RealT

Legally Compliant Ownership of Tokenized Real Estate

Abstract

RealToken is a system for tokenizing property in the United States, that retains all legal rights and protections provided by traditional ownership of real estate. This system is structured around RealToken LLC ("**RealToken LLC**" or "**ReatT**"), a Delaware series limited liability company ("**LLC**"). RealToken LLC, as a series LLC is a unique form of limited liability company in which the certificate of formation specifically permits for unlimited segregation of membership interests, assets, and operations into independent series. Each series of the series LLC (each a "**Series**") is treated as a separate entity. The Series functions as an intermediary between a token-owning individual and a piece of real estate property. Ownership of the Series is tokenized to unique ERC-[20] tokens ("**RealTokens**") on the Ethereum blockchain, each of which represents an equity ownership interest in one of the independent series of the RealToken LLC and, thus, in the real estate property owned by the Series. Ownership of any or all of the RealTokens gives an indirect ownership interest in the property directly owned by the series of RealToken LLC. Because the sole purpose of the Series is to own one single property, the Series can be abstracted away; ownership of RealTokens to be issued by a Series is effectively ownership of the property owned by the Series. Through the services of an LLC and Series manager, or Managing Member, and a property management company, the LLC and each of the Series of the LLC can be maintained with little-to-no engagement from any token holding individuals, while the individuals themselves retain full legal rights to the property held by the series. Through the use of Ethereum's IPFS (Interplanetary File System), all necessary documents that prove ownership of the real estate by token holders can be accessible at any time, by anyone, from anywhere.

Real Estate

The growth and development of the real estate industry is interwoven with the progress of humankind itself. When hunter-gatherers abandoned their nomadic lifestyle, and took to settling in permanent dwellings, the real estate industry, concepts of home ownership, and personal property were established. With the settling of humans, and the turn towards agriculture and farming, the size of the human population exploded. Physical space is finite, however, and the supply of valuable property is limited. Demand for superior real estate property has always been increasing. As the human population surpasses 7.5 Billion, the value of real estate property has increased commensurately. The new supply of high-value property has never been able to keep up with demand. Properties that give access to resources, have a superior view, located in a comfortable climate, near areas of commerce and social centers, or exhibit other valuable characteristics, are highly limited and increasingly sought after.

Few commodities have the same value proposition as real estate. It can be argued that real estate is the one form of value that has intrinsic properties. Gold, paper money, internet ledgers all have perceived value; value attributed based on the belief that others will accept it as equally valuable. Other commodities like those produced through agriculture have intrinsic value, in that they are required by humans for survival, but act as a poor store-of-value, as they often decompose relatively quickly. Real estate, on the other hand, has been the single best store-of-value throughout human history. While money has changed its form many times, real estate has stayed the same. The explosion of the population of humans has made investment into real estate extremely enticing. Shelter is a human necessity, and there is finite space on planet Earth. The demand for, and scarcity of, real estate has made this industry the single most valuable industry in the world: $162 Trillion; roughly 30% of the total world's wealth (as of April, 2017 according to Savillis).

While human history is a story of inequality and competition, a robust industry has been created to help democratize access to real estate property. The advent of finance has helped many middle and low income people gain access to home ownership they would otherwise never have had. This has resulted in advancing the quality-of-life for a large part of the global population. Through the use of banks and mortgages, renters have a vehicle to transition to homeownership, and lock-in their ownership of an increasingly scarce resource.

New internet-based platforms such as AirBnB, tech-enabled brokerages like Redfin, and third-party property management services can enable homeowners to better leverage the value of their property. These platforms all are able to reduce the costs of middlemen by introducing automation wherever possible and by leveraging economies of scale when a human is needed. AirBNB and tech-based property management services reduce the barriers

for a homeowner to become a landlord, opening up a new source of revenue to the home owning population. The direct connection of buyers and sellers of home-space enables a more efficient use of the world's resources, while providing diversity in revenue for the average homeowner. Likewise, tech-enabled brokerages are reducing costs for connecting buyers and sellers of real estate, providing some amount of liquidity to an illiquid industry.

Blockchains are positioned to be the next step for the technological innovations for the real estate industry. The power of blockchains as a tool for global value exchange and digital asset representation is currently being proven. The potential to digitize ownership of almost any asset will enable new mechanisms for democratizing access to real estate previously, unavailable to the average person. Digitized ownership on a "turing complete" blockchain, that is, a blockchain that can logically process the terms and conditions of any contract that is properly coded and constructed for execution on the blockchain, allows for the building of the infrastructure necessary to begin the next iteration of technological developments that enable better access to financial infrastructure and the ownership of financial assets for the global population.

The integration of asset-backed tokens and decentralized finance platforms like MakerDAO, Compound, and Dharma show the beginnings of a fully decentralized financial stack. With tokenized assets on a turing complete blockchain, the options available for leveraging the value of the asset are substantially increased. Infrastructure continues to be developed surrounding decentralized finance, asset ownership, utilization, and exchange. The potential for blockchains to create new tools for asset owners makes it obvious that the next step for the real estate industry is integrating with public blockchain asset platforms.

Decentralized finance platforms currently available on Ethereum

Real-Estate Illiquidity

Illiquidity is the state of an asset that cannot easily be sold or exchanged for cash, without a substantial loss in value. Illiquid assets are difficult to sell quickly, because of a lack of ready and willing buyers to purchase the asset. The lack of potential buyers leads to a larger discrepancy in the bid-ask spread between buyers and sellers, which often forces the purchaser into a "long-term hold" investment strategy for the asset.

Illiquidity is a tax on the value of an asset. Owners of an illiquid asset must lower their sale price in order to entice a buyer; compensation to the buyer for bearing the burden of an illiquid asset. This "illiquidity tax" has been estimated to be between 20%-30% of the value of the most illiquid assets. The illiquidity tax can be accurately called the "buyers remorse" tax: The expense you incur on reversing your decision.

Liquidity is valued. Liquid assets offer protection from risk in the event of an liquidity crisis. During a liquidity crisis, an insolvent investor who owns illiquid assets must sell its assets, no matter the price, in order to come up with enough cash to pay off debts. In the event that someone needs access to cash, illiquid investments offer little to no help. The 20%-30% reduction in value of the most illiquid assets cited above can be represented by the potential cost of not having access to cash when needed.

Real estate is known to be one of the most illiquid asset types. Numerous different variables contribute to the illiquidity of real estate property.

Transaction Costs

The sale of real estate is riddled with transaction costs. Once a buyer and seller agree to exchange the property, several third parties are brought into the transaction, such as bankers and real estate agents. Realtors charge an average 6% of the sale price, and legal fees and jurisdictional taxes add to this. Legal processes, sourcing of finance, and other red tape slow the process down, and add middleman costs. The required time and energy from both the buyers and the seller must also be accounted for. Organizing and executing the transaction for real estate often is minimum 30 days, and often much longer, meanwhile opportunity costs of capital is a small, but constant tax on both parties.

IBISWorld's Real Estate Sales & Brokerage Industry in the US reported $155B revenue generated by the real estate brokerage industry in 2018, a metric that shows a total amount of value extracted by brokerage middlemen from real estate sales.

Private, Siloed Markets

Since there is no public market for real estate, exchange of property is achieved privately. Public markets offer constant price discovery and asset valuations, while the private market for real estate operates on an opaque, "as needed", basis. Because properties are not frequently bought or sold, the valuation of a home must be analyzed for every exchange, which slows down and adds costs to the transaction.

Most purchasers of real estate are primarily interested in properties in their general geographic vicinity. Obviously, interested home buyers must search for homes near where they live. Even wealthy real estate investors have shown a preference for investing in the geographic region with which they are familiar.

The process of investing in real estate makes it difficult to complete the necessary steps to purchase property that is not near situated the purchaser. Hence, capital interested in real estate tends to stay inside the locale it already resides in. In order for a geographic area to receive any meaningful buyers from outside its region, there must be either be significant potential for a return, or political incentives to exfiltrate capital outside of a jurisdiction.

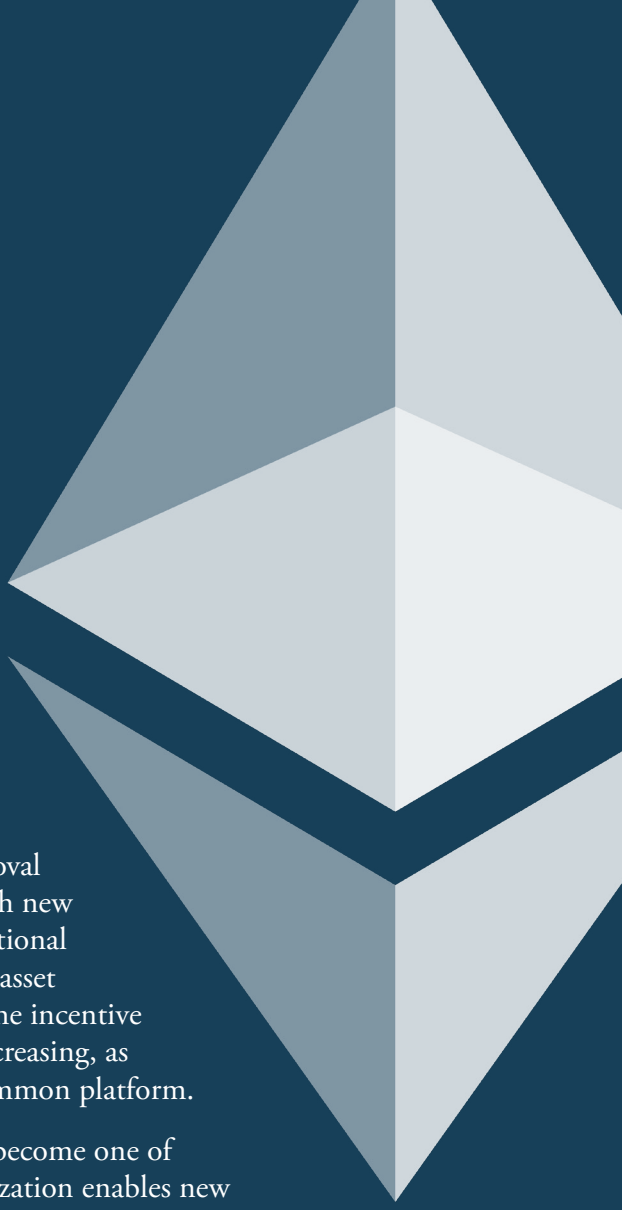
High Costs

As alluded to in the introduction above, real estate is the highest-valued industry in the world. This results in property ownership being prohibitively expensive for the majority of the world's population. Even the most inexpensive homes often have too high a price for the average person to accept. For the middle class, the high cost of real estate makes the purchasing of a home closer to a cultural rite-of-passage, rather than a calculated investment decision.

The median home price in the U.S. is $200,000, making any investment in real estate prohibitively expensive for the average person. The home in which an individual lives is likely the only piece of real estate that he (or she) will ever own, if the mortgage on that home is ever fully paid off. The significant majority of home buyers requires a loan from a bank in order to afford their investment, making true home ownership dependent on 30-years of mortgage payments, and significant amounts of total interest paid. A $200,000, 30-year 4.5% APR mortgage will result in an extra $164,800 in total interest paid. This is the cost associated with purchasing an unaffordable asset. While being able to live in a purchased home is invaluable, as an investment opportunity, it makes no sense.

There are various solutions for lowering the barriers for investing in real-estate. REITs enable access for the average person to invest in real estate. However, investors neither have control over management of the REIT, nor actually own any share of the REID held properties themselves. REITs are an important tool for democratizing access to real estate investments, but when it comes to owning the assets themselves, a REIT offers no solution.

Ethereum as an Tokenized Asset Platform



Ethereum's strength as a tokenized asset platform has been proven. The 'decentralized first' principles behind Ethereum's design choices have given asset issuers and investors the security and peace-of-mind required for the safe investment and ownership of tokenized assets. The promise that the asset will always be available to the controller of the associated private keys, as well as the removal of all unnecessary rent-seeking mechanics, has enabled both new types of assets, as well as new mechanisms for issuing traditional assets. Additionally, the network effects of Ethereum as an asset issuance platform have entered a positive feedback loop. The incentive to issue assets on the same platform as all other assets is increasing, as interoperability and exchange between assets requires a common platform.

Tokenization of real estate and other real-world assets has become one of the prevailing narratives of the future of Ethereum. Tokenization enables new functionality for ownership and exchange of assets that previously were not possible. By enabling an asset to be legally represented by a token on Ethereum, the asset is able to gain all the valuable qualities of a cryptographic token, while retaining the original value of the asset.

The tokenization of real estate powerfully illustrates the potential behind asset tokenization. The illiquid real estate industry, with its high prices, expensive transaction costs, slow exchange, and poor access to buyers, has been the exemplar industry to tokenize for the supporters of the future tokenized world. Real estate, a $228 trillion industry with significant illiquidity and limited access, is hailed as the tokenized world's golden goose.

If the tokenization of real-world assets is a potential future for humanity, it will be proven with real estate.

Liquidity Through Tokenization

The most significant benefit that tokenization can bring to real estate is improved levels of liquidity. The characteristics that make public blockchains so revolutionary all contribute to improving the liquidity of assets. Permissionless global access, asset fractionalization, instant settlement, and peer-to-peer transactions all play symbiotic roles in benefiting the liquidity of assets. These same characteristics are similarly real estate's biggest weakness, all contributing to the restriction of access to real estate to mainly two populations: well-capitalized investors, and homeowners.

Transactability

Digital tokens that exchange peer-to-peer with instant-settling provides a strong juxtaposition to the slow exchange of real estate properties. Reducing the 30-day average exchange period of real estate, to the 12 second block time on Ethereum, represents revolutionary improvement in the sale mechanics of real estate. With ownership of the property represented by ownership of the token, the cost of exchange is reduced to the price of gas, that is, the internal pricing on the Ethereum blockchain for executing the computation that effects a transaction.

If the token exhibits sound legal representation of ownership, the exchange of ownership of the property becomes significantly more simplified. Where previously, many documents require signatures, notarization, submission and approval, a sound legal, blockchain-based structure is able to eliminate this process. Public-key cryptography is able to automate the signature process. If the legal structure for providing ownership to the token is sound, then there should be little to no further steps required for the exchange of the asset, enabling the transaction itself to represent the exchange of the asset.

Access to Public Markets

The Ethereum public blockchain is accessible wherever the internet is found. It's permissionless nature has no restrictions on who is able to transact on the platform. Cryptocurrency exchanges that do not restrict regional sign-up, such as Binance or Bittrex, represent the world's first international marketplace. Decentralized exchanges on top of Ethereum such as Uniswap, IDEX, or ETH2DAI, further emphasize the permissionless access to Ethereum's financial utilities. These exchanges have no accounts or sign-ups, and therefore have no restrictions on who is able to access them. While these exchanges exist in a legal grey area, they reflect one of the core ethos of Ethereum and cryptocurrency - permissionless access to financial tools.

The few tokenized assets currently on Ethereum benefit from this worldwide marketplace. For example, DigixDAO has tokenized gold. Ownership of these gold tokens (DGX), each representing one gram of gold, has spread to over 1,000 unique addresses with 12,000+ individual transactions. It is feasible that many of the current owners of DGX tokens have never owned gold before, and have been enabled to do so, specifically as a result of the public Ethereum marketplace.

The real estate market desperately needs to break out from its silos. While it is possible that investor preference for local properties will always dominate the real estate marketplace, enabling a worldwide marketplace for properties located worldwide is the next step for the evolution of the real estate industry. Access to a global network of investors can help mitigate the difficulty in finding a buyer in the illiquid real estate industry. By expanding the pool of potential buyers from the local region to the entire world, the aforementioned 20-30% illiquidity tax can be mitigated. Improved access to buyers can also reduce the significance of the decision to purchase a property, as the option to sell is now much more available. These potential new qualities represent the required improvements in the real estate market needed to reduce the bid-ask spread traditionally found in regional real estate markets, and individual properties might establish a new valuation metric: transaction volume.

Access to Public Securities Markets

In an ideal, unregulated permissionless world, tokens representing interests in real property would be able to freely trade on the blockchain like any cryptocurrency or tokenized commodity, as discussed above. RealTokens, however, are digital manifestations of traditional limited liability company membership interests which, by their nature in the context of a managed investment that might be expected to appreciate in value based on the efforts of the LLC managers, are securities under U.S securities laws. As such, RealTokens, which are representations of these LLC membership interest securities, are also deemed to be securities under these U.S. securities laws as such laws are currently interpreted by the U.S. Securities and Exchange Commission (the "SEC"). As securities, RealTokens will be subject to certain regulations imposed by applicable U.S. securities laws, including restrictions on transferability. Additionally, as securities, RealTokens will be tradable only on secondary markets that are regulated by the SEC, including securities exchanges such as the Nasdaq and alternative trading systems, or ATSs. Certain of these regulatory restrictions are further discussed below.

Fractionalization

Fractionalization enables democratization of investment types. The "minimum investment size" barrier can now be wholly removed, and average investors can allocate their capital into investments previously inaccessible to them. By reducing the price of an asset by orders of magnitude, the pool of potential buyers is significantly increased. This has powerful implications when it comes to adding liquidity to previously illiquid assets, as the market size of buyers and sellers has increased to encompass anyone with any surplus capital.

The high price of real estate is the single largest barrier-to-entry for the average investor. Investments in real estate typically only make financial sense if the investor is able to pay for the property outright, or is able to receive more value from owning the property than it costs for a bank loan. This severely restricts the population of buyers to just a select few parties or individuals who are able to accept large price tags. Real estate fractionalization has significant potential to positively impact the real estate market. With fractional ownership tokens costing significantly less than the asset itself, the average person is able to make sound real estate investments without any additional financing. Fractionalization can make the price of real estate ownership comparable to share prices of a company.

RealT: Achieving Tokenized Real Estate

Real Token LLC has created a system for tokenizing real property in the United States, that allows a token holder to purchase and retain all legal rights and protections that are provided by traditional ownership of real estate.

When designing the RealT project, certain goals were established for achieving the effective tokenization of real estate. To be an effective asset-backed digital token, the RealToken was designed to encompass the following characteristics:

1. To enable legally-recognized ownership of a discrete real property asset, not an IOU of ownership;
2. To be freely transferable to anyone without restriction, as any real estate property is, subject to applicable U.S. securities law transfer restrictions;
3. To give RealToken holders rights to all cash flows generated by the real property held by the Series; and
4. To enable all rights and activities associated with traditional ownership, for example, the right to access the property.

Legally Tokenizing the Property

In order to legally tokenize a property within the RealToken framework, a short series of steps are required to bridge the gap between ownership of a distinct real property and the digital tokens on the Ethereum blockchain that represent that property.

First, RealToken LLC was established as a Delaware series limited liability company by filing a Certificate of Formation with the Secretary of State of the State of Delaware. This LLC Certificate of Formation allows for the unlimited segregation of membership interests, assets, and operations into independent series, each of which is treated as a separate entity. Each Series of RealToken LLC will purchase and own one discrete real property asset. LLC membership interests in each series is split into equal digital token units, or RealTokens. Ownership of any or all of the RealTokens of a particular Series gives an individual ownership and governing rights over the Series which has issued the RealTokens and, therefore, over the discrete property owned by the Series. Because the sole purpose of a Series is to own one single property, ownership of all of the RealTokens issued by a Series is effectively ownership of the property held by that Series.

Each of the membership interest units of a Series is represented by a single unique digital token, or RealToken, on the Ethereum blockchain. These digital tokens each have a Unique Identification Number (UIN) that is found both in the metadata of the token, and in the Certificate of Formation of RealToken LLC.

The deed for the real property asset being acquired by a Series, that is, the legal document showing who owns the real property, lists the Series as the recorded owner of the real property. The deed is filed in the county where the property is located and thus ownership of the property by the Series becomes a matter of public record. Along with the filing of the deed, an affidavit will be filed stating that the property listed and described in the deed is owned by the Series, which has membership interest split into equal units, each with a distinct UIN and each UIN reflected in the affidavit. The affidavit is a redundant mechanism for linking ownership of the deed to the membership interests of the Series of the LLC.

RealT Management and Property Management

RealToken LLC has an Operating Agreement and each Series of the LLC will be governed through a Series Designation. The Operating Agreement is an internal document of RealToken LLC that defines the governance and operation of the LLC and the relationships among members of the LLC, i.e., between the various owners of the LLC, and the management of the LLC. The Series Designation is an addendum to the Operating Agreement that sets forth the particular specific terms and conditions that define the operation of a Series in relation to the property owned by that Series and the members, or RealToken holders, of that Series. A primary objective of the Operating Agreement is to outsource significant management of the properties to be owned by the multiple Series of RealToken LLC to third party service providers, while retaining all ownership rights in the RealToken holders. Under the Operating Agreement, the authority to manage the day-to-day operations of the real property assets owned by the multiple Series is given to external property management service providers.

The purpose of this operating structure is to minimize the responsibility RealToken holders will have in the upkeep and maintenance of the property held by a Series, save for the most crucial choices such as the decision to sell, restore, remodel, or rebuild the property, or any other unforeseen circumstances that require owner input. The Operating Agreement defines the required quorum for decisions to be executed on behalf of the property management company. This Operating Agreement also establishes the ability for RealToken holders to elect to dismiss the property management service and any other contracted service providers, if they so choose, enabling the potential for self-sovereign control of governance of the Series.

RealT Property Management

RealToken holders are not able to manage the properties they own as a traditional landlord. It is unrealistic to expect numerous individuals from across the world to coordinate proper property management decisions. A property management company is required in order to upkeep the property and manage all landlord responsibilities. Property management companies are paid by the rent collected by the tenant, and are responsible for paying the property owners. Using a property management company allows for minimum necessary involvement on behalf of the RealToken owners. In the most ideal scenario, nothing of significance will ever be asked of RealToken owners, and ownership of the property is as simple as owning a RealToken.

At the genesis of a property in the RealT system, an independent, third-party property management service will be selected by RealT. If RealToken owners elect to ever switch property management services, they will be able to do so by quorum decision among themselves. RealT will enable the infrastructure required to do this. This functionality provides self-sovereignty to the owners of RealTokens, enabling the ability to take the management of their property into their own hands, if they so choose.

The property management service provider will be paid a cash fee equal to 5% of rents collected on the real property asset held by a Series and a cash fee equal to 1.5% of the cost of all repairs to an Real property while the asset is owned by the Series.

RealTokens

RealTokens are electronic, cryptographic, digital tokens to be issued as Ethereum-based smart contracts on the Ethereum Blockchain. The protocol, or code, for the RealToken smart contracts has been designed based on the open source ERC-20 standard, modified to address the requirements of U.S. securities law and to limit the ability of Digital Wallet holders, or any other persons other than RealT, to transfer or otherwise change the number of RealTokens in a Digital Wallet without the proper authorizations and permissions.

RealTokens are effectively digital limited liability company membership interests. Each RealToken represents a limited liability company membership interest in a series of RealToken LLC and, thus an equal ownership interest in the distinct property owned by the particular RealToken LLC series. For each series of RealToken LLC, there will be a limited number of RealToken security tokens contained inside the RealToken contract that is unique to each Series owned property. While all RealTokens are equal, they are not fungible. Each RealToken has a designated universal identification number, or UIN, that is required for linking the RealToken to ownership of the membership interest in the series of RealToken LLC, and, thus, to the ownership of the property held by the series. The distinct UINs will be listed in the certificate of formation of RealT, which will be updated and amended to reflect the acquisition of the RealTokens by the token holders in each series of the RealToken LLC and posted on the Ethereum blockchain. This will allow anyone to search the Ethereum blockchain to identify the Ethereum digital wallets that own any or all of the RealToken interests in any series of RealToken LLC. The format for the RealToken's UIN is as follows:

RET-[Property Address]

For example, the first property in the RealT system is "RET-9943-MARLOWE-PLACE-MI" and has a Token supply of 1000. All RealTokens are fully fungible within its own set of tokens, but have no relation to any other RealTokens outside of each series contract. RealTokens are ERC20-compliant tokens, enabling interoperability with other Ethereum platforms.

Receiving Rental Payments

For the first phase of RealT, all listed properties will be rented properties. In order to prove the reality of tokenized real estate in its fullest, it is important to illustrate the full rights of RealTokens owners. Receiving rental payments from tenants is one of the most salient mechanisms in which full rights over the property are conveyed. Receiving rental payments also makes RealToken offerings more enticing. While ownership of property via a token is noteworthy; adding in rights to the cash flows generated by rent from tenants makes things far more interesting.

The rent from tenants is collected by the property management service. The rent is then exchanged for USD stablecoin by the property management service or the Managing Member and submitted to the RealToken rent contract associated with the property. The rent contract automatically dispenses the rent pro rata to the Ethereum digital wallets that hold RealTokens or a regular basis.

Stablecoin of Choice: DAI

RealT is being designed to be aligned with the values and goals of Ethereum and cryptocurrency at large. We have selected DAI to be the stablecoin used in the RealT system to distribute rental income streams to the RealToken holders. DAI represents a jurisdiction-agnostic stablecoin on the Ethereum blockchain, and it is also the only decentralized stablecoin. By choosing the only stablecoin without a "Burn and Reissue" function, the selection of DAI removes a potential risk vector from the RealT system. Upon receiving DAI in their Ethereum wallets, RealToken owners are able to exchange DAI for any other currency, including a fiat-backed stablecoin that enables them to receive US Dollars to their bank accounts.

Daily Rent Disbursal

Innovations created by blockchains and smart contract technology have enabled new mechanisms for payments. The RealT rent disbursal smart contract is designed to leverage these new innovations, to break from, and improve upon, the old system wherever possible.

Rental payments are disbursed to RealToken owners on a daily basis. With the advent of smart-contracts, there is no reason to retain the archaic system of payment every 30 days. Instead of one lump sum paid out every month, a smart contract manages the dispersal of funds to RealToken owners so that they are able to collect their amount of rent every day.

The contract sends out a fixed percentage of the supply of DAI inside of it every day to the digital wallet addresses that contain the associated RealTokens. Every day, the contract dispenses 1/30th of the DAI contained inside of it to all the associated RealTokens. This results in a dynamic rent payment. You can view the modeling of rent disbursement, using a $1,000/Month example, here. Over time, a surplus is generated in the rent contract, as the rent contract never completely empties before it is replenished with a new rent payment. This surplus asymptotes to an extra 56.6% of a single rental payment, and it may act as a buffer in case there is a period in which the property is not being rented.

Ideation Surrounding Potential Utilities

The tokenization of real estate enables new utility functions for how ownership of a real estate property is managed. We discuss different ways which the tokenization of real estate invents new mechanisms for property ownership and investment strategies.

Rent-to-Own

If a tenant finds themselves renting a RealT property, they might have the option of purchasing the RealTokens for the property. While purchasing all RealTokens might be outside of the means of the tenant, the fractionalization of the property enables them to purchase a more reasonable number. Upon purchasing the RealTokens, the tenant is effectively paying rent to themselves. If they are only able to afford ⅓ of a house, they can purchase the rights to ⅓ of the rent they are paying. Through the purchasing of 1/3 of the property's RealTokens, they are effectively reducing their rent by ⅓. The reduction in their cost-of-living can help enable the purchasing of future RealTokens, and can help snowball a tenant into owning the home outright.

Accessing Capital

A homeowner may want to leverage the capital locked up on their house, but without seceding ownership of the property to anyone else. A second mortgage, reverse mortgage, or a collateralized loan are all options available from a bank, but the bank charges high fees or interest. A homeowner could tokenize their house on the RealT platform, and using decentralized finance platforms like Dharma or MakerDAO, can leverage some or all of the RealTokens to secure a collateralized loan. The MakerDAO offers collateralized loans at 0.5%- 3.5%, far more compelling than the interest rate offered by a bank. This service would require MakerDAO governance to accept RealTokens as collateral, and is purely hypothetical.

Tokenized REITs Without Cooperation Costs

By combining a collection of RealTokens from various RealT properties, a smart-contract created REIT is possible. This REIT is a basket of diversified properties across the U.S., offering risk protection and investment across diversified geographic areas. The REIT itself can be tokenized, in order to reduce the costs of entrance. This tokenized REIT could be offered at an comparable price to RealTokens themselves, but offer fractionalized ownership to multiple properties, not just one. All rights to cash flows are retained by the tokenized REIT owners.

The Offer and Sale of RealTokens

The issue of legally compliant token sales has been a common topic of conversation in 2018. 2017 ICOs took advantage of new technology and the grey area surrounding the legal status of Ethereum token offerings. This grey area is quickly becoming black and white as the SEC has been clarifying its position that most, if not all, ICOs are, in effect, offerings of securities that need to comply with U.S securities laws and regulations. This section discusses the legal sale of RealTokens.

Regulation D/Regulation S

The RealTokens will not be registered under the Securities Act of 1933, as amended (the "**Securities Act**"), and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. Accordingly, the RealTokens are being offered and sold only (i) to "accredited investors" (as defined in Rule 501 of Regulation D under the Securities Act) in reliance on Regulation D under the Securities Act and (ii) in offshore transactions to persons other than "U.S. persons" (as defined in Regulation S under the Securities Act) in reliance upon Regulation S under the Securities Act.

KYC/AML

In order for the sale of RealTokens to be compliant with applicable regulations, purchasing a RealToken through the RealT website will require the implementation of "know your customer" (KYC) and anti-money laundering (AML) procedures. RealT is implementing KYC procedures to verify the identities of our RealToken purchasers and AML procedures to ensure that payments for RealTokens do not come from illegal sources. RealT is implementing AML/KYC solutions through IndentityMind, an independent third-party solutions provider.

RealTokens Placement Agent

Primary Capital, LLC, a Delaware limited liability company and broker-dealer registered with the SEC and other necessary state or other regulators and a member of the Financial Industry Regulatory Authority Inc. (**FINRA**"), will act as exclusive placement agent (the "**Placement Agent**") for the "best efforts" offer and sale of RealTokens. The Placement Agent may enter into selling agreements with other SEC registered, FINRA member broker-dealers to sell RealTokens in the RealT series offerings. The Placement Agent will receive selling commissions in an amount up to 5% of the Offering Price of the RealTokens sold in the series offerings. RealT has also paid the Placement Agent an investment banking fee of $40,000 and the Placement Agent will receive reimbursement for all of its reasonable out-of-pocket expenses (including attorney's fees) incurred in connection with its provision of services to RealT and a three percent (3%) cash commission on the disposition of a real property asset owned by a RealT series.

Risk Factors

There are many risk factors associated with any type of investment, cryptocurrencies included. These risks span operational, regulatory, market-based, and technological challenges. Prospective investors in the RealTokens should carefully consider the risk factors set forth in the RealToken LLC Private Placement memorandum dates [*], 2019, as well as the information appearing in this Whitepaper, before purchasing RealTokens. Prospective purchasers of RealTokens should understand that there is a possibility that they could lose their entire investment in the RealTokens.

Self-Sovereign Identity for Real Estate

In the legacy system of buying, selling, and owning real estate, the discovery process for evaluating a house is an as needed, manual process. Inspections need to be made to ensure the property is up to code, doesn't need any significant repairs, create a valuation of the property, and others. Each evaluation that comes from a different 3rd party entity adds costs to the sale of the property, but more importantly the information produced from these costly inspections are only used once, and are quickly forgotten once a sale is made.

In the world of tokenized real estate, each property needs to have this data be made available for review. Online purchasers of tokenized real estate need to be able to access transparent information about the property, in order for them to understand what they are buying.

Ethereum's IPFS provides a mechanism for giving access to documents to anyone that is able to connect to Ethereum. RealT intends to use the IPFS mechanisms to provide all RealToken owners with access to their relevant documents. In future the phases of the RealT project, the Certificate of Formation, deed, affidavit, and operating agreement will all be made available by ownership of the relevant RealToken, via IPFS. Additional property information such as a home inspection report, title insurance, history of maintenance, and logs of all repair or renovations are also documents that are of interest to property owners, and future development of RealT will enable the appending of documents to the associated properties. This will allow for each property on the RealT system to have a provable and immutable history grow, providing clarity and security for potential real estate purchasers. As RealTokens diffuse throughout the Ethereum ecosystem, the perpetually available documents on Ethereum's IPFS will always be present and accessible to the RealToken holders.

RealToken LLC – "RealT"

RealToken LLC, the issuer of the RealTokens, is a series limited liability company formed on February 14, 2019 pursuant to Section 18-215 of the Delaware Limited Liability Company Act. The offices of RealT are located at 2750 NE 185th Street, Suite 306, Aventura FL, 33180.

RealT will be managed by RealToken Inc., a Delaware corporation formed on February 14, 2019, sometimes referred to as the Managing Member. The offices of RealToken Inc. are located at 2750 NE 185th Street, Suite 306, Aventura FL, 33180.

RealToken Inc. – The Managing Member

The Managing Member will own and operate the web-based investment platform called RealToken (the "**RealToken Website**") through which RealT will offer membership interests in each of its Series, in the form of RealTokens. RealToken Inc. will also be responsible for all of the day-to-day management of RealT.

The officers and directors of RealToken Inc., the Managing Member of RealT, are:

Remy Jacobson, President
Chief Executive Officer

Remy is also the Chairman, Managing Partner and Co-Founder of Bunker Capital, a blockchain consulting and advisory firm based in Aventura, Florida and founded in November 2016. Remy brings a wealth of experience in sales, investor relations, and security token structure to the Managing Member. In addition, Remy has been deeply involved in real estate since 1999. Since 2012, Remy has been the Chief Executive Officer of J Cube Development, a real estate investment and development company based in the Miami area, where he has built multiple real estate investment portfolios which have had positive growth.

In 2011, Remy decided to transition into crypto, where he quickly developed a passion for cryptocurrency and blockchain technology. He began his career in blockchain as a miner, building his first mining operation called Liquid Bits. This operation quickly evolved into a more substantial company called CoinWare, which became one of the first commercial mega mines in 2013.

Jean-Marc Jacobson

Jean-Marc has been at the forefront of the crypto revolution, and brings over 25 years of financial, information technology, and executive management expertise. Early on in his career Jean-Marc focused on financial strategy, and trading algorithms. Later he took this experience and transitioned into real estate where he developed novel software that helped his company manage entire real estate portfolios.

After exiting real estate, Jean-Marc initiated another project called Liquid Gold. It was here he first learned about Bitcoin, and immediately became passionate about the transformational implications cryptocurrency would have on the world. He quickly transitioned from Liquid Gold to Liquid Bits and began to focus solely on Bitcoin.

In 2013, he founded Bitcoin Embassy, the world's first entrepreneurial hub for developers, professionals and startups in the Bitcoin industry. His vision for the Embassy was to foster a cryptocurrency community where people from different backgrounds and experiences could come together and create mutually-beneficial relationships that could help further develop and advance this disruptive technology.

Through these experiences, Jean-Marc sees the potential of blockchain technology and the important implications it has for society on a massive scale. He has a deep interest in using blockchain to help people and organizations strike the balance between privacy and transparency

Remy and Jean-Marc are brothers. They are also the equity owners of RealToken Inc. Neither Remy not Jean-Marc are subject to any "bad actor" disqualifications under U.S. securities laws and regulations.

Gary Krat

Gary began his professional career in 1973 as an attorney at the Proskauer law firm in New York City, after having graduated from the School of Law at Fordham University.

In 1977 he joined a client, Integrated Resources, Inc., a publicly-held financial services company, and spent 13 years in the marketing, structuring and acquiring of over 600 leveraged real estate, equipment leasing, cable TV and other operating company transactions. He also headed and built the largest financial planning broker dealer group in the United States at that time.

In 1990 he was the senior-most officer at Integrated to move with the acquisition by Eli Broad and SunAmerica Inc. of Integrated's trust company, annuity company, brokerage business and mutual fund company. During his career with SunAmerica he managed as Chairman, CEO and/or President these and other SunAmerica companies.

In 1999 following the acquisition of SunAmerica Inc. by American International Group, Inc., he stepped away from many of his day-to-day responsibilities and worked directly with AIG's Chairman, Hank Greenberg, traveling extensively in Europe and the Far East to recreate the SunAmerica core businesses in AIG strongholds located in those places.

He decided to step back even further and spent time in the capacity of Senior Consultant to SunAmerica and AIG. He ended his formal relationship with both companies at the end of 2001.

Thereafter, he formed a series of companies to lend to, invest in and manage operating real estate and storage businesses, which to this day have been involved in over 250 transactions.

The last decade he's focused on what has become a 40 acre real estate assemblage in the Wynwood area of Miami, a 10 acre assemblage encompassing more than 50 buildings in the Flagler Street area in downtown Miami and a 20 acre real estate assemblage in Jersey City, New Jersey, named Mana Contemporary, which today represents one of the largest 100% art related business/real estate assemblages in the world.

David Hoffman
Director of Operations

David Hoffman began his professional career starting in the cryptocurrency and blockchain industry. David has been consulting and advising blockchain startups since 2017, in order to ensure these new teams are building products that are in alignment with the ethos found in the cryptocurrency community. David has consulted for 12 cryptocurrency startups, from various industries such as insurance, healthcare, supply chain management, and gambling

David operates a cryptocurrency focused podcast called POV Crypto, where prominent guests come to discuss their views and predictions about the cryptocurrency and blockchain industry. POV Crypto is praised for it's balanced arguments between the co-hosts and guests, in it's attempt to bring unbiased arguments into the space. Additionally, David frequently writes articles about the Ethereum ecosystem, MakerDAO, and token economics, and is leading advocate for the adoption of the decentralized finance industry.

Dario Domfrocht
Head of Property Management

Darío began his career in New York City's Goldman Sachs Credit Derivative Product Control, where he developed an understanding of complex financial products. His team monitored market risks associated with trading activities as well as reporting key financial data. Dario's strong attention to detail and work ethic enabled him to become a key player in the firm's success.

After working in one of the leading financial global firms, Dario transitioned into the retail sector as C.F.O of a high-end luggage chain, where he oversaw the company's day to day operations, and commercial and market development. Darío also spearheaded the company's expansion into both U.S and Latin America territory. Eventually, Dario became a partner of the company and helped it become acquired profitably by an international chain.

Darío currently specializes in real estate investments in merging markets where he brings important returns for both his clientele and himself. His current focus is in Detroit, South Florida and Buenos Aires.

The Managing Member will not receive any fees for managing RealToken LLC or any of the Series. The Managing Member will receive, however, a cash fee equal to 3% of the gross proceeds received by a Series upon the sale or disposition by a Series of the real property asset held by that Series. RealToken Inc. has the ability to purchase RealTokens off of the RealT website, at the same price offered to the general public. RealToken Inc. has no entitlement to any RealTokens that are not available to the general public.