with the evolution of the stable coin, backed by precious metals.