

# FUTURE OF CAPITAL MARKETS

ROB VERHEUL (LIQWITH) EN DANIËL DEN BOER (CHAINTIP)

Liqwith  
Innovators in Finance



CHAINTIP



## LIQWITH

High-Tech Campus 32  
5656 AE Eindhoven  
The Netherlands

Email : [r.verheul@liqwith.io](mailto:r.verheul@liqwith.io)

<https://liqwith.io>

## CHAINTIP

Kastanjelaan 400  
5616 LZ Eindhoven  
Microlab Building  
The Netherlands

Email: [support@chaintip.io](mailto:support@chaintip.io)

<https://chaintip.io>

*“New technologies are transforming the financial industry by revolutionising the way people access financial services. They make the market more accessible for innovative entrepreneurs, start-ups and small companies. This objective is at the heart of the Capital Markets Union.”*

- Jyrki Katainen, EC Vice-President for Jobs, Growth, Investment and Competitiveness

*“The best way to predict the future, is to create it.”*

- Abraham Lincoln

*“Every ICO I have seen is a security.”*

- Jay Clayton, Chairman Security and Exchange Commission (SEC)

# S U M M A R Y

This position paper is the work of more than a year of research and discussion between Liqwith and Chaintip. The result? A proposal for a new ecosystem in the financial world. Our goal is to bring together new technologies and traditional financial parties in the Netherlands. This is necessary, because technological developments are happening so fast that global online solutions offering an alternative to current decentralised administrations and high operational and processing costs will otherwise not root here, but elsewhere. That would be a missed opportunity! On top of that, this ecosystem resolves the broader challenge of how to achieve regained trust in the financial sector. How do we meet future standards of transparency, that are likely to become stricter rather than more lenient? A question to which blockchain technology and cryptography hold the key. Consider the immense rise in crowdfunding through ICOs! Sure, there is a lot of criticism, which we largely share, on the current form of ICOs and the shady way people go about regulation. That is precisely why we are so focused on reducing the gap between traditional financial parties - with proven expertise regarding regulation - and these new technologies. Or even better, remove it altogether. Hence, the importance of jointly creating the new financial ecosystem. Note: the European Union supports this with its plan of action aimed at more competitive and innovative markets, published on 8 March 2018.

By implementing new technologies and combining the 'new' world with the 'old' world, we have the capacity to create a much better version of the financial ecosystem. In line with the ICO (which is not perfect), we propose a strongly improved approach: the IPCO. It meets all relevant regulation and is considered the issuance of a security token without any reservations. This approach can only function properly when multiple partners cooperate in a new ecosystem. Challenging, yes, but also very promising.

No single party can achieve this on their own. Only by bringing together various parties are we able to create a watertight ecosystem in which access to capital markets and post-trade processes is much more efficient. With Liqwith and Chaintip, we are taking the initiative in bringing both worlds together and working towards a proof-of-concept for the capital markets of the future.

What follows is a proposal for all parties involved, including a realistic risk analysis. Without cooperation and knowledge-sharing, the chances of success are slim. The strength is in partnership! Together we can shape the future of capital markets for the next few decades to come, putting the Netherlands on the map by combining 'old' with 'new'. In those capital markets we embrace blockchain technology and compliance, where regulation is the foundation on which we build. The financial markets will undergo a radical change and become more efficient, but the essence will remain unchanged. Supply and demand will still be brought together on the capital markets of the future, but more efficiently, accessibly and less expensively than today.

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# READER'S GUIDE

## GOAL

It is important that the intended ('old' and 'new') parties in the new ecosystem reach a shared vision and are willing to cooperate to create the world's first ecosystem for the next generation capital markets. A cooperation between established, traditional companies and FinTech companies may not be the easiest thing to achieve, but it is definitely the most powerful way to put into practice the theoretical models. This position paper presents the kick-off! The rules will be discussed during the kick-off meeting on the 29th of June on the High-Tech Campus in Eindhoven.

## CONTENTS

1	TRADITIONAL FINANCE VS. NEW TECHNOLOGY <ul style="list-style-type: none"><li>• Important technological developments</li><li>• Why is the traditional financial world lagging behind, while everything else goes global and online?</li><li>• How can we apply the potential of ICOs and blockchain to the financial world?</li></ul>
2	HUGE FINANCIAL POTENTIAL <ul style="list-style-type: none"><li>• Proven financial potential of ICOs</li><li>• Why current form of ICOs is not the solution</li></ul>
3	CHALLENGES <ul style="list-style-type: none"><li>• Do crypto and blockchain technology fit in with current regulation?</li><li>• How to deal with security tokens</li></ul>
4	SOLUTIONS <ul style="list-style-type: none"><li>• What does the future of capital markets look like?</li><li>• Tokenization</li></ul>
5	NEW DUTCH ECOSYSTEM <ul style="list-style-type: none"><li>• What does this initiative entail?</li><li>• What parties play a role?</li><li>• How will the new ecosystem work?</li></ul>
6	RISK ANALYSIS <ul style="list-style-type: none"><li>• What are the risks?</li><li>• What solutions are there?</li></ul>
7	THERE IS STRENGTH IN PARTNERSHIP <ul style="list-style-type: none"><li>• How to establish a cooperative ecosystem?</li><li>• How to make this ecosystem a success?</li></ul>

# T R A D I T I O N A L F I N A N C I A L W O R L D V S . N E W T E C H N O L O G Y

## N O N - S T O P G L O B A L M A R K E T

Over the last decades, the world has shrunk fast due to the many developments in information technology. The period after transitioning to the millennium will be remembered as a period in which we suddenly became wireless and connected. Through the internet, almost everything became available, anywhere and anytime. News travels around the world in seconds. We have access to a continuous stream of online news, messages, entertainment, e-commerce and marketing etc. Political frameworks, standards and values change, and people demand instantaneous service. The speed, the force and the magnitude of these changes mark this period as a true 'revolution'

## T R A D I T I O N A L F I N A N C I A L M A R K E T

Those developments have largely passed the financial sector by. Processes there have existed for decades and are being maintained by strict regulation and conservative directors. The entire chain from IPO to settling transactions and corporate actions (dividend) is dominated by decentralised administrative processes and manual actions. This leads to high operational risk and the need for many extra checks. Mistakes in processing corporate actions alone leads to costs of more than \$300 million<sup>1</sup>. Banco Santander calculated that it would be possible to save \$20 billion by making use of blockchain technology in post-trade processes<sup>2</sup>. By now, everyone realises that there is much room for improvement. By implementing new technologies, the capital market could be made much more efficient, more accessible and less expensive, even under current regulations. We are eager to discuss with regulators what changes in current regulation could lead to further improvement, without impacting investor protection.

## C R Y P T O A N D B L O C K C H A I N

The financial world could become more continuous, global and connected by integrating digital assets and blockchain. These technologies have really shaken the financial world over the last years. Moreover, the digital asset industry has grown into a diverse ecosystem. Every day, new applications and ideas appear and more and more mainstream financial institutes start researching and developing use cases. A multitude of projects and companies have emerged at a rapid pace to provide products and services that facilitate the use of digital assets for mainstream users and build the infrastructure for applications running on top of public blockchains.



## BEST OF BOTH WORLDS

The technology may be promising, but the impact of individual parties is limited and unfortunately the government often still has a wait-and-see attitude. Regulatory authorities are waiting for solutions to be presented which they subsequently evaluate, without having presented guidelines in advance. We are taking up the gauntlet to build the bridge between the traditional financial world and modern technology. We aim to take the next step in shaping a new blockchain-based ecosystem, consisting of various actors who provide trust and build an interface between public blockchains, the traditional financial sector and

various economic sectors. This will enable us to combine the advantages of a more efficient, more controlled and less expensive process with the advantage of market penetration and regained trust in traditional financial parties.

<sup>1</sup>Oxera - Corporate Action Processing - What are the risks?, <https://www.oxera.com/Oxera/media/Oxera/downloads/reports/Corporate-action-processing.pdf?ext=.pdf>

<sup>2</sup>Santander: Blockchain Tech Can Save Banks \$20 Billion a Year." 16 Jun. 2015, <https://www.coindesk.com/santander-blockchain-tech-can-save-banks-20-billion-a-year/>

# H U G E F I N A N C I A L P O T E N T I A L

## I N I T I A L C O I N O F F E R I N G

When discussing crypto and blockchain, the term ICO is virtually inevitable. An Initial Coin Offering (ICO) is a relatively new fundraising mechanism that has become a dominant subject of discussion in finance. Although they have shown enormous financial potential, they have also highlighted the lack of regulation and associated risks. Almost without exception, financial authorities are sceptical with regards to ICOs. That is why they cannot be considered a structural solution in the financial sector, in their current form.

## P R O V E N P O T E N T I A L

What we do know for sure is the proven financial potential of ICOs. In the second half of 2017, over 50 start-ups each month launched an ICO to raise funding for their projects or business ideas. In 2018, Coindesk has already registered 394 ICOs, raising a total amount of over \$13 billion<sup>3</sup>. Moreover, ICO funding had already surpassed traditional VC-funding by early 2017<sup>4</sup>.

	2014	2015	2016	2017	2018
ICO size (\$M)	30	9	256	5.482	8.117
# of ICO's	7	7	43	343	334

## T Y P E S O F T O K E N S

A major drawback in ICOs is the uncertainty about the nature of the tokens and the amount of regulation associated with them. The market has classified two categories. Each is different in nature and governed by different laws apply.

- Tokens that do not represent a financial system: utility tokens grant the holder the right to make use of the product or service once it goes live. Legally speaking, they are often no more than shower or funfair tokens and therefore do not require heavy regulation, especially on the part of the issuer. There are also voucher tokens, where the issuer pre-sells vouchers for a product or service that will later be for sale. Airdrops or airdropped tokens that are distributed freely for marketing purposes and to encourage people to use their service also belong in this category.

- Tokens that do represent a financial system: security tokens are financial instruments that represent some form of monetary value. Tokens known as 'asset-backed' tokens can vary from precious metals to real estate and from energy to clean air. Tokens that represent shares in a company, i.e. equity tokens, are a clear form of security tokens. The token holder is a shareholder and that gives certain rights. Because they are financial instruments, they are bound by strict laws.

<sup>3</sup>"CoinDesk ICO Tracker - CoinDesk." <https://www.coindesk.com/ico-tracker/>

<sup>4</sup>"Bitcoin Venture Capital Funding - CoinDesk." <https://www.coindesk.com/bitcoin-venture-capital/>

# H U G E F I N A N C I A L P O T E N T I A L

## A L I G N E D I N T E R E S T

The success of a project issuing a utility token is usually dependent on the usage of its protocol. Just like any other economy, initial capital is needed to bootstrap the network, because organic growth is slow. The solution the industry currently adopts is an ICO or a token pre-sale to fund the development of the platform by selling tokens.

However, the ICO mechanism and the construction of a secondary market have a massive impact on the token economics. In addition to the regulation of network usage, speculators using the token solely for investment purposes and with no interest in using the network, now enter the equation. In other words, this means protocol usage and value coming from investment are intertwined for a token that is tradable on a secondary market. In the long term, this creates a conflict of interests between issuer and buyer. Consider the following situations:

1. The goal of the issuing party is to raise funds in order to capitalise on the services they intend to develop. However, the tokens needed for that service have already been issued and can no longer generate income. The solution that many companies choose is to reserve a portion of the tokens for themselves, to sell on a secondary market, causing a lot of pressure on the price of the token, or even collapsing it.

2. The issuer is bound to a token's business model, which may need to be modified over time as the company evolves. Changing the business model may render the tokens worthless.

3. With a voucher model, the company has pre-sold vouchers for their products or services. The company will first need to pay off these vouchers before it can capitalise on the product or service. Essentially, the company has taken out a loan, limiting the company's growth.

4. When the price of a token increases as a result of investments and speculation, protocol usage comes to a halt. When the underlying value of the internal resource has failed to increase, and the unit of payment is unaltered, users will be paying more for the same service. This will likely lead to a reduction in the protocol usage or have people looking for a cheaper alternative. Hence, tokens which intertwine protocol usage and investment-generated value limit platform growth and decrease its potential value.

Aligning the interests of issuers and buyers can be achieved by issuing security tokens, for example equity tokens that represent a share in a company.

# H U G E F I N A N C I A L P O T E N T I A L

## I C O A N D R E G U L A T I O N

Although the past returns on ICOs highlight the large financial potential, they do not offer the solution for the future. ICOs have a bad name and involve a lot of uncertainty. With most ICOs, the token is intentionally structured in such a way as to exempt them from security regulation. They are often labelled as utility tokens by the issuing parties, although that is arguable in many cases. This has led regulators to issue warnings and act against parties

falsely claiming to be issuing a utility token. According to the American Security and Exchange Commission (SEC), virtually all ICOs should be labelled as security offerings and should comply with all associated regulations.



# C H A L L E N G E S

## TRANSLATING TECHNOLOGY TO THE FINANCIAL WORLD

As far as technology is concerned, there are lots of possibilities and numerous initiatives. The challenge is how to merge both worlds and translate new technologies into current regulatory frameworks.

## COMPLY WITH REGULATION

In September 2017, Jay Clayton, chairman of the American SEC, stated that every ICO the SEC had investigated was a security. When a token is issued by a company and fluctuates in value due to the company's efforts, it is security. "You can call it a coin, but if it functions like a security, it's a security"<sup>5</sup>. The Dutch Authority for Financial Markets shares that opinion.

Regulators worldwide are currently figuring out whether additional regulation is required to stop the proliferation of non-compliant ICOs and to provide regulations and guidelines. At the same time, it is important not to stifle innovation as Christine Lagarde recently said.

In February 2018, the Swiss Financial Market Supervisory Authority (FINMA) published the world's first ICO guidelines<sup>6</sup>. With the right approach, the Netherlands can lead the way in creating the capital markets of the future.

In March 2018, the European Commission published a plan of action aimed at transforming the capital markets by introducing new FinTech companies, more efficient solutions, increasing competition and reducing costs for companies and investors<sup>7</sup>.

*International Monetary Fund (IMF) chief Christine Lagarde contributed to the discussion by suggesting an "even-handed approach" to regulating cryptographic assets and highlighted their potential benefits for consumers in a blog post on the IMF website. Lagarde, who had previously voiced her positive opinion about the benefits of digital currencies at a speech at the Bank of England in September 2017, stated that "policymakers should keep an open mind and work toward →an even-handed regulatory framework that minimizes risks while allowing the creative process to bear fruit".*

<sup>5</sup>"SEC.gov | Statement on Cryptocurrencies and Initial Coin Offerings.", 11 dec. 2017, <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11>

<sup>6</sup>FINMA - FINMA publishes ICO guidelines.", <https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/>

<sup>7</sup>European Commission - FinTech: Commission takes action for a more competitive and innovative financial market.", 8 maart, 2018, [http://europa.eu/rapid/press-release\\_IP-18-1403\\_en.htm?locale=en](http://europa.eu/rapid/press-release_IP-18-1403_en.htm?locale=en)

# SOLUTION

## OUR VISION - NEXT GENERATION CAPITAL MARKET

At present, there is a gap between traditional finance and the cryptocurrency industry. This gap is the result of ignorance, conservatism and prejudice on both sides. The financial sector could take a giant leap forward by making use of the knowledge and experience of the cryptocurrency industry. Inversely, the cryptocurrency industry has a lot to learn from the decades of experience in the traditional financial sector.

Many ICOs have tried to circumvent regulation. Under pressure from regulators they are now being urged to comply. However, the cryptocurrency world is isolated from traditional financial parties and lacks the financial and regulatory experience. In some cases, the wheel is simply being reinvented. Custodians, depositaries, exchanges, market makers; all familiar names in the current financial system. Although challenging the way system is currently set up is good, a lot of time and energy is wasted.

## LET'S CLOSE THE GAP

It is our ambition to bring both worlds together and build an ecosystem to create the capital markets of the future, based on blockchain technology. A world where financial instruments are all tokenized and regulatory compliance is the foundation on which we build. The essence of the capital market will not change, only the way in which we organise it will undergo modernisation. Supply and demand are still brought together on the capital markets of the future. We still have companies looking for funding, we still have capital looking to invest, we still want to keep criminals and terrorists out of our financial system and prevent money laundering, etc. However, this time markets are more accessible, faster and cheaper than today.

Tokens can be effortlessly exchanged for other tokens and used as payment. No more T+2, transactions will be settled almost immediately. Dividends will be processed much more efficiently. Instead of thousands of decentralised investment administrations, dividends will be processed by a single entity that is responsible for maintenance of the financial instrument. Processing Apple dividends will no longer be time-consuming and prone to error, but rather involve a mere matter of seconds through a single smart contract. This will lead to enormous improvements; faster, cheaper, more transparent and less errors.

# NEW DUTCH ECOSYSTEM

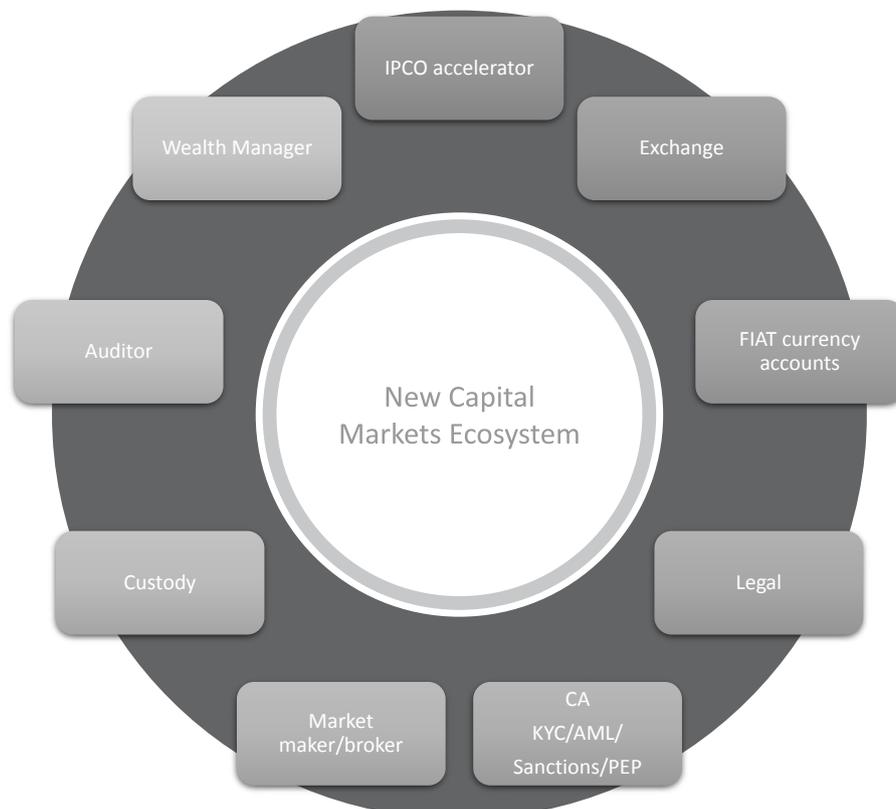
## NATIONAL INITIATIVE

There is much innovation taking place in the cryptocurrency industry. Unfortunately, most start-ups and companies only solve part of the equation, while very few all-in-one solutions exist. The result is a fragmentation of knowledge and an increasing barrier to integration with the traditional financial sector, creating a huge gap between the latter and the cryptocurrency industry. Just as in the current financial system, multiple parties are needed, each playing a part in the ecosystem. No single party can take up this challenge by itself. By bringing together different parties, we are able to create a watertight ecosystem in which access to capital markets and post-trade processes is much more effective and efficient. Even in a situation where regulation has not yet fully crystallised.

We are taking the initiative to create a Dutch ecosystem in which all required components are integrated to facilitate the capital markets of the future. A Dutch proof-of-concept that we can scale internationally. This ecosystem consists of many familiar and trusted parties with comparable roles, which will also acquire new roles. At the same time, other specialised parties are involved, which focus on specific chain components. The creation of this ecosystem is of crucial importance if we are to create the high level of trust and compliance that this industry needs.

## CHAIN COMPONENTS

The ecosystem that we are proposing consists of the following components.



# D I V I S I O N   O F   R O L E S

IPCO-accelerator	A fully-compliant ICO is a mix of an IPO and an ICO, hence an IPCO (Initial Public Coin Offering). Public offerings are no longer reserved for large, wealthy companies. Now start-ups, scale-ups and SMEs can easily and effectively launch an IPCO
Exchange	An exchange where digital assets/tokenized financial instruments are listed and traded (vs. fiat). This exchange has a full audit trail and is accessible to everyone.
Market Maker	A market maker ensures there are continuous quotes for every asset. This is essential to a properly-functioning exchange.
Payment traffic in fiat (EUR)	A closed circuit through the use of bank accounts where customers are identified and verified before taking part on the exchange.
Fund manager	New investment funds are created, based on these digital assets. This enables retail investors to invest in a basket of start-ups and scale-ups, previously reserved for Venture Capital, Private Equity and Angel Investors.
Custodian	The custodian's role will change. Their focus will shift from managing and holding assets to managing and holding investors' keys.
Wealth Manager	A wealth manager is always looking for better returns. A software provider will enable wealth managers to compose a portfolio with exposure to both traditional and digital asset classes.
Certificate Authority	A certificate authority provides identity services by performing KYC, AML, CFT and sanction list checks and maintaining a whitelist. This ensures a controlled ecosystem in which all transactions are legitimate. Identity verification is a fundamental step in reaching compliance.
Accountant	The auditor plays an important role in translating legal contracts to smart contracts and performing prospectus activities just as with a traditional IPO. The auditor will still perform audits on transactions, although the audit process will be more continuous.
Legal advisor	Provides support in the expansion of financial instruments and translating new regulations and their impact on the status quo. Translating the Dutch proof-of-concept to other countries will be one of the main tasks.

# R I S K   A N A L Y S I S

## R I S K S   A N D   S O L U T I O N S

The current ecosystem contains certain risks which every party in it has faced at some time. Many mitigating measures are implemented, often at high costs: extra checks and steps in the process of, for example, the central clearing of transactions or the role of the depositary. The current ecosystem consists of many parties and the exchange of much data in order to process orders and settle transactions. All these steps contain operational and financial risks.

We can eliminate many of these risks in the new ecosystem. At the same time, we will unfortunately introduce new ones. The ability to recognize and control the corresponding risks of the proposed ecosystem is of crucial importance and serves as the foundation for the creation of a trusted ecosystem. The nature of the associated risks varies from those related to technology and cybersecurity, to storage and access of private keys, to law and compliance and to the level of social acceptance.

RISKS	SOLUTION IN ECOSYSTEM
TECHNOLOGICAL AND CYBERSECURITY RELATED RISKS	
<ul style="list-style-type: none"><li>- Vulnerabilities in Dapps, smart contracts and consensus mechanisms</li><li>- Network attacks such as Distributed Denial of Service Attacks (DDoS)</li><li>- Exchange hacks: historically, most hacks occurred on exchanges, where millions of euros in crypto assets were stolen.</li></ul>	<ul style="list-style-type: none"><li>- The exchange: in contrast to many of the hacked exchanges we use of a federated private blockchain and multi-signature technology.</li><li>- Participants of the ecosystem take part in the consensus mechanism and are required to co-sign depending on the type of transaction.</li></ul>
RISKS RELATED TO STORAGE AND ACCESS TO PRIVATE KEYS	
<ul style="list-style-type: none"><li>- Lost or stolen private keys. The owner of an asset is represented by a private and public key pair. A powerful principle from a security standpoint. At the same time, this also means that access to, and usage and protection of one's private key create a significant risks.</li><li>- Transfer of private keys. To circumvent KYC/AML, one could transfer private keys. This is comparable to transferring a debit card including its code.</li></ul>	<ul style="list-style-type: none"><li>- Multi-factor authentication is a basic requirement for identification verification.</li><li>- Linking wallets to bank accounts aids in the prevention of identity fraud.</li><li>- Identification verification should perhaps not be a one-time event at the start of the relation. Periodic or ultimately even continuous identification verification during the lifetime of a wallet would increase the safety of the ecosystem</li><li>- Management of digital identity certificates by a Certificate Authority (CA).</li></ul>

# R I S K   A N A L Y S I S

- Multi-signature key systems are a minimum requirement for protection of customers and transactions.
- Safe storage and management of private keys by a custodian are essential to guaranteeing the safety of the ecosystem

## LEGAL AND COMPLIANCE RELATED RISKS

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>- KYC/AML/CFT: the ability to identify participants in the ecosystem through KYC procedures is of crucial importance for the execution of AML and CFT checks.</li><li>- How do we make sure that assets not traded on the exchange do not end up in the hands of unidentified people?</li><li>- Offering services to create crypto assets based on financial instruments requires a lot of legal work and the current legal framework is under stress. How do we make sure we are and remain compliant?</li></ul> | <ul style="list-style-type: none"><li>- KYC/AML/CFT both IPO and secondary market take place on an exchange where the wallet is linked to a fiat bank account. KYC/AML checks are performed by the exchange or by the financial institution hosting the fiat account.</li><li>- The smart contract ensures the token can only be transferred to whitelisted wallets. Certificates will be issued by a Certificate Authority</li><li>- Legal support by an international law firm with connections to regulators both nationally and internationally</li></ul> |
|---|---|

## RISKS RELATED TO LEVEL OF SOCIAL ACCEPTANCE

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>- Wallets for mainstream investors are still very complex.</li><li>- Managing crypto assets is consequently considered complex and laborious.</li><li>- Solutions are offered by new, unknown parties. Can they be trusted? What is their track record?</li></ul> | <ul style="list-style-type: none"><li>- More user-friendly interfaces</li><li>- By establishing an ecosystem of trusted parties with a long track record in finance we can create trust for the consumers.</li><li>- By combining the years of expertise in mainstream finance with the technological expertise of new parties we can lower, or even remove, the entry barrier for mainstream investors</li></ul> |
|---|---|

# T H E R E I S S T R E N G T H I N P A R T N E R S H I P

## R A C E F O R T H E F U T U R E

Like professor Diane Nijs noted, the high rate in which technological developments follow up each other these days has produced a race for the future that will be won by companies that can adapt the best. It cannot be won by individual companies, because the rate of change occurs in an ever increasing rate, which makes looking ahead further than a year impossible. Consequently companies have no time to learn, since the opportunity will have past by then. Knowledge has to be brought in by cooperation. The complexity of technologies and markets are such that no single company houses the knowledge and experience to operate independently. As a result of the increased speed and complexity, uncertainty has increased as well. Cooperation and sharing of knowledge helps reduce that<sup>8</sup>.

We believe that the ecosystem described above, with all financial services integrated, is the ultimate way to create the future of capital markets. Together we can set an international example from which all actors benefit individually but in which the strength is in the bundling of services. During the meeting in Eindhoven we worked on the conceptualisation of the ecosystem. What is everyone's role and how will we work towards a proof-of-concept by the end of the year? We do not pretend to predict the future, but as Abraham Lincoln once said: "The best way to predict the future, is to create it".

<sup>8</sup>Nijs, D. en F. Peters, 2002, *Imagineering, het creëren van beleveniswerelden*, Uitgeverij Boom, Amsterdam



# K I C K - O F F

We do not pretend to predict the future, but as Abraham Lincoln once said: "The best way to predict the future, is to create it".

The kick-off for this ecosystem was held on 29 June 2018, initiated by Liqwith and Chaintip.

Date	Friday 29 June 2018
Location	<i>HTC - High Tech Campus 1</i> <i>5656 AE Eindhoven</i> <i>Conference Center, Room Ernst</i>
Schedule	We welcome you at 9:30 (dress code Friday casual) We start at 10.00 and close at 14.30 10.00 - Welcome and kick-off 10.15 - The new financial ecosystem; <i>Rob Verheul</i> 10.30 - Blockchain and Byelex proof-of-concept; <i>Herman Vissia</i> 11.30 - What does it mean to build a safe exchange? <i>Sten Reijers</i> 11.50 - What's in a name ICO-IPCO; <i>Roel Wolfert</i> 12.15 - Lunch 12.45 - Discussion / brainstorm / input - three main topics 13.30 - Global discussion / recap 14.00 - Next step: division of roles and who facilitates the next session? 14.30 - Closing

## EVALUATION



## ECOSYSTEM

We look back on the very successful kick-off of a new Dutch ecosystem aimed at shaping the future of capital markets. It was an energising and inspirational day. All parties present convincingly indicated their intention to commit to further development of the various roles in the ecosystem in order to work towards a proof-of-concept for the new capital markets, based on blockchain technology and digital assets and to put the Netherlands back on the map.

# EVALUATION

## TECHNOLOGY

By means of a demo, both Herman Vissia (Liqwith) and Sten Reijers (Chaintip) have reiterated the power of technology. The live transfer of a few shares of Byelex tokens on the Ethereum blockchain from Herman Vissia to Rob Verheul demonstrated the paradigm shift that is coming. This development will have a huge impact on our society and form a huge opportunity for the Netherlands. Together, we aim to realise that potential. With his demo, Sten Reijers illustrated how tokenized shares of companies like Byelex can be made tradable on a secondary market in a responsible manner, while offering liquidity for SME companies looking to raise funds.



# EVALUATION

## BRAINSTORM

We had a fruitful brainstorm session together, revolving around three central questions; is the ecosystem present here complete? What bottlenecks do we have? How can we make this a success? The value of the ecosystem immediately became clear, because participants were able to really complement each other from their own domain expertise. Despite the many questions and challenges, we are convinced that together we will find a solution. We have made a great start, developing the different roles and indicating the strengths and weaknesses of the ecosystem.



# EVALUATION

## WHAT NOW ?

One of the greatest obstacles to the acceptance of the implementation of blockchain technology and digital assets, in order to optimise our financial system, is the lack of knowledge, both on the part of individual parties and the consumer. Connecting the wide range of knowledge and experience in this ecosystem is one of the most important steps that we took straight off the bat.

This is the first of many meetings in which we will develop the ecosystem and create a governance framework. Sharing knowledge and the impact this will have on society are central to this process.



# JOIN US IN THIS REVOLUTION!

ROB VERHEUL (LIQWITH) EN DANIËL DEN BOER (CHAINTIP)



Email : [r.verheul@liqwith.io](mailto:r.verheul@liqwith.io)

<https://liqwith.io>

Email: [support@chaintip.io](mailto:support@chaintip.io)

<https://chaintip.io>