

# VISIO BLOC

CHAINING INNOVATIVE IDEAS

#002 / MAY 2019

A student-run bi-monthly newsletter that aims to share and promote the development of regulatory technology



## THE CRYPTO-FUNDRAISING LANDSCAPE

- ICO, STO OR IEO?
- TOKEN SALE AGREEMENTS
- REGULATING DIGITAL ASSETS

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## MESSAGE FROM THE VISIO CREW



Similar to IPOs in investment markets, ICOs first emerged as a means to raise funds in the form of cryptocurrencies. Having helped to raise billions of dollars, ICOs allow startups to avoid regulatory compliance and intermediaries, which eventually led to its downfall due to scams and securities law violations. Following this, the landscape of crypto-crowdfunding has witnessed the rise of security token offerings (STOs), a more transparent investment vehicle approved by regulators. This phenomenon hence raises questions on the potential of STOs in replacing ICOs entirely and how long STOs can survive in the crypto market.

In this issue, VisioBloc focuses on digital assets and crypto-fundraising. We have both tech and legal experts to provide us with insights on the regulation of digital assets and the recent trends and possible developments of crypto-crowdfunding, particularly in Asia. Aside from the ICO v STO discussion, there is a brief overview of initial exchange offerings (IEOs) as the next fundraising trend.

We hope our readers enjoy this issue as much as the previous issue. As we work towards providing better content, we welcome any feedback on possible topics you'd like us to cover in upcoming issues via [umregtech@um.edu.my](mailto:umregtech@um.edu.my)

Best wishes,  
The Visio Crew

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## REGTECH CUBE

The RegTech Cube is a Centre of Excellence for Regulatory Technology (RegTech) situated at the Faculty of Law of the University of Malaya. The Centre of Excellence serves as a platform for students to conduct research, education and outreach programs related to RegTech, particularly on blockchain technologies. The RegTech Cube also aims to be a global leading RegTech research hub.

## OBJECTIVES

UM RegTech Project aims to:

- Set up a centre specifically for RegTech research and create a community of students and academicians in UM focused on RegTech-related initiatives;
- Bring together academics, technologists, policymakers, and members of the private sector for programs that explore blockchain's impact on law, government, and society; and
- Collaborate with government, private entities, NGOs, and educational institutions on the use and adoption of blockchain technology.

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*The Insights section provides an overview of the theme in each issue. In this issue, we briefly explain RegTech from four different areas - computer science, law, economics, and business.*

## FUNDRAISING THROUGH CRYPTOCURRENCY

Investment in the Fourth Industrial Revolution is defined by accessibility and risk. As cryptocurrency has become a mainstream currency for transactions, investors and project startups have utilized this form of currency to bypass the strict, complex, and high entry barrier of traditional investment methods through company stocks, better known as Initial Public Offerings (IPOs). Thanks to blockchain technology, investors now have access to fund products with cryptocurrency through Initial Coin Offerings (ICOs).

An ICO is where an investor funds projects with popularly traded coins like Bitcoin or Filecoin in exchange for an exclusive currency that the project produces. These coins will then increase in value and investors trade them to generate profit. This easy approach has led to a major boom in ICOs and generated \$2.6 billion in 2017. However, because of the fact that ICOs are unregulated and are extremely difficult to legislate, investors are often exposed to monumental risks of fraud and illegitimacy. This shifts the focus of the investment process from product success to risk aversion, which hampers the fundraising process.

This has led to the creation of Security Token Offerings (STOs) to act as an alternative. An STO is where instead of trading currency, projects trade security. The process is similar to an ICO, with the exception that every project must achieve certification with a regulated body. For example, if a project wishes to advertise their product for investment in the US, it must go through the Security

and Exchange Commission (SEC) and fulfil their guidelines before being capable of entering the market. This allows for better investor protection since projects are backed by a regulated body and can be held accountable. However, this forces projects to purchase legal counsel to abide by SEC guidelines and wait for certification. This defeats the purpose of blockchain-based investments as it again creates a barrier of entry for the market.

The advent of Initial Exchange Offerings (IEOs), which came about due to the proliferation of fraud and scams plaguing the ICO market, has brought a whole new dimension to the crypto fundraising market. From a regulatory perspective, the flurry of ICOs cropping up across a multitude of platforms driven by the blockchain hype renders it cumbersome for regulators to even keep track of, let alone monitor the ICO market in their respective jurisdictions for tokens which may amount to fraud or scams. This issue of regulatory overload can be mitigated to a certain extent if the use of IEOs picks up in the time to come. Under this mode of offering, the exchanges would effectively be playing the role of a watchdog as they will be undertaking due diligence screening to assess the integrity of the token issuance framework. Exchanges must also evaluate the legitimacy of the relevant project of any IEO proposed for hosting on the exchange's platform in addition to handling matters relating to regulatory compliance. This brings about the two-fold benefits of reducing the risk of losses on the part of crypto investors to fraud and scams as well as lightening the workload of the regulators.



Additionally, IEOs also offer a possible solution to the problem of barrier of entry due to the imposition of regulations to STOs as discussed above. Generally, the need to regulate STOs arises due to the nature of STO tokens which renders them to function as investment contracts. The funds invested by the public are managed by the proprietor of the scheme whereby there is an expectation of profit on the part of the investors. As the primary role of regulators is to safeguard the interests of the investing public, the regulators have little choice but to intervene in the context of STOs. These tokens amount to investment contracts under which the token issuers will be managing funds belonging to crypto investors. On the other hand, regulators are generally wary of the need to exercise restraint on their part lest their intervention cause more harm than good. Regulators may inadvertently end up stifling the development of the crypto funding market in their jurisdiction if they are not careful.

The advent of IEOs offers a possible saving grace to the conundrum faced by regulators. This is because, as the role of exchanges under the IEO issuance framework involves handling matters relating to regulatory compliance, regulators can mandate the use of an IEO for the issuance of securities tokens, thereby balancing the need for regulation with the prospects of development of the crypto fundraising market. As exchanges would

be playing the role of watchdogs under the IEO issuance framework, regulators can impose on the exchanges the obligation to ensure that the token offerings which are hosted on the exchanges' platform duly comply with the relevant securities-related regulations, whereby the exchanges will be responsible for flagging to the regulators any material non-compliance.

By imposing securities-related regulations in this manner, the issue of barrier to entry would not arise as the IEO is a creation of the crypto fundraising market to enhance the accountability and transparency of the market. Any decision on the part of regulators to mandate the offerings of securities tokens using IEOs will be perfectly in line with the developmental path of the market. However, as crypto tokens are generally offered on a cross-border basis whereby the purview of regulators is limited to exchanges which operate in their respective jurisdictions, there may be a need for the International Organization of Securities Commissions (IOSCO) to establish a model regulatory framework to implement the aforementioned use of IEOs to address the issues affecting the ICO and STO markets.

In conclusion, investor risk and accessibility are two big facets in investment, and with IEOs optimizing the balance between the two facets, the sky's the limit for the crypto fundraising market.



# REGULATING DIGITAL ASSETS IN MALAYSIA: A BRIEF OVERVIEW OF THE 2019 ORDER

By *Thong Ming Sen*

On 15 January 2019, Malaysia's Minister of Finance exercised his powers under Section 5 of the CMSA to issue the Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019 (henceforth, "the 2019 Order")<sup>1</sup> which widened the scope of the Capital Markets and Services Act 2007 (CMSA) to cover blockchain-based digital currencies<sup>2</sup> and digital tokens<sup>3</sup>. In essence, the 2019 Order provides for two categories of prescribed securities, whereby the first category covers blockchain-based digital currencies which can be traded on any place or facility where such transactions are regularly made, whereas the second category covers blockchain-based digital tokens whose issuance framework is similar to investment schemes under the Investment Schemes Act 2016 (ISA). Following the enactment of the 2019 Order, the RegTech aspect of blockchain technology would play a much more pivotal role than before, given the newly-imposed regulatory compliance requirements.

With regard to the first category, its primary objective is to cover blockchain-based digital currencies which can be traded on digital currency exchanges, whereby the application of the CMSA to such currencies is necessary. Prior to the enactment of the 2019 Order, neither digital currency exchange markets nor the digital tokens traded thereon were regulated under Malaysian laws. With respect to digital currency exchanges, although their operations would presumably fall under the purview of Bank Negara Malaysia (BNM) in enforcing the Money Services Business Act 2011 (MSBA), there is arguably a gap in the law in this regard. Only money services activities which deal with ringgit, foreign currency or funds would fall under any of the three categories of money services businesses regulated under the MSBA i.e. money changing businesses, remittance businesses, and wholesale currency businesses<sup>4</sup>.

Accordingly, the enactment of the 2019 Order is necessary to plug the lacuna by expanding the scope of the CMSA to cover blockchain-based digital currencies through the prescription of such currencies as securities. This empowers the Securities Commission of Malaysia (SC) to exercise its regulatory purview over the operators of exchanges, facilitating the trading of these currencies through the regulation of such exchanges as stock markets

<sup>5</sup>. From the perspective of RegTech, the transparent design

of blockchain is of much utility to operators of digital currency exchange markets in complying with their data verification and due diligence reporting obligations under the CMSA.

With regard to the second category, its primary objective is to empower the SC to exercise its regulatory purview over blockchain-based digital tokens, whose issuance framework is similar to investment schemes, by enforcing the provisions in the CMSA which are applicable to such tokens<sup>6</sup>. Given the increasingly widespread adoption of the digital token issuance framework, the Malaysian legislature may have deemed that blockchain-based digital tokens, which are akin to interests in an investment scheme, should be more properly regulated by the SC under the CMSA as opposed to the Companies Commission of Malaysia under the ISA<sup>7</sup>, whose regulatory compliance requirements are less stringent than those of the CMSA. From the perspective of RegTech, the automated nature of blockchain is of much utility to the issuers of blockchain-based digital tokens in complying with their data recording and financial accountability obligations under the CMSA.



**Suruhanjaya Sekuriti**  
Securities Commission  
Malaysia

Subsequent to the enactment of the 2019 Order, the SC issued a media statement on 17 January 2019<sup>9</sup> in which the SC clarified that there will be a transitional period until 1 March 2019 during which existing digital asset platform operators are allowed to operate without the SC's authorization<sup>9</sup>. With regard to Initial Coin Offerings

(ICOs), the SC reiterated that the undertaking of any ICO in Malaysia will require its prior authorization. Proprietors of existing ICOs in Malaysia should cease their activities and return all investment funds to the investors pending the issuance of guidelines for ICOs which are expected to be ready by the end of the first quarter of 2019.



1. Available at [http://www.federalgazette.agc.gov.my/ouputp/pua\\_20190114\\_PUA12.pdf](http://www.federalgazette.agc.gov.my/ouputp/pua_20190114_PUA12.pdf) (last accessed 13 February 2019).

2. Defined as "a digital representation of value which is recorded on a distributed digital ledger whether cryptographically-secured or otherwise, that functions as a medium of exchange and is interchangeable with any money, including through the crediting or debiting of an account"

3. Defined as "a digital representation which is recorded on a distributed digital ledger whether cryptographically-secured or otherwise".

4. In the context of digital currency exchanges, the lacuna in the law stems from the fact that blockchain-based digital currencies are not caught under the definitions of "ringgit", "foreign currency" or "funds" as set out under section 2 of MSBA as a result of which none of the three categories of money services businesses regulated under the MSBA would be applicable to such exchanges which facilitate the trading of such currencies.

5. After the enactment of the 2019 Order which prescribed blockchain-based digital currencies as securities for the purposes of the CMSA, digital currency exchanges would amount to stock markets under the CMSA as section 2 thereof describes "stock market" as "a market or other place at which, or a facility by means of which offers to sell, purchases or exchanges of securities are regularly made or accepted". Accordingly, the enactment of the 2019 Order has had the effect of rendering the establishment and operation of any digital currency exchange in Malaysia to be unlawful if the operators thereof fail to comply with the requirements as set out in section 7 of the CMSA.

6. It can be noted that notwithstanding the fact that section 2 of the ISA defines an "interest in an investment scheme" as excluding capital market products such as securities which fall under section 2 of the CMSA, prior to the enactment of the 2019 Order, blockchain-based digital tokens which amount to interests in an investment scheme are regulated by the Companies Commission of Malaysia under the ISA instead of the SC under the CMSA as such tokens did not amount to securities for the purposes of the CMSA before the 2019 Order came into effect.

7. Nonetheless, it can be noted that notwithstanding the identical nature between interests in an investment scheme under the ISA and that of blockchain-based digital tokens which are prescribed under the 2019 Order as securities for the purposes of the CMSA, there are some subtle differences between the two which are namely (1) only blockchain-based digital tokens which had been issued to its holders in return for compensation in the form of money or money's worth would amount to interests in an investment scheme under the ISA whereas the 2019 Order does not provide for the requirement that compensation be in the form of money or money's worth and (2) the underlying business or undertaking of the blockchain-based digital token issuance framework from which income or return is generated is required to be specifically related to the acquisition, holding, management or disposal of property, assets or business activities under the 2019 Order whereas the ISA provides that such underlying business or undertaking can take the form of any financial or business activities.

8. Available at <https://www.sc.com.my/news/media-releases-and-announcements/media-statement-on-implementation-of-digital-assets-prescription-order> (last accessed 13 February 2019).

9. Subject to the condition that these platform operators do not accept new investors but only facilitate the withdrawal or transfer of assets belonging to existing investors.

# TOKENISATION AND THE FUTURE WITH CELEBRUS ADVISORY

By Ahmad Haikal

We approached *Edmund Yong of Celebrus Advisory* to gain insights into the process of tokenisation and how regulation can come into play.

***I believe Celebrus is dealing with compliance consultancy for blockchain development and business tokenisation. In line with the theme of our upcoming newsletter, do you mind elaborating on tokenisation?***

Tokenisation is a process of replacing sensitive data with non-sensitive data. In the payments industry, it is used to safeguard a card's PAN by replacing it with a unique string of numbers. The payment token itself is the unique string of numbers – a secure identifier generated from a PAN. Payment tokens are automatically issued in real-time and used online in predefined domains and/or payment environments. With tokenised payments, the PAN is not transmitted during the transaction, making the payment more secure. This is the key strength of tokenisation as a security measure. Since the PAN is never compromised, there is very little possibility that the token can be used for fraudulent activities – even if a data breach occurs and payment tokens are accessed.

***At the mention of tokens, the first thing that comes to mind would be initial coin offerings (ICOs) and security token offerings (STOs). How are they related to tokenisation?***

ICOs and STOs are tokenised in terms of their payment mechanisms. So, when you do transactions to purchase ICOs and STOs, you're actually buying tokens through a secured system.

***What do you think is the likelihood of STOs replacing ICOs?***

ICOs are dead. The obituary came in towards the end of last year. ICOs will still have its hallowed place in crypto history, but the industry has evolved. STOs are supposed to be the comeback sequel, but they have been overhyped and are underwhelming, so far at least. There is still a long way to go before STOs can enter the mainstream, and one should not expect STOs to become the same frothy bubble as ICOs.

***Do you mind explaining why you think ICOs are dead?***

ICOs are basically donations – purchasing ICOs does not give rights to a share in any real asset. You simply trade ICOs then. There was a bubble in ICO prices as it is not backed by any real asset – like the Bitcoin bubble when it was reaching \$20,000/coin.

***How about STOs, then?***

The difference between STOs and ICOs is the presence of real assets as its underlying security. The word security in STOs means that the token represents ownership in a part of a real asset. Theoretically, I could issue STOs of my shirt and sell it to people. So, the buyers of my STO would have partial rights to my shirt. Because of that, it is unlikely to be as speculative as ICOs are, due to its asset-backed nature.

***Since STOs are backed by real assets, does this mean that it can be treated like assets in the capital market?***

Not entirely. STOs are actually easier to regulate in some ways. Since STOs are by definition securities, they will need to conform to existing securities laws.

***In what ways are STOs easier to regulate?***

STOs cannot be regulated completely in the same way conventional capital market securities are regulated. This is because regulators have no idea how to regulate STOs completely, as this is a new technology. If regulators over-regulate STOs, the crypto industry will not be happy with this approach and will argue that current laws are too restrictive and stifle innovation. They will lobby for a permissive environment for this technology to take its course.



***That's quite difficult. Having to balance between innovation and regulation is already tricky, but what other aspects of STOs might pose challenges to regulators?***

From my observations, most issuers are drawn to STOs because they want shortcuts. That is, they don't want to go through the whole nine yards of seeking approval and would rather just mint the tokens and place them out directly to investor pools. For now, the one thing that makes this innovation better than an ordinary share is speed-to-market.

Let's consider a company going for an IPO (Initial Public Offering). The company needs to comply with regulations of the Securities Commission and find investment banks to advise on its valuation and sale of its newly issued shares. These processes take time.

In contrast, if you just issue STOs, you don't need investment banks. You'd need to conform to some regulatory laws, but that's about all. You can have your IT team issue tokens to other companies or interested parties.

So, regulators will have to assess whether STOs can really make the capital formation process faster and easier, especially for the underfunded SME community, and find ways to reduce bureaucratic friction.

As for Regtech, STOs will open up whole new directions, like custody and walleting solutions to help store crypto assets; digital identification of the holder and forensics to trace the transaction trail; smart contract integrity and audits so that it cannot be compromised, and so on. You cannot really decouple Fintech and Regtech; both will need to move together for regulators to accept STOs.

***Speaking about Regtech, how would Regtech be directed in respect to STOs?***

Regtech is a reactionary technology. You see, innovation happens at a quick pace. However, regulation has always been slower than innovation – this is inevitable. When the Internet was introduced to the public, regulators could only use laws related to postal mail and telephone to regulate Internet-based activities. It is pretty hard.

Besides, there are other issues in terms of regulating something with the potential to go global like STOs. Now, let me give a hypothetical scenario. Assume that I'm planning to issue 1,000 tokens for an acre of land I own at Seremban. I can, in theory, sell my tokens to anyone in the whole world. However, for me to issue ownership

rights to other people, I'd need to comply with land laws. Land is handled by the state authority, in this case, Negeri Sembilan state government. I'd have to update the status of land ownership to the Negeri Sembilan state government. The buyer would have to check if he or she is allowed to have ownership over my land as per the law.

***So, regulation is not standardised, and this is a challenge as well?***

Yes. For good reasons. Each country has its laws and regulations.

***That can be quite troublesome. In some things such as accounting and banking standards, there is already a standard the world adheres to. Do you see regulation in Fintech and Regtech becoming standardised?***

As per my observation, we are heading towards that in some issues.

***While we're still on the topic of regulation, I'd like to ask about any possible governance issue with STOs and Fintech in general.***

Foremost on my mind is AML-CFT (Anti-Money Laundering and Counter-Financing of Terrorism). Crypto may be borderless but securities are not, so AML laws could stunt this. Two things to watch out for: Japan which hosts the coming G20 will share a framework on governing crypto. FATF, of which Malaysia is a member, will also release its much-anticipated guidelines soon.

It is very hard to track tokens and any form of payment done in a blockchain network. Regulators who are concerned about the possibilities of money laundering or terrorism financing would be scratching their heads to investigate the possibilities of dirty money being cleansed through blockchain channels.

Beyond that, there is a whole body of jurisprudence that is almost non-existent for STOs right now. You need new laws and judicial decisions on property, contract, taxation and so on to give the market confidence. If Bitcoin is property, then what is it? How does the tort of conversion apply to intangibles like Bitcoin? Will bankruptcy laws recognise Bitcoin as properties? Are smart contracts validly enforceable, when there are no digital signatures involved in the transfer of assets? What is the evidentiary value of smart contracts and will courts even accept them? Taxation is a confusing mess. Is it classified as income or property? Should you tax this as a new asset class or at the primary activity level? Mining, issuing, and trading are very different animals.

### ***Those are some legitimate issues to which Regtech might be able to offer solutions.***

Definitely. People are avoiding ICOs because ICOs are tainted with terms such as being scams and illegitimate. Some people would love to be unregulated. These are the anarchists who want to break out of the system. They do not adhere to the existing system and seek absolute freedom.

However, the majority look forward to regulatory technology, as Regtech would assist regulators in monitoring these technologies, hence allowing them to give the nod and give confidence to the public to engage in these new technologies.

### ***Then, how do you see the growth of STOs in Southeast Asia?***

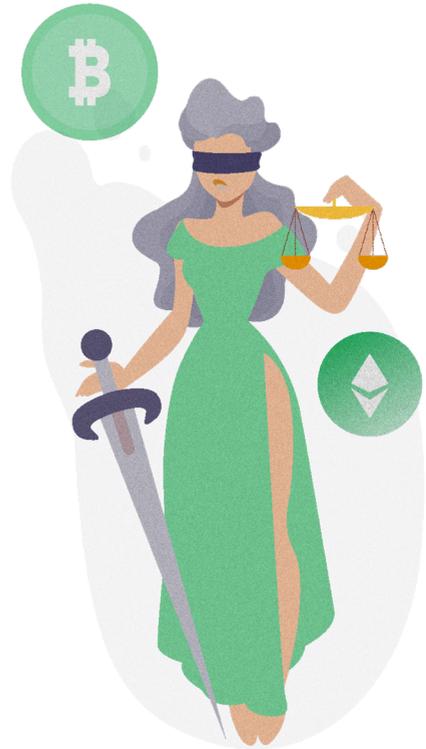
It will not be as exciting as you think. STOs have to conflate two financial worlds, the old and new, and there is bound to be inertia and resistance. Don't expect a peaceful co-existence at the start. I see more progress in the money services front, for payments and remittances, due to the large unbanked population in Southeast Asia, compared to the capital markets.

The region is diverse and moving on different gears. For examples: Thailand is legalizing STOs, Singapore allows for 'reverse ICOs', Bitcoin is being commoditized in Indonesia, and Philippines has created a 'safe harbour'. Where Malaysia goes with this will be interesting to watch. It is a late entrant and has the benefit of hindsight from its neighbours.

However, in the long run we're pretty bullish on tokenization. Definitely.

### ***How does Celebrus Advisory see itself in the business of tokenisation?***

Well in the end, tokenisation is meant towards ownership of something. So, we think that tokenisation is a process and not the end goal. This is where we come in, to assist in giving advice on regulation and ownership of assets backing the tokens.



## Edmund Yong

Co-founder of Celebrus Advisory, a bespoke and compliance-first consultancy for blockchain development and business tokenisation. He boasts a vast array of experiences as the former Asia Pacific Director for a big data and blockchain-powered company on the Fortune Global 500, and General Manager of a dominant credit reporting bureau. He has led several industry-first and market-leading solutions on fintech, risk scoring, and e-delivery, which are honoured with dozens of international awards for product innovation.

# ESSENTIAL CLAUSES IN TOKEN SALE AGREEMENTS

By *Kevin Koo Seng Kiat*

In July 2014, a young, awkward Vitalik Buterin launched the Ethereum blockchain token sale. The sale raised \$18 million in Bitcoin to develop the Ethereum platform. Ethereum was described as a platform to build decentralised applications.

The Ethereum token sale launched one of today's most popular blockchains, but it was not the first. The Mastercoin initial coin offering (ICO), in 2013, was the world's first ICO, raising about \$500,000.00 in Bitcoin. Today, it's called the Omni layer, well known as the protocol behind Tether.

By 2017, token sales were a lucrative industry, generating millions of dollars, many with nothing more than a white paper. The EOS token sale, for example, raised more than \$1 billion.

At first, token sales seemed to operate without proper regulation. Then, the hacking of The DAO occurred, and the Securities and Exchange Commission in the USA expressed its opinion that the business model of the project meant that the token was potentially a security under its jurisdiction.

Lawyers everywhere predicted that regulations would tighten as would compliance requirements. They advised their clients that token sale contracts should comply with the law.

## TYPES OF TOKEN SALE AGREEMENTS

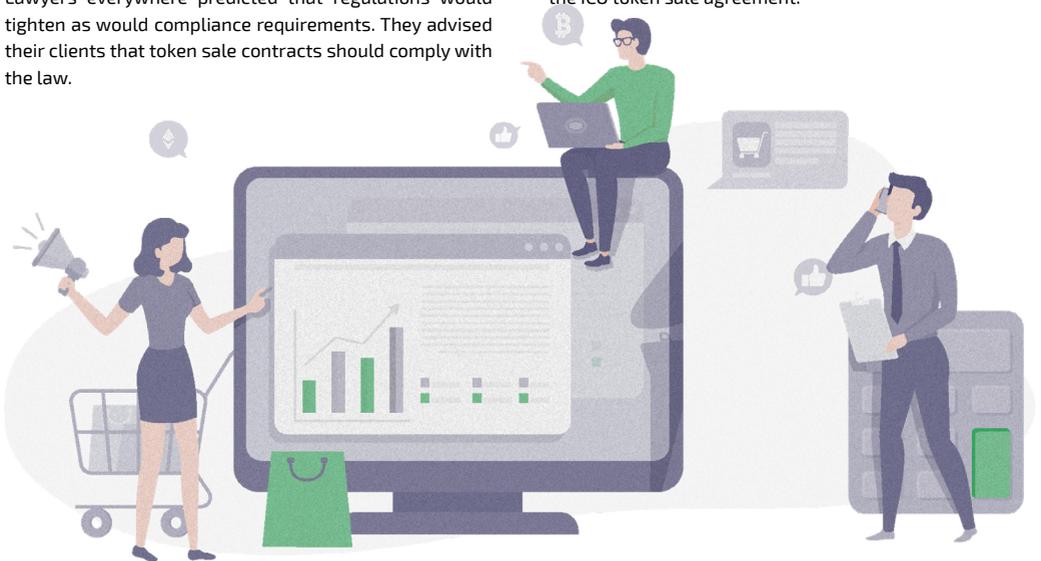
To simplify things, there are a few types of token sale agreements.

First, there is the sale agreement for a token that is to be sold to the world for the first time. The token may not yet exist, or some of the tokens may have been generated, or even all of the tokens may have been generated in a pre-mine.

Second, there is the sale agreement for a spot transaction of tokens, also known as a 'trade contract'. This type of transaction is meant to take place almost instantaneously, or in the near future, with the price following the current market pricing.

Finally, there is the sale agreement for tokens far in the future, also known as a 'futures contract'. Here, the selling price of the token is locked in, with payment and delivery at a future date. The market price of the token at delivery could diverge greatly. What is certain is that one party will profit handsomely.

For this article, we focus on the first type of agreement, the ICO token sale agreement.



### THE ICO TOKEN SALE AGREEMENT

The ICO is also known as initial token offering, and token generation event (TGE), among others. It is a sale of a new token in exchange for an existing token to raise funds for a project.

Without further ado, here are some essential clauses, which should be included in a token sale contract.

### EXCLUSION FROM PARTICIPATION

It is common to exclude citizens and residents of certain countries from participating, if such countries have banned cryptocurrencies and token sales. Many contracts tend to exclude people from the USA, China, and Singapore. If the seller of the token is based in Malaysia, it may be a good idea to exclude Malaysians.

### INVESTOR STATUS

In some token sales, ordinary retail investors are not allowed to participate, and only accredited investors and sophisticated investors are allowed to purchase the tokens. This is true, especially if the token is a security. Proof or verification of such status must be provided.

### KYC

The token purchaser must undergo KYC (Know Your Customer) protocols to confirm he or she is not a terrorist, bankrupt, a politically exposed person (PEP), etc.

### CAUTION

The token purchaser should be cautioned that purchasing the token has risks, and the purchaser agrees to bear those risks. The risks may be enumerated, e.g. the token may be worthless, development could be stalled, or the project declared illegal.

### SOFT CAP

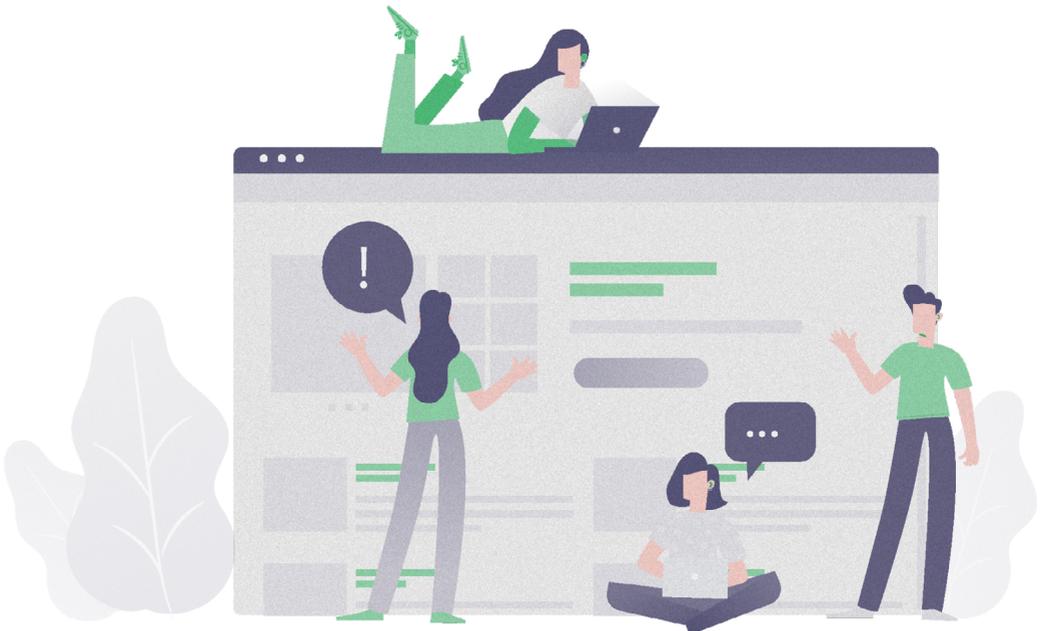
The agreement should state the "soft cap", i.e. the minimum that is required to be raised from the token sale. If this amount is not met, funds received will be returned to their contributors.

### HARD CAP

There may be a need to state the "hard cap", i.e. the maximum that a project will raise from the token sale. Once this amount is met, the token sale ends.

### JURISDICTION

A contract should state under which jurisdiction it is governed. It would be expected that the law governing the token sale contract should follow the country in which the entity selling the tokens is based.



### RESOLUTION OF DISPUTE

In case of dispute, which court or arbitration center should hear the dispute? Are there any ADR methods incorporated, such as mediation?

### TRUSTEE OR STAKEHOLDER

In some cases, a trustee or a stakeholder would hold the funds raised. The funds will be released bit by bit, as milestones in the roadmap are reached. This is good practice, as it guarantees the safety (and return) of the funds if the project fails for any reason.

### CUSTODY, LOCK IN AND RELEASE OF TOKENS

Often, the token purchaser must agree to a delayed release of the tokens. The tokens are often sold at a discount, and a lock in is required to avoid a huge dump on the market, causing the price to plummet. Ideally, the trustee or stakeholder will have custody of the tokens until they are released.

### CONSIDERATION

Is the token being sold in consideration of money being paid? Is the sale an outright sale, which is final and non-refundable? Sometimes, lawyers get creative with this part. For example, funds received may be described as donations or contributions to a project, and tokens are issued as rewards for contributions.

### ROLE OF RELATED ORGANIZATION

In some cases, a non-profit organization is established, such as a foundation, that oversees and directs development of the project.

### MAINNET SWAP

Where there is a new, separate blockchain, the ERC20 tokens that a purchaser gets need to be swapped for mainnet tokens. They need to agree to participate in the token swap or token burn.

### SOLE RESPONSIBILITY

The token purchaser must bear responsibility for his tokens once they are transferred to him. He must keep his private keys and recover word list safe.



**Koo Chin Nam & Co.**  
ADVOCATES & SOLICITORS

### ABOUT THE AUTHOR

## Kevin Koo

Managing partner of Koo Chin Nam & Co., a law firm based in Kuala Lumpur, Malaysia, as well as co-founder of Lex Futurus, an international decentralised legal advisory firm for blockchain registered in Russia, Kevin Koo has acted as legal advisor for CoinBene, a leading global crypto exchange, and several ICOs. In his day-to-day legal practice, he handles court litigation with a wide range of experience in all manner of cases including debt collection, criminal work (causing injury and narcotics), conflict of laws (constitutional), industrial court work, land disputes, contentious probate, copyright enforcement, appeal to appellate courts, etc. He holds an LLM from Universiti Malaya and a Master of Management from Universiti Tun Abdul Razak.

# REGULATORY ISSUES IN DIGITAL ASSET EXCHANGES

By Edwin Lee

KPMG, one of the big four accounting firms, released a 42-page report in November 2018 where it identified the key challenges to the adoption of blockchain-powered crypto assets in the global financial services ecosystem. While KPMG noted that "crypto-assets are now impossible to ignore", they need institutionalisation in order for crypto-assets to create trust and scale. Amongst the key challenges listed are regulatory compliance, forks, custody, accounting, and tax implications.

2017 was the year where cryptocurrencies seemed to be moving towards becoming mainstream. More cryptocurrency exchanges are being set up to facilitate trading of cryptocurrencies, and more projects are going for initial coin offerings (ICOs) to raise funds for their blockchain-related projects. Following this, regulators around the world are finding ways to respond to the emergence of this new innovation. Some regulators had resorted to banning it altogether, while some had decided to put in regulations to strike a balance between protecting their monetary sovereignty and consumer protection and encouraging the development of such innovation.

Cryptocurrency exchanges are an important component of the cryptocurrency market. Without it, most people would not have a platform to trade in cryptocurrencies. In this article, we will examine the regulatory issues surrounding cryptocurrency exchanges, with a particular focus on how Malaysian regulators deal with it.

In Asia, Japan was the first country to regulate cryptocurrency exchanges. Under Japan's Payment Services Act, cryptocurrency exchanges are legal if they are registered with the Financial Services Agency. In South Korea, cryptocurrency exchanges are regulated by the Financial Supervisory Service, and they are treated like banks in which they have to adhere to some of the strictest crypto laws in Asia.

In Singapore, cryptocurrency exchanges will be regulated under the new Payment Services Act once the new law is passed by the Parliament. The Hong Kong Securities and Futures Commission had also proposed a regulatory framework for cryptocurrency exchanges, requiring them to follow the same legal frameworks that apply to traditional financial services.

In Malaysia, the Securities Commission (SC) had introduced a new legal framework to facilitate trading of cryptocurrencies on electronic platforms. In the SC's Guidelines on Recognized Markets (henceforth, the "Guidelines"), cryptocurrencies are called 'digital assets' and electronic platforms are 'digital asset exchanges (DAXs)'. If a DAX is operated, provided, or maintained in Malaysia, or is located outside Malaysia but actively targets Malaysian investors, then such DAX is subject to the Guidelines and must apply to the SC for approval in order to operate in Malaysia by 1 March 2019. Since the application window has closed, anyone who wishes to operate a DAX that falls under this definition will have to wait for the next round of application (if any).

The SC has attempted to tackle the following regulatory issues through the guidelines:

## LOCAL INCORPORATION

In order for the SC to have jurisdictional power over a DAX, the SC requires all DAX operators to be locally incorporated and have a minimum paid-up capital of RM5 million. This is to ensure that the company will have sufficient funds to pay compensation (if they are sued by their users) or penalty (if they are fined by the regulator).

## FAIR TRADING

A DAX operator must:

- Ensure its DAX is operating in an orderly, fair, and transparent manner;
- Have in place rules and procedures for the trading, clearing, and settlement of Digital Assets on the DAX;
- Ensure that all disclosures are fair, clear, and not misleading including risk warning statements and other qualifications to enable investors to have an accurate understanding of the associated risks;
- Conduct real-time market surveillance.

## COMPLIANCE AS A KEY ELEMENT

The SC requires all DAX operators to put compliance as a core element in their business. Some of the compliance measures that a DAX operator should take would include having policies to deal with:

- conflict of interest;
- trading operations;
- market transparency; and;
- market making and proprietary trading for liquidity.

### RISK MANAGEMENT

All DAX operators should put in place a risk management policy which covers IT systems, main business risks, as well as cyber security management. In view of the large number of high-profile hacking incidents involving cryptocurrency exchanges, regulators also require cryptocurrency exchanges to build frameworks to identify and protect against hacking risks and to detect, respond to, and recover from such incidents. DAX operators must also put in a business continuity plan and internal audit policy.

### PROTECTION FOR INVESTORS' MONIES

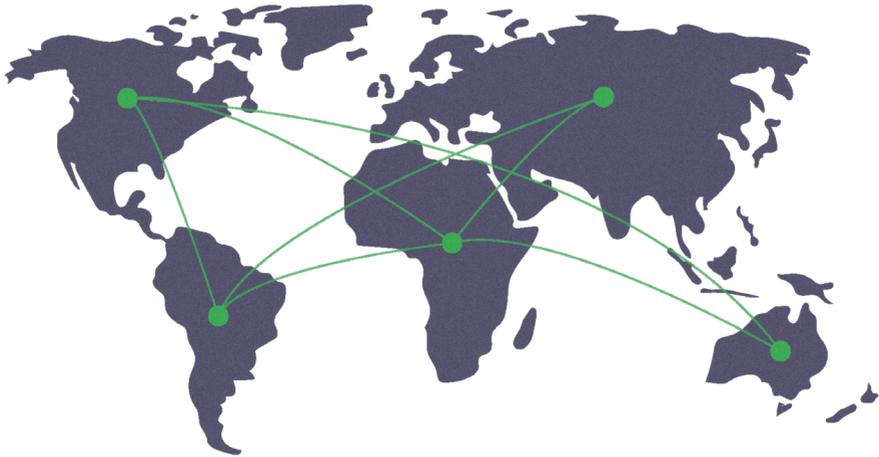
All DAX operators must also prepare a client's asset protection policy and settlement and custody policy which set out a transparent framework on money-handling arrangements, secure storage media as well as processes to protect against risk of loss, theft, or hacking.

### TRANSPARENT AND FAIR CUSTOMER-FACING PROCESS

All DAX operators must put in place clear and fair terms and conditions, with investors and customers and publish risk warning statement that outlines the level of risk of the digital assets to users so that they are made aware of the risks involved.

### PERSONAL DATA AND ANTI-MONEY LAUNDERING PROTECTION

An important element of trading on cryptocurrency exchanges is whether users will be allowed to create anonymous accounts on their exchanges. Most regulators require cryptocurrency exchanges to collect the real identities of their users so as to comply with data protection law. Regulators also note that there are significant money-laundering and terrorism-financing risks associated with trading of cryptocurrencies, and as such, exchanges are required to develop and maintain a strong anti-money laundering and counter-financing of terrorism (AML/CFT) program as part of their customer due diligence exercise.



### ABOUT THE AUTHOR

## Edwin Lee

Corporate, commercial and technology partner at GLT Law. Prior to this, Edwin was a senior associate in the corporate M&A, technology, media and telecommunications as well as competition practice group at Christopher & Lee Ong, one of the largest law firms in Malaysia (an associate firm of Rajah Tann Singapore LLP). He was also an Intellectual Property lawyer specialising in trademarks, passing off, domain name, confidential information, patent, design and copyright contentious and non-contentious matters at SKRINE (also a top-tier law firm in Malaysia). With his past experiences working in large corporate law firms, Edwin focuses on producing "big firm work product, but without all the bells and whistles".

## IEO: THE NEXT FUNDRAISING TREND

Over the last decade, the cryptocurrency ecosystem has seen the rise and fall of cryptos as well as growing interest in Initial Coin Offerings (ICOs) in several countries. Now, the trend is shifting towards Initial Exchange Offerings (IEOs) which may have an advantage over ICOs in many respects, including greater due diligence and a simplified buying process for investors.

In IEOs, an exchange acts as a counterparty: project developers would mint their tokens and send them to the exchange, which undertakes the commitments and performs due diligence on behalf of the startups, before offering them to investors. This way, instead of startups directly selling tokens to individuals, crypto exchanges would serve as intermediaries for a listing fee.

A key difference between ICOs and IEOs is that only members of the designated crypto exchange can purchase tokens in an IEO, while anyone can do so in an ICO. Moreover, ICO procedures differ from one offering to the next, whereas exchanges are more likely to have standardised procedures for all its IEOs.

Taken further, as exchanges are the ones conducting the IEOs, more due diligence is carried out when compared to ICOs. Buyers of IEOs must also undergo know-your-customer (KYC) and anti-money laundering (AML) checks, screening out unqualified investors.

IEOs are fast becoming more familiar among investors and developers in the crypto industry. Many are currently on offer or about to conclude, such as Green Funding Coin on LATOKEN; IOTW on Bitmart; and Terra Green, VenusEnergy and Farm2Kitchen on Exmarkets.

Over the past few years, ICOs have generated significant buzz among fundraisers and startups and experienced a boom. That is, before scammers and less-qualified ICOs prompted governments to ban them and investors to lose faith. A study conducted by Satis Group found that over 80% of ICOs are scams<sup>1</sup>. This prompted the advent of IEOs as a remedy for the scam-ridden ICO market, whereby exchanges would conduct a thorough due diligence screening of startups looking to raise capital for their projects from crypto investors.

With the promise of greater due diligence behind IEOs, crypto instruments are regaining trust among investors, and IEOs are on track to becoming the next big thing for

cryptocurrency. It may be fruitful, therefore, to assess the merits of IEOs from the different perspectives of stakeholders in the crypto industry.

From the perspective of token issuers, listing fees have always been a hindrance to listing their tokens on exchanges. In fact, it has been reported that listing fees can range from \$100,000 to \$3 million depending on the size and liquidity of the exchange, with household names such as Binance fetching up to \$7 million<sup>2</sup>. This may be the underlying reason behind the observation made in a report issued by crypto analytical agency ICORating, which noted that a mere 2% of ICOs announced in the fourth quarter of 2018 were listed on exchanges from 3% recorded in the previous quarter<sup>3</sup>.

It is likely that the cost factor plays a critical role in determining the use of IEOs, as token issuers will only resort to this mode of offering if they deem the cost expenditure to be commercially justifiable based on the scale of their offerings and the value of their projects. However, token issuers also have to account for the fact that fundraising via an IEO would do away with costs that may otherwise be incurred via an ICO, including expenses related to setting up a token issuance platform, marketing, and regulatory compliance expenses, all of which are dealt with by the exchange on which an IEO is hosted.

From the perspective of crypto investors, they will most certainly benefit from the reduced risk of fraud and scams, thanks to the due diligence screening carried out by exchanges prior to hosting any IEO on their platforms. For example, Bittrex International had in March this year announced the cancellation of the hosting of the RAID IEO on its platform. The cancellation was prompted by the termination of a significant partnership previously entered into between RAID with e-gaming analytics data company OP.GG, which resulted in a significant change in the business status of RAID. Due to this change, Bittrex determined that it was no longer in the best interests of the exchange's customers to host RAID's IEO<sup>4</sup>.



Nonetheless, this is an atypical example of a very circumspect exchange. It would be wrong to assume that all exchanges abide by such high standards in terms of their screening process. Prudent crypto investors should continue to undertake their own due diligence vetting of any IEO in which they are planning to invest, lest they end up misplacing their trust in wayward exchanges.

Another advantage that IEOs offer to crypto investors is the instant market liquidity of the tokens, given the fact that the issuance framework of IEOs is such that the tokens are, by default, immediately tradable on the exchange on which the IEO is hosted. This contrasts with the position in ICOs, whereby the tokens of non-exchange listed ICOs will be lacking in market liquidity. Though the tokens of exchange-listed ICOs do have market liquidity, trading could be delayed by up to several months after the end date of an ICO.

Nonetheless, the instant liquidity of IEO tokens comes at the price of a higher risk of market manipulation, due to the limited number of such tokens coupled with the fact that only users of the exchange are entitled to purchase them. Although the risks of market manipulation may be addressed by the relevant exchange capping the number of tokens that can be purchased by an individual, it is important that the KYC verification process put in place by the exchange is sufficiently secure, as there have been reports of market manipulators resorting to falsifying their KYC credentials in order to gain access to IEO markets<sup>5</sup>.

From a regulatory perspective, the advent of IEOs presents a golden opportunity for authorities to impose regulations on the crypto industry, with the objective of enhancing the level of protection afforded to crypto investors. The underlying idea of IEOs is to enable token issuers to leverage the reputation and standing of exchanges to support the legitimacy of the issuers' projects and the profitability of its tokens. Imposing regulations would, therefore, serve to enhance the integrity and trustworthiness of the exchanges, which effectively act as underwriters-cum-promoters for their IEOs.

In terms of enforcement, the imposition of regulations on exchanges that play host to IEOs is much more practical compared to imposing regulations on the token issuers of ICOs. As previously mentioned, most ICOs are non-exchange listed, making it impractical and cumbersome to enforce regulations against the individual issuers, whose numbers could run into the thousands in any particular jurisdiction.

If IEOs come to the fore in the crypto industry, regulators from around the world would do well to seize the opportunity to bring the industry under its purview, with optimum efficiency in terms of supervision and enforcement costs. As of the time of writing, only South Korea has issued regulations for IEOs in the form of a guideline, which provides for investor protection, development planning with regard to the underlying projects, as well as technical and security issues<sup>6</sup>.



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# THAILAND AND HONG KONG: LEADING THE PACK FOR STO IN ASIA



## QRC GROUP

Security token offerings (STOs) are almost all anybody can talk about these days. Of course, STOs have some clear benefits<sup>1</sup>. First, unlike in initial coin offerings (ICO), all utility tokens have some kind of tangible backing in the form of something like a company's ownership (equity), profits (dividends), or even in physical assets. Second, STOs' technical features provide things like automation and even transparency that cannot be fully integrated into security issuance. Finally, STOs are flexible and give many contemporary options to businesses that might have particular community building or financial needs.

Right now there are already many large institutions and innovative individuals that are extremely interested in the benefits that STOs could bring to Asia. The Singapore Stock Exchange, for one, have shown keen interest and have made investments in the security token sector. In terms of national governments, Thailand and Hong Kong<sup>2</sup> look to be leading the pack.

### ICO PORTAL IN THAILAND

In March this year<sup>3</sup>, Thailand's Securities and Exchange Commission (SEC) approved the country's first ICO portal. This makes it easier for ICOs in Thailand to be screened, confirm smart contract code, and to fulfill KYC requirements in regard to investors. While this portal currently only concerns utility token issuance, regulators have indicated that this is the first step towards the establishment of a full framework for security token finance in Thailand.

Legislation has already gone in that direction. On 8 February 2019<sup>4</sup>, Thailand's National Legislative Assembly voted to approve an amendment to the Securities and Exchange Act that effectively legalizes the issuance and trading of securities such as stocks and bonds using blockchain technology. This first step certainly sets the tone for STOs in Thailand.

### HONG KONG'S REGULATORY FRAMEWORK FOR VIRTUAL ASSETS

In early November<sup>5</sup>, Hong Kong's Securities and Futures Commission (SFC) announced that they would be taking a new approach to the regulation of virtual asset portfolio managers and funds. Now, all portfolio managers and other service providers that intend to invest at least 10% of assets in tokens and cryptocurrencies will be monitored by the SFC and obtain relevant licenses.

Similar obligations have been applied to virtual asset trading platforms, such as token exchanges. While these new rules are not specific to security offerings, they certainly indicate the positive attitude that this jurisdiction is taking regarding the STO concept.

### WILL 2019 BE THE YEAR OF THE STO?

A topic of constant debate in the blockchain community is whether 2019 will be the year of the STO<sup>6</sup>. However, today, almost halfway through the year, things still look to be undeveloped in terms of regulation. While positive developments are being made everywhere, including in Asia, it looks like some things still need to be figured out. If one thing is for sure, though, it's that STOs are coming. It's just a question of when, how, and where that will happen.

The Asian STO is on the way, and Thailand and Hong Kong are almost certainly ahead of the pack.

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# SOLVING SECURITY ISSUES IN THE CRYPTO FUNDRAISING INDUSTRY

The crypto industry faces a billion dollar problem. According to a report released by blockchain security firm CipherTrace, a staggering \$950 million worth of cryptocurrencies were stolen from exchanges in 2018 as compared to \$266 million in 2017 and \$152 million in 2016<sup>1</sup>. In the context of exchange-listed Initial Coin Offerings (ICOs), the solution to the critical security issues may be found in blockchain-based startup Cloudbric, which conducted its own ICO in September last year.

Cloudbric's artificial intelligence (AI)-based Decentralized Universal Security Platform utilises its patented VISION deep learning technology. VISION works by sorting out data through traffic conversion before carrying out traffic detection using the Convolutional Neural Network (CNN) learning model, which analyses the data in order to identify patterns of behavior to detect possible attack inputs, i.e. security threats. Cloudbric deploys its VISION technology to provide security services to BitForex Exchange and BitSonic Exchange <sup>2</sup>.

In the context of Security Token Offerings (STOs), the most critical issue is perhaps that of regulatory compliance. Of all the different types of tokens, security tokens attract the most regulatory scrutiny. This issue is further exacerbated for STOs that are offered in multiple jurisdictions on a cross-border basis. As for Initial Exchange Offerings (IEOs), the pertinent issue is the risk of KYC (Know-Your-Customer) credentials falsification<sup>3</sup> by market manipulators. The limited number of such tokens issued—coupled with their distribution pattern, i.e. among a small group of people—result in a lack of market liquidity, which consequently renders them to be particularly vulnerable to market manipulation activities.

Blockchain-based startup iComply, which completed its seed-funding round in August last year, offers solutions to the regulatory compliance issues of STOs and the market manipulation risks of IEOs in the form of its iComplyICO

and iComplyKYC suites of services, respectively. Both of these suites of services, which form part of the iComply token platform, utilize the patented Prefacto Technology. With regard to the regulatory compliance issues of STOs, the LegalTech functions of iComplyICO offer a solution to these issues in the form of an automated compliance screening mechanism carried out on a country-to-country basis using the Prefacto Rule Sets. As a further safeguard, the Prefacto Compliance Protocol will screen transactions and restrict the execution of those which fail to comply with the applicable regulations. As for the market manipulation risks of IEOs, the RegTech functions of iComplyKYC, which operates using REST API, verifies the identity of users through an identity validation process. In this process, the authenticity of the users' identity documents is checked against a host of databases. It also uses a photo-to-identity verification mechanism, which relies on facial recognition and machine learning to confirm that the photo submitted by a user is indeed genuine. As the iComply platform only entered public beta in August last year<sup>4</sup>, it is currently still in development. Nevertheless, iComply has entered into a collaboration with Hoshio<sup>5</sup> to address the security vulnerabilities of exchanges through enhancing jurisdictional compliance with the applicable regulations, particularly with regard to KYC-related provision<sup>6</sup>.



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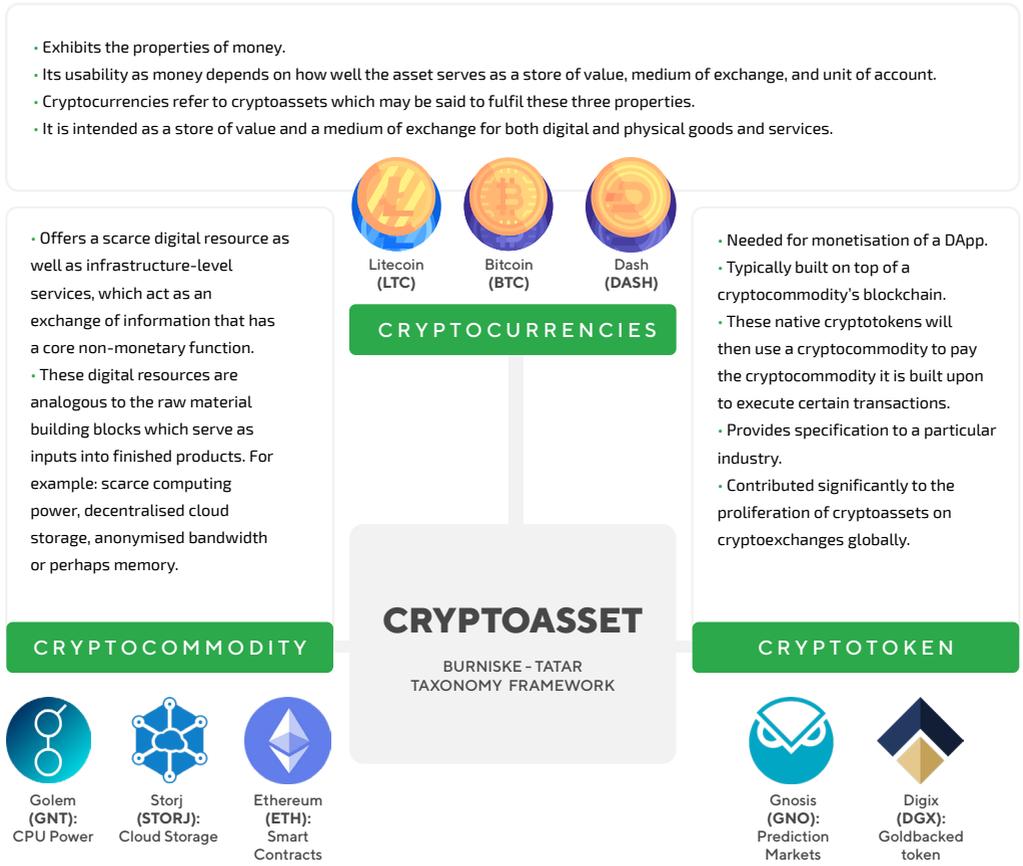
# BURNISKE-TATAR TAXONOMY FRAMEWORK

Chris Burniske and Jack Tatar have divided cryptoassets into three main classes, which are cryptocurrencies, cryptotokens, and cryptocommodities:

Initially, blockchain native assets have been called cryptocurrencies, since their first use cases were designed to work as a medium of exchange that uses strong cryptography to secure financial transactions and verify the transfer of assets. However, since these terms only cover a fraction of the innovation that has been occurring in the blockchain economy nowadays, the wider term of cryptoasset is preferred.

Cryptoassets define a new asset class of the 21st century and the first digitally native asset class in history, that consists not just of decentralised currencies, but also of commodities, digital goods, and services that combine the technology and markets. This new asset class consists of tokenised assets that are enabled by the blockchain technology.

Source <https://blocknovum.com/about-us/cryptoassets/>



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# THE EVOLUTION OF CRYPTOASSETS

## 1<sup>ST</sup> STAGE

### 'Unbanking the banks'

Autonomous currency to counter fractional reserve banking and fiat inflation.

Bitcoin / Mastercoin / Litecoin

## 2<sup>ND</sup> STAGE

### Privacy coins advancing darknet.

"Swiss style banking" for everyone.

DarkCoin (DASH) / Bytecoin / ZCash

## 3<sup>RD</sup> STAGE

### More efficient cryptography /algorithms.

A move from Proof of Work to Proof of Stake.

Primecoin / Pearcoin / NXT

## 6<sup>TH</sup> STAGE

### DAOs and on-chain governance.

To improve voting on protocol updates and take human error out of process.

Tezos / The DAO / Decred

## 5<sup>TH</sup> STAGE

### Scalability for IoT.

Directed Acyclical Graphs (DAGs), blockchain alternatives for higher throughput.

Hashgraph / Burstcoin / IOTA

## 4<sup>TH</sup> STAGE

### App coin revolution.

Adding utility of Dapps, DEX's and ICOs.

Antshares / Ethereum / Waves

## 7<sup>TH</sup> STAGE

### Trade mining/exchange tokens.

Incentivising trading and speculating.

Huobi Token / Binance Coin / Fcoin

## 8<sup>TH</sup> STAGE

### Fiat stablecoins for trading expediency.

Enticing institutional investors with stable fiat-backed crypto.

Gemini coin / Tether / True USD

## 9<sup>TH</sup> STAGE

### Security tokens (STOs).

The ICO for accredited investors, tokenized equity.

TZero / VTF / ZRX

# UM REGTECH TALK SERIES: AN INTRODUCTION TO THE REGTECH ECOSYSTEM

On 15 March 2019, as a part of the UM RegTech Talk Series, we held a talk on an overview of the RegTech landscape at the Faculty of Law, University of Malaya. With 60 attendees, the talk focused on the usage of regulatory technology and relevant issues in various fields, specifically information technology (IT), business administration, economics, and law. It began with a brief lecture on the basics of blockchain technology by Dr. Muhammad Reza bin Za'ba from the Faculty of Computer Science and Information Technology, who explained the mechanisms of blockchain to the attendees by using simple analogies.

Next, we had Dr. Noor Sharoja binti Sapie from the Faculty of Business and Accountancy, who presented on the potential of RegTech in reducing regulatory compliance costs in businesses, especially costs related to tax administration. The event continued with a lecture on 'Financial Sustainability of RegTech Startups' by Assoc. Prof. Dr. Lau Wee Yap from the Faculty of Economics and

Administration. He delivered a comprehensive talk on how RegTech has helped startups to save cost and the growth factor of RegTech in various industries. After the introductory discussions on the growth of RegTech, Nur Husna Zakaria and Dr. Mohammad Firdaus bin Abdul Aziz from the Faculty of Law talked about the existing ethics issues in corporations and provided their views on how RegTech can be introduced to help solve these problems. The event ended with the an inspiring speech by Mr. Shogo Ishida, the CEO of QRC Group. He analysed statistics on the drastic changes in the world economy since the introduction of technology and compared the blockchain market in public and private sectors , before coming to the conclusion that the adoption of blockchain innovation in various industries boosts the economy on a global scale.

Receiving positive responses, we hope that the talk had benefited all the attendees and provided much input on blockchain and regulatory technology.



## CORPORATE VISIT TO LUXTAG.IO

On 5 April 2019, we organised an academic visit to LuxTag. Based in Cyberjaya, LuxTag is a blockchain solution provider that has created blockchain-powered applications to cater to the market of anti-counterfeit, ownership tagging, track and trace, and manufacturer big data. During the visit, Jonathan Tey, one of Luxtag's tech team members, shared some insights on the basic principles behind blockchain technology along with an introduction to core features of LuxTag products. One of the highlights of the session was the E-scroll system, a blockchain-based application that was recently developed by LuxTag for a consortium of Malaysian public universities to verify and validate certificates using a blockchain-powered web application. Through the fruitful session with LuxTag, we were exposed to the various possibilities of blockchain technology in solving real-life issues. With that, we hereby thank LuxTag for hosting us!



For further details on our events, stay tuned to updates on our Facebook page!

Do reach out to us at

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if you would like to partner or collaborate with us for academic visits or outreach programs!