realio ®

EMPOWERING THE NEXT GENERATION OF INVESTORS

March 2020

There is currently a massive opportunity to capture value within the private investment marketplace with <u>disruptive technology</u> given this market's high friction, lack of transparency, illiquidity and complicated regulatory environment.

At over <u>$7 trillion in size</u>, the global private real estate markets are a prime example.

VISION

As a blockchain enabled issuer, fund manager and technology provider, our mission is to merge private equity with blockchain technologies and provide much broader global access to institutional quality investment products that create long term value and build wealth.

We aim to provide a link between the global retail investment community and cash generating investment opportunities, opening up access to previously untapped global capital markets where transactions take place 24/7, instantly, with little or no cost, and without borders.

TECHNOLOGY ABSTRACT

Realio is a digital issuance, investment and peer-to-peer trading platform that utilizes a proprietary distributed network for issuing-on and interconnecting decentralized ecosystems. The platform leverages both a permissioned and permissionless architecture to satisfy the need for stringent securities regulations while allowing uniquely democratized access to investment products normally reserved for a select subset of institutional investors. We source investment opportunities across many asset classes with a focus on real estate private equity and we also provide the tools for 3rd party issuers to digitize their assets and raise capital within the network or use our tech stack as a private white-label solution.

Our network architecture is modular, scalable, and enables built-in liquidity while distributing previously highly-centralized activities such as issuance and regulatory compliance across a private and secure network of independent participants.

DISCLAIMER: PLEASE READ

This document referred to herein as a "white paper," is for informational purposes only. The information herein does not constitute an offer to sell or solicit any offer to buy securities, nor is it a recommendation to invest in Realio. Any decision to purchase or subscribe for securities should be made solely on the basis of information contained in a final offering memorandum and related subscription agreement and/or limited partnership agreement, (collectively the "Offering Documents") delivered in connection with the Realio tokens described herein.

The information in this whitepaper may not be complete. This whitepaper contains forward-looking statements based on certain assumptions that may or may not occur and are subject to change. No representation or warranty, express or implied, is made by Realio LLC or any related persons, as to the accuracy or completeness of the information contained in this document and nothing contained herein is, or shall be relied upon as a promise or representation in the past or the future as a recommendation to make any investment.

While we intend to realize our vision, please recognize that it is dependent on quite a number of factors and subject to a number of risks. All statements contained herein are qualified as subject to applicable law. Due to the retrospective nature of regulatory action, we can make no guarantees regarding the legality of the platform or token launch in any given jurisdiction.

Please know that we will work to achieve the vision as described in this white paper, but there are no guarantees. Blockchain, other aspects of our technology and digital assets markets are still relatively new and will be subject to many challenges, competition, and a changing environment. We will always endeavor to update our community as Realio evolves to meet these challenges.

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MARKET OPPORTUNITY

Over the next 25 years, baby-boomers will pass $68 trillion to their children[1] — the greatest generational wealth transfer in history. The demographic inheriting this windfall is technology-savvy, welcomes change and disruption, and has an inherent distrust of banks. At the same time, legacy financial markets and institutions lack the agility and willingness to be first-movers with new technologies. The rapid rise of decentralized blockchain technology is an early indicator that the next generation of financial technology and asset management will need to exist on these digital rails.

There is currently a massive opportunity to capture the private investment marketplace with disruptive technology given this market's high friction, lack of transparency, illiquidity and complicated regulatory environment. At over 7 trillion dollars in size, the global private real estate markets are a prime example.

In response, we have created a digital issuance, investment and p2p trading platform, leveraging blockchain technology, in order to unlock value and movement within the private equity landscape. The Realio platform provides an easy-to-use, customized experience that allows for the frictionless and socially engaged private marketplaces expected by the next generation of investors.[2]

[1] "Here's how to prepare your heirs for the $68 trillion 'great wealth transfer'." 25 Feb. 2019.

[2] "Global real estate: Opportunity for income and … - Nuveen." 2 Jul. 2019. Accessed 22 Dec. 2019.

THE DIGITAL EVOLUTION OF FINANCIAL MARKETS

A Brief History

Until the mid-nineties, most stock exchanges were simple cry-out systems. A broker would receive customer orders in-person or by phone, make a note of the order, execute a series of hand signals and call out the desired stock, indicating a buy or a sell. Once two brokers agreed on the price, the transaction would be recorded in the system, on paper.

Shortly thereafter, most stock exchanges transitioned towards the digital world. The world which was hailed as the entrance into *precise price discovery and fair trading*. There have been some exceptions, such as the London Stock Exchange, which adopted pilots of an electronic system even before the start of the 90s. The input of all prices into electronic systems has enabled trade through rule and the national best bid offer (NBBO), the concept in the US whereby the investor/broker has the option to buy/sell at whichever exchange offers the best price. These advancements led to one conclusion summarized by an excerpt from the book **Flash Boys** by Michael Lewis: "The 1987 stock market crash set into motion a process — weak at first, stronger over the years — that has ended with computers entirely replacing people."

This merely represents one facet of the financial markets, but is an important one because it helps us understand why, instead of expanding the technology horizontally, the stock market was so attractive that most if not all funds were directly funneled into expanding the technology vertically on this particular niche. While stock trading and public market digital infrastructure are largely developed, the private investment markets and other forms of asset trading have seen very little technological or regulatory advancement in the past century. This incredible market imbalance combined with the emergence of DLT technology positions us with the potential for disruption and reshaping of the private securities industry.

Blockchain technology is the next evolution of financial markets, making them more connected, trustless, borderless, faster and less costly through the use of smart contracts which reduce third party friction. It affords a higher level of accountability via the transparency of an immutable record of information processed. From an investor's point of view, digital securities on blockchain enable buyers to access a larger universe of assets.[3] Lastly, it offers next level security through encryption and elimination of a single point of failure through the network.

The technology opens up exciting possibilities including tokenization of non-traded REITs, affording them much of the same liquidity of publicly traded REITs while maintaining the a more attractive return profile. Other opportunities for technological disruption in alternative asset classes include merchant cash advances, small business loans, home equity lending, entertainment finance, collateralized art finance, bridge real estate lending, and distressed municipal bonds and corporate debt.

Security tokens are bound to be a mainstay of the industry in the future: they are technologically superior, safer and more transparent, at least for regulators. The current securities value chain is organized around a number of different intermediaries that act sequentially during the various stages of its lifecycle. Consolidation of these intermediaries through technological innovation is a natural next step. The introduction of DLT therefore represents a clear re-shaping and disruption of the business model and of the roles of the various stakeholders.[3]

Now, we are introducing a new, open distributed ledger environment without intermediaries linking issuers directly to investors. Our aim is for trading venues and custodians to be fundamentally disrupted by a ledger in which participants manage the entire security value chain in real time via security and hybrid tokens.

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[3] "Are token assets the securities of tomorrow? - Deloitte." Accessed 6 Jan. 2020.

While stock trading and public market digital infrastructure are largely developed, the private investment markets and other forms of asset trading have seen very little technological or regulatory advancement in the past century.

This incredible market imbalance combined with the emergence of DLT technology positions us with the potential for disruption and reshaping of the private securities industry.

INDUSTRY CHALLENGES: TOKENIZATION OF PRIVATE MARKETS

Regulatory & Legal

The tokenization of asset-backed securities requires identity-based networks in order to establish a much higher degree of trust at the network level, while the issue of multi-jurisdictional compliance requires interoperability through a chain-agnostic network.

There is still a big gap in terms of the availability of regulated secondary market infrastructure for both the trade and post-trade stages. The burden of regulatory compliance when setting up such ecosystems is a key reason for this gap.[4]

Technical

To fully leverage DLT and security token opportunities, we need to view DLT not simply as a new type of "database" but rather as a new way to organize the securities landscape, from issuance to custody. This is clearly one of the main challenges we face, breaking away from the sequential centralized model to a distributed ledger model, where participants can access the same information at the same time. This entails defining new roles and responsibilities along the entire value chain of the existing securities industry.

Private markets suffer from slow execution, lack of transparency and limited liquidity, resulting in a higher cost of capital. Most legacy financial systems use practices that have not evolved compared to our data-driven world.[5] Legacy institutions have a financial incentive to maintain this inefficient status quo.

Instead of a bidding war, we have something more elementary at play here. If all the large financial institutions have legacy systems, then it is in the interest of neither to evolve it as that would lose money for the company/investors. Therefore the optimal decision for these companies is to stay as they are.

Standardization

When digitizing assets, one of the most important issues is the need for proper standards and structure. Blockchain is the ideal medium for this, as proven with various implementations. One example is the tokenization of real-estate. This has many possible implementations, from digitizing a house as a non-divisible whole to transforming it into fractional parts that several people may own while partaking in the revenue it generates.

There are still many questions to be answered for security tokens to enter the mainstream. Widespread use of the technology is likely to be particularly dependent on standardization and interoperability between ledgers.

Changing Demographics

As noted in the introduction, we are beginning to witness the largest generational transfer of wealth in history. Generation X and millennials are the first digitally native generations with a new set of expectations. These include better communication, transparency and convenience through more accessible financial products and services. This generation expects an online and customized experience at low or no cost for nearly everything they do, and has a collective inherent distrust of banks and large institutions due to the 2008 financial crisis being their introduction to how financial markets operate.

A user-friendly digital experience with enhanced transparency and customized options is needed to

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[4] "Reducing the Rist of Policy Failure: Challenges for Regulartory Compliance" Accessed 6 Jan. 2020.

[5] "Legacy systems are a pain in the bank - Finextra." 26 Oct. 2018, https://www.finextra.com/blogposting/16205/legacy-systems-are-a-pain-in-the-bank. Accessed 17 Dec. 2019.

engage millennials. Traditional financial services will become obsolete with the emergence of and desire for crowdsourced information and capital formation. Social media, online investment clubs and social trading help millennials collaborate and navigate wealth management. Millennial investors value crowdsourcing with the validation of transparency and peer review.[6]

We are beginning to witness the largest generational transfer of wealth in history. Generation X and millennials are the first digitally native generations with a new set of expectations.

[6] https://www.pwc.com/us/en/industries/financial-services/library/managing-millennial-money.html

THE REALIO ECOSYSTEM

Empowering the next generation of investors through access, transparency and choice.

To address the growing technological imbalance in private markets, we built Realio – a digital investment platform combining cutting-edge blockchain solutions with institutional-quality investing in assets previously inaccessible to many investors.

Our platform enables digitized issuance of securities, transfer and tracking of ownership and regulatory compliance. Our secure, distributed infrastructure provides a brand new instantly accessible, global and borderless peer-to-peer marketplace.

Using a 2nd layer proprietary issuance and compliance network to manage digital assets provides the best combination of security and transparency by keeping certain data out of the public domain though transparent to issuers and investors, facilitating value-add features and functions across multiple blockchain protocols.

We provide the tools to digitize real assets through our proprietary compliance layer, adding clarity on regulatory questions and a straightforward technological solution with simplicity. Realio enables digital investments in any asset class

through a low-cost, efficient, transparent, liquid and accessible platform that accommodates all types of issuers and investors, from retail to institutional, and can scale to fit any market.

Value proposition:
- Modernizing custody of assets, how they are issued, analyzed and exchanged
- Lowering costs and removing friction by automating trust and dis-intermediating unnecessary third parties
- Improving access to and quality of data
- Introducing the potential for enhanced execution and increases in liquidity

TECHNOLOGY INTRODUCTION

As an end-to-end solution for digital assets, we designed the platform from the ground up. Starting with custody and storage, it is important we create a secure yet easy to manage system for users to access both fiat and crypto-assets. From a regulatory perspective, we chose to integrate an institutional quality custodian for fiat accounts while giving users non-custodial crypto wallets for use with peer-to-peer marketplaces.

Multi-currency Wallet

1. **USD Wallet and Fiat Onramp:** Once an investor passes KYC, they are given a USD account on the Realio platform (through Prime Trust[7] as custodian), enabling a seamless fiat onramp through ACH (Automated Clearing House), wire transfer and credit card. Bitcoin and Ethereum assets may also be custodied with Prime Trust.
2. **Cryptocurrencies, Tokens, and Stable Coins**: The wallet system for crypto is designed to be non-custodial. This places users on the Realio platform in control of their own wallets while providing an automated and secure multi-currency key management system. The private keys are encrypted, a salt is used for added security and users have optional levels of security with regard to decryption methods.
3. **Cold Storage**: After tokens are purchased, they can optionally be securely stored in cold storage through Prime Trust.

The Realio Network

The Realio Network is a multi-layer solution designed to allow the coexistence of regulation and decentralization by providing "layer 2" issuer controls in a modular, chain agnostic protocol. By standardizing the asset creation, issuance and compliance functions in a single protocol, the

tokenization of assets can be accommodated on a number of "layer 1" public, permissionless blockchains utilizing shared standards and technical specifications. There are a number of issuer controlled compliance restrictions that can be applied and automated in parallel when using such an architecture, while providing token holders with transparency into such controls and an ability to transfer ownership peer-to-peer without middlemen. While our roadmap has indicated the development of a fully decentralized network, this whitepaper will focus only on our layer 2 solution referred to herein as the Realio Issuance Network.

The Realio Issuance Network is a distributed ledger network of independent parties who share an aligned incentive in the development and growth of the ecosystem.
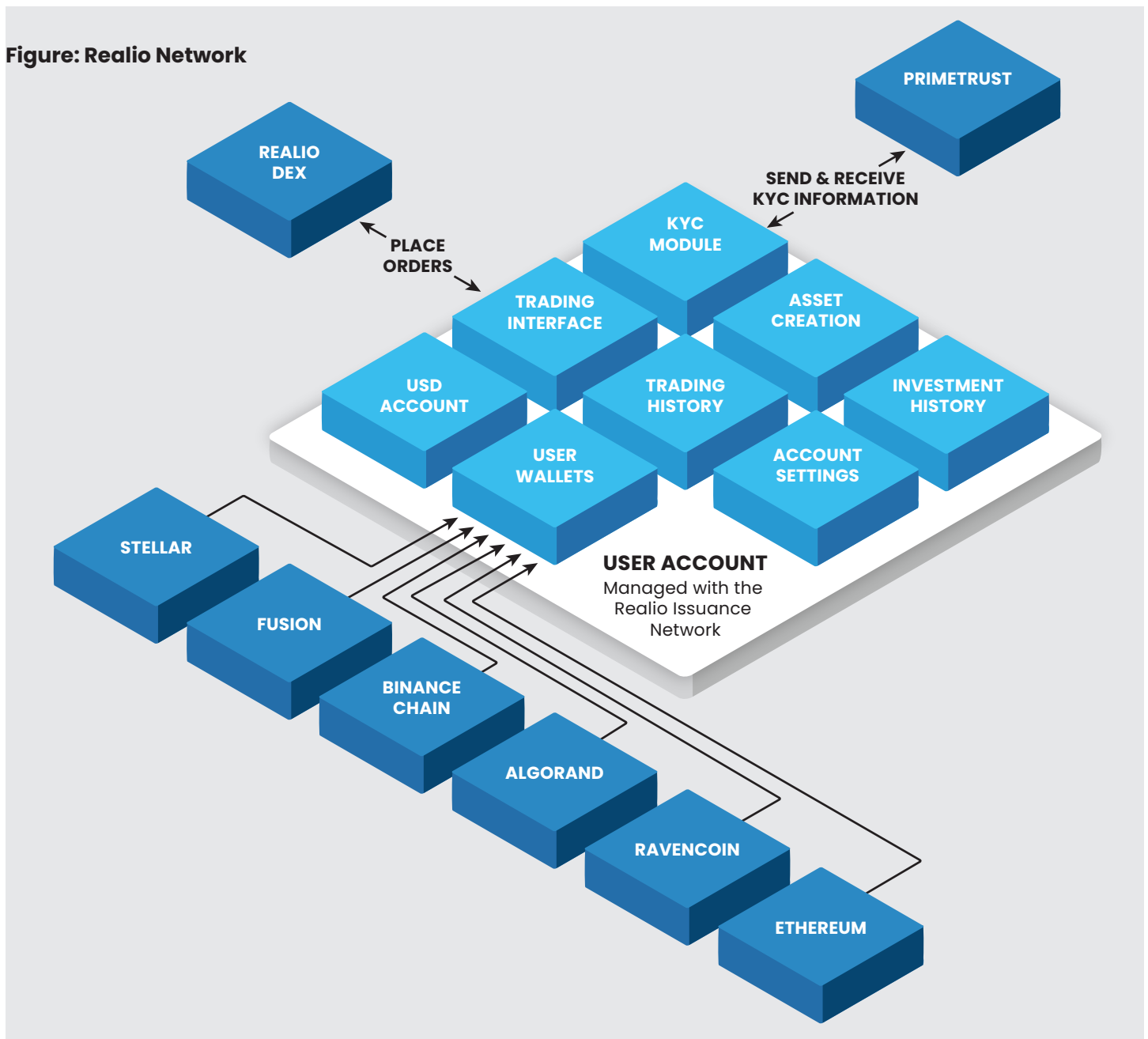
It is comprised of various validator nodes, represented by entities such as the foundations behind the various supported public blockchains on the Realio Platform (Fusion and Algorand are members), broker dealers, other issuance platforms and issuers, asset managers, PE funds, financial institutions and/or any other major stakeholders.

Members of the network (known as organizations) can issue assets and vote on network level matters such as which projects are listed on the shared issuance portal and RealioX. While this layer of the network is permissioned, we are adding a level of decentralization to the issuance of securities which keeps issuers transparent and compliant, adds another level of validation on the quality of digital assets, and maintains security and privacy as needed for such transactions while removing a single point of failure.

The Realio Issuance Network consists of modular compliance and asset tracking protocols which record all transfers using a shared, chain agnostic security token standard to transmit ownership among users. While each

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[7] "Prime Trust | The Technology-Driven Financial Institution." Accessed 8 Dec. 2019.

Figure: Realio Network

individual layer 1 blockchain has its own way of validating transactions publicly, there is a parallel validation process that takes place within the Realio Issuance Network based on automated issuer controls which seek to allow or disallow any asset ownership transfer on the public network.

All transactions (and associated confidential/private information recorded as a part of the securities transaction) end up being hashed on both the public and private networks,

combining public audit-ability with the ability to control the privacy of data.

Interoperability

There are many blockchains and platforms with large user bases competing to bring assets on-chain, however there are fewer quality investment projects than there are platforms currently.

Most platforms specialize only in tokenizing on Ethereum, however Ethereum is plagued by network bottlenecks and a lack of ability to scale while there is growing consensus in the industry that Ethereum is not an ideal fit for digital securities. Interest is rapidly growing in networks such as Stellar, Fusion, Algorand, Tezos, Raven, etc, while others such as Polymath have opted to move off of Ethereum and create their own focused blockchain. On the institutional side, permissioned networks such as Hyperledger, R3 Corda or private ethereum forks are becoming the implementation of choice. The foundations for these various chains are well funded and eager to grow adoption and bring tokenized value to their respective ecosystems.

We propose a plug and play solution as a single point of entry to this growing universe of blockchains, and connect them to provide a seamless transition between chains and standards so they all can benefit from the same investment opportunities and user base of prospective investors and ecosystem stakeholders. Modular architecture provides flexibility for organizations to issue and trade tokens privately among their own members, or publicly on the network among all organizations interoperably, empowering them to choose what types of opportunities to provide their members.

Organizations may vote at the network level, while their members (peer nodes, or individuals who stake RST within an org) may vote at the organization level.

The landscape for digital securities is currently highly fragmented, furthering the barrier to entry for both issuers and investors.

The Realio Network is both shared and inclusive of all industry participants, providing the connective tissue needed to drive adoption.

NETWORK ARCHITECTURE

Security Token Standard

Realio is developing a new security token standard, limiting ownership of the token to verified investors who have passed KYC and AML checks while building in other regulatory items to address secondary market trading. The token may only be held and traded in a compliant manner as set by the issuer on the network, based on which exemptions from registration were used or which jurisdictions were targeted in the initial offering. Our token standard combines required issuer controls with near permissionless purchaser flexibility to transfer ownership peer-to-peer, and is chain-agnostic. By placing the issuance and compliance protocol on a layer 2 network, issuer controls become auditable, while asset ownership is recorded and transferred on public, permissionless networks.

This allows users to buy digital assets and securities in a safe environment, with lawful and necessary regulatory compliance validated independently by a group of credible industry participants.[8] The Realio Network provides the perfect balance between chain-interoperability, regulatory compliance, trustless architecture and p2p transactions.

NATIVE COMPLIANCE PROTOCOL

Developed in Hyperledger Fabric, the Realio Compliance Protocol facilitates governance and legal security, providing multi-jurisdictional compliance globally with a focus on U.S. SEC exemptions from registration under Regulation S and Regulation D (and in the future, Regulation A+ and CF).

Features:

- **Integration of the chaincode modules in our Compliance Protocol with public chains** to release Security Tokens only when pre-defined rules allow
- Oracle to read data from exchanges and other markets for specialized compliance conditions such as rule 144. The Data compiled register is in a specific chaincode module enabling the time stamp, data traceability and transparency for future auditing
- Built-in, **digital purchaser agreements** to comply with Reg S and restrictive legend covenants during purchase/transfer of tokens to/from whitelisted wallets.

This chaincode module registers the time stamp of acceptance and relates this information with the tokens the user has in their wallet on the public network. The buyer's security tokens are directly linked and recorded with this acceptance, allowing future demonstrations for auditing and governance.

- An issuer specific custom module for investment documents/agreements and other required disclosure documentation. The seller may make them viewable to potential buyers in p2p and OTC trades. The hash of these documents is available on a public mainnet. The authenticity of the documents and timestamp for the general public is guaranteed.
- Capitalization Table module: Each includes current token holders, their asset count, value, time of purchase, and source.

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[8] "hyperledger-fabricdocs Documentation" 14 March 2018

PRIMARY CHAINCODE MODULES

KYC/AML/Accreditation Whitelisting

Our network architecture enables us to on-board a large quantity of users and place KYC and accreditation data on-chain, while preserving data privacy and removing unnecessary weight from the layer 1 blockchains that digital asset ownership resides on. This interoperable whitelist management module provides issuers with the user data they require and integrates with our automated compliance protocol features.

Asset Tokenization and Issuance

Assets are tokenized and issued through the network, and once approved by the members, automatically posted to the issuance portal for purchase by whitelisted users. Once a new issuance is on-boarded and submitted for approval, the rest is automated and issuers can track progress on their dashboard. The chaincode in this module integrates with the compliance protocol and automates token minting on the issuers preferred public blockchain. All purchases by whitelisted users and applicable agreements and documentation related to the transaction are recorded privately on-chain and linked to the hash of the transaction minting new tokens on the public chain.

Network Fees, Market Maker Rewards and Block Rewards

As a layer 2 network, the incentive structure for securing the network with nodes and for adding economic value and liquidity through market making is inherently different from that of typical PoW or PoS blockchains. First, the Realio Issuance Network rewards participants with assets issued on supported layer 1 chains interoperably rather than limiting a native asset to a permissioned network. This is done for a few reasons which we cover elsewhere in this whitepaper, but mainly because we believe these types of permissionless digital assets issued through the incentive

protocol (ie. RIO) belong on public chains. Subsequently, we created chaincode to automate and validate tokenization fee distribution to RST holders, market maker rewards for liquidity providers and "block rewards" to node operators in our ecosystem's native asset RIO. Similar to the mechanism used for the asset issuance module, rewards and fee distributions are managed on-chain and transparent. Changes to the incentive structure and block reward protocol requires consensus of the member organizations.

Cap Table, Investment Tracking and Distributions of Profits

Post-issuance, the network stores and tracks transactional data and ownership transfer, updating cap tables for issuers in real time with verifiable data and visualized through a user dashboard. Through the use of our native stable coin or any other crypto asset, profit distributions can be easily automated from the issuer's operating account.

Annual reports and other types of reporting can be easily generated by either the issuer or the investors, as both users are pulling from the same auditable data source.

On-chain cap tables contain the full list of current token holders, their asset count, value, and time of purchase.

Secondary market trading – P2P and OTC Transactions

Lock-up periods and flowback restrictions (along with KYC/AML and accreditation whitelisting as mentioned above) are the key regulatory filters applied to and integrated with our P2P and OTC trading solutions. Our primary P2P marketplace utilizes the Stellar decentralized exchange and on-chain orderbook, while integration with our compliance protocol restricts transactions at the network level based on applicable regulatory filters. OTC transactions take place as atomic swaps directly on the Realio Network, privately, and

can be negotiated directly with other users P2P via built-in chat features or facilitated through a licensed member organization.

Chain Interoperability

Standardization of a layer 2 protocol allows for interoperability across all supported chains in the Issuance Network, providing purchasers with their choice of blockchain to hold their assets. Automating the mint/burn controls of the issuance account on-chain at layer 2, assets can be seamlessly swapped across blockchains in order to take advantage of the unique features of each. For example, an asset issued on the Fusion blockchain can be traded on SDEX seamlessly through RealioX without the user knowing the swap ever took place, as it all happens instantly behind the scenes and is completely auditable as the transaction occurred through chaincode connected with the issuance account. There is no need for a 3rd party custodian in the process as the swap takes place through the issuer.

LAYER 1 SUPPORTED BLOCKCHAINS

STELLAR

We have issued our initial digital assets (RIO, RST and rUSD) as Stellar tokens. Stellar is an open-source, decentralized protocol that allows for fast, cross-border transactions between any pair of currencies and assets issued on its network through its design as a 100% on-chain decentralized exchange. Apps built on Stellar give users access to a borderless, frictionless marketplace[9].

The regulated asset approval flow for Stellar[10] utilizes built-in compliance features, such as sep0008 and authorization flags, which enable network level issuer controls and transfer restrictions that can be automated through the Realio Issuance Network.

RAVENCOIN

Ravencoin is a peer-to-peer network built as a fork of the Bitcoin code, designed to efficiently handle one specific function: the transfer of assets from one party to another[11].

Issuers of securities on the Ravencoin network benefit from built-in features such as "Restricted Assets" and "Tags" that provide layer 1 network level issuer controls. Restricted Assets are tokenized assets on the Ravencoin platform following rules set by a token issuer. Tags are needed so movement of Restricted Assets is restricted to only those addresses whitelisted through the Realio Issuance Network, which automates tagging throughout the lifecycle of the securities issued. Tagging may be used for KYC, accreditation, affiliation, and limits on the number of addresses that may hold tokens.[12]

FUSION

Fusion is an innovative solution to remove obstacles between various cryptocurrencies and to streamline the globalization of blockchain technology. A core feature of the Fusion protocol is distributed control rights management (DCRM), the process that hands over the control of digital assets by individuals or centralized organizations to the decentralized nodes' management. The distributed generation and distributed storage of a private key ensures that no single individual can access the complete private key, which means that no single node can obtain the control of the digital assets under the state of distributed control rights management.[13]

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[9] "What is Stellar? - Stellar Development Foundation." Accessed 8 Dec. 2019.

[10] "stellar-protocol/sep-0008.md at master · stellar/ stellar ... - GitHub." 22 Aug. 2018. Accessed 22 Dec. 2019.

[11] "Ravencoin - Ravencoin - Medium." 31 Oct. 2017.

[12] "Ravencoin — A Securities Token Roadmap." 20 Dec. 2019

ETHEREUM

The intent of Ethereum is to create an alternative protocol for building decentralized applications. The code in Ethereum contracts is written in a low-level, stack-based bytecode language, referred to as "Ethereum virtual machine code" or "EVM code".[14]

For releasing security tokens to Ethereum, we use a customized ERC-1400 token standard, briefly described here. The contracts send requests to the Realio Issuance Network and then receive a confirmation if a user is allowed to purchase or trade the asset.

BINANCE CHAIN

Binance Chain is a blockchain software system developed by Binance and its community. Binance DEX is the decentralized exchange developed on top of Binance Chain. Binance Chain is essentially a digital asset creation and exchange platform.[15]

ALGORAND

Our platform security token, RST, is being issued as an Algorand Standard Asset (ASA). The Algorand blockchain enables creation of frictionless financial assets. They provide users easy-to-use tools to issue financial products.

Algorand lets users generate their own fungible tokens, thus becoming their token managers. A token manager may:

- Generate a supply of new tokens
- Increase the circulating supply of the new tokens
- Freeze their generated tokens in a given account
- Transfer their abilities to a new token manager

Algorand allows multiple users, who hold possibly different fungible tokens and have negotiated a set of transfers of these tokens, to execute all of these transfers by posting on chain a single transaction. Algorand provides a whitelist model for privileged asset transacting, which allows only specific addresses that have been approved to transact within a specific asset, that integrates directly with the Realio Issuance Network.

NATIVE TOKENS

The platform currently has three native tokens; RST, RIO and RealioUSD, each detailed below.
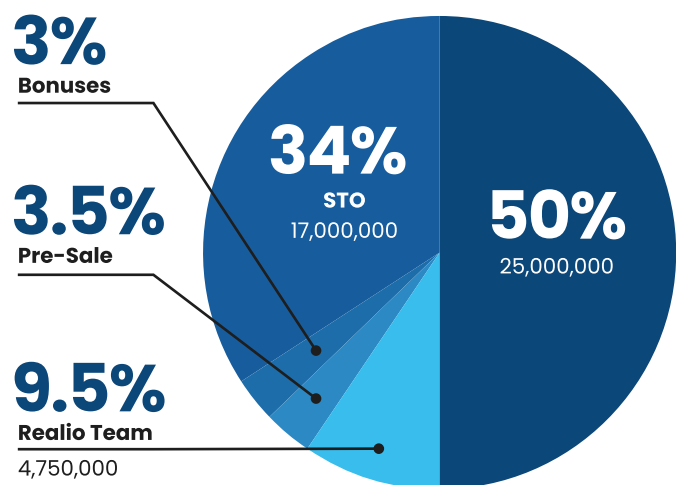
RST

RST is issued as a security token to represent ownership of the Realio Ecosystem. The Realio Security Token (RST) represents an investment in the platform and ecosystem and offers a revenue stream in the form of profit share.

Holders of over 10,000 RST can also run a node on the Realio Network to validate transactions while earning block rewards and additional revenues from issuance fees paid out in RIO. RST is being sold through a security token offering (the "STO), starting with a private sale at a $1 per RST issuing price.

The RST token fund will own 100% of the Realio technology platform and network, and have a maximum supply of 50,000,000 RST tokens. Half of the tokens (25M RST) will be issued to the entity that provided all equity funding towards the development of the platform to-date, which is controlled by the founders, and 4.75M RST will be allocated to individual team members and advisors. The remaining 20.25M tokens will be sold in multiple rounds via a private offering, including bonus rounds.
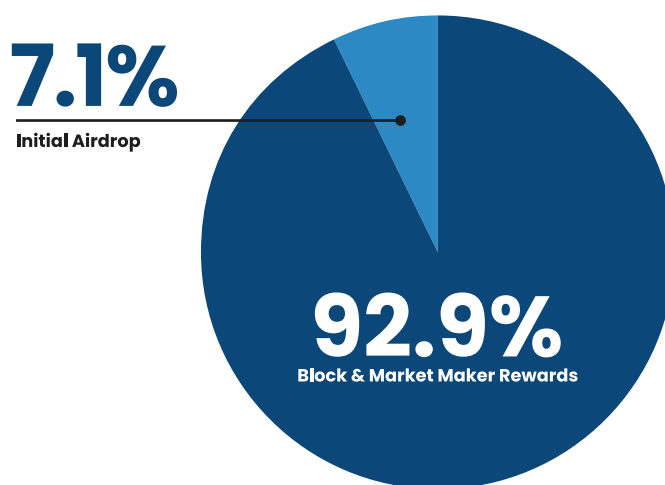
Figure: RST Distribution

3%
Bonuses

3.5%
Pre-Sale

34%
STO
17,000,000

50%
25,000,000

9.5%
Realio Team
4,750,000

RIO

RIO is a cryptocurrency and utility token[16] for the Realio Network and platform. There is/was no ICO, sale or founder pre-mine associated with RIO and the distribution mechanism is/was designed to be 100% fair to anyone interested in the ecosystem. The maximum supply of RIO will never exceed one hundred million (100,000,000). The initial circulating supply of 7,070,000 RIO issued during the airdrop will be the total supply until block rewards/market maker rewards begin distribution on the Realio Network[17].

Platform fees for tokenizing and trading will be paid in RIO. There will not be any trading fees for market makers on RealioX, while fees for market takers are currently calculated at 0.1% of the trade's value[18]. As a peer-to-peer network, market makers will earn 100% of all trading fees paid by market takers. Issuing a tokenized asset on Realio requires a fee of 5,000 RIO, of which 2,500 RIO will be burned upon issuance of the asset and the remaining 2,500 RIO will be distributed to wallets staking RST.

The first stage of RIO distribution was through a publicly announced airdrop that began in April, 2019 and ended on November 29th, 2019. The airdrop was open to anyone, distributed 10,000 RIO to each recipient and ended with a total circulating supply of 7,070,000 RIO. The RIO distribution model will now be exclusive to block rewards paid out to node operators on the Realio Network and market maker rewards through RealioX.

From a regulatory perspective, RIO was designed and issued to exist outside of the definition of a security, per guidance issued by the SEC which touches on airdrops and the Howey test in its recently published Framework for "Investment Contract" Analysis of Digital Assets.[19] RIO was not and never will be sold as an investment and no money

Figure: RIO Token Allocation

has been or will be raised through any issuance of RIO. There are a number of characteristics of RIO tokens that distinguish them from securities. For example, one of the aspects of the Howey Test indicates any person receiving tokens will have a reasonable expectation of profits derived from the efforts of others, particularly the efforts of the company's management. For RIO tokens, recipients are receiving tokens for use on a functional platform and not as a speculative asset and should have no reasonable expectation of profits since the tokens are not expected to appreciate in value. If they do happen to increase in value due to speculative trading by unrelated third parties on an exchange, that increase in value, will not be a result of the efforts of management.

The SEC may, however, change their view and issue different guidance in the future, which could potentially change the classification of many crypto-currencies, including RIO. In

[16] "Utility Tokens vs Security Tokens: Learn The … - Blockgeeks." Accessed 8 Dec. 2019.

[17] "RIO by … - StellarExpert." Accessed 8 Dec. 2019.

[18] Subject to change.

[19] "Framework for "Investment Contract" Analysis of … - SEC.gov." 3 Apr. 2019. Accessed 16 Dec. 2019.

terms of utility value, RIO will be utilized on the platform to pay fees for creating and issuing tokens for projects, listing them on RealioX, trading fee payments/discounts, etc. RIO will also function as the native *gas*[20] of the Realio Network.

Utility functions of RIO include:

- Payment of asset tokenization fees
- Delegating a stake with a member organization to participate in block rewards
- Holders of the original 10,000 airdropped RIO (less any burned tokens or tokens used for RealioX fees) will be invited to the private sale of RST (the platform's security token sale with profit share rights) that comes with a bonus allocation
- Users must stake RIO to use RealioX: Taker fees will be paid out of the staked RIO with 100% of taker fees paid to makers or burned
- Users must stake RIO to become a Market Maker and earn MM rewards: MM rewards are issued as new RIO tokens; users do not need to be an MM to receive taker fees for maker orders

RealioUSD (rUSD)

The value of cryptocurrencies tend to fluctuate dramatically over short periods of time. This volatility can be alarming, especially for users of a cryptocurrency, and mitigated through the use of stablecoins. A stablecoin's value may be pegged to fiat money or to exchange-traded commodities including precious metals.

rUSD is a stablecoin backed 1-to-1 with U.S. dollars held in an account with PrimeTrust, an institutional quality, licensed custodian and trust company based in the United States. rUSD tokens can be purchased with and redeemed for U.S. Dollars with KYC/AML approved accounts instantly on the Realio platform. Regular 3rd party audits are conducted

to verify the USD collateral value matches the circulating supply of rUSD.

rUSD acts as the primary fiat on/off ramp to the RealioX decentralized network.

Since the Realio Issuance Network intermediates transactions between digital assets across different chains, rUSD comes with an inherent mechanism to "transfer" from one chain to another with minimal or even zero loss of value.

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[20] "What is gas? – Blockchain Support Center." 4 Oct. 2019. Accessed 8 Dec. 2019.

ROLE OF TOKENS

Value Flow

Value Capture in the Realio Ecosystem happens through tokenizing assets and bringing them onto the platform. Asset issuers pay fees in RIO and node operators are rewarded in RIO for validating transactions. Market Makers add liquidity to the ecosystem and are rewarded in RIO.

The main value exchange happens between investors and asset issuers/owners. A number of other actors must do their part to maintain a healthy ecosystem. By using a native currency, we enable the value creation of the whole network to be represented by a single, programmable currency.

Users can stake RIO to become traders on RealioX, burn RIO to become Market Makers or stake their RIO with a member organization of the Realio Network to earn block rewards. Added value in the ecosystem flows from issuers who tokenize assets on the platform. At the same time Market Makers decrease total token supply and increase liquidity in the ecosystem.

Every time an asset is tokenized there are two forces influencing the macroeconomic environment of RIO.

1. Burning 2500 RIO per tokenized asset.
2. Paying a fee of 2500 to the platform.

In the meantime, RIO also means revenue opportunity for these parties:

1. RST holders who collect dividends from the platform. This is essentially the 2500 per asset fee paid out to RST holders at set intervals.
2. Node operators receiving block rewards for validating transactions.

Since the ecosystem includes an exchange, Market Makers are introduced to provide liquidity. RIO's value is affected by the following principles:

1. Users stake RIO on RealioX to use the platform and pay the (variable) 0.1% taker fee.
2. Users earn taker fees paid by other users in RIO for placing maker (limit) orders .
3. Users stake RIO to become Market Makers.
4. Market Makers earn rewards in newly minted RIO for providing liquidity.

Based on current fees for asset tokenization, the current model allows up to 20,000 assets being brought onto the platform. Since we are looking at also burning RIO for becoming Market Makers and node operators, realistically, the theoretical maximum for assets on the platform should be around 15,000 assets.

By calculating with an average asset value of $50M this means that at equilibrium, Realio Ecosystem would be managing over $1.5T worth of assets. This gives us a comfortable large enough margin to operate under, as in the first 5 years we're unlikely to bring more than 100-200

assets on to the Ecosystem. As the current supply from the airdrop is 7.07M, with the current fee structure, the current maximum before supply increase is economically needed is <1500 assets.

REWARD MECHANISMS

Growth projections of the Realio Ecosystem informs us about the liquidity and velocity at which tokens are being minted, and how tokens will be burned, with equilibrium as a basis for the RIO model.

Node operator rewards will fluctuate between being paid out from the platform and receiving block rewards for minting new tokens based on an algorithmic equilibrium. Ideally, the supply and demand for tokens will balance each other, so within a specific time frame the revenue made by node operators and RST holders should equal the sum of fees paid to the platform (after burn).

The core reward mechanisms for RIO therefore are aimed at maintaining this equilibrium long term while being aligned with our growth plans. Exact block rewards will be confirmed closer to network launch.

Table: Actors and corresponding economic interests on the Realio network

Actors	Benefit	Effort / Resource Provided	Comments
Shareholders of Realio	Revenue / Profit share	RST purchase in the STO	Tiered bonuses (rights, running nodes)
Asset Issuers/ Owners	Increased liquidity through tokenisation / digitisation of assets	Pays platform fees	In early models, payout in RIO, a native cryptocurrency
Node Operators	Revenue in the form of RIO	Computing Power	RST buyers can obtain the right to set up nodes by buying a certain amount
Users/Investors	Access to Investments, Asset Management Platform and DEX	Invests in projects, provides liquidity to DEX	---
Market Makers	Revenue in RIO	Provides liquidity on RealioX	---

NODE OPERATORS

Users of the Realio Ecosystem have the capability to run nodes by staking tokens in their wallet.

Layer 2 of the Ecosystem is scheduled to launch in Q4 2020 with initial members of the Realio network running "organization nodes". RST holders who stake a minimum of 10,000 RST can run peer nodes with any of the initial member organization nodes. RIO holders who stake a minimum of 10,000 RIO may delegate their stake with any organization node.

Description of Node Types

Organization Node: Similar to a full validator node or masternode, run by Realio Network Organizations. Members of each Org can delegate their stake to the Org or run a peer node within the Org. Orgs can create private "channels" and give permission to peer nodes to create private "channels". Orgs can charge a fee on delegated stakes and peer node block rewards to create competition among Orgs.

Peer Node: a node run by anyone staking RST with any Organization. Basic permissions give access to network level block data (non private issuance and transaction data) which is viewable in a block explorer.

Delegated Stake: any holder of RST or RIO may delegate their stake to an Org to share in Block Rewards.

Table: Node Operators

Peer Nodes and Staking	RST: costs/features/ permissions	RIO: costs/features/ permissions
Cost	10,000 RST	10,000 RIO
KYC	required	not required
Actions	• Run a peer node, or • Delegate stake with an initial member organization	• Delegate stake with an initial member organization
Benefits	• Earn tokenization fees paid by issuers • Earn block rewards in RIO • Voting rights for network matters such as compliance protocol updates and which projects are to be listed on the investment portal and realioX • Profit share / Ownership stake in Realio Platform	• Earn block rewards in RIO

PLATFORM

The Realio Platform provides users with all services in a single secure application, where assets are listed for investment and traded peer-to-peer. Tokenized funds can also be managed throughout their life cycles on the platform. Asset owners may join Realio to leverage its platform and services to create special-purpose financial vehicles with tokenized equity. Realio offers investors the advantage of a secure multi-currency wallet, fiat on-ramp, access to an issuer listing portal and peer-to-peer multi-currency swaps.

The Realio platform consists of a web-based platform and mobile app where users may easily tokenize assets and/or create their own diversified investment portfolio. Initial functions of the web-based platform include:

User Account
User registration/sign-in; identity verification through KYC and AML checks and procedures; accreditation verification

Wallets
Dashboard to view the balance and performance of holdings; wallet overview (all wallet transactions & balances); token Swap Interface Access (p2p marketplace)

Investment Portal
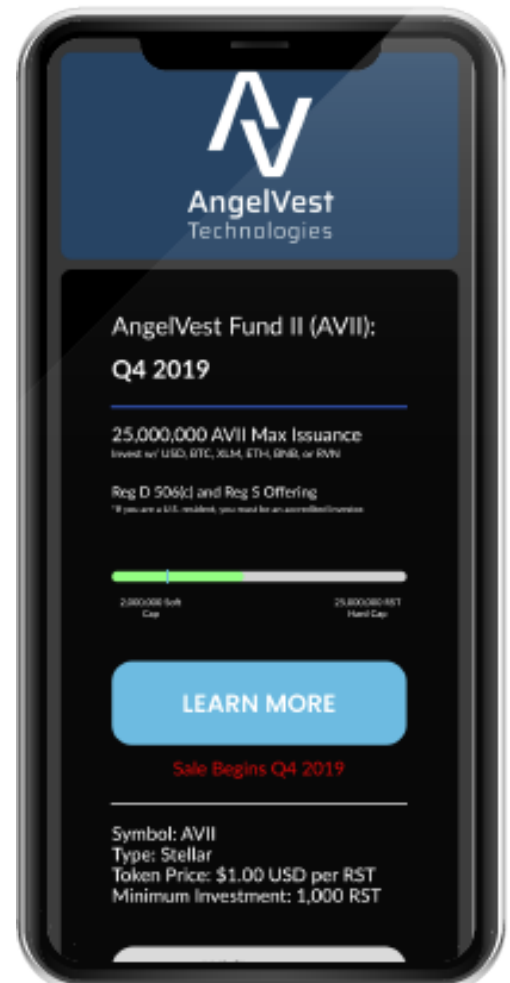Ability to purchase tokens and invest in projects

Portfolio Management
Manage options for staking tokens to receive dividend distributions; historical performance data

Issuance Portal
Apply to become an issuer on the network; create and launch custom tokens utilizing the Realio blockchain infrastructure

MULTI-CURRENCY WALLET SYSTEM

The wallet supports fiat in addition to assets on several layer 1 permissionless blockchains. By synchronizing the different chains through virtual copies, a record is kept of activity on both blockchains. More features of the wallet system include:

- Secure Non-Custodial & Custodial Wallets
- Multiple Crypto-currencies and Tokenized Assets.
- Stable Coins (rUSD)
- Tokenize and Swap Assets in real-time

Deposits and Withdrawals

Deposits and withdrawals of USD and fiat currencies are managed using PrimeTrust custodial accounts which require KYC/AML review prior to opening. Deposits and withdrawals of crypto into the non-custodial Realio wallets are at the discretion of each user.

KYC and Custody Accounts

KYC and accreditation verification is the primary compliance gatekeeper for all digital securities issuance portals. Therefore, we chose two of the best companies in this space to collaborate with as 3rd party providers, assuring personal data is safe and kept private:

- Prime Trust[21] — Custody and KYC Provider for Realio. PrimeTrust is a chartered, regulated and insured trust company with full fiduciary powers. Other clients include TUSD, Polymath, Stronghold and OKcoin.
- VerifyInvestor — Investor Accreditation Verification Provider for Realio. VerifyInvestor was recently acquired by tZERO and is part of their tech company portfolio.

Realio does not store certain sensitive information (such as SSNs), so will never be the source of a leak of such content.

PORTFOLIO/ASSET MANAGEMENT

Users may become issuers after specific criteria are met. Real assets may then be tokenized and capital raised through tokenization, leveraging Realio's unique security token offering process and global distribution network.

The platform will automate many asset management functions, including distributions of profits, new token issuance, cross-chain interoperability, etc.

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[21] https://primetrust.com/

USER INTERFACE DESIGN CONCEPT

The Realio UI is designed to be elegant, simple and effective enough for anyone to invest in, manage and trade digital assets from anywhere in the world. Anyone with a laptop or smartphone and an Internet connection may participate in the Realio Network. The customizable interface comes in light and dark schemes, offering users a personalized experience.

Dark Scheme GUI

Light Scheme GUI

RealioX | Decentralized Exchange

OVERVIEW OF A DECENTRALIZED EXCHANGE

A decentralized exchange application[22] is built on top of a decentralized exchange protocol, adding an on-chain or off-chain order book database and a graphic user interface (GUI) and/or APIs so that the information is easily accessible. Overall, a decentralized exchange application may be broken down into:

1. The blockchain platform & technical implementation
2. The counterparty discovery mechanism
3. The order matching algorithm
4. The transaction settlement protocol

CENTRALIZED	DECENTRALIZED	REALIOX
Exchange controls funds	User controls funds	User controls funds
Not anonymous	Anonymous	Securities compliant
Hacks & server downtime	No hacks & server downtime	No hacks & server downtime

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[22] "Deconstructing Decentralized Exchanges · Stanford Journal of ...." 5 Jan. 2019. Accessed 8 Dec. 2019.

A decentralized exchange application may not be fully decentralized in all four components (Ethereum based applications for example). Note that for many decentralized exchange applications, one or more components may be off-chain/centralized (such as Idex, 0x or other smart contract based DEXs), or otherwise feature economic incentives to promote a tendency to centralization.

Examples of on-chain order books include the Bitshares and Stellar decentralized exchanges. In the Stellar network, users submit orders which are hosted on a persistent and public on-chain order book in the Stellar distributed ledger. Information about this order book is broadcast to all Stellar validator nodes and is viewable by the public. When two orders intersect in price, the trade is automatically executed and settled by the Stellar network.

The advantages of decentralized cryptocurrency exchanges include:

1. **Security:** Decentralized exchanges do not store user assets. Therefore, neither hacker attacks nor the total collapse of the exchange can lead to a loss of funds. The absence of a single entry point, through which one could gain access to all assets and data, complicates work for hackers and makes an attack meaningless.

2. **Low risk of manipulation:** There is less reliance on a centralized party to host and operate the order book. There may be a centralized GUI (Graphics User Interface) for the order book, but any independent party will be able to create separate GUIs and populate it with the on-chain data. If hosting and operating of the order book is distributed across independent, non-colluding validator nodes, there is no centralized point of attack, compromise, or liability that would result in the order book being shut down or specific orders being restricted by another party.

3. **Independence from middlemen:** The distributed architecture protects the exchange from interference by local or international authorities. Decentralized, on-chain order book hosting means one does not need to trust centralized, off-chain actors, to accurately and reliably publish or broadcast order books.

4. **Accessibility for different projects:** In contrast to centralized exchanges, a decentralized exchange makes it possible not only to place orders for existing cryptocurrencies, but also to create new ones directly in the system.

REALIO'S DEX GUI

One of the features that set Realio apart as an issuance platform is the built-in liquidity accessible through its DEX GUI. No KYC is needed to access the DEX or to trade any tokens on a decentralized network. Still, the Realio compliance protocol will not allow transfers between users (for platform issued tokens) unless verification has been cleared.

Given that the design of our compliance protocol operates at the network level, assets issued on Realio will follow the same rules on any DEX UI outside the realio ecosystem, but will benefit from added functionalities within it. This means issuers can build in enough control to be sure secondary markets are compliant, instantly listing their tokens on RealioX.

Institutional users may like the OTC functions of RealioX, and the ability to instantly make large trades with buyers in their network without requiring any middlemen or other interfering complications associated with exiting a large position. For institutional issuers of funds with long lock-ups, RealioX allows their investors to interact in private channels and negotiate trades directly with each other, potentially avoiding redemptions.

Through the interoperability features of the Realio Network, tokens issued on any supported blockchain will be able to utilize this built-in DEX functionality, enabling P2P (wallet to wallet) bulletin board style trades.

Finally, Realio's decentralized exchange enables digital assets to be exchanged 24/7 (after lock-up periods have been met) globally (after compliance criteria have been met), contributing to market efficiency and financial inclusion for its users.

MARKET MAKER REWARDS

Realio will offer market maker rewards for users of the RealioX GUI. These include implementing trading fees to market "takers" and paying them to market "makers." Currently, Realio will implement taker fees in RIO (Realio's native utility/cryptocurrency token) and pay 100% of those fees to makers. Given that RealioX shares the decentralized Stellar order book, some takers may be users of other platforms outside of the Realio wallet service and therefore will not pay the taker fee at all. In these cases, it will be necessary to mint new RIO tokens to pay the maker rewards to the maker of such trade. On the inverse side, some makers will place their orders outside of the Realio wallet service, yet takers on Realio will have already paid the fees in RIO. When this particular situation/edge-case occurs, the fees will be sent back to the RIO issuing account and burned.

THE REALIOX TRADING GUI

Realio is prepared to launch two different interfaces for trading tokens on the decentralized exchange. The first is a "Swap" feature built into the Realio wallet GUI page that is easily accessible and does not require knowledge of advanced trading features typically found on trading venues. The second is the advanced trading interface, built with dedicated traders and investors in mind.

The Realio Wallet Service "Swap" Function

Primary functions of the Realio wallet "Swap" service are similar to those of a typical exchange, however the interface is much more simplified:

1. **Price Chart –** Price charts will be displayed with public data available via the Stellar Horizon API and viewed with a TradingView chart API.
2. **Mid-Market Price –** Real-time price data will be displayed from public data via the Stellar API.
3. **Effective Price –** Realio's backend will calculate the "effective price" of executing a market order, based on available order book info.
4. **Transaction Fees to be paid (in RIO) –** Realio's backend will calculate the fees to be paid in RIO for the trade, or conversely the rewards to be earned by a maker.
5. **Orderbook (on SDEX) –** a graphic display of the Stellar order book will be available.
6. **Open Orders –** all open orders may be viewed with order and transaction history.
7. **OTC Order –** a bulletin board style order posting system will be available to post orders off-chain and negotiate directly with other users to conduct peer-to-peer transactions. These orders do not use the Stellar DEX and use custom Realio code to execute an atomic swap.
8. **Token Info –** Information on tokens or investment vehicles will be available to view on this page.
9. **Market/Limit Orders –** both market and limit orders will be available.

Advanced Trading Interface

A more advanced trading interface is being developed by Realio that will look and feel like many other centralized exchanges currently operating. While providing more advanced functions for traders, the basic infrastructure will be the same as the "Swap" services mentioned above.

Some of the advanced trading features in the roadmap include decentralized Futures and Margin trading functions and dark pools, which are being evaluated for development given the large market demand for these products.

PROVIDING MARKETING FOR PROJECTS

Additional value to the platform will be created by our ability to provide marketing services to projects issued on Realio. Project sponsors will benefit from full-service marketing assistance, including strategy outline, ad platform selection, account build, image/copy creation, optimization and reporting. Handling clients' marketing work ensures projects opting to build on Realio will be successful with increasing awareness and building their community.

This provides additional value to the platform and makes it an attractive offer to prospective projects.

Identification of a Customer Funnel

The Realio team will identify the ideal customer flow through the client website from cold lead through conversion. A custom landing page may be created for cold leads.

Value is created by generating awareness and driving interest. Promotion of a newsletter and social channels helps stay in touch with visitors who don't initially convert.

A retargeting strategy specifically marketing to subscribers not yet invested would be beneficial. Creating a sequence of video or image ads across platforms will keep audiences informed and engaged with the project.

Identification of KPIs through the Funnel

The team at Realio will work with each project to determine their KPIs (Key Performance Indicators such as cost per lead, cost per newsletter signup, or cost per investor) and create effective marketing plans.

We may recommend a few small test campaigns initially to get a better idea of costs before scaling up to a full marketing budget.

Community Building Strategy

A brand community can be a powerful, supportive strategy to develop Realio projects. Building a community across social channels such as Telegram, Medium, and Reddit is key to build interest organically.

Our team will post regularly across social channels, interact with the community and answer questions to demonstrate the legitimacy of the project.

Increasing the subscriber/follower base may include an influencer marketing campaign and a bounty campaign.

Identification of Marketing Platforms

Marketing platforms like Facebook Ads, Google Ads, YouTube, and Instagram will be evaluated per project. We will provide recommendations on which platforms are best, and recommend marketing budgets and estimated results.

Determination of Marketing Budget

The marketing budget for each project will be recommended according to the agreed upon KPIs as well as the effectiveness of the sales funnel.

Example: Project ABC plans to sell 25M tokens. Based on our above funnel we're expecting a 10% site visit to newsletter signup rate and 20% of newsletter signups will invest,

with an average customer value of $15k. Based on those projections, 50 visitors are needed to generate one new investor for $15k.

We anticipate driving qualified visitors at $50 each, putting our customer acquisition cost at $2,500 each. In order to reach our $25M liquidity goal, we'll need approximately 1,667 customers. Based on those numbers we anticipate we'll need a total marketing budget of approximately $84k. Please note: these numbers are hypothetical.

Creating a Social Marketing Calendar

Creating a social media marketing calendar provides a framework for deploying a robust and multi-platform social media campaign

Example: Blogging 2x/week on Monday and Thursday, FB live streams weekly on Fridays, newsletters 2x/week on Wednesday and Sunday, etc.

TEAM AND ADVISORS

REALIO FOUNDING TEAM

Derek S. Boirun
Co-Founder | Chief Executive Officer

Derek earned his bachelor's degree from the University of Florida in 2006, and subsequently received a dual master's, including a Master of Science in Real Estate Development, from Columbia University in 2010. He is an entrepreneur with experience in commercial real estate development, EB-5 capital investments and blockchain-based investing. He founded and acts as managing member of the American Economic Growth Fund, focused on sourcing overseas capital for U.S. based real estate projects, which owns 2 regional centers, hosts over 100 investors, and sponsors over $1.2 billion in total project cost. He was involved in the development of major urban real estate projects at Tishman Speyer, with a property portfolio in excess of $70 billion in total value worldwide.

Aaron Gooch
Co-Founder | Chief Technology Officer

Aaron spent the last two years building tech for various blockchain start-ups and has over 10 years of software and mechanical engineering expertise. He is a decorated US Air Force Veteran with a Medal of Valor, responsible for disarming IEDs in Iraq. He served as a robotics software engineer at iRobot and Mitre Corporation. Aaron designed, built and managed a collection of distributed systems across multiple cloud providers powering the global Red Bull TV application. In 2017, he founded the LA Blockchain Meet-Up, a group of over 600 blockchain enthusiasts. Aaron began in the crypto world building Ethereum miners and selling bootstrapped hard drives.

Marcelo Moyano

Co-Founder | Chief Experience Officer

Marcelo has managed an award-winning tech business since 1999 (MindSmack) specializing in multimedia production and interactive content. Marcelo is known as an expert designer and animator. His skills include visual design, animation sequences, and application development. He has led full-scale projects for clients including DreamWorks, America Online, Citibank, Doritos, and MTV. Marcelo's many international accolades include Adobe Site of the Day for his work with DreamWorks SKG and 5 Favorite Website Awards.

Ilyas Abayev

Business Development

Ilyas is an entrepreneur and has spent his career in NY's real estate world. He has vast experience in multiple business development roles and in structuring complex deals. Throughout his career, he has been involved in several development projects, multi-family value add acquisitions and deployment of private funds in the real estate sector. Ilyas received his Bachelor's degree from Cornell University's SC Johnson College of Business with a minor in Real Estate and concentration in Real Estate Development.

Eduardo Romeiro

Co-Founder | Director of Engineering

Eduardo is a software engineer and entrepreneur who is very passionate about technology and solving complex problems. He was previously instrumental in a successful smartphone telematics startup which leveraged machine learning on driving data and enabled social impact products. As a senior engineer and solutions architect he helped deliver products for both the enterprise and consumer market. Eduardo earned a bachelor's degree from Northeastern University in 2013, double majoring in Computer Science and Biology.

Andre Salem

Blockchain Developer

André is CEO and co-founder of Blockforce. He holds a degree in Business Administration from FGV and is studying Data, Economy, and Policy Development at MIT. André has worked for several companies in blockchain, leading their business, research, and blockchain innovation. He is a blockchain mentor for Social Impact and a Professor at Blockchain Academy. At Moeda, André is Head of Blockchain, responsible for providing strategic and architecture solutions in the technology field.

Charles Kaufman

Legal Counsel | Lexcuity

Charles Kaufman practices corporate, securities, and business transactional law in Los Angeles. He has over 23 years of experience representing companies in a broad range of industries. He has extensive experience advising public companies on securities regulation and compliance and advising both new and established companies on public and private offerings of equity securities, security tokens and debt securities, mergers and acquisitions, corporate governance, Sarbanes-Oxley and Dodd-Frank regulation, global compliance, conflicts and special committee concerns, internal investigations, listing and delisting, crisis management, and insolvency. His practice also includes international joint venturing and development agreements in addition to supply and distribution agreements, licensing agreements, and general corporate transactions. Charles has attended over two hundred public company board and committee meetings as board counsel.

ADVISORY BOARD

Nick Cerasuolo

Advisor | Imperium Investments

Nick specializes in cross-border investment strategies, with deep expertise in fintech, cryptocurrency, and blockchain. Nicholas has significant operational experience with regards to legal entity structuring and architecting structured financial products. Nicholas has advised on over 200 venture capital/private equity transactions ranging from $5mm to $7B throughout his career. Nicholas is a Certified Public Accountant (CPA) and Chartered Global Management Accountant (CGMA) and previously spent 11 years in M&A/public accounting at Deloitte and PwC.

Behzad Taufiq

Senior Advisor | CIO Valentus Capital Mngmt.

Prior to forming Valentus, Mr. Taufiq was the Head of Credit Trading and Managing Director at Hudson Advisors ("Hudson"), from 2011 until March 2020. Hudson is the asset manager of Lone Star Funds ("Lone Star"), a private equity fund that has raised $85 billion in capital since 1995 and specializes in distressed investing. At Hudson, Mr. Taufiq was responsible for the oversight and trading execution of Lone Star's credit assets, which included US Residential Mortgage Bonds, Whole Loans and Corporate Loans.

John Liu

Advisor | Chief Product Officer for Fusion

John has led product organizations and taken multiple Fintech products from ideation to multi-million dollar revenue generation over 19 years. With his deep expertise in finance, data, and blockchain John advises and leads various blockchain companies including WeDeFi, Fusion, and AXP.

Tron Black

Advisor | Ravencoin & Principal Dev. Medici Ventures

Tron was the founder of two startups sold to publicly traded companies. He has worked in cryptocurrency as a miner, developer, investor, and trader. He was one of the first employees of TZero, and helped issue the first publicly traded SEC acknowledged parallel crypto-equity for Overstock.com, and the world's first crypto bond offering. He worked for ANX International, a Fintech company that runs a Bitcoin exchange, and offers Bitcoin debit cards. He is currently an advisor to TZero and the lead developer for Ravencoin.

Enzo Villani

Advisor | Managing Partner Transform Strategies

Enzo leads corporate development, focused on business development, corporate strategy, stakeholder communications and aftermarket support. He is building security token infrastructure through investments and advisory. He was Managing Director, Strategy, for NASDAQ, where he co-founded NASDAQ Global Corporate Solutions Group. He co-founded and became Chief Strategy Officer for SAGE Holdings, where he completed a $200 million strategic M&A roll-up of five Tier-1 communications firms, including DF King & Co.

Dail St. Claire

Advisor | COO Park Avenue Finance

Dail St. Claire has significant history building investment management firms for institutional investors from the ground up, bringing them to market and controlling them for implementation in asset management activity in the public and private markets. With over 20 years of experience as President & Chief Operating Officer for financial institutions, Ms. St. Claire launched and managed several SEC-registered investment advisors, private equity, private credit and liquidity funds.