



Cryptocurrency and Blockchain Technology

the road ahead

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The Internet has profoundly changed the world. Can you imagine the world today without the Internet? Most people will be confounded.

What then is blockchain technology? A quick search on the Internet will reveal numerous definitions along the lines of it being a distributed ledger. This ledger or record book in the digital world records data which cannot be altered due to the data being distributed amongst a network of computers. Hence by design a blockchain is inherently resistant to data modification.

Why does this technology keep not only the technology geeks awake, but businesses, governments and regulators excited about blockchain? When data is stored in a blockchain, it is verified by a huge crowd (or cloud) of peers to prevent the information from being manipulated. If any party attempts to manipulate or alter the stored information, this needs to be done with the many computers in which the information is distributed or stored – a very unlikely possibility as compared to a situation where the digital information is stored at a single point.

Responding to the potential of blockchain technology and growing interest in cryptocurrencies, CFA Singapore organised a talk on 12 March 2018 at Capital Tower.

Speakers

- **Professor David Lee Kuo Chuen** (2nd from right)
Professor at Singapore University of Social Sciences / Co-founder, LeftCoast
- **Victor Chua**, CFA (2nd from left)
Managing Director
Vynn Capital
- **Peter Sin Guili** (3rd from left)
Assistant Vice President,
Financial Services & Co-Head of
Digital Currency Subcommittee
ACCESS

Host

Darren Chua, CFA (right)
Vice President, Development and
Investment, Infra Capital Myanmar

Moderator

Alan Lok, CFA (left)
Director, Society Advocacy
Engagement, CFA Institute

The internet profoundly changed the world.

Will blockchain technology do the same?

However, interest in cryptocurrencies such as Bitcoins has far outpaced interest in blockchain technology despite the recent rout in the prices of cryptocurrencies.

More importantly, there are claims that with blockchain, Internet users can for example determine if people they meet online are who they say they are. Other possible uses include being able to verify claims such as if products are genuine or counterfeits. For years, donations to the poor in less-developed nations have often been siphoned away by various intermediaries to a point where the beneficiaries often receive but a fraction of the original sum donated. With blockchain technology, this problem can arguably be resolved.

Will these claims become reality? One would probably have to demonstrate how a distributed ledger of digital records that is unlikely to be altered can successfully result in the above. The world is indeed waiting.

In the midst of these claims, interest in cryptocurrencies such as Bitcoins (BTC) has far outpaced interest in blockchain technology despite the recent rout in the prices of cryptocurrencies. The explosion of interest in cryptocurrencies can be traced to spectacular returns. In 2017, the price of Bitcoin rose from US\$963 in January to US\$17,697

at year end. Investors sat up. Even students in high schools and colleges started to take interest in cryptocurrencies. The spectacular increase, however, was short lived. Bitcoin prices tumbled to US\$8,683 in March 2018. In spite of the rout, the interest in cryptocurrencies is still growing.

What then are cryptocurrencies? It can be deemed as another form of money which is typically not regulated or acknowledged by governments. Fiat money (such as notes and coins) are currencies without intrinsic value that have been established as legal tender by governments. One has to accept legal tender currency as a form of payment. This other form of money has an added feature – cryptocurrency transactions are encrypted or hidden so that they can be done anonymously.

It has to be noted however that cryptocurrencies such as BTC and Ethereum (ETH) utilise blockchain technology. The same cannot be said for other cryptocurrencies such as Ripple (XRP) which was the third largest cryptocurrency by market capitalisation in March 2018. Hence, it is a myth to assume blockchain and cryptocurrencies must co-exist.

Armed with a Ph.D. in Mathematical Economics and Econometrics, Professor Lee began his career as an academic lecturer. Subsequently, he got involved in REITS, started and managed a hedge fund and eventually moved upstream to property development. He is currently involved with the fin tech sector. At the talk, Professor Lee highlighted that Singapore is the place to be for financial innovation given the Singapore government and regulators' openness and active support for innovation that can value add to and grow the economy.



David Lee Kuo Chuen
Professor, School of Business
Singapore University of Social Sciences

How Blockchain Technology Can Change Our World



Blockchain can help lessen wealth and income inequality via digital asset sharing. Everyone including the poorest wherever they are in the world can register ownership of assets such as livestock in a country or outside of it using digital means with just a smartphone. This enables even the poorest to participate in income generating assets and undertake peer-to-peer transactions at a fraction of the cost if it were to be done via existing methods.

The views of Monetary Authority of Singapore (MAS) on cryptocurrencies are still evolving. Though cryptocurrencies are not regulated, the central bank of Singapore monitors activities associated with the cryptospace including risks posed by these new developments in technology. In an online article on Today dated 15 March 2018, the Managing Director of MAS, Ravi Menon, said that regulation should not front-run innovation. MAS is closely watching developments in the United States where futures contracts based on cryptotokens have been introduced.

Initial Coin Offering

Initial Coin Offering (ICO) is a typically an unregulated method by which funds are raised for companies. Coins and token launched at ICOs can be utility or security tokens. Utility tokens, also called user tokens or app coins, represent future access to a company's products or services. They are not designed to be an asset class for investment purposes. If the utility tokens are properly structured, they will carry a defining characteristic – the tokens will be exempted from local securities regulation.

However, if tokens derive their value from an external tradable asset, they are then classified as security tokens and are subjected to local securities regulation. Failure to abide by regulation can result in costly penalties and derailed projects. However, if a start-up meets all its regulatory obligations, the security token classification creates the potential for a wide variety of applications, the most promising of which is the ability to issue tokens that represent shares of company stock.



Victor Chua
Managing Partner
Vynn Capital

According to the second speaker and expert panellist, Victor Chua, CFA, his venture capitalist firm, Vynn Capital, views ICO not as a get-rich-quick scheme but a potential alternative in raising funds for companies. Before investing in ICOs, Victor recommends fundamental checks similar to that practiced with Initial Public Offers or most other forms of investing. Firms which seek to raise capital should have a viable business model and a game plan to create value for

the company and ultimately for the providers of capital.

Victor added that regulators have an important role to play in the future development of ICOs. Bona fide ICOs that can add value to the company's performance should be supported whilst fraudulent ICO should be not be approved. In contrast with ICOs, investing via venture capitalist funds are deemed more strategic and should be seen as an entry point to

investing into any other derivatives that rides the growth of tech industry. Victor said that with Vynn Capital, the key focus is to help 'traditional' investors in understanding more about the new economy, particularly the tech industry. He finds that the understanding gap between 'traditional' investors and technology investing an area of concern if these investors are making decisions purely based on herd mentality.

Allocate Only a Fraction of Your Wealth to Cryptocurrencies

The third speaker was Peter Sin, who is the Co-founder of Singapore Bitcoin Club and the Co-Head of the Digital Sub-Committee (ACCESS). He explained that there are several types of cryptocurrency investors -- from the day traders that look at technical pricing and trending to those who have a long term horizon by looking at the business value behind the currency. Like equity investors, cryptocurrency investors employ fundamental and technical analysis in helping them enter and exit the market.

Having 5 years of experience in the finance industry, Peter has knowledge and experience in wealth protection and growth. This knowledge and experience,

coupled with his insights into cryptocurrencies, has enabled him to introduce cryptocurrencies as a new asset class into his personal investment portfolio.

Because of the volatile nature of this new asset class (some regulators deem cryptocurrencies as a commodity), Peter recommends that investors who plan to dabble with cryptocurrencies allocate a small fraction of their wealth into it. When fielding a reply to a question from the audience, Peter said that his investment portfolio is predominantly made up of dividend-paying equities, unit trusts, annuities and a small holding of cash and cryptocurrencies.



Peter Sin
Co-founder
Singapore Bitcoin Club